

The Semitic Languages

An International Handbook

Edited by

Stefan Weninger

In collaboration with

Geoffrey Khan, Michael P. Streck

and Janet C. E. Watson

Handbooks of Linguistics and Communication Science
Handbücher zur Sprach- und Kommunikationswissenschaft

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Foreword

This volume, which presents a comprehensive overview of the current state of research on the Semitic languages, has undergone a long period of preparation. Our heartfelt thanks go first of all to the authors for their cooperation and patience. We are also indebted to the editor of the series, Herbert Ernst Wiegand for accepting this volume in the series *Handbooks of Linguistics and Communication Sciences*, and to Barbara Karlson of De Gruyter Mouton for her efficient and friendly manner in dealing with issues concerning this volume. Special thanks go to Melonie Schmierer (Cambridge) who did a wonderful job in editing the English. Finally, thanks are due to Michael Waltisberg (Marburg) for his help in proofreading and to the student assistants Maren Hadidi, Temesghen Tesfu and Christina Gansloser (Marburg) for their help in copy-editing and indexing.

The editors

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1. Introduction

1. Scope of the volume
2. Technical and formal aspects
3. References

1. Scope of the volume

The present volume, *Semitic Languages: An International Handbook*, is meant to serve as comprehensive reference tool for Semitic Linguistics in its broad sense. In contrast to Brockelmann (1908–1913), Moscati (1964), Lipiński (1997), Stempel (1999), Kienast (2001) and Haelewyck (2006), it is not restricted to comparative Grammar, although it covers also comparative aspects. On the other hand, the Handbook is not a collection of grammatical sketches, as e.g. the works of D. Cohen ([ed.] 1988, 31–159), Bergsträsser (1928/1983) or Hetzron (1997). By comprising a section on typology (see chs. 10 and 11), chapters with sociolinguistic focus (see chs. 16, 25, 26, 35, 46, 48, 56, 62, 69, and 71) and chapters on language contact (chs. 15, 17, 42, 43, 59, 60, 61, 74) the conception of the book aims at a comprehensive, unbiased description of the state of the art in Semitics. The articles on language contact are especially welcome within the framework of the HSK series, because the HSK volume on language contact (Goebel et al. [eds.] 1996–1997) concentrates its examples in the second volume on languages of Europe and the former Soviet Union. The articles on individual Semitic languages and dialect groups give basic facts on location, numbers of speakers, scripts, size and nature of text corpus, attestation etc., where appropriate, basic facts of the grammar and an overview on the research.

At the beginning of the Handbook, the greater genealogical context of Semitic is discussed (*Section I*), reconstruction and classification (*Section II*), and typological aspects of Semitic (*Section III*). In the following chapters, research on the individual Semitic languages and dialects is presented. As the internal classification of Semitic is, at least partly, still open to discussion due to several conflicting isoglosses, the organisation of the chapters is based on largely non-technical, admittedly rather traditional, geographical principles (*Sections IV–VII*).

1.1. Semitic in an Afroasiatic context

It is commonly held by Semitists and Afroasiaticists that the Semitic language family forms part of the macro-family of Afroasiatic (Hamito-Semitic) languages, although the sub-classification of the Afroasiatic families is disputed. A notorious problem of Afroasiatic studies is the vast variety of languages that makes it virtually impossible for an individual researcher to cope with the whole of Afroasiatic. The articles of this chapter sum up the traits that might be part of the common heritage of Semitic and Egyptian (ch. 2), Semitic and Berber (ch. 3), Semitic and Chadic (ch. 4), and Semitic and Cushitic-Omotiic (ch. 5). Problems of language contact are not the focus of this

section, but are treated in chapters that follow where appropriate (see ch. 59 on Berber-Arabic contact and ch. 74 on Ethio-Semitic – Cushitic contact). The editors firmly believe that the inclusion of Afroasiatic in larger families such as ‘Nostratic’ cannot be justified. The topic therefore is not covered in the volume.

1.2. Reconstructing Proto-Semitic and models of classification

This section is devoted to Semitic studies as a historical-comparative discipline. There is one section on the reconstruction of Proto-Semitic phonetics and phonology (ch. 6), one on the morphology of Proto-Semitic (ch. 7), and one on the lexicon (ch. 8). Due to the lack of research on this area to date, reconstructive syntax is excluded here (But see below ch. 7 on syntactic typology). The internal classification of Semitics has been subject to particularly hot debate since the very beginning of comparative Semitics. The various models and the assumptions on which they are based are the subject of a separate section (ch. 9).

1.3. The Semitic languages and dialects I: Their typology

In addition to the historic-genetic perspective of the previous section, this section covers typological aspects of Semitic languages. Both morphological typology (ch. 10) and syntactic typology (ch. 11) are covered. As this section is of special relevance for typologists without a Semitic background, the authors paid extra attention to ensure the readability of the articles for the non-Semitist.

1.4. The Semitic languages and dialects II: East Semitic

The introductory section (ch. 12) provides an overview of the Akkadian language, its history and attestation, including sections on cuneiform writing. Then the oldest varieties of Akkadian, i.e. Old Akkadian and Eblaite are treated (ch. 13). After this, the two main dialects of Akkadian, i.e. Assyrian and Babylonian, their distinctive features and their development through the ages are covered in a contrastive perspective by a central section (ch. 14). Akkadian is heavily influenced by Sumerian, which was transmitted by speakers of Akkadian as a classical language after its extinction as a spoken language. Therefore, a section on Sumerian-Akkadian language contact is necessary (ch. 15). Akkadian was used as a language of diplomacy in wide areas of the Middle East. A further chapter gives an overview of the role of Akkadian in history outside Babylonia and Assyria (ch. 16). Later, during the first millennium B.C., Akkadian was finally replaced by Aramaic. This justifies an additional section on Akkadian-Aramaic language contact (ch. 17).

1.5. The Semitic languages and dialects III: North-West Semitic

In the introductory section, the notion ‘North-West Semitic’ is discussed, including internal classification, an overview of Aramaic, N.-W. Semitic alphabets, contacts with Egyptian, Tell Amarna and treatment of the smaller varieties of North-West Semitic

that are not covered by the other sections such as Moabite, Ammonite, and Edomite (ch. 18). This is followed by a section on the oldest attestation of NW-Semitic, i.e. Amorite (ch. 19). The first NW-Semitic language with textual attestation is Ugaritic (ch. 20). Then the Canaanite languages are covered, first with a section on Phoenician and Punic (ch. 21) and one on Biblical Hebrew (ch. 22). The later stages of Hebrew are covered by a section on Rabbinic Hebrew (ch. 23), and on Modern Hebrew (ch. 24). Historical aspects of Hebrew as the language of Judaism are also described (ch. 25). The unique case of a language revival from written sources is analyzed in a chapter on the emergence of Modern Hebrew (ch. 26). Aramaic is treated in a series of chapters, first on Old Aramaic (ch. 27) and Imperial Aramaic (ch. 28). The role of Imperial Aramaic as an administrative language and its role in history is described in a special section (ch. 29). A chapter on Late Imperial Aramaic examines varieties such as Nabataean or Palmyrene (ch. 30). This is followed by articles on several Western Middle Aramaic varieties, i.e. Jewish Palestinian Aramaic (ch. 31), Samaritan Aramaic (ch. 32), and Christian Palestinian Aramaic (ch. 33). The part on Eastern Middle Aramaic begins with a section on Syriac (ch. 34), that is complemented by a section on Syriac as the language of Eastern Christianity and its role in history (ch. 35). Then the other Eastern Middle Aramaic varieties, Babylonian Talmudic (ch. 36) and Mandaean (ch. 37) are covered. The next part of the chapter is devoted to Neo-Aramaic, that can be classified into Western Neo-Aramaic spoken in Syria (ch. 38), ʿTuroyo (with Mlaḥso) (ch. 39), North Eastern Neo-Aramaic (ch. 40) and Neo-Mandaean (ch. 41). The rest of the section consists of two chapters on language contact, one on contact between Aramaic dialects and Iranian languages (ch. 42), and one on Aramaic-Arabic language contact (ch. 43). The latter covers both directions, to avoid repetition in section VI.

1.6. The Semitic languages and dialects IV: Languages of the Arabian Peninsula

This section covers the varieties spoken on the Arabian Peninsula and adjacent islands, and those that have their historical origin on the Peninsula (i.e. Arabic dialects outside the Peninsula). Beginning with Ancient North Arabian (ch. 44), the structure of Classical Arabic (ch. 45) and its role as the *lingua sacra* of Islamic culture (ch. 46), it then covers Middle Arabic (ch. 47), the modernization of Arabic and the role of the Arabic academies (ch. 48), Modern Standard Arabic, the differences between Classical Arabic and MSA, registers and regional varieties of MSA (ch. 49). Arabic dialects in general and their geography are treated in an introductory chapter to the second part of the section (ch. 50). This is followed by chapters on the Arabic dialects of the Arabian Peninsula (ch. 51), the dialects of Mesopotamia (ch. 52), the dialects of the Levant (ch. 53), of Egypt and Sudan (ch. 54), and of North Africa, including Maltese (ch. 55). Spoken Arabic is treated in a systematic, non-geographic way in chapters on sociolinguistics (ch. 56) and Arabic urban vernaculars (ch. 57). This is followed by a chapter on Arabic-based pidgins and creoles (ch. 58). Three chapters treat the contact of Arabic with other languages in this section: Arabic-Berber (ch. 59), Arabic-Persian (ch. 60), and Arabic and modern European languages (ch. 61). Aramaic-Arabic language contact is treated above in the context of Aramaic (ch. 43). This is followed by a

chapter on Maltese as a national language (ch. 62). In the third part of this section, the non-Arabic languages of the Arabian Peninsula are covered. As the attestation of the four varieties of Ancient South Arabian is rather unbalanced, the editors thought it best to treat them together (ch. 63). This is followed by an extensive overview of the Modern South Arabian languages of Yemen and Oman (ch. 64).

1.7. The Semitic languages and dialects V: Ethio-Semitic languages

In an introductory chapter (ch. 65), the distinctive features of Ethio-Semitic in general are covered, together with its internal classification to avoid repetitions in the following articles. This chapter also touches briefly varieties without special articles. This is followed by a chapter on the classical language of Ethiopia and Eritrea, Gəʿəz (ch. 66). Chapters on the modern North-Ethiopic languages Tigre and Tigrinya then follow (ch. 67 and ch. 68). In a chapter with a more sociolinguistic focus, the role of Tigrinya as a written language and a language of Eritrea is described (ch. 69). A rather large chapter treats Amharic together with Argobba (ch. 70). A further chapter (ch. 71) elucidates the role of Amharic as a national Language and an African lingua franca. The following chapter covers the Gurage dialect bundle (ch. 72). In the next section, Harari is treated (ch. 73). Due to widespread multilingualism, phenomena of language contact are especially salient in Ethio-Semitic. The research and its perspectives on Ethio-Semitic–Cushitic contacts are covered by the last article (ch. 74).

1.8. Limits

Needless to say that even a book of this size cannot cover all aspects of the subject. Chapters originally planned but unwritten for different reasons include Diachronic Typology of Semitic Languages, Middle Aramaic in general, and Sociolinguistic aspects of Neo-Aramaic. Apart from single chapters, three further aspects are systematically neglected:

This volume focuses on the structure of the Semitic languages themselves, their history and their roots in societies. Hence, there is no special section on the history of Semitic studies. The reader is referred to the relevant chapters in the HSK volume *History of the Language Sciences* (Auroux et al. [eds.] 2000–2006) where both the indigenous traditions are covered (Auroux et al. [eds.] 2000–2006, 1–5, 215–344), as well as the European tradition of Semitic studies since the age of Humanism (Auroux et al. [eds.] 2000–2006, 673–680, 728–734, 1311–1325).

For similar reasons, no chapter is devoted to the writing systems of Semitic languages in this volume. Instead, the reader is referred to the HSK volume *Writing and Its Use* (Günther/Ludwig [eds.] 1995–1996) where several aspects of written language and writing systems of Semitic languages are covered (Günther/Ludwig [eds.] 1995–1996, 274–288, 297–321, 491–510, 525–536). Needless to say, information on the script of individual languages are given where their attestation and rooting in society is covered.

Onomastics is a field that is important in Semitic studies. Names of persons, tribes and places reveal valuable information on social, religious and linguistic history, espe-

cially for periods and regions where other sources are scarce or missing (cf. as an example the articles in Streck/Weninger [eds.] 2002). Nevertheless, as there is a HSK-volume especially devoted to name studies (Eichler et al. [eds.] 1995–1996) that comprises several articles on Semitic onomastics as part of the section on the historical development of names (Eichler et al. [eds.] 1995–1996, 854–879), the editors of the present volume decided not to include a special section on onomastics here, the chapter on Amorite (see ch. 19) being a necessary exception for obvious reasons.

2. Technical and formal aspects

The editors had a long discussion on the question whether they should attempt to impose a unified transcription on the whole volume. They finally decided that it is impossible to devise a transcription that reconciles all the necessities of synchronic descriptions of individual Semitic languages with those of diachronic reasoning. For example, it is *communis opinio*, that the Proto-Semitic source of Hebrew *q* (ק), Classical Arabic *q* (ق), Egyptian Arabic *ʔ*, Muslim Baghdadi Arabic *g* and Geez *k* (ቀ) most probably was an ejective velar stop [**kʔ*] that approximately can be symbolized by IPA *kʔ*. But is anything gained in using the etymological symbol in the attested languages? The idea to present data of, e.g. Modern Arabic dialects in etymological writing would be clearly inappropriate. On the other hand, the use of IPA-symbols instead of the time-honored Semitological transcription is also problematic. IPA-symbols are meant to represent very precise phonetic sounds. How should, e.g., Ugaritic *ṣ* be transcribed in IPA, when all we know about this phoneme is that it is the product of the merger of **ṣ*, **ṣ̣* and **ṣ̥*? Finally the editors agreed not to impose a unified transcription, but to leave the decision on how to transcribe the individual languages to the respective authors.

The editorial responsibilities have been distributed like this: S. Weninger: Semitic in an Afroasiatic Context (chs. 2–5), Typology (chs. 9–10), Ancient North Arabian and Classical Arabic (chs. 44–47), Ethio-Semitic (chs. 65–74). M. P. Streck: Comparative Semitic (chs. 6–9), Akkadian (chs. 12–17), and part of ancient North-West-Semitic (chs. 18–21 and 27–30). G. Khan: North-West-Semitic (chs. 31–43). J. C. E. Watson: Ancient South Arabian, Modern South Arabian, and Modern Arabic, both standard and dialect (chs. 48–64).

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1. Semitic in an Afroasiatic Context

2. Semitic-Egyptian Relations

1. History of the research on genetic connections between Semitic and Egyptian
2. Egyptian consonantism and its Semitic correspondences
3. Egypto-Semitic nominal morphology
4. Common elements of verbal morphology
5. Egyptian numerals in Semitic
6. Egypto-Semitic inherited lexicon
7. References

Abstract

This overview summarises the regular consonantal correspondences of Egyptian and Proto-Semitic, the innovations and divergences of each branch, and surveys the basic common elements of morphology shared by both Egyptian and Semitic. Problems of research on the common Egypto-Semitic lexicon are also discussed.

1. History of the research on genetic connections between Semitic and Egyptian

Although the hieroglyphic and demotic writing systems were deciphered and the language identified by Champollion in 1822, some elements of the relationship with the Semitic languages had already been recognized on the basis of Coptic, which had been familiar to European science several centuries before. The findings of the first researchers in the 19th century are summarised in the works of Erman (1892), Ember (1930), von Calice (1936), and Cohen (1947), who laid firm foundations for the study of regular consonant correspondences. These fundamental works contain retrospective bibliographies.

In the second half of the 20th century, the study of Egyptian linguistics failed to keep pace with rapid developments in Afro-Asiatic linguistics and little interest was shown in investigating the Afro-Asiatic background of Egyptian. Until the 1990s, only three Egyptologists (Vycichl, Ward and Hodge) carried on this work.

In 1971 the outstanding Semiticist Rössler (who erroneously regarded Egyptian as a 'Semitic language') proposed a significantly different interpretation of the Old Egyptian phonological system and the Egypto-Semitic phonological and lexical correspondences, based on controversial assumptions and an *a priori* selected group of disprovable etymologies. The currently ongoing 'Etymological Dictionary of Egyptian' (EDE) project has confirmed the validity of the older conception (cf. also Takács 2003; 2006, 90ff. and 2007, 5ff.). For the literature of the diverse periods of Egypto-Semitic comparative research, cf. EDE I 1–8.

2. Egyptian consonantism and its Semitic correspondences

Old Egyptian had 24 consonant phonemes that are clearly reflected in the writing, to which can be added at least **l* (which had no special sign of its own). These have been identified with relative safety both on inner and etymological grounds (cf. Vergote 1945; 1973; Edel 1955, 47–66; Vycichl 1990, 39–71).

Old Egyptian was innovative from the perspective of historical phonology. It is already clear that several Old Egyptian consonants represent a merger of diverse proto-phonemes of fully different origins (EDE I 271–272). Thus, the high diversity of the Afro-Asiatic system of sibilants (inherited by Semitic, South Cushitic, and West Chadic) was radically simplified in Egyptian, e.g. OEg. *z* < PAA **ʒ* and **ʒ̥* (yielding Semitic **z* and **d*); OEg. *s* < PAA **c*, **s*, **č*, **š*; or OEg. *š* < PAA **š* and **č*. Similarly, OEg. *d* < PAA **g* and also **ç*, **č*, **ĉ* (Sem. **š*, **t̪*, **d̪*), while OEg. *h* < PAA **h*, **q*, **g*, **q̥* (which had merged in Semitic also). Proto-Semitic, in turn, had the ancient system of sibilants only slightly modified (PSem. **s*, **š*, **t̪*, **š̌* < PAA **c*, **s*, **č*, **š̌*, while PSem. **š*, **t̪*, **d̪* < PAA **ç*, **č*, **ĉ*). Only the Afro-Asiatic labial triad (**b*, **p*, **f*, preserved intact also in South Cushitic and Chadic) was better retained in Egyptian (*b*, *p*, *f*) than in Semitic (where both PAA **p* and **f* had merged in **p*). The regular correspondences are as follows:

Tab. 2.1: Regular Egyptian-Semitic consonant correspondences

E	3	j	ʕ	w	b	p	f	m	n	r	h	ḥ	ḥ	ḥ	z	s	š	q	k	g	t	ṯ	d	ḏ
g.																								
S	r	yʔ	ʕ	wy	b	p	p	m	n	r	h	ḥ	ḥ	ḥ	z	s	š ₁	k	k	g	t	k	d	g
e	l	l	γ						l	l				ḥ	ḏ	š	š ₂				ṯ		ṯ	ṣ
m.		r														ṯ							ṯ	
*																								ḏ

Note that Eg. 3 correspond rarely also to Sem. **ʔ* (EDE I 67–78), but the conditions of this merger with the Eg. reflex of Sem. **r* and **l* are not clear.

There are further peculiarities of the Old Egyptian consonant system that evidently distinguish it from that of any of the ancient (or even several modern) Semitic languages:

- Palatalization of the PAA velars (**k* and **g*) as OEg. *t* and *ḏ*, in certain positions (presumably conditioned by the following vowel as supposed by Diakonoff 1965, 24–25, fn. 11; 1988, 39, #1.4). This process had begun well before the script appeared and was completed in the case of *k* > *ṯ* only towards the end of the Old Kingdom. This is why the Pyramid Texts contain both non-palatalized and palatalized varieties, e.g. OEg. *kw* ~ /> *tw* ‘you’, *kb.wj* ~ /> *ṯb.wj* (dual) ‘sandals’.
- Palatalization of PAA **l* and **r* > *j* [y] (presumably under the influence of the subsequent vowel as with **k* > *ṯ* and **g* > *ḏ*). This process was long-lasting, starting well before the written period and lasting throughout the 3rd millennium B.C.
- Erosion of PAA **l* and **r* (under conditions not yet satisfactorily clarified) in the first stage as a kind of voiced alveolar (or dental) vibrant or rolled sound (‘Egyptian aleph’), which later weakened into a real aleph (glottal stop). This process was later repeated.

The status and the Semitic counterparts of some of the Old Egyptian consonant phonemes have been debated by Rössler (1971) and a minor, albeit recently active group of his followers (the trend of the so-called ‘*neuere Komparatistik*’: except for Voigt, Egyptologists), who have suggested entirely new Egypto-Semitic correspondences. The arguments and especially the methods applied in this trend’s arbitrary etymologies have, however, provoked a fierce critique, cf. 6. below.

Tab. 2.2: Radically new suggestions by Rössler

OEG.	ʒ	j ~ r	ʕ	f	z	d	ḏ
PSem.	*d too	*g, *ʕ too	*γ, *d, *z, *ḏ	*b	*t too	*s, *ḏ too	*t, *ʕ, *k

3. Egypto-Semitic nominal morphology

Similar to Semitic and some other groups of Afro-Asiatic, the vocalism of the Old and Middle Egyptian verbal forms was apparently apophonic. The Egyptian primary nouns (i.e. those that were not derived from verbal roots), in turn, probably had a firm root vowel just as in Semitic ones, whereas Egyptian derived nouns were formed according to apophonic patterns, some of which can be detected in Semitic (as demonstrated by Osing in his NBÄ).

Most Egyptian grammatical morphemes can be traced back to a common Afro-Asiatic heritage, but a not insignificant number of these are not shared by Semitic.

The feminine marker was in both Semitic and Egyptian nouns the well-known common Afro-Asiatic *-t. The fossilized OEG. ending of masculine nouns -w (attested only occasionally) has, however, evident reflexes only outside Semitic, cf., i.e. Brb. *w- ~ *u- ‘prefix of nouns in status annexus’ [Djk.] ||| PCu. *-u ‘morpheme of the masc. gender’ [Zbr. 1991, 76, #2] ||| NOm.: Kafa -ō ‘masc. noun suffix’ [Crl. 1951, xxiii, #1] (for the AA comparison cf. also Diakonoff 1986, 47–48; 1988, 58). Similarly, out of the three gender markers of the OEG. demonstrative pronoun series only two have reliable Semitic cognates: e.g. *-t- (fem.) is identical with the ending -t of fem. nouns and *-n- (pl. and non-animate) is related to PAA *-n ‘plural ending of nouns’ [Sasse] > e.g. Sem. *-ān- > Akk. -ān-ū (nom.), -ān-ī (acc./gen.), e.g. šarr-ān-ū ‘kings’ (sg. šarr-u) || Syr. -ān-īn, e.g. rabb-ān-īn ‘masters’ (sg. rabb-ā) || Geez -ān (masc. pl. ending), e.g. šādaq ‘just’, masc. pl. šādaq-ān (Sem.: CGSL 88) ||| Brb. *-i...-ən ‘pl. affix’ [GT] ||| SAgaw: Awngi (dial.) -Vn ‘pl. suffix’ [Dlg.] || LECu.: Oromo pl. suffixes -w-ān, -w-ōn(i), -ēn(i), -ān(i) [Dlg. 1991, 21] = -ān, -en, -w-an [Ali-Zbr. 1990, 10] ||| NOm.: Kafa -i-na-ō ~ -e-na-ō (pl. suffix) [Crl. 1951] ||| CCh.: e.g. Logone ṅgun, pl. ṅwan-en ~ ṅgunn-en ‘Bauch’ [Lks. 1936, 114] (AA: Greenberg 1955, 49; Sasse 1981, 141).

In Old Egyptian too, there were three grammatical numbers. The singular had no particular marker. Both the dual and plural morphemes have Semitic counterparts. OEG. dual marker -j- (followed by the gender marker: masc. -w-j vs. fem. -t-j) ~ Sem. *-ā (nom. case), *-ay (obl. case and full form) ‘dual ending’ [GT pace Grande 1972, 285–287] ||| NBrb.: Shilh *-i- dual marker, cf. mərəw-i-n ‘twenty’ [Djk. 1988, 64]. OEG. plural marker -w- (preceding the gender suffix: masc. -w < *-w-w vs. fem. -w-t) ~ Sem.

*-āṭ- < *-aw-at- (?) ‘fem. pl. ending’ [GT, cf. Grande 1972, 283–284] ||| PCu. *-aw ~ *-wa ‘morpheme of plural’ [Zbr. 1991, 76, #5] ||| CCh.: e.g. *Lame wó* ‘pluralisateur’ [Scn. 1982, 297].

The system of Old Egyptian personal pronouns with all the Afro-Asiatic cognates cannot be presented here in full (cf. recently especially Blažek 1995; also Diakonoff 1988, 70–79). There is a significant overlapping in the Egyptian and Semitic systems, and examples of the common Afro-Asiatic character of these systems are presented here.

Independent personal pronouns: OEg. *jnk* (the original root was **jn*, to which the personal ending *-k* was attached) → Cpt.: (S) *anok* ‘I’ ||| Sem. **ʔan-āku* ~ **ʔan-ā/ī* ‘I’ [Djk.] ||| Brb. **ʔnakkʷ* ‘I’ [Prasse 1972, 179] ||| Bed. *ane* ~ *anī* ~ *anī* ‘ich’ [Rn. 1895, 20] ||| ECu. **ʔan-i/u* ‘I’ [Sasse 1982, 26] ||| SCu. **ʔan-i* ‘I’ [Ehret 1980, 283] ||| NOm.: *Kafa anō* ‘I’ [CR] | Maji *inu* ‘I’ [Bnd.] ||| SOM. **in-ta* ‘I’ [Flm. 1976, 315] (Cu.-Om.: Dlg. 1973, 210–1) ||| WCh.: e.g. PRon **yin* ‘I’ [GT, cf. Jng. 1970, 390].

Dependent personal pronouns: OEg. *sw* ‘him’ ||| Sem. **sū* < **suw* (?) ‘he’ [GT] = **suwa* [Djk. 1965] = **šuw*- [Djk. 1988] = **šūʔa* [Dlg. 1990, 213] ||| Brb. **ʔs* ‘3rd person sg. indirect object’ [Prasse 1972, 164] ||| ECu. **ʔu-sū* ‘he’ [Sasse 1979, 34] ||| SCu. **ʔusu* ‘he’ [Ehret 1980, 295] ||| WCh.: Hausa *šū* ‘he (indep.)’, cf. *sá* ‘him (object)’ [Abr. 1962, 808, 754] | Kulere *šī* ‘er (subj. Pron.)’ [Jng. 1970, 355] ||| CCh.: Hitkala *sí* ‘er, sie (sg.)’ [Lks. 1964, 109]. The fem. counterpart: OEg. *sj* ‘her’ ||| Sem. **šiya* ‘she’ [Djk. 1965] = **šiy-* [Djk. 1988] ||| ECu. **ʔi-šī* ‘she’ [Sasse 1979, 34–35] ||| SCu. **ʔisi* ‘she’ [Ehret 1980, 290] ||| WCh.: Mupun *sér* ‘3rd person fem. sg. reflexive pron.’ [Frj. 1991, 54].

Suffix pronouns: OEg. *-k* (2nd person masc. sg.) ||| Sem. **-ka* ‘your (masc. sg.)’ [Djk.] ||| Brb. **-ak* ‘2nd masc. sg. compound indirect object pron.’ [Prasse 1972, 170] ||| Bed. (Beni Amer) *-ka* ‘2nd masc. sg. poss. pron.’ [Rn.] ||| ECu. **ka* ~ **ku* ~ **ki* ‘your (masc. sg.)’ [Apl. 1984, 13] ||| SCu. **ku* ‘your (masc. sg.)’ [Ehret 1980, 245] ||| PCh. **-ka* ~ **-ku* ‘your (masc. sg.)’ [GT].

Among the interrogative pronouns, only OEg. *m* ‘who? what?’ is to be explained from a common Afro-Asiatic heritage, cf. Sem. **mī* ‘1. what, 2. who?’ [GT] ||| PBrb. **mā* ‘what?’ vs. **mī* ‘who?’ [Prs. 1972, 216, 239] ||| Agaw **-mā* (postpos. interrog. particle) [Rn. 1884, 390] ||| ECu. **maʔ*/**mā* ‘what?’ [Sasse 1982, 143, 138, 146; Lsl. 1988, 195] ||| SCu. **ma* ‘which?’, **mi* ‘what (kind of)?’ [Ehret 1980, 153–159] ||| PCh. **mV* ‘who, what?’ [Dlg. 1973, 178–179] = **mi*/**mə* ‘what?’ [Nwm. 1977, 34]. For further details see EDE III 9–13. The only other Egyptian interrogative pronoun having a clear cognate in Semitic was only preserved in Coptic (SBF) *ou* ‘who?’ (KHW 264). Its Egyptian etymology has been hitherto mistakenly conceived: typically, an inner Eg. derivation from ʕ ‘person’ (!) has been proposed (l.c.) due to ignorance of the Afro-Asiatic evidence. The unattested OEg. **w* derives in fact from AA **ʔaw* ~ **wa* ‘who?’ [GT] > Bed. *aw* (aw) ‘who?’ [Rn. 1895: 35; Rpr. 1928, 157] ||| Agaw **ʔaw* ‘who?’ [Apl. 1984, 50; 1991, 23] ||| ECu.: Somali *āwe* ‘dove?’ [Lmb. 1994, 112] ||| NOm. **ō-* ‘who’ [GT] (NOm.: Lmb. 1994, 111–2) ||| PCh. **wa* ‘who?’ [Nwm. 1977, 34]. Cf. also AA **ʔay* ~ **ya* ‘who?’ [GT]: Sem. **ʔayy-u* ‘welcher?’ [Zbr.] (Sem.: WUS #161) ||| ECu. **ʔay*[y]- ‘who? which?’ [Sasse 1979, 46; 1982, 30] ||| Om. **ay-* ‘who?’ [GT] (Om.: Flm.

1969, 321; Lmb. 1994, 112) ||| WCh.: Ngizim -yee ‘who? whom? whose?’ [Schuh 1981, 177] (AA comparison: Mukarovsky 1987, 408–409; Dolgopolsky 1988, 629, #3; Zabor-ski 1989, 590, #97; Appleyard 1991, 23; Hodge 1994, 530; Starostin et al. 1995 MS, 34). The Afro-Asiatic etymologies of some other Egyptian interrogative pronouns (e.g. OEg. *jšs.t* ‘what?’, LEg. *jḥ* ‘what?’, OEg. *tn* ‘where?’) have not yet been thoroughly investigated.

Non-productive distance (deictic) elements (*Distanzelement*) of the Egyptian demonstrative pronouns are also reflected in Semitic and other Afro-Asiatic branches:

- (1) OEg. *-3 (closeness) preserved in ʿ3 ‘(t)here’, *p3* (m), *t3* (f), *n3* (pl.) ‘this’ ~ Sem. *-ll-: Akk. *ullū* ‘jener, entfernt’ [AHW 1410] || Hbr. *ʔēlle(h)* ~ *ʔēl* ‘these’ [KB 50, 52] || Ar. *ʔullā-(ka)* ‘ceux-ci’, ‘these’ [BK I 49] (Sem.: CGSL 111; Grande 1972, 204) ||| SCu. **la* ‘there, at (a place)’, **la* ‘where?’ [Ehret 1980, 202].
- (2) OEg. *-f (remoteness) retained in ʿf ‘there’, *pf(3)* (m), *tf(3)* (f), *nf(3)* (pl.) ‘that’ ~ NWSem. **p-* ‘here’ [GT]: Ug. *p* ‘here’ [WUS #2179], Hbr. *po(h)* ~ *pō* ~ *po(?)* ‘1. hier, an diesem Orte, 2. hierher’ [GB 635] ||| PCu.-Om. **-pa* ‘locative case ending’ [Lmb. 1991, 557] ||| WCh.: Kupto *fá* ‘diese/-r/-s’ [Leger 1992, 18] | *Pa’a fa* ‘(loc. adv.) there, here (not far)’ [MSkn. 1979, 176] || CCh.: Tera **fá-* [GT], cf. *fá-n* ‘here’, *fá-ra* ‘there’ [Nwm. 1964, 46] | Lame *fī* ‘(directionnel) indique un mouvement de retour vers le point de départ’ [Scn. 1982, 290].
- (3) OEg. *-n (closeness at hand) in ʿn ‘here’, and *pn* (m), *tn* (f), *nn* (pl.) ‘this’ ~ Sem. **-n-* ‘усилительный указательный элемент’ [Grande]: Akk. *annu* [< **ha-nn-*] ‘that’ || Aram. *-n-*, cf. *yawmānā* ‘today’ (Sem.: Grande 1972, 204) ||| NBrb.: *Shilh* **-n* (remoteness), cf. *yi-n* ‘there’ vs. *yi-d* ‘here’ [Vcl.] ||| Om.: Yemsa and Ari *-na* ‘far’ demonstrative morpheme’ [Bnd. 1990, 678–679] ||| WCh.: Hausa *nān* ‘this, these (near at hand)’ [Abr. 1962, 698] | PRon **na-* ‘demonstrative basis’ [GT]: Bokkos *na* ‘hier(her)’, *nāā* ‘dort’, *nayí* ‘dann’, Daffo-Butura *nān* ~ *nānní* ‘hier’, *nāy* ‘nun, dann’ (Ron: Jng. 1970, 145, 219) || CCh.: Tera *ná* ‘this’ [Nwm. 1964, 46]. Ultimately cognate are PCu. **ni* ‘he’ [GT] ||| SOM. **no* ‘he’, **na* ‘she’ [Flm. 1976, 315], etc. (Eg.-Brb.: Vycichl 1933, 171, #1; 1934, 84; AA comparison: Greenberg 1955, 50; Illič-Svityč 1976, #332; Zaborski 1984–1986, 505; Blažek 1989, 215; 1990, 212).

4. Common elements of verbal morphology

The Old Egyptian system is not yet fully clear. As a rule the vowels were not written, and it is therefore difficult to discern the apophonic patterns governing the making of verbal forms. As in Semitic, the formation of the diverse verbal and participial stems was affected by the class to which the underlying verbal root belonged (monoradical, biradical, secundae geminatae, triradical, tertiae infirmae with -j or -w as 3rd consonant, quartae infirmae, etc.).

Old Egyptian used a suffix conjugation (the so-called *sḏm=f* pattern and its extended varieties) for the verbs of action, where the personal endings coincided with the possessive suffixes. In this respect, Egyptian differs radically from Semitic, Berber or Cushitic and forms a special group with Chadic.

Both derivational morphemes of the passive voice in the Egyptian suffix conjugation have correspondences in Semitic. Thus, the OEg. passive element *-tw-* ($\sim / < -tj-$) of the *sdm-tw=f* pattern (and its extended varieties) might be identical with Sem. **-t-* ‘refl.-pass. pre-/infix’ [CGSL 127] ||| Brb. **-ə-* ‘suffix of intr. and pass. verbs’ [Ajhenval’d 1987, 5–9] ||| PCu.-Om. **-t-* ‘suffix of refl., med., pass. verbs’, **tV-* ‘refl. prefix’ [Dlg. 1991, 94–95] = **t-* $\sim$ **-t-* ‘refl.-pass. affix’ [Zbr. 1991, 78, #36] ||| CCh.: Hitkala *t* ‘refl. affix’ [Stl. 1991, 364]. The Eg. marker *-w-* of the perfective passive *sdm-w=f* form is equivalent, for example, with Sem. **-u-* ‘vowel of pass. in inner flexion’ [GT]: Hbr. *-u-*, preserved in intens. act. *qittēl* vs. pass. *quṭtal* (cf. the *-o-* in caus. act. *hiqūl* vs. pass. *hoqṭal*) || Ar. *-u-*, e.g. I act. *kataba* vs. *kutiba*, II act. *kattaba* vs. pass. *kutiba*, III act. *kātaba* vs. pass. *kūtiba* etc. (Sem.: Grande 1972, 222) ||| NBrb.: Qabyle *-u-* ‘pass. marker between the personal prefix and the stem’ [Ajh. 1987, 10] ||| WCh.: Hausa *-ú* ‘suffix of pass. and refl. stems’ [Stl. 1991, 363].

Egyptian shares a special verbal paradigm with Semitic and Berber, namely the so-called Egyptian ‘old perfect’ or ‘pseudoparticiple’ (Coptic and Berber qualitative, Akkadian stative). This is the only exception where a peculiar set of personal endings (entirely different from that of Eg. *sdm=f* and Semitic perfective/imperfective) was used.

Tab. 2.3: Personal pronouns common in Old Egyptian, Akkadian, Arabic, and Qabyle

	Old Egypt- ian suffix (<i>sdm=f</i>)	Old Egyptian ‘old perfect’	Akkadian stative	Arabic new perfective	Qabyle qualitative
1 st sg.	-j	-kwj	-ā-ku	-tu	-əγ
2 nd sg. masc.	-k	-tj	-ā-ta	-ta	-əḏ
2 nd sg. fem.	-t	-tj	-ā-ti	-ti	-əḏ
3 rd sg. masc.	-f	-w > -Ø	-Ø	-a	-Ø
3 rd sg. fem.	-s	-tj	-at	-at	-it
1 st pl.	-n	-wnj	-ā-nu	-na	-it
2 nd pl. masc.	-tn	-tjwnj	-ā-tunu	-tumu	-it
2 nd pl. fem.	-tn	-tjwnj	-ā-tina	-tunna	-it
3 rd pl. masc.	-sn	-w	-ū	-ū	-it
3 rd pl. fem.	-sn	-tj	-ā	-na	-it

The Egyptian ‘old perfect’ (pseudo-participle, stative) and the Coptic qualitative express a state or condition (whereby transitive verbs gain passive sense) in contrast to the essentially dynamical suffix conjugations, which correspond to the Akkadian stative (permansive, predicate of state).

5. Egyptian numerals in Semitic

The Egyptian numerals are clearly of Afro-Asiatic origin (for a comprehensive etymological survey see Blažek 1999, 28–56; cf. also Takács 1997 with additional entries), even if sometimes these numerals are not common to all branches and out of ten, only five have more or less reliable Semitic parallels:

- (1) OEg. *sn* ‘two’ ~ Sem. **tin*- ‘two’ [Djk. 1988, 67] ||| Brb. **sin* ‘two’ [Mlt. 1991, 75] < AA **čin*- ‘two’ [Djk.] (well-known etymology with abundant literature).
- (2) OEg. *srs* (partial reduplication from **sr*?) → (later) *sjs* ‘six’: perhaps either an irregular change from **sds*, cf. Sem. **šid̥t*- ‘six’ (as usually suggested in the literature) or perhaps cognate with NOm.: (?) Kefoid **širit̥t*- ‘six’ [GT] (unless this is a strongly modified Ethio-Sem. loan as usually suggested) ||| CCh.: Musgug *sāra* ~ *šāra* ‘six’ [Krause] = *sāra* [Röder], Kada *širè* ‘six’ [Br̥t.], Munjuk *šāra* [*sl*-] ‘six’ [Tr̥n. 1991, 117] = *šārà* [Br̥t.], Mbarà *širá* [TSL 1986, 270], Vulum *šārà* [Tr̥n.] (Musgu: Lks. 1941, 76; Br̥t.-Jng. 1993, 133) | Gidar *sërré* ‘six’ [Str. 1910, 457] = *θirre* ~ *šire* [Mch. 1950, 59] (for Eg.-CCh. see Greenberg 1955, 60; 1963, 62).
- (3) Eg. *sḫ* ‘seven’ (incompatibility shift from **sḫ* </~ **sb*^ʕ) ~ Sem. **sab*^ʕ/**šab*^ʕ- ‘seven’ [GT] ||| Brb. **ə-ssab* (?) → **ə-ssah* ‘seven’ [GT] = **sāh* [Blz.] ||| SOm.: Hamar *so’ba* [Flm.], Karo *sopbo* ‘seven’ [Flm.] (SOm.: Bnd. 1994, 157) ||| CCh.: Mofu *čibe* [*tsch*-] ‘seven’ [Str. 1922–1923, 122], Gwendele and Hurzo *čibà* ‘seven’ [Clm.] = Hurzo *čibà* [Rsg. 1978, 322, #622] || ECh.: Jegu *sub* ~ *sup* ‘seven’ [Jng. 1961, 107] (Eg.-AA etymology: Zyhlarz 1931, 137; Rössler 1952, 142, #66; 1966, 228; Diakonoff 1965, 47; Zavadovskij 1974, 109, #10; 1975, 49; Blažek 1990a, 31).
- (4) Eg. *ḥmn* ‘eight’, cognate with Sem. **ṭamāniy*- ‘eight’ [Blz.], may be due to an irregular shift from **smn*, influenced by the last consonant of Eg. *sḫ* (somewhat analogous to Eg. *psd* ‘nine’ vs. *mḏ* ‘ten’) and/or Eg. *ḥmt* ‘three’. The connection to Brb. **tām* ~ **hiitām* ‘eight’ [Prasse 1974, 405] is obscure.
- (5) Eg. *psd* ‘nine’. Most probably, this represents a shift < **tsd* ~ **tsḫ* (provable, cf. Goedicke 1955; Vycichl 1957, 71; Knudsen 1962) < **ts*^ʕ (due to the incompatibility of *t/s* + ^ʕ in the same Eg. root, cf. EDE I 326–327) ~ Sem. **tiš(a)*^ʕ- ‘nine’ [GT] ||| PBrb. **təzah* (?) ‘nine’ [GT] = **t-s-ʔ* [Rsl. 1966, 228] = **taššaʔu* [Rsl. 1952, 143] = **tza* [Zvd. 1974, 109; 1975, 49] = **tižāh* ~ **tūzah* [Prs. 1974, 403, 404] ||| ECh. **t-g-s* ~ **g-s-t* ‘nine’ [GT] (cognate or Ar. loan?): PLay **t-g-s* [GT] | PSomray **t-s* (or **d-s*) [GT] | (?) Mokilko *géssát* [Lks. 1977, 210] = *géssá(t)* [Jng. 1990, 101] (ECh.: Hoffmann 1971, 9).

6. Egypto-Semitic inherited lexicon

As knowledge of the common lexicon is largely incomplete and etymological research has been hindered by diverse and serious controversies, at present it is impossible to estimate the relative degree of overlapping of the two branches in this respect as compared to that of other Afro-Asiatic branches. In any case, the preliminary results of both the Diakonoff group (SISAJa, HCVA) and the ‘Etymological Dictionary of Egyptian’ (EDE) project suggest that the divergence of the Egyptian vs. Semitic lexicon is surprisingly significant. The surmised closeness of Egyptian and Chadic (Diakonoff 1981; 1988, 22; 1996, 293–294; Takács 1998, 324; EDE I 35–36) should also be subject to further investigation. In addition, etymologies for several Egyptian lexemes cannot be sought on Afro-Asiatic grounds at all and have only distant (extra-Afro-Asiatic) African parallels (from Nilo-Saharan, Bantu, Khoisan).

Recent decades have witnessed a regrettable confrontation of two radically opposed conceptions on Egypto-Semitic comparative consonantism (‘old school’ vs. ‘neuere Kom-

paratistik'). The latter has been established by Rössler using a brilliant argument (based on the incompatibility of root consonants) and a vulnerable etymological apparatus against the traditional system. Some of his followers have recently proposed numerous far-fetched and dilettantic alternative 'etymologies' in support of the theory. The alarming methods of this trend have already evolved a heavy debate and a considerable literature (for a critical appraisal of these etymologies see Ward 1985; Vycichl 1985; Osing 1997; 2000; EDE I 333–393; Takács 2003; 2006, 90ff. and 2007, 5ff., where so far the most detailed discussion of the whole problem can be found). The problem cannot be discussed here but will be illustrated by the following example: Eg. *ʿb3* '(ein Schiff) kommandieren, leiten' (PT, Wb I 177, 1) was compared by Rössler (1971, 286), Zeidler (1992, 206), and Kammerzell (1998, 29) with Syr. *db̄r* 'egit, duxit' and Ar. *db̄r* II 'verwalten, gut regieren', which was rightly rejected by Ward (1985, 241) as '*an excellent example of words in different languages having an apparent relationship which is shown to be illusory by an examination of their origins*', since (1) as pointed out already by Sethe, OEg. *ʿb3* cannot be separated from OEg. *ʿb3* 'sceptre' (i.e., who holds the sceptre he commands), while (2) Syr. *db̄r* and Ar. *db̄r* II are denominal from the primary sense 'to say' of Sem. **db̄r* (GB 153–154). Thus, OEg. *ʿb3* 'sceptre' and Sem. **db̄r* 'to say' have nothing in common. Besides, one cannot ignore the correspondence of OEg. *ʿb3* and OSA (Qatabanian) *ʿbr* 'to arrange', *s₁-ʿbr* 'to command, order' [Ricks 1982, 169].

Abbreviations of languages and related terms

AA: Afro-Asiatic (Semito-Hamitic), Akk.: Akkadian, Amh.: Amharic, Ar.: Arabic, Aram.: Aramaic, Bed.: Bed'awye (Beja), Brb.: Berber, C: Central, Ch.: Chadic, Cpt.: Coptic, CT: Coffin Texts, Cu.: Cushitic, Dem.: Demotic, E: East, Eg.: Egyptian, ESA: Epigraphic South Arabian, GR: Ptolemaic and Roman period, H: Highland (in Cushitic), Hbr.: Hebrew, Hrs.: Harsusi (in MSA), Jbl.: Jibbali, L: Late or Low(land), Lit.: literary texts, LP: Late Period, M: Middle, Mag.: magical texts, Math.: mathematical papyri, Med.: medical texts, Mhr.: Mehri, MK: Middle Kingdom, MSA: Modern South Arabian, N: New, N: North, NE (or NEg.): New Egyptian, NK: New Kingdom, O: Old, OK: Old Kingdom, Om.: Omotic, OSA: Old South Arabian, P: Proto-, PT: Pyramid Texts, S: South, (S): Sahidic, Sem.: Semitic, Sqt.: Soqotri, Syr.: Syriac, Tna.: Tigrinya, Ug.: Ugaritic, W: West.

Abbreviations of reference works

CGSL: Moscati 1964; DELC: Vycichl 1983; EDE I: Takács 1999; EDE II: Takács 2001; EDE III: Takács 2008; EG³: Gardiner 1957; KHW: Westendorf 1977; NBÄ: Osing 1976.

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3. Semitic-Berber Relations

1. Berber and Hamito-Semitic (Afro-Asiatic)
2. Phonetics
3. Grammar
4. Some peculiar isoglosses
5. References

Abstract

This chapter examines the genetic relationships linking Semitic and the Libyco-Berber branch of the Hamito-Semitic family, and considers some of the main isoglosses shared by Berber and Semitic languages.

1. Berber and Hamito-Semitic (Afro-Asiatic)

The languages and dialects of Libyco-Berber are spoken west of the Nile in North Africa. First attested in ancient times (the oldest inscriptions in a native alphabet date

to the second half of the first millennium B.C.E.), the epigraphic data provide scant linguistic evidence, so that linguistic comparison usually takes into account only the modern Berber languages.

The classification of Berber as a branch of the Hamito-Semitic (Afro-Asiatic) linguistic family is now undisputed (Chaker 1995; Galand 2010, 11). A number of linguistic features are recognised in common with other branches, most notably with languages of the Semitic group. Although ties with Semitic are conspicuous, it is not easy to determine the linguistic layer to which these belong. Berber has existed in close contact with Semitic languages for millennia (Punic in antiquity and Arabic since the 7th century C.E.), and features in common with Semitic derive not only from a shared Hamito-Semitic heritage, but also from extended and intense contact with the Semitic world.

Isoglosses shared with Semitic were noted in the first essays exploring the linguistic affiliation of Berber. In the mid-19th century, De Slane (1856, 524) highlighted a number of ‘points de ressemblance’, most of which are still commonly cited: 1) trilateral roots; 2) similar personal markers in verb conjugations; 3) secondary stems derived through affixation; 4) gender distinction in 2nd and 3rd person verb inflections; 5) affixed pronouns different from independent pronouns; 6) alternation of vowels and semivowels in ‘weak’ roots; 7) verbs marking aspect rather than tense (‘les temps du verbe manquent de précision’); 8) existence of ‘broken’ plurals; 9) similar word order. De Slane also noted features unique to Berber: 1) vocabulary; 2) the existence of a set of pronouns affixed to verbs, marking the indirect object; 3) place of clitics, which may be both prefixed and suffixed.

Well into the modern period, most research was limited to the recognition of ties with Semitic alone, even though most of the features taken into consideration belong to the common Hamito-Semitic heritage. The existence of ancient legends ascribing the origins of the indigenous peoples of North Africa to the Canaanites (a claim reported since Augustine’s time) or to Yemenite populations (reported by Arabic authors including Ibn Khaldun) may be partially responsible. The focus on Semitic alone has also been a consequence of evolving definitions of the Hamito-Semitic macro-family, an entity which has been more difficult to define than Semitic. One of the last studies with this perspective, a disputed article by O. Röbber (1952), is rather an argument against the concept of ‘Hamitic’ as a homogeneous branch of Hamito-Semitic than a real attempt to integrate Berber into the Semitic family.

1.1. Berber and Semitic: General Overview

The most systematic contribution to the question of the degree of closeness between Berber and Semitic is an article by L. Galand (1973). Taking a list of 26 features considered by D. Cohen as typical for Semitic languages, Galand compared these with Berber. The result was 10 features shared by modern Berber, 10 possibly shared by ancient stages of the language and 6 features not shared.

As is often the case within Hamito-Semitic, the greatest differences lie in the verbal morphology. Semitic displays an opposition between suffixal and prefixal conjugations (features #16; #20 [?] and #21 [?] are connected), while all Berber tenses (usually) display the same series of affixes, which may be prefixed or suffixed, and sometimes

both. Setting to one side a questionable feature (#22: the existence of a double series of pronouns), the last points of difference (features #23 and #24) are concerned with the aspect of some independent pronouns, in which Semitic probably innovated beyond Hamito-Semitic.

The altogether small differences resulting from this structural analysis do not include the matter of lexicon, which, on the contrary, sharply distinguishes Berber and Semitic. The Semitic languages share a wide, easily recognizable common lexicon and the differences are usually explained in terms of regular phonetic ‘laws’. In contrast, the Berber lexicon – also very compact – is much more difficult to compare, as phonetic correspondences are not easily established.

Although details are disputed, it is commonly accepted that structural isoglosses and lexicostatistics show a higher degree of convergence between Semitic and Libyco-Berber than with any other branch of the Hamito-Semitic family. The relationship is depicted by Lipiński’s Proto-Afro-Asiatic tree in which Libyco-Berber represents the last branch split from Semitic (2001, 42), with a period of independent development of both branches of approximately 5500 years (2001, 48).

2. Phonetics

The common Afro-Asiatic heritage is reflected in similar phonological systems, although some differences have developed in the separate evolution of both branches. Despite the similarity of both sound systems, phonetic comparison between Berber and Semitic is complicated by difficulties in establishing regular phonetic correspondences in cognate lexemes. For example, the reconstruction of the numerals Berber *sin* ‘2’ and *tam* ‘3’, and Semitic *ṭin-ānī* and *ṭamānī*, show two different sounds, *s* and *t*, corresponding to Proto-Semitic **ṭ*.

2.1. Consonants

The most noticeable feature shared by Berber and Semitic is the existence of a set of ‘emphatic’ consonants along with the non-emphatic voiced and voiceless series. In modern Berber, emphatics are uvularized and often divided into a voiced and a voiceless set, although this appears to be an innovation due to contact with Arabic. Like Proto-Semitic, the original Berber system had but one series of emphatics (now represented by *d/ṭṭ*, *z/zz*, *γ/qq* with voiceless geminated stops), which supports a hypothesis that the articulation could also be different (Dolgopolski 1999a, 30; 2005).

Most back consonants such as pharyngeals and laryngeals are lacking in Berber, a striking point of difference with Semitic, in which these are typical sounds. However, the internal reconstruction based on the analysis of some verbal paradigms suggests an ancient stage of the language in which ‘weak’ sounds were dropped, triggering phonetic modifications. Prasse (1972, 105ff.; 1973, 96ff.) marks these sounds as **h*, while Vycichl (2005, 68–71) speaks of unknown ‘laryngeals’ and marks them with **X*. Recent studies on Zenaga, a peripheral Berber dialect (Mauritania), revealed the

preservation of two laryngeals, voiceless ʔ and voiced h (Taine-Cheikh 1999 and 2004; Kossmann 2001a).

The spirantisation of non-emphatic plosives in several Northern Berber dialects is an interesting phenomenon. The situation in Djerba (Tunisia) is similar to that of the NW Semitic *begadkephat* (Vycichl 1975), but the time and the circumstances of this shift are still uncertain.

2.2. Vowels

The original vocalic systems of Berber and Semitic seem almost identical. Prasse (1972, 77ff.) reconstructs a proto-Berber system with 2 quantities and 3 qualities (a , i , u - $\bar{a}$, $\bar{i}$, $\bar{u}$), just as in Semitic. According to this reconstruction, the lack of vowel quantity in most Berber languages derives from the preservation of former long vowels as ‘full vowels’ and the reduction of short vowels to ǣ ($< a$) and ɛ ($< i, u$) in Tuareg, and simply $\text{ə}/\emptyset$ ($< a, i, u$), the so-called ‘zero vowel’, elsewhere. A parallel phenomenon to this vowel reduction is observed in the North African Arabic dialects (D. Cohen 1970; Durand 1996). Significantly, Zenaga did not undergo the same process and preserved short a , i and u (Kossmann 2001b, 92), thus confirming the validity of this reconstruction. Some Berber dialects, namely Kabyle (Algeria) and Siwi (Egypt), show a strong tendency towards a spontaneous nasalisation of final vowels (Vycichl 2005, 186), recalling the archaic stages of Semitic preceding the grammaticalization of nunation and mimation.

3. Grammar

The most obvious correspondences between Semitic and Berber are the wide use of apophony, and the existence of two genders.

3.1. Apophony

The morphological systems of both Semitic and Berber are based on a combination of roots and schemes. Vowels are mostly used as morphological elements, while consonants bear the lexical meaning of roots, with a small set of consonants (usually nasals, semivowels plus s and t) sharing both functions. It is therefore noteworthy that Berber widely uses apophony in nouns (‘broken plurals’), and not only in verbs, which is consistent with South Semitic, while apophonic plurals are hardly found in the rest of Semitic (Lipiński 2001, 251–251).

3.2. Gender

The division of nouns into two classes governing agreement with verbs, pronouns and adjectives is a typical Afro-Asiatic feature. The feminine is usually marked by t in

contrast with $\emptyset$ marking of the masculine. A feature affecting almost all Berber nouns is the double marking of gender at the beginning and at the end of the word as a consequence of the incorporation of an ancient gendered ‘article’ (*ta-mğar-t* ‘an old woman’ vs. *a-mğar* ‘an old man’).

3.3. Verb

Unlike Semitic, the Berber verbal system does not display an opposition between suffixal and prefixal conjugations and instead all tenses have the same set of personal markers (prefixes, suffixes, and circumfixes). Although there have been many attempts to reconstruct ancient stages similar to that of Proto-Semitic, also taking into account a peculiar class of ‘quality verbs’ in Berber (midway between verbs and adjectives) which display a rudimentary suffixal conjugation similar to the Akkadian permansive, the results of such investigations are far from definitive (see, among others, Prasse 1973; Taine-Cheikh 2003; Vycichl 1952a and 2005, 106–120).

Despite the remarkable difference in the conjugations, the threefold scheme of Berber tenses and its similarities to that of Akkadian and Ethiopian, has attracted the interest of many scholars. In fact, the Berber verb displays three basic forms: two are marked as perfective vs. imperfective, and a third is unmarked as far as aspect is concerned (the ‘aorist’). The themes of perfective and aorist are usually different. The imperfective clearly derives from the aorist (usually by consonantal reduplication or by a *t(t)*- prefix) and is also called ‘intensive aorist’ (or ‘habitud’). Accordingly, it is commonly accepted that an archaic opposition between perfective and aorist (which perhaps once had an imperfective meaning) was replaced by another when a new tense, formerly a derived stem, replaced the aorist, which consequently went on to be used in other secondary uses.

3.4. Ergativity

Some recent claims (among others, in Lipiński 2001, 35, 261), that the nominal prefixes affecting two ‘states’ of Berber nouns are relics of an ergative phase, are unfounded, as this phenomenon arose within Berber itself at a period when a sort of ‘article’ was integrated into the noun (Brugnatelli 1997, 2006; Galand 2010, 130ff.). An interesting feature which may be considered with reference to this subject is the Berber category of ‘reversible verbs’ having an intransitive (‘passive’) or transitive (‘active’) meaning in accordance to the number of arguments. For example, the verbal form *yebna* means ‘was built’ if it occurs with only one argument, as in *yebna wexxam* ‘was built – the house’, while the same verbal form means ‘has built’ when it occurs with two arguments, as in *yebna wergaz axxam* ‘has built – the man – the house’ (cf., among others, Aikhenvald 1995; Satzinger 2005 and Galand 2010, 294).

4. Some peculiar isoglosses

There is neither sufficient space nor reason to examine here all comparable features of Berber and Semitic. The following list of isoglosses, far from comprehensive, is

intended to draw attention to some interesting features deriving either from areal phenomena which developed after the common Afro-Asiatic phase, or which show parallel developments of tendencies common to the Afro-Asiatic family.

4.1. Shift $*p > f$

A noticeable phonological feature is the lack of a voiceless bilabial stop $*[p]$, replaced by a labio-dental fricative $[f]$. Within Semitic, this phenomenon is an isogloss typical of Southern Semitic (Arabic, modern and ancient South Arabian, Ethiopian). However it should be noted that, unlike the South Semitic shift, already complete before the first contacts with Romans and Greeks (Lipiński 2001, 115), the period in which the shift $*p > f$ occurred in Berber is still in dispute. The shift may have taken place in historical times, as transcriptions in Latin and Greek of Berber words and names often contain $\langle p \rangle$; however the modern reflexes of Latin loanwords containing p are inconsistent. For example, two borrowings tracing back to Christian times show different reflexes of p : *peccatum* $>$ (a)*bekkaḍu* ‘sin’ but *pascha* $>$ (ta)*faska* ‘religious feast’.

4.2. Loss of morphological t

Like many other Afro-Asiatic languages, Berber and Semitic share a tendency to phonetically reduce this plosive sound in morphology (Brugnatelli 1994).

This general phenomenon is widespread in both nouns and pronouns. Moreover, it is worth noting that striking correspondences exist between Berber and modern South Arabian concerning the loss of t - prefixes in ‘hollow’ verbs and in some derived forms, even if these phenomena should be regarded as a common tendency rather than as an inheritance from a common stage (Johnstone 1968 and 1975, 19; Brugnatelli 1994, 6–7; Voigt 2006).

4.3. Dissimilation of m - initial

All Berber languages show a dissimilation of m - $>$ n - as a prefix of roots containing a labial sound (*naḥṛan* ‘to be chosen’; *ānālkam* ‘he who follows’: Prasse 1972, 55). Rößler (1952, 128) has noted the peculiarity of this phenomenon, which appears to be ancient and is also shared by Akkadian and, sporadically, Aramaic (Lipiński 2001, 118). The feature appears to be long-lived, and may also be observed in recent loanwords as *aneslem* ‘muslim’ $<$ Arabic *muslim*.

4.4. Adjectives

Although Berber appears to be devoid of a true class of adjectives (‘quality verbs’ are used instead), it is worth noting that some procedures of deriving ‘denotative’ elements through affixes are also shared with Semitic (*nisba* and suffix *-ān*) (Vycichl 1952b; Pennacchietti 1974).

4.5. Causatives

In both Berber and Semitic derived verbal forms are created through affixation, in particular causatives in *s*- (Lipiński 2001, 395). Significantly, the Berber causative shows the reflexes of an ancient *i*-vocalism, which coincides with the ancient NW Semitic vocalism: Amarna *hiḫil*, Phoenician/Punic *yifil*/*ifil*, Hebrew *hiḫil* (possibly also Aramaic: Brugnatelli 1985).

4.6. Syntax of kinship terms

Berber kinship terms usually contain, even implicitly, a personal possessive (*yemma* without affixes means ‘my mother’ not simply ‘mother’), which seems superfluous when the kinship term refers to a noun (*yemma-s n Muḥend* ‘M.’s mother’, lit. ‘his-mother, of M.’). Similar phenomena have been detected in Ebla (J. Krecher 1984, 145–6) and in Khamtanga, a Cushitic language (Appleyard 1987, 261). It is not clear whether this is a relic of an archaic common feature or just a parallel development, as the phenomenon is also shared by many languages of different linguistic families (Brugnatelli 1991).

4.7. Two sets of pronouns affixed to verbs

In Berber, there are two sets of pronouns affixed to verbs: a ‘direct’ series, showing a typical consonant *t* in the third person, and an ‘indirect’ series, marked by the consonant *s*: *eml-as-t* ‘show (*eml*) it (*t*) to him (*as*)’. This closely resembles the distribution of demonstratives in Akkadian, where two sets exist: the ‘direct’ series ending in *-āti* and the ‘indirect’ series ending in *-āši*. (Brugnatelli 1994, 8; Dolgopolsky 1999b gathers some data on *-t* accusative in Semitic and Cushitic but omits the obvious parallel with Berber). The order of the affixes is also the same, with the indirect object preceding the direct object. For example, Akkadian **aṭrud.am-kum-šu* ‘I-sent to-you it’ and Berber (Tuareg) *nəg-assən-tu* ‘we-did to-them it’.

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4. Semitic-Chadic Relations

1. Introduction
2. Phonology
3. Personal pronouns
4. Morphology
5. Syntax
6. Lexicon
7. References

Abstract

This section examines Semitic and Chadic languages in terms of phonological typology, with particular attention to consonantal and vowel systems, the root-and-pattern structure of nominal and verbal lexemes, derivational and inflectional morphology of nouns and verbs, and expressions of negation.

1. Introduction

Chadic and Semitic are universally accepted as two families within the Afro-Asiatic macro-family. Accordingly, Chadic languages are expected to share a number of phonological and grammatical similarities with Semitic languages that reflect structural patterns inherited from Proto-Afro-Asiatic. Striking similarities in the shapes of personal pronouns have long been noted, as have lexical correspondences. Less widely known are the striking similarities in terms of phonological typology which pertain to the triadic organization of obstruent articulation, as well as regarding the conspicuous role of vowels in the shared root and pattern system. In addition, nominal morphology shows some common markers of plural formation and noun derivation and similar structural patterns in the domain of gender. Verb morphology shows striking similarities again between “pluractional” verb stem formation in Chadic and Semitic verb stem formations of the *qattala* and *qātala* type, and between Chadic inflectional “plural verb stems” and subject

pronoun marking devices in Semitic (2nd and 3rd person plural). Furthermore, negative markers appear to provide another domain of shared inherited patterns.

From the vantage point of recent insights into “Common Chadic” and conspicuous parallels in Semitic, this study examines features long assumed to be diagnostic for Semitic which have influenced assumptions on Afro-Asiatic as a whole.

2. Phonology

2.1. Consonant inventories

Although Chadic systems are not uniform in consonantal inventory, they share with Semitic “triadic” sets of *voiced-voiceless-glottalized* obstruents. Newman (1977a) reconstructs such sets for PC labials, alveolars and palatals. *p/f* and often *b/v* may not regularly contrast in Chadic, a feature reminiscent of (Proto-)Semitic and later developments in Ethiopian Semitic. There is no interdental series of consonants in Chadic (unlike that reconstructed for PS). Table 4.1. lists reconstructed PS consonants (Moscati et al. 1964, 24 – slightly modified) alongside Akkadian (Buccellati 1997, 70) and PC (Newman 1977a, 9) plus West Chadic Standard Hausa (Newman 2000, 392) and Central Chadic Lamang (Wolff 1983, 25).

2.2. Vowel systems

Generally speaking, a much larger number of *synchronic* vowel phonemes reflect a much smaller number of *abstract underlying* and/or *historically reconstructable* vowels to the extent that, as is the case with certain Central Chadic languages, only a single vowel **/a/* can be safely reconstructed internally. In languages of this type, all other (ten or more) surface vowels reflect – historically – either *[i]* or *[u]* syllabifications of the approximants */y/* and */w/*, or assimilatory raising of */a/* to *[e]* or *[o]* in [+high] phonological environments. Other synchronic vowels would simply reflect positional “colourings” of pro- and epenthetic vowels (in particular short high and central vowels). The combination of pro-/epenthetic vowel plus approximant may yield phonetically long vowels, despite the absence of phonological vowel length.

Some Central Chadic languages, in particular, have developed labialization and palatalization prosodies stemming from umlaut/distant assimilation effects that would apply to both vowels and consonants across the whole phonological word. The likely historical origin of such prosodies are historically reconstructable markers which carried the feature [+high] (quite likely from a defunct petrified determiner system, such as **-y/*-i*, **-k^wV* etc., cf. Wolff 2006), e. g. Lamang root **y^w-dz-f* ‘bone’ plus petrified determiner **-y* undergoes the following phonological processes:

epenthetic vowel insertion:	<i>*y^w[ə].dz[ə].f + *-y</i>
prosody creation:	<i>*y^wə.dzə.f⁺y</i>
/+y/ prosody anticipation:	<i>*y^wə⁺ydzə.⁺yf</i>
phonetic realizations:	<i>[yùdʒifi ~ yùjifi]</i>

The palatalization $C_2 /dz/ > [dʒ \sim j]$ is triggered by the petrified determiner suffix $*-y$ and becomes anticipated onto the penultimate syllable where epenthetic $[ə]$ is realized as $[i]$, the underlying approximant of the determiner suffix $*-y$ itself is syllabified to $[i]$ in final syllable nucleus position.

Tab. 4.1: Selected consonant inventories

place of articulation		PS	Akkadian	PC	Standard Hausa	Lamang
<i>bilabial</i>	vl	<i>p</i>	<i>p</i>	<i>p</i>	<i>*p/f</i>	<i>p</i> <i>f</i>
	vd	<i>b</i>	<i>b</i>	<i>b</i>	<i>b</i>	<i>b</i> <i>v</i>
	glott			<i>β</i>	<i>β</i>	<i>β</i>
	prenas					<i>mb</i>
		<i>m</i>	<i>m</i>	<i>m</i>	<i>m</i>	<i>m</i>
<i>inter-dental</i>	vl	<i>ɬ</i>				
	vd	<i>ɖ</i>				
	glott	<i>ɬ'</i>				
<i>dental/alveolar</i>	vl	<i>t s</i>	<i>t s</i>	<i>t s</i>	<i>t s</i>	<i>t s</i>
	vd	<i>d z</i>	<i>d z</i>	<i>d z</i>	<i>d z</i>	<i>d z</i>
	glott	<i>t' s'</i>	<i>t' s'</i>	<i>d' ʒ</i>	<i>d' ts</i>	<i>d'</i>
	prenas					<i>nd nz</i>
		<i>l r</i> <i>n</i>	<i>l r</i> <i>n</i>	<i>l/ɬ r</i> <i>n</i>	<i>l r ɞ̃</i> <i>n</i>	<i>l r</i> <i>n</i>
<i>palato-alveolar/palatal</i>	vl	<i>ʃ ʃ̣</i>	<i>ʃ</i>	<i>c (sh)</i>	<i>c sh</i>	<i>ts/c ɬ</i>
	vd			<i>j</i>	<i>j</i>	<i>dz/j ɓ</i>
	glott			<i>*J</i>	<i>'y (<*d̥iy)</i>	
	prenas					<i>ndz/nj</i>
		<i>y</i>	<i>y</i>	<i>y</i>	<i>y</i>	<i>y</i>
<i>velar</i>	vl	<i>k ɸ</i>	<i>k ɸ</i>	<i>k kʸ kʷ x xʸ xʷ</i>	<i>k kʸ kʷ</i>	<i>k kʷ x xʷ</i>
	vd	<i>g ɡ̣</i>	<i>g</i>	<i>g gʸ gʷ</i>	<i>g gʸ gʷ</i>	<i>g gʷ ɣ ɣʷ</i>
	glott	<i>q</i>	<i>q</i>	<i>ƙ ƙʸ ƙʷ</i>	<i>ƙ ƙʸ ƙʷ</i>	
	prenas					
		<i>w</i>	<i>w</i>	<i>w</i>	<i>w</i>	<i>ŋg ɳgʷ</i> <i>ŋ ɳʷ</i> <i>w</i>
<i>pharyngeal</i>		<i>ʕ ħ</i>				
<i>laryngeal</i>		<i>ʔ h</i>	<i>ʔ</i>		<i>ʔ h</i>	<i>ʔ</i>

3. Personal pronouns

Out of the different sets of pronouns (independent, possessive, object, subject etc.), many forms attested for Semitic or other Afro-Asiatic languages have counterparts in Chadic. A striking selection by form (not necessarily corresponding in synchronic function) is given in Table 4.2. based on the following sources: Diakonoff 1988 (as quoted in Hayward 2000, 88) for PS, Moscati et al. 1964, 106 for Akkadian, Newman 1980, 15 for “Old Hausa” (with slight modifications of presentation), Wolff 1983 and author’s ongoing research for Lamang, Alio 1986 for Bidiya.

Tab. 4.2: Comparative list of personal pronouns

	Proto-Semitic	Akkadian	West Chadic: “Old Hausa”	Central Chadic: Lamang	East Chadic: Bidiya
1. sg.	*-ii, *-ya’ *-n(i)	-i, -ya -ni	*ni	-i, /-yu/	no
2. sg. m.	*-ka	-ka	*ka		ki, -kiŋ
f.	*-ki	-ki	*ki, *kim	-ka	ka, -kaŋ
3. sg. m.	*-šu	-š(u)	*ši	Ø,	ŋa, -yi
f.	*-ši	-š(a)	*ta	/-dī ~ -tsi/	na, -ti
1. pl. (ex.) (in.)	*-na ~ *nu ~ ni	-ni	*na *mu, *mun	-ni(y), -yiŋ -mwa	ni -yaŋ -niŋ
2. pl. m.	*-kumu	-kunu	*ku, *kun	-keni	ku...oŋ, -kuŋ
f.	*-kina	-kina			
3. pl. m.	*-šumu	-šunu	*su, *sun	-xaŋ, -taŋ	ŋu, -yo
f.	*-šina	-šina			

Note that many Chadic languages have replaced whatever pronoun shapes were inherited from PC (or PAA) for 3rd person, by innovative synchronic pronouns which reflect, most of all, previous determiners such as *n(V), *t(V), *d(V), *y(V), or nominal plural markers. In particular, feminine *ta has widely been reassigned as a pronoun of 3rd person sg. f. (or has been generalized to 3rd person c.g. marking in the sg. and/or pl.).

4. Morphology

4.1. Root and pattern

Biradical rather than triradical roots appear to represent the canonical forms in Chadic. Note, however as is often proposed for Semitic (for instance in Moscati et al. 1964, 25ff. and more recently Ehret 1995), in some languages final consonants of verb roots (“determinants” in Semitic linguistic terminology) appear to semantically modify the root. Examples are provided by Central Chadic Ouldeme (de Colombel 1987) and West Chadic Hausa (Jungraithmayr 1970; Newman 2000). Plural noun formation may be based entirely on a systematic change of vocalization pattern from singular to plural noun stem, and such “internal” plurals occur widely across Chadic. They characteristically involve the occurrence of /a/. With verbs, so-called “internal a” reflects a basic distinction between “zero-vocalization” and “a-vocalization” (the latter being the instantiation of “a-infixation”), to morphologically mark “pluractional” formations which, in many languages, become reassigned as imperfective/habitative stems within the TAM system.

As in Semitic, formative gemination of consonants occurs synchronically in Chadic both in nominal and verbal morphology. Surface “gemination”, however, usually reflects diachronic consonantal reduplication with subsequent syncope as, for instance, in Hausa *zóobèè* ‘ring’, pl *zôbbáa* < *zóobàbáa.

Some West and East Chadic languages have developed binary systems of verb stem formation in which “internal /a/” ablaut and consonant reduplication look deceptively identical to Semitic forms in terms of surface appearance, as Hayward 2000, 91 points out once again:

	<i>preterite</i>	<i>imperfect</i>	
Akkadian	<i>ikbit</i>	<i>ikabbīt</i>	‘become heavy’
	<i>perfect</i>	<i>imperfect</i>	
Migama	<i>ʔāpīlé</i>	<i>ʔāpállá</i>	‘wash’
Mubi	<i>ʔēwīt</i>	<i>ʔūwát</i>	‘bite’
Ron (Daffo)	<i>mot</i>	<i>mwaát</i>	‘die’

This surface similarity must, however, be viewed with a strong *caveat*, as Hayward 2000, 91 points out: “Schuh (1976) carries the argument further in identifying fossils of the ablaut in one set of verbal nominalizations found in both West and East Chadic branches. Wolff (1977), however, shifts the emphasis away from considering these forms as primarily concerned with tense/aspect and relates them at a wider level to plural categories of events and actions marked in the verb – which could, of course, actually be closer to their original AA role.”

4.2. Nominal morphology

From a Semitic/Afro-Asiatic vantage point, it may be interesting to note that Chadic nouns do not, as a rule, mark “case” in their morphology, nor do distinctions of “state” play any role. There is also no reason to assume that PC had a category of dual in addition to plural and singular in the nominal system.

4.2.1. Grammatical gender

Grammatical gender was a feature of PC with marked feminine opposed to unmarked masculine in the singular, and a common gender plural. There is no known Chadic language that differentiates gender in the plural. The dominant pattern of gender marking is the A/B/A pattern (Newman 1990), such as found in Hausa *n/t/n* with /t/ marking sg. f., and /n/ being used both for sg. m. and pl. c.g. However, the category of gender is no longer operational in the pronominal and nominal systems of about half of the modern Chadic languages. Some languages which have given up gender distinction may nevertheless show lexicalized/petrified traces in nominal morphology and pronominal forms. Note that the feminine marker **t(V)* with “triple function ‘female / diminutive / singulative’” also in Chadic and stemming from the original deictic system (Newman 1980, 13) has widely taken over personal pronoun functions as 3rd sg. f. (but is also found in innovative 3rd pl. c.g. forms), cf. Table 4.2.

Interestingly, Newman 1980, 17–20 is able to show “gender stability” in Chadic/Afro-Asiatic, i.e. certain non-sex related nouns attribute gender on the basis of mean-

ing alone, irrespective of phonological shape and etymological relationship. These meanings are *blood* m., *crocodile* m., *egg* f. (?), *eye* f., *fire* f., *fly* (n.) m., *louse* f., *moon* m., *monkey* m., *name* m., *nose* m., *root* m., *sun* f., *water* m./pl.

4.2.2. Noun plurals

Newman 1990 reconstructs four plural formatives for PC, two of which are of particular interest for Afro-Asiatic comparison, namely **-n-* and **-ay/*-ai*. Hayward 2000, 92 (following Zaborski 1976 and despite considerable doubts expressed by Newman 1990, 36, 50) suggests adding **-w* to the list of noun plural markers that may be retentions from PAA. Wolff 2009 has identified **-n(a)* as the only PC “external” plural suffix, in addition to PC “internal” plurals based on vocalization patterns (general **a-a-a*, **a-a-i*, marginal **a-i-a*, *a-i-i*). The incorporation of “frozen determiners” (**-n-*, **-k-*, **-d-*, **-y ~ *-w*) enlarges the surface variation of available noun plural forms.

4.2.3. Noun derivation

Like many other Chadic languages, Hausa allows a prefix *ma-* (with different noun endings and tone melodies) to productively form nouns of agent/location/instrument. Abstract and other nouns with fairly transparent semantics are formed by various suffixes and tone melodies from nouns and verbs.

4.3. Verbal morphology

Verb stems may show agreement of number with the subject (referred to as “plural [agreement] stems”). In some languages, verb stems may have overt inflectional forms relating to triads or binary distinctions within the TAM system. Certain verbs have particular imperative forms.

4.3.1. Vocalization patterns and pluractional forms

One can distinguish between *a*-vocalization and non-*a*-vocalization (zero- or schwa-vocalization). Zero-/schwa-vocalized bases are open to insert **-a-* (or to replace schwa with **-a-*) to form internally derived bases which serve as “pluractionals”. Verb bases may, however, be *a*-vocalized from the start without carrying any pluractional semantics. Surface high vowels occurring in the base can often be identified as syllabic manifestations of underlying /y/ and /w/ as part of the root (to be compared to “weak radicals” in Semitic), although as a rule they cannot be replaced but rather give way to infixation of pluractional **-a-*. In this process the weak radicals become palatal or labial glides or corresponding prosodies. Chadic languages also use reduplicative processes for pluractional expressions.

4.3.2. Plural stem formation

In addition to and quite different from pluractional forms, Chadic verbs allow external derivation of inflectional plural stems which mark grammatically conditioned number agreement with the subject. Out of several attested synchronic markers, Newman 1990 reconstructs **(a)n* for Proto-Chadic. Interestingly, this agreement suffix in Chadic finds itself in very much the same position as the suffixed elements of disjunctive personal pronouns in prefix conjugation type verb inflection elsewhere in Chadic (and Semitic, for that matter). The following illustrations are taken mainly from Newman 1990. They show striking similarities in the 2nd and 3rd person plural across Afro-Asiatic which, however, relate to plural agreement verb stem formation in Chadic.

Tab. 4.3: “Ambifixal” pattern of 2nd and 3rd personal pronoun marking in Chadic and across Afro-Asiatic

	2 nd sg.		2 nd pl.		3 rd sg.		3 rd pl.
West Chadic:	<i>kà ðee-wò</i>		<i>kù ðe-n-kò</i>		<i>shì mak-ki Garbà</i>		<i>sù mat-in-ki Garbà</i>
Kirfi	you (m.) got (it)		you (pl) got (it)		he shot Garba		they shot Garba
Central Chadic:	<i>kə kəd'</i>	c.g.	<i>kə kəd'-am</i>	c.g.	<i>'a kəd'</i>	c.g.	<i>'a kəd'-am</i>
Gisiga ‘kill’							
East Chadic:	<i>ki 'ás</i>	c.g.	<i>ku 'ás-ŋo</i>	c.g.			
Bidiya ‘come’							
(2 nd person only)							
Semitic:	<i>tə-</i>	m.	<i>tə-...(-am)</i>	m.	<i>yə-</i>	m.	<i>yə-...(-am)</i>
South Arabian	<i>tə-... V/i</i>	f.	<i>tə-... -an</i>	f.	<i>tə-</i>	f.	<i>tə-... -an</i>
Cushitic:	<i>ti-gis</i>	c.g.	<i>ti-gas-en</i>	c.g.	<i>y-igis</i>	m.	<i>yi-gas-en</i>
Rendille ‘kill’					<i>ti-gis</i>	f.	
Berber:	<i>θ-...-əð</i>	m.	<i>θ-...-im</i>	m.	<i>i-</i>	m.	<i>Ø-...-in</i>
Tamazight	<i>θ-...-əð</i>	f.	<i>θ-...-im-θ</i>	f.	<i>θ-</i>	f.	<i>Ø-...-in-θ</i>

4.3.3. Thematic derivation (extended verb stems)

Thematic derivation of verb stems in Chadic is usually achieved by suffixation. Modern languages may show large inventories of “extension suffixes”, many of which appear to be fairly recent grammaticalizations of prepositions, body part expressions, etc. and convey both locative-directional (ventive, allative, illative, efferential, etc.) as well as grammatical meanings with regard to argument structure (applicative, causative, benefactive, etc.).

Reconstructable for PC is a suffix **-tV* which carries iterative/frequentative semantics (Newman 1990), and **-an* for benefactive/pre-indirect object forms at least for West Chadic (Newman 1977b). There is little if any evidence that Chadic thematic extensions relate to any of the widely spread Semitic prefixal derivations other than by semantic coincidence (such as, for instance, causative, passive-like and reflexive/reciprocal functions), unless PC **-tV* should turn out to be somehow related to the rare *tan-* prefix of similar iterative semantics in Akkadian. If this were the case, then this would be an interesting instance of a suffix in Chadic corresponding to a cognate

prefix in Semitic. This, again, would then be parallel to the issue of “causative” marking containing /s/ in Chadic (cf. suffix *-(a)s* in West Chadic Hausa and Ngizim) which, however, may not represent a retention from (pre-)PC due to doubtful semantics, highly restricted occurrence, and still unclear internal history.

Correspondences to the proto-typical Semitic stem formations based on doubled second radical (*qattala*) and lengthened first vowel (*qātala*) must be sought in Chadic in the internal formative processes affecting the verb base (*pluractionals*), i.e., consonant reduplication and infix *-a-*.

4.3.4. The tense/aspect/mood system

Chadic prefix and suffix conjugational patterns appear to have little or nothing to do with counterparts in Semitic, but are largely predictable from word order typology. As a rule, SVO order entails pre-posed pronouns, and VSO order entails post-posed pronouns. These pronouns tend to reflect originally non-subject (“primary”) pronouns, hence their particular patterning with Semitic pronouns as illustrated in Table 4.2.

Two historical theories compete to explain Chadic inflectional verb stem morphology.

The first theory is strongly influenced by theories virulent in Semitic philology and was developed by H. Jungraithmayr in the mid 1960s. This theory assumes a basic binary aspect distinction between “perfective” and “imperfective”, in which the imperfective stem is marked in terms of ablaut (cf. the inconclusive “internal *a*” discussion) or additional phonological material (such as consonant gemination and affixation).

A competing theory was developed by H. E. Wolff since the mid 1970s. According to this theory PC had a binary aspect-dominated set of verb stems in the indicative mood (unmarked **aorist/*aspect-neutral* vs. marked **perfective(?)*). Morphologically marked verb stems outside this basic inflectional system were, among others, pluractionals and verbal nouns. Many Chadic languages have reassigned either their pluractionals or their verbal nouns to the TAM system to create a marked imperfective category (with iterative/habitual/durative/progressive, etc. readings). The resulting tri-chotomic structure of **aorist/*aspect-neutral* vs. **perfective* vs. (*new*) *imperfective* has then often been reduced again to secondary binary structures, as Table 4.4 shows.

The question of whether there were one or two original prefix conjugations in Semitic reminds Chadicists of the reassignment of pluractionals to the aspect system as innovative imperfective stems (most likely with mainly iterative/habitual readings). The latter would be responsible for the repeatedly quoted striking similarities between verb stem pairs such as Semitic/Akkadian *-prus* (preterite) ↔ *-parras* (present) and (East) Chadic/Mubi *lèlè’j-* (simple) ↔ *làllà’j-* (pluractional) ‘to taste’, the more so in the light of the observation that many such pluractionals end up in the aspect system of a given Chadic language indicating iterative, habitual, durative, or continuous action.

5. Syntax

As research into comparative Chadic syntax is very much in its infancy, no generalizations will be attempted here with the exception of a few remarks on word order and negation.

Tab. 4.4: Diachronic development of the PC aspect system in the indicative mood

Proto-Chadic category			
	<i>unmarked</i> *aorist/*aspect-neutral	<i>marked</i> *perfective(?)	<i>marked</i> *verbal noun (VN) or *pluractional
Scenario A. <u>Retention</u> of the inherited unmarked/marked binary system (often re-analyzed as <i>imperfective/perfective</i>)	so-called <i>imperfective</i>	<i>perfective</i>	(unassigned to aspect system)
Scenario B. System simplification: <u>Reduction</u> to inflectional neutrality of verb stem			
B.1 loss of *aorist/*aspect-neutral	---	<i>aspect-neutral verb stem</i>	(unassigned to aspect system)
B.2 loss of marked PRF stem	<i>aspect-neutral verb stem</i>	---	(unassigned to aspect system)
Scenario C. <u>Expansion</u> of dichotomic to trichotomic system by <u>reassignment</u> of VN or pluractional			
C-1. innovative aspectual trichotomy	* <i>aspect-neutral</i> /*aorist	<i>perfective</i>	<i>imperfective</i>
with secondary reduction to binary system, generalized reading of <u>any</u> binary opposition as <i>imperfective/perfective</i>			
C-2. loss of PC *perfective(?)	so-called <i>perfective</i>	---	<i>imperfective</i>
C-3. loss of PC *aorist/*aspect-neutral	---	<i>perfective</i>	<i>imperfective</i>
C-4. loss of reassigned VN or pluractional (result = scenario A)	so-called <i>imperfective</i>	<i>perfective</i>	---

The predominant word order in Chadic is SVO, with a geographically neatly defined area encompassing a number of Central Chadic languages displaying VSO order (this language area corresponds largely to the one in which the inherited gender distinction has been lost and likewise inherited rich inventories of noun plural formations have also been abolished). Whether this VSO order represents a retention from PC or manifests yet another highly areal innovation is still under debate, with the theory advanced by Williams 1989 taking a kind of intermediary position in assuming VS order for intransitive and SVO order for transitive constructions in PC.

5.1. Negation

Faber 1997, 9 mentions an inherited Afro-Asiatic negative marker **b* with some relationship to more complex Semitic negative markers (which probably reflect combinations of **b* with another morpheme of the shape **la*) such as Hebrew *bli* 'without', Ugaritic/Phoenician *bl* 'not', and Arabic *bal* 'on the contrary'. Chadic has a widespread negative marker

**ba* which, however, does not appear to be the general PC negative marker because this can be reconstructed as **wa* (Newman 1977a, 30). **ba* tends to occur in disjunctive negation patterns of the type *bà(a) ... bá* (as, for instance, in Hausa), and ... *ba ... wo* (as, for instance, in Lamang predication focus negation). Note that typological parallel patterns are found in Modern South Arabian *al ... la'ʾɔl ... lɔʾ*. What etymological relationship, if any, exists between these and forms found in, for instance, Bedouin Arabic like *muu-b* (Kaye/Rosenhouse 1997, 302), remains an open question (the more so if Semitic negative marker **maa* could eventually be established as related to PC **wa*). Note also Harari -*m* (Wagner 1997, 502). Within Chadic, at least, *m* ↔ *w* sound shifts do occur, if only sporadically.

6. Lexicon

Many PAA etymologies that are shared between Chadic and Semitic have been proposed (and many have been subsequently rejected) since the beginning of comparative Afro-Asiatic scholarship. Quite recently, Hayward 2000, 94 has given a short selection as seemingly “unlikely to be disputed”, founding his list on compilations in Ehret 1995 (E) and Orel and Stolbova 1995 (O and S), cf. Table 4.5.

Tab. 4.5: “Undisputed” shared PAA etymologies acc. to Hayward 2000

PAA	gloss	number in E	number in O&S
* <i>ba</i>	not be there, negative	2	
* <i>bak</i>	strike, squeeze		194
*- <i>dar-</i>	enlarge, increase	150	
* <i>dim</i> /* <i>dam</i>	blood	140	639
*- <i>fir-</i>	flower, bear fruit	85	
* <i>gad</i> -/* <i>gud-</i>	be big	265	867
*- <i>geh-</i> , * <i>gay-</i>	speak	274	911
* <i>kamaʔ</i> -/* <i>kamay-</i>	food		1424
* <i>kop-</i>	sole	327	1406
* <i>kab-</i>	shoe, sandal		
* <i>kʼar-</i>	tip, point	424	1549
* <i>kʼar-</i>	horn		
* <i>man</i> -/* <i>min-</i>	house		1723
* <i>nam</i> -/* <i>nim-</i>	man	621	1841
* <i>pir</i>	fly (v.)	51	
* <i>sum</i> -/* <i>sim-</i>	name	220	2304
* <i>sin</i> -/* <i>san-</i>	nose	222	2194
* <i>sʼam-</i>	to sour	535	
*- <i>tuf-</i>	to spit	162	2413
*- <i>zaaʕ-</i>	rend, tear	208	

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5. Semitic-Cushitic/Omotic Relations

1. Introductory remarks
2. Grammatical survey
3. Concluding remarks
4. References

Abstract

The 30+ Cushitic languages, excluding Omotic now generally agreed to constitute a separate branch of Afroasiatic, comprise four distinct branches broadly named after their geographical location across the Horn of Africa as North, Central, East and South. Typical of the more conservative phonological systems is the presence of pharyngeals and laryngeals as well as triads of stops and affricates with voiceless, voiced and glottalised articulation, as well as five-term vowel systems with phonemic length. Most Cushitic languages are pitch-accent languages in which accent plays a morphologically defined role. Throughout inflectional morphology most fundamental structures and associated morphemes can be related to the rest of Afroasiatic, including Semitic. Nouns exhibit gender, number and case; in the latter instance typical is a “marked nominative” contrasting with a multi-function “absolutive” and a possessive or genitive. Postpositions, some-

times developing into further case suffixes, are also typical. The personal pronoun system shows partial division into independent subject and often clitic oblique (object, possessive, etc.) sets. A few conservative languages show two types of verbal inflection, one with person marking essentially by prefixes, the other by suffixes. Remnants of the prefix system are found in a few more languages. The suffix conjugation demonstrably derives from the addition of a prefix-inflecting auxiliary to the verb stem. Also typically Afroasiatic is the system of derived stems in verbs marking valency variations (causative, reflexive, passive, etc.)

1. Introductory remarks

There are between 30 and 50 or so Cushitic languages depending in the first instance on what is differentiated as a language or a variety or dialect of a language, and in the second instance on whether or not the so-called Omotic languages are subsumed under the term Cushitic, which would add around another 30 languages. For a brief discussion on the status of Omotic see 1.2. below. The various Cushitic languages are considerably more differentiated amongst themselves than the members of the Semitic family, and several branches of Cushitic themselves show as much internal complexity as Semitic as a whole. The present-day focus or epicentre of the Cushitic languages is the area of the four countries of the Horn of Africa: Djibouti, Eritrea, Ethiopia and Somalia. Outside this region, one language, Beja, is also spoken in Sudan and southern Egypt, and Somali and Oromo extend into Kenya along with a few smaller languages, chiefly members of the South Cushitic branch, which are found only in Kenya and Tanzania. There is also some linguistic evidence that Cushitic languages were in the past more widespread in East Africa and have now given way both to Bantu and Nilotic languages in the area of today's Kenya and Tanzania.

In terms of numbers of speakers many Cushitic languages are comparatively small, with a few thousands, tens of thousands or occasionally hundreds of thousands of speakers, and in a few instances with only a few hundred or less. Although available figures are not always reliable in respect of exact numbers, the only Cushitic languages with more than a million speakers are 'Afar (c. 1 million), Beja (c. 1.2 million), Oromo (at least 18 million, counting all varieties), Sidaama (c. 2.9 million), and Somali (around 13 million). To these may be added Omotic Wolaitta and the varieties of the Gamo-Gofa-Dawro cluster (c. 1.2 million each). There are no pre-modern records of Cushitic languages, the earliest attestations being in the first instance extracts from the Song of Songs translated at the behest of the Scottish traveller, James Bruce, in the late 18th cent., and later some Agäw prayer texts written in Ethiopic script that probably date from the mid 19th cent. Otherwise, until orthographies were developed for some languages towards the end of the 20th cent., all prior attestations derive from language studies made by foreign scholars from the latter half of the 19th cent. onwards. Some languages remained unknown to scholarship until the second half of the 20th cent.

1.1. Internal classification

Whilst Cushitic is now universally recognised as a branch of the Afroasiatic phylum, there is still some controversy about the details of the internal classification of the

family, and a detailed account of the history and various developments in the internal classification of Cushitic can be found in Tosco (2000) (see also Hayward 2003). Aside from the question of Omotic, with regard to the internal classification of the remaining languages, the fairly conservative picture that is generally presented divides Cushitic into four branches:

- (1) North Cushitic, represented by the single language Beja.
- (2) Central Cushitic [C. Cush], also called Agäw (or Agaw), represented by four closely related languages or dialect clusters, the two largest being Awngi (500,000 speakers) and Bilin (100,000 speakers).
- (3) East Cushitic [E. Cush], by far the largest both in terms of number of languages and of the overall number of speakers of those languages; also the most complex branch insofar as it is further divided into several discrete sub-branches: Lowland East Cushitic [L. E. Cush], with various sub-groups (the largest languages being Oromo and Somali), Highland East Cushitic [H. E. Cush] (the largest languages being Sidaama and Hadiyya), and Yaaku-Dullay, comprising the single, now extinct language Yaaku as one branch, and a cluster of small languages and/or dialects as the other (e.g. Gawwada).
- (4) South Cushitic [S. Cush], represented by a number of small languages of Kenya and Tanzania, of which the largest is Iraaqw (c. 460,000 speakers). This branch, in particular, has been the subject of debate in recent years: one language, Ma'a (also called Mbugu) has been regarded as a mixed language with sizeable non-Afroasiatic (Bantu) input, and another, Dahalo, is now regarded as forming a separate branch of E. Cush.

Various refinements and adjustments to this model have been proposed: in his major survey of various questions of Cushitic morphology, Hetzron (1980) suggested on the one hand that Beja should be reclassified as a separate branch of Afroasiatic and not a member of the Cushitic family, and, on the other hand, that C. Cush. and H. E. Cush. showed sufficient features in common to query whether there might be a closer genetic affiliation between the two to form a "Rift Valley Cushitic" branch. Both of these suggestions have, however, been contested (for Beja see Tosco 2000; and Appleyard 2004; for C. Cush. and H. E. Cush. see again Tosco 2000; and Appleyard 1996) and there is no reason to redraw the generally accepted classification here. Hetzron also proposed that the for him remaining E. Cush. languages and S. Cush. be merged into a single group, as there is insufficient morphological differentiation to warrant two separate groups. Since the 1970s, other scholars have questioned the inclusion of one language, Dahalo, under the S. Cush. umbrella, notwithstanding the picture commonly presented in reference works deriving from the only detailed study of comparative S. Cush. (Ehret 1980), which places Dahalo as a separate branch of S. Cush. A contrary statement was decisively presented by Tosco (2000), arguing for the placing of Dahalo as a separate branch of E. Cush.

1.2. The question of Omotic

The ongoing re-analysis of the internal classification of Cushitic is not the only question regarding the nature of the family, nor the most recent one. For many years since the

first attempts at a classification of Cushitic a further branch called West Cushitic was proposed, comprising a number of languages spoken in South West Ethiopia. There are sufficient substantial differences both in morphology and lexicon that set these languages apart from the rest of Cushitic such that the erstwhile West Cushitic, now renamed Omotic, was proposed as a quite separate family of the Afroasiatic phylum originally by Fleming in 1969 (see Fleming 1976) and backed up in several in-depth studies by Bender (esp. 2000). The majority of linguists working in the area now concur with this classification (see Hayward 1990). There has, however, been some opposition to this view with the proposal to retain some or all of Omotic within the Cushitic family (Zaborski 1986a; Lamberti 1987). It has for instance been suggested that only part of Omotic, the Aroid (also called Ari-Banna, or Southern Omotic) languages, form a separate branch of Afroasiatic, whilst the rest are part of Cushitic. These problems of classification essentially revolve around the questions (a) how much that is similar between Omotic and Cushitic is due to shared archaisms from Afroasiatic, and (b) how much arises from convergence due to an extended period of geographical proximity. There are certainly many similarities at all levels of linguistic analysis that are best explained by contact and convergence. On the other hand, there are considerable and fairly fundamental differences. Originally, much was made of the fact that in the personal pronoun system, in the languages of several branches of the family, the 1sg. and 2sg. forms seemed to show the reverse of what would be expected for Cushitic, or indeed any Afroasiatic language: Wolaitta *ta*, *ne*, resp., hence the label “ta/ne” sometimes applied to these languages. This isogloss has certainly been overstated in the past, and it has been shown (Bender 2000) that the current forms represent a specific internal development. Nonetheless, person marking in Omotic both in the pronouns and in verbal inflexion shows some differences from Cushitic, as do, by and large, gender and case marking in nominals. Further discussion of Omotic is excluded from what follows.

2. Grammatical survey

For the Semitist the Cushitic languages show numerous familiar structural and formal features, especially in the areas of phonology and morphology. Together with the Berber (see ch. 3) languages, Cushitic shows the closest parallels with Semitic most notably in the inflexion of verbs with the distinctive interlocking or “block” pattern (Tucker 1967, 657) marking of person by means of prefixes, such that it is sometimes suggested that Berber, Cushitic and Semitic form a closer grouping within the Afroasiatic phylum. There are also clear similarities in the morphology of the pronominal system and in the inflexion of nouns.

2.1. Phonology

Many Cushitic languages show a number of parallels with other Afroasiatic and specifically Semitic languages in their phonemic and phonological systems. For instance, the presence of pharyngeals (ʕ, ħ) and laryngeals (ʔ, ʰ), and a series of stops

with secondary, typically glottalised articulation, forming triads with plain voiceless and voiced stops (*t, d, t'* and *k, g, k'*) as well as an affricate triad (*c, j, c'*). Consonant and vowel length are also widely phonemic, as in Proto-Semitic, for example. Another feature of Cushitic phonemic systems that is reminiscent of some Semitic varieties, including Ethiopian Semitic, is the widespread absence of a voiceless pair *p* of the labial stop *b* and the concomitant presence of a labial fricative *f*. Not all of these features, however, occur in all Cushitic languages. The pharyngeals, for instance, only occur in 'Afar-Saho, Somali, Dullay, Dahalo and Southern Cushitic. The phonemic systems of Beja and the C. Cush. branch, for instance, show marked differences: Beja has no pharyngeals and no glottalised consonants, but a retroflex pair (*ɬ, ɖ*); similarly, in C. Cush. there are no pharyngeals and generally no glottalised consonants (other than chiefly in loans from Ethiopian Semitic and glottalised *k'* in Bilin which seems to be a comparatively recent realisation of older uvular *q*, still occurring in Awngi as well as apparently in the earliest recorded Bilin material), but reconstructed in the proto-language there is a pair of alveolar affricates (**ts, *dz*) which have differing reflexes in the various languages. It is probable that the Beja retroflex and the C. Cush. affricate pair derive from earlier glottalised alveolars. As well as the retroflex *ɖ*, a voiced implosive *ɗ* is also found in many E. Cush. languages (the symbol *ɗ* or orthographic *dh* is often used in the literature for both), which suggests that both may derive from an earlier glottalised stop.

Other features of the phoneme inventory that are found in separate languages or branches of Cushitic and which are sometimes reconstructed for the proto-system are the presence of labialised velars (*kʷ, gʷ, kʷʷ*), found in C. Cush. and S. Cush. and partially in Beja; a lateral fricative/glottalised affricate pair (*ɬ, ɬ'*) also exists in Iraaqw and is reconstructed for Proto-South-Cushitic; a voiceless velar fricative (*x*) occurs in a wide range of languages, sometimes demonstrably deriving from an earlier stop, but *x* is also sometimes tentatively reconstructed for the proto-system (Sasse 1979, 20–21); some E. Cush. languages have a voiceless glottalised labial (*p'*) of infrequent occurrence, which cannot, however, be reconstructed for the proto-system and is perhaps due to Omotic influence. There have been various proposals for the reconstruction of the Proto-Cushitic consonant system, some with a smaller number of phonemes, others with a larger set. Table 5.1. shows what is by and large the most widely accepted system, differing little from what is proposed for Proto-E. Cush.

Tab. 5.1: Proto-Cushitic consonants

	Labial		Dental/Alveolar		Alveolar-Palatal		Velar		Pharyngeal		Laryngeal
Voice	–	+	–	+	–	+	–	+	–	+	–
Stops		<i>b</i>	<i>t</i>	<i>d</i>	<i>c</i>	<i>j</i>	<i>k</i>	<i>g</i>			<i>ʔ</i>
Glottalised			<i>t'</i>	<i>d'</i>	<i>c'</i>		<i>k'</i>				
Fricatives	<i>f</i>		<i>s</i>	<i>z</i>	<i>ʃ</i>		<i>x</i> (?)		<i>ħ</i>	<i>ʕ</i>	<i>h</i>
Nasals		<i>m</i>		<i>n</i>							
Liquids				<i>l, r</i>							
Glides		<i>w</i>				<i>y</i>					

The majority of Cushitic languages have a five-term vowel system (*i, e, a, o, u*) each with long counterparts. C. Cush., however, has the same seven-term system as Ethiopian Semitic (*i, e, a, ä, ə, o, u*) without phonemic vowel length. The vowels *e* and *o* are of restricted occurrence, and the other five appear to have developed from an earlier three-term system $\pm$ length in the same way as Ethiopian Semitic vowels derive from Proto-Semitic (**i/u* > *ə*, **ii* > *i*, **a* > *ä*, **aa* > *a*, **uu* > *u*).

2.2. Morphology

The type of non-concatenative morphology that is a hallmark of the classical Semitic languages, typified by apophony in verb stems, partial reduplication again as a part of verb inflexion, the so-called “broken plurals” in nouns, etc., features that are noted elsewhere in Afroasiatic, can also be found in Cushitic, though in many languages only as traces. At the northern extent of the Cushitic area, however, Beja and ‘Afar-Saho preserve this kind of morphology best. In the instance of verbal inflection, it has been suggested that this may be due to close contact with Semitic languages, and not just in obvious loans which adopt the prefix-conjugation, but also as an over-all “revitalisation” of the inherited pattern (see Hayward 1978, 356). The Cushitic languages of the Ethiopian highlands have been in close contact with Ethiopian Semitic languages for more than two millennia, at least as far as the C. Cush. languages are concerned (see 77). These are generally believed to have formed the substratum over which the modern Ethiopian Semitic languages developed, and there are many shared typological features in morphology and especially syntax, as well as the more expected borrowings in the lexicon, in both families of languages. The beginnings of this linguistic interference can already be observed in Ge’ez (see 69), though of course it is much more apparent in the modern languages such as Tigrinya (see 71) and Amharic (see 73). The typical SOV, head-final syntax of the modern Ethiopian Semitic languages is generally attributed to the influence of substrate Cushitic languages.

2.2.1. Personal pronouns

One of the most obvious parts of the morphological system of Cushitic languages where the common Afroasiatic heritage is apparent is the system of personal pronouns, both in terms of structure and form. Most Cushitic languages operate with a seven-term system, in which gender (masculine and feminine) is only distinguished in the 3sg. Whilst only S. Cush. retains the inherited gender distinction in the 2sg. and plural, there are traces of the different forms of the 2sg. in C. Cush. though without any gender distinction. Somewhat differently, Beja, which has innovated extensively in its independent pronouns, marks gender distinction in both the 2nd and the 3rd persons, singular and plural (the latter in some dialects only), but not in dependent (possessive and object) pronouns. Beja also has “allocutive” suffixes marking the gender of the addressee (masc. *-a* and fem. *-i*) added to verbs. A number of L. E. Cush. languages (Somali, Rendille, Dhaasanac, etc.) have introduced a distinction in the 1pl. between exclusive and inclusive, though no common form of the exclusive can be reconstructed, even at a low level. Most languages also make a formal distinction, particularly in the

1st and 2nd persons, between the independent pronoun, typically used in subject function, and the dependent or clitic pronoun used in a range of oblique functions, such as possessive, verbal object, or in combination with various case suffixes. These two sets of pronouns have clear parallels and indeed cognates in Semitic with, for example, the 1sg. and 2sg. independent forms in **ʔan-* and **ʔa/i[n]t-*, resp., and the corresponding dependent forms in **yV-* and **kV-*. Some languages have confused the two sets, especially in the plural, but note also Arbore *ye, ke*, as both subject and object pronouns 1sg. and 2sg., resp. The 3rd person pronouns in both sets derive from proto-forms in **sV-* or **šV-*. Interestingly, differing Beja dialects have clitic forms in both *s* and *h/Ø*, which recalls the similar alternation in Semitic (e.g. in both modern and ancient South Arabian, and between Akkadian and Central Semitic for further details see Appleyard 1986).

Tab. 5.2: Independent pronouns (nominative). The *-s* form in the Beja sg. 3 m. is the ‘Amar’ar dialect; the upper forms of pl. 1 in Somali and Rendille are exclusive ‘we but not you’, and the lower forms are inclusive ‘I/we and you’.

	Beja	Somali	Rendille	Oromo	Sid-aama	‘Afar	Bilin	Iraaqw
sg. 1	<i>ane</i>	<i>anigu</i>	<i>ani</i>	<i>ani</i>	<i>ani</i>	<i>anu</i>	<i>an</i>	<i>an[i]</i>
sg. 2	<i>baruuk</i> <i>batuuk</i>	<i>adigu</i>	<i>ati</i>	<i>ati</i>	<i>ati</i>	<i>atu</i>	<i>anti</i>	<i>kuuŋ</i> <i>kiiŋ</i>
sg. 3 m.	<i>baruus</i> ; <i>baruus</i>	<i>isagu</i>	<i>usu</i>	<i>inni</i>	<i>isi</i>	<i>usuk</i>	<i>ni</i>	<i>inos</i>
sg. 3 f.	<i>batuu</i> ; <i>batuus</i>	<i>iyadu</i>	<i>ice</i>	<i>išeen</i>	<i>ise</i>	<i>is</i>	<i>nəri</i>	
pl. 1	<i>hinin</i>	<i>annagu</i> <i>innagu</i>	<i>naḥ</i> <i>inno</i>	<i>nuy</i>	<i>ninke</i>	<i>nanu</i>	<i>yən</i>	<i>at[en]</i>
pl. 2	<i>baraak[na]</i> <i>bataak[na]</i>	<i>idinku</i>	<i>atin</i>	<i>isini</i>	<i>kiʔne</i>	<i>isin</i>	<i>əntən</i>	<i>kungga</i> <i>kinga</i>
pl. 3	<i>baraa</i> ; <i>baraasna</i> , <i>bataasna</i>	<i>iyagu</i>	<i>ico</i>	<i>isaani</i>	<i>insa</i>	<i>oson</i>	<i>na</i>	<i>inoʔin</i>

2.2.2. Gender, number and case in nouns

The typical Afroasiatic grammatical gender system comprising “masculine” and “feminine” runs throughout Cushitic morphosyntax. In nouns, gender is not always apparent from the citation form of the noun, though in ‘Afar, for example, all consonant-final and all vowel-final nouns with penultimate accent are masculine, whilst all others are feminine; or, in the C.Cush. language Awngi in the citation form all masculine nouns end in *-i* or a consonant, and all feminine nouns end in *-a*. Apart from nouns referring

Tab. 5.3: Oblique pronouns

	Beja		Somali		Oromo		Sidaama		'Afar		Bilin	
	poss.	obj.	poss. ²	obj.	poss. ²	obj.	poss.	obj. ³	poss.	obj.	poss./obj. ⁴	
sg. 1	-Ø	-heeb	-kayga	i	koo/kiyya	[a]na	-ya	-e ane	yi	yoo	yə	
sg. 2	-k	-hook	-kaaga	ku	kee	si	-kki	-he ate	ku	koo	k ^{va} ə	
sg. 3 m.	-Ø; -s ¹	-Ø; -hoos ¹	-kiisa	Ø	isaa	isa	-si	-si iso	kay	kaa	ni	
sg. 3 f.			-keeda		iŕee	iŕee	-se	-se ise	tet	teeti	nər	
pl. 1	-n	-hoon	-kayaga -keenna	na ina	keenya	nu	-nke	-nke ninke	ni	nee	yəna/ä	
pl. 2	-kna	-hookna	-kiinna	idin	keessan	isin	-ne	-ne ki ^{va} ne	sin	sini	ənta/ä	
pl. 3	-hina; -sna ¹	-Ø; -hoosna ¹	-kooda	Ø	isaanii	isaan	-nsa	-nsa insa	ken	keeni	na	

¹ -s forms 'Amar'ar dialect² masc. non-subject forms³ Sidaama has both suffixed and independent object pronouns⁴ object forms require the case suffix -t

to humans, where natural gender assignment prevails, grammatical gender is mostly randomly assigned. Gender is for the most part manifested through agreement, for instance, between the verb and its noun subject, or between determiners and head nouns: e. g. Beja *yaas* ‘dog/bitch’ but *uu-yaas* ‘the dog’, *tuu-yaas* ‘the bitch’; [ʔ]oor ‘boy, girl’ but *wi-ʔoor-i baaba* ‘the boy’s father’, *ti-ʔoo[r]-t-i baaba* ‘the girl’s father’; *uu-tak uu-win ee-ya* ‘the tall man came’, *ti-takat tuu-win ee-ta* ‘the tall woman came’, where the feminine markers are the various *t*-elements. Throughout Cushitic the commonest feminine marker in determiners is the consonant *t*, or its development in keeping with predictable sound changes in individual languages. It is often associated with the vowel *i*. The corresponding masculine determinative element in all of Cushitic except for Beja is *k* or its development, which is often linked with the vowel *u*, though the latter may be rather a nominative case marker: cp. Oromo demonstrative ‘this’ masc. nom. *kun[i]*, fem. nom. *tun[i]*, masc. abs. *kana*, fem. abs. *tana*; Burji possessive pronoun ‘our’ masc. nom. *nin-ku*, fem. nom. *nin-ci*, masc. abs. *nin-ka*, fem. abs. *nin-ta*; Awngi complemental relative suffixes masc. *-ɣ^w/w*, fem. *-t*. There is some evidence that the Beja masculine marker in determiners equivalent to *k*- in the rest of Cushitic was **w*- (see Appleyard 2004, 180). If this is so, the use of **k[u]* in this function is a later innovation of the rest of Cushitic. In some languages, there are also differences in case inflection according to gender; typical is that in several languages only masculine nouns are marked for the nominative or subject case, as well as some classes of feminine having a distinct genitive suffix. In Bilin, on the other hand, nouns have different endings for the accusative or object case and the dative case, as well as the genitive, according to gender.

Number marking in nouns in Cushitic is particularly complex and heterogeneous, and whilst there are commonalities, by and large it is not possible to reconstruct a single system for the proto-language. The number system in most languages operates with three terms: a basic, indeterminate form that is often called “the singular” in the literature, though it is usually neutral in respect of number, which in many languages has collective or mass reference, too. Formally derived from this may be two marked forms, a “singulative” referring to a single individual, and a plural with multiple reference: Bilin *dəmmu* ‘cat(s)’, *dəmmura* ‘a single cat’, *dəmmut* ‘several cats’. All three terms, however, do not necessarily occur in every noun or in every language: Kambaata basic *adani-ta* ‘cat(s)’, singulative *adancu-ta* ‘a single cat’; singulative *abur-cu* ‘a single cockerel’, plural *aburra-ta* ‘cockerels’; basic *ciila-[ta]* ‘infant’, plural *ciilla-ta* ‘infants’. The singulative suffixes vary, but many incorporate the feminine *t*-suffix (though singulatives are not necessarily grammatically feminine): e.g. ‘Afar *-yta*, *-ytu*, *-yto*, *-ta*, *-tu*, *-to*; Sidaama, *-icco*, Oromo *-icca* (masc.), *-ittii* (fem.), Bayso *-ti/-titi*; Bilin *-ra* (for more details see Zaborski 1986b, 291–293). This recalls, for instance, the *nomen unitatis* forms in Arabic and Hebrew constructed with the feminine ending, and is thus most probably an inherited Afroasiatic feature.

The formation of noun plurals is very diverse, even within groups of closely related languages, though is mostly by means of suffixes. Plurals formed by internal modification of the noun stem, sometimes in combination with the addition of a suffix, do exist in a number of languages; devices include partial or, rarely, total reduplication, lengthening or shortening of an internal vowel of the stem, consonantal ablaut and lengthening. The northern languages, such as ‘Afar-Saho and Bilin, also have examples of Semitic-type “broken plurals”, but these seem to occur mostly in loans from Arabic

or Ethiopian Semitic (Tigrinya and Tigre). Examples of Cushitic internal plurals are: Beja *ginuuf* – *ginuf* ‘nose’, *oor* – *ar* ‘child’, ‘Afar *dayla* – *dayloola* ‘medicine’, *du’ur* – *du’uura* ‘fool’, Saho *anrab* – *anrub* ‘tongue’, Bilin *ʕəl* – *ʕələl* ‘eye’, *gira* – *git* ‘mountain’; Somali *geel* – *geelal* ‘herd of camels’. Plural suffixes show a wide range of forms, and often more than one plural-forming device may be used with the same noun. The commonest shape of plural suffixes may be typified as: $-[V]t[V]$, $-[V]w[V]$ and $-Vn$. A further formative that is restricted to E. Cush. is $-Vy[V]$, and there are others of more restricted occurrence (for details see Zaborski 1986b). The first three of these all have parallels elsewhere in Afroasiatic, including Semitic, and are almost certainly inherited from Afroasiatic, though because of continuing uncertainties about the relevant sound changes at such a deep level, as well as the inevitable cycles of morphological innovation, it is impossible to reconstruct precise proto-forms. Examples of suffixed plurals are: Beja *gaw* – *gawa* ‘house’, *ragad* – *ragada* ‘leg, foot’, ‘Afar *bar* – *baritte* ‘night’, *bakkeela* – *bakkelwa* ‘hare’, Saho *ʕeela* – *ʕeliit/ʕeelwa* ‘well’, Oromo *laga* – *lagoota/laggeen* ‘river’, *gaara* – *gaarota* ‘mountain’, *saʔa* – *saawwan* ‘cow’, Somali *kab* – *kabo* ‘shoe’, *ʕas* – *naʕasyo* ‘fool’, *waddo* – *waddooyin* ‘road’, *ugah* – *ughan* ‘egg’, Bilin *marawa* – *marawti* ‘snake’, *bəra* – *bərtət* ‘field’. In many languages such plural noun forms require singular (masculine or feminine) rather than plural agreement, since gender assignment attaches to the specific “plural” formative: in Kambaata, for instance, most formal plurals are feminine. In other languages, such as Somali, different plural devices have different associated genders; e.g. the ending *-o* requires masculine agreement: *naag* f. ‘woman’ – *naago* m. ‘women’, *jilib* m. ‘knee’ – *jilbo* m. ‘knees’, but *-Co/yo* is feminine: *baabuur* m. ‘truck’ – *baabuurro* f. ‘trucks’, *naʕas* m. ‘fool’ – *naʕasyo* f. ‘fools’.

Most languages have a three-term primary case system: a marked nominative or subject case, an unmarked form often called “absolutive” with a wide range of functions including that of citation form as well as the complement or object of verbs, and a possessive or genitive case. In some languages such as ‘Afar and C. Cush. Kemant (and this appears to be the original situation) only masculine nouns mark the nominative. Others have innovated and spread nominative marking to some classes of feminine nouns, as in Somali and Oromo, whilst yet others (e.g. C. Cush. Bilin and Awngi, also the languages of the Dullay group) have replaced the marked nominative-absolutive system with a nominative-accusative pattern, introducing a specific accusative case marker and leaving the nominative unmarked. Table 5.4. shows a sample from a few languages, but it should be borne in mind that there are variations and complexities in each language that have had to be omitted. Beja, however, appears never to have had this system, but to have retained an older pattern which may be compared directly with Proto-Semitic (see Appleyard 2004, 178–180; also Sasse 1984), whilst the rest of Cushitic innovated with a marked nominative system in *-i*. There are traces of the older pattern here, too, with masc. nom. *-u* in demonstratives, as well as ‘Afar personal pronouns (*anu*, *atu*, cp. Table 5.2.), and in H. E. Cush. nouns.

Adverbial relations are variously denoted, in keeping with the typical SOV syntax of Cushitic, by means of postpositions, which in some languages, notably C. Cush. and H. E. Cush., but also to some degree in ‘Afar-Saho and Oromo, have become so closely fused with the noun as to be regarded as secondary case suffixes. Interestingly, however, in Somali and most of its closest relatives, these original postpositions have become detached from their nouns and accumulate in preverbal position: Somali *markaasay šEEKADII DABADA UGA GAŠAY* ‘then she entered upon the story from the beginning’,

Tab. 5.4: Primary cases in nouns

masculine							
	‘Afar	Somali	Oromo		Bilin	Beja	
						indef.	def.
nom.	<i>awki</i> <i>dul</i>	<i>inan</i> <i>nin</i>	<i>namni</i>	nom.	<i>gərwa</i> <i>ləpən</i>	<i>tak</i> <i>haqa</i>	<i>uu-tak</i> ¹ <i>wi-haqa</i>
abs.	<i>áwka</i> <i>dul</i>	<i>inán</i> <i>nín</i>	<i>nama</i>	acc.	<i>gərwäs</i> <i>ləpənsi</i>	<i>tak</i> <i>haqaa-b</i>	<i>oo-tak</i> <i>wi-haqa</i>
gen.	<i>awki</i> <i>dulti</i>	<i>inán</i> <i>nín</i>	<i>namaa</i>	gen.	<i>gərwi</i> <i>ləpən</i>	<i>tak-i</i> <i>haqa-i</i>	<i>i-tak-i</i> <i>wi-haqa-i</i>
	‘boy’, ‘hippo’	‘boy’, ‘man’	‘man’		‘man’, ‘house’	‘man’, ‘lion’	

feminine							
	‘Afar	Somali	Oromo		Bilin	Beja	
nom.	<i>saga</i>	<i>naagi</i>	<i>lafti/lafni</i>	nom.	<i>gäna</i>	<i>yaas-t</i>	<i>ti-yaas</i>
abs.	<i>saga</i>	<i>náag</i>	<i>lafa</i>	acc.	<i>gänät</i>		
gen.	<i>sagáh/</i> <i>sagáC</i>	<i>naagéed</i>	<i>lafaa</i>	gen.	<i>gänär</i>	<i>yaas-t-i</i>	<i>ti-yaas-t-i</i>
	‘cow’	‘woman’	‘land’		‘mother’	‘bitch’	

¹ The article in Beja varies according to the syllabic structure of the following noun (see Appleyard 2007, 452). The endings *-t* and *-b* are gender markers on indefinite nouns, masc. and fem., resp., the latter only in the acc. case.

Tab. 5.5: Proto-forms of primary cases

	masc. short vowel	masc. long vowel	fem. short vowel	fem. long vowel
nom.	*-i	*-ii	*-a	*-VV
abs.	*-a	*-VV	*-a	*-VV
gen.	*-i	*-ii	*-[a]ti	*-VVti

in which *uga* is a combination of *u* and *ka* referring to nouns *šEEKADI* ‘the story’ and *DABADA* ‘the front’. The forms of many of these elements are clearly related across Cushitic, though the functions vary to some extent: dative/instrumental **si*, locative **la/li*, instrumental/comitative **ni*, ablative/instrumental **ka*, locative **[V]dV*, allative/adessive **wa* (for details see Appleyard 1990; Sasse 2003).

2.2.3. Verbal inflexion

It is perhaps in the area of verbal inflexion in Cushitic that the Semitist will most readily recognise several familiar features. Inherited from Afroasiatic, most languages show a

complex system of verbal derivation marking changes in valency: a causative or transitive formed with a sibilant affix *s*, or its expansions (e.g.; “double causative”), a passive or intransitive formed with a nasal affix *m* (*ŋ* in C. Cush. with reciprocal and allied functions), and another passive or reflexive extension, which in some languages developed a subjective or “middle”, or “autobenefactive” sense, formed with a dental affix *t*. Some L. E. Cush. languages have a further affix *-VVw* with inchoative function, and all languages have the possibility of combining derivational affixes. Many also have intensive or iterative derivations which are formed by partial or total reduplication of the basic stem. In Beja some verb types also form an intensive by means of inserting a long vowel within the verb stem: *adbil* ‘I collected (once)’, *adaabil* ‘I collected (several times or several things)’. A few languages have two types of verbal inflexion, one involving person marking by means of prefixes, and the other, more common type, by means of suffixes. In Beja (always) and ‘Afar-Saho (frequently), where prefix-conjugating verbs are common, the derivational affixes appear in the verbal chain between the personal prefix and the verb root: Beja *?i-too-maan-na* ‘they have been shaved’ (passive *-tVV-*), *ti-s-dabil-a* ‘you made (him) collect’ (causative *-s-*). Otherwise, they occur after the verb root and before the personal marker: Beja *raat-am-een* ‘they were asked/asked one another’ (passive-reciprocal *-am-*), *tam-s-een* ‘they made him eat’ (causative *-s-*).

Tab. 5.6: Prefix-conjugation paradigms

	Beja		‘Afar		Somali	
	present	past	present	past	present	past
1 sg.	<i>anbiis</i> ¹	<i>abis</i>	<i>amaate</i>	<i>emeete</i>	<i>imaadaa</i>	<i>imi[d]</i>
2 sg.	<i>tinbiis-a</i> <i>tinbiis-i</i>	<i>tibis-a</i> <i>tibis-i</i>	<i>tamaate</i>	<i>temeete</i>	<i>timaadaa</i>	<i>timi[d]</i>
3 m. sg.	<i>inbiis</i>	<i>ibis</i>	<i>yamaate</i>	<i>yemeete</i>	<i>yimaadaa</i>	<i>yimi[d]</i>
3 f. sg.	<i>tinbiis</i>	<i>tibis</i>	<i>tamaate</i>	<i>temeete</i>	<i>timaadaa</i>	<i>timi[d]</i>
1 pl.	<i>neebis</i> ²	<i>nibis</i>	<i>namaate</i>	<i>nemeete</i>	<i>nimaadaa</i>	<i>nimi[d]</i>
2 pl.	<i>teebisna</i>	<i>nibisna</i>	<i>tamaaten</i>	<i>temeeten</i>	<i>timaadaan</i>	<i>timaadeen</i>
3 pl.	<i>eebisna</i>	<i>ibisna</i>	<i>yamaaten</i>	<i>yemeeten</i>	<i>yimaadaan</i>	<i>yimaadeen</i>
	‘bury’		‘come’		‘come’	

¹ the *n* before *R*₁ in 2-consonant verbs and before *R*₂ in 3-consonant verbs is seen by some as a dissimilation from a geminate or long consonant, and by others as an *n*-infix deriving from the interpolation of an old auxiliary.

² the plural persons of the present adopt an intensive stem inflexion.

As indicated earlier there are two types of inflection for person, the prefix-conjugation, which has marked similarities to the same in Semitic and Berber, and which is clearly related, and the suffix conjugation, a Cushitic development, in which it has long been recognised that the person + tense marking suffixes derive from an old prefix-inflecting auxiliary suffixed to the verb stem. The exact nature of the auxiliary is uncertain as it is now reduced to the tense/aspect marking vowel, but the most likely contender is the monoconsonantal root *y-* ‘say’ which still survives in C. Cush. and H. E. Cush. with traces elsewhere, e.g. in Saho and Somali.

The person markers are readily identifiable as the same or similar in both patterns and follow the distinctive Afroasiatic “block” pattern: 1sg. ?- (> Ø), 2sg., 2pl., 3fsg. *t-*, 1pl. *n-*, 3msg., 3pl. *y-* (> Ø), and a suffixed element *-n* in the 2pl. and 3pl. The prefix-conjugation is an archaism and occurs as a functioning and productive part of verbal inflexion only in Beja and ‘Afar-Saho (see *inter alia* Voigt 1996). Several other languages (C. Cush. Awngi and L. E. Cush. Somali varieties, Rendille, Boni, Arbore, Dhaasanac) preserve a handful (between four and thirteen according to language) of such verbs. There are generally two tenses or aspects (past/perfective and present or non-past/imperfective), which are distinguished by contrasting vowels in the verb stem in the case of prefix-inflecting verbs, or in the ending in the case of suffix-inflecting verbs. Whilst the imperfect is generally marked by the vowel *a*, a variety of other vowels marks the perfective: e.g. in ‘Afar prefix-verbs *i*, *u*, *e*, *o*, which are lexically conditioned, and *e* in suffix-verbs. The position of the tense/aspect vowel may be both after the person marker and inside the stem: *yemeete* – *yamaate* ‘come’ (see Table 5.7. and Table 5.8.), or only after the person marker: *yokme* – *yakme* ‘eat’, *yuduure* – *yaduure* ‘return’. In Beja the vocalisation is different; it has been argued (see Zaborski 1975, 12ff.) that with the innovation of a “new” present (*inbiis*), the old present shifted to past function (*ibis*), whilst the old past acquired a variety of other functions ranging from remote past to dubitative and conditional (*iibis*). The expected vocalisations, however, only appear in suffix-verbs: old present = past, *tam-ya*, old past *tam-i*; the new present is *tam-iini*. In H. E. Cush. and in C. Cush. the original pattern of the prefix-conjugation has mostly been ousted from main-verb functions by new forms and is retained chiefly in various subordinate functions. In H. E. Cush. (see Table 5.7. Sidaama) the new endings contain some additional elements, perhaps of pronominal or copular original. In C. Cush. the original forms are retained in the negative verb complex, e.g.

Tab. 5.7: Suffix-conjugation paradigms. Present/Imperfective

	Beja		‘Afar	Somali	Oromo	Sidaama
	new pres.	old pres. (= past)				
1 sg.	<i>tamani</i>	<i>taman</i>	<i>faka</i>	<i>keena</i>	<i>deema</i>	<i>sirbeemm-o/-a</i> ¹
2 sg.	<i>tamtinii-a</i> <i>tamtinii</i>	<i>tamtaa</i> <i>tamtaa-i</i>	<i>fakta</i>	<i>keentaa</i>	<i>deemta</i>	<i>sirbatt-o/-a</i>
3 m. sg	<i>tamiini</i>	<i>tamya</i>	<i>faka</i>	<i>keena</i>	<i>deema</i>	<i>sirbanno</i>
3 f. sg	<i>tamtini</i>	<i>tamta</i>	<i>fakta</i>	<i>keentaa</i>	<i>deemti</i>	<i>sirbitanno</i>
1 pl.	<i>tamnay</i>	<i>tamna</i>	<i>fakna</i>	<i>keenna</i>	<i>deemna</i>	<i>sirbineemmo</i>
2 pl.	<i>tamteena</i>	<i>tamtaana</i>	<i>faktaana</i>	<i>keentaan</i>	<i>deemtu/deem-sirbitinanni</i> <i>tani</i>	
3 pl.	<i>tameen</i>	<i>tamaan</i>	<i>fakaana</i>	<i>keenaan</i>	<i>deemu/</i> <i>deemani</i>	<i>sirbitanno</i> , ² <i>sirbinanni</i>

¹ the vowels *-o* and *-a* mark masc. and fem., resp.

² in Sidaama the 3 fsg. functions as a plural, whilst the old 3 pl. now marks 3rd polite.

Tab. 5.8: Past/Perfective

	Beja (old past)	‘Afar	Somali	Oromo	Sidaama
1 sg.	<i>tamii</i>	<i>fake</i>	<i>keenay</i>	<i>deeme</i>	<i>sirbumm-o/-a</i>
2 sg.	<i>tamii-a</i> <i>tamtii</i>	<i>fakte</i>	<i>keentay</i>	<i>deemte</i>	<i>sirbitt-o/-a</i>
3 m. sg.	<i>tami</i>	<i>fake</i>	<i>keenay</i>	<i>deeme</i>	<i>sirbi</i>
3 f. sg.	<i>tamti</i>	<i>fakte</i>	<i>keentay</i>	<i>deemte</i>	<i>sirbitu</i>
1 pl.	<i>tamni</i>	<i>fakne</i>	<i>keennay</i>	<i>deemne</i>	<i>sirbinummo</i>
2 pl.	<i>tamtiina</i>	<i>fakteeni</i>	<i>keenteen</i>	<i>deemtani</i>	<i>sirbitini</i>
3 pl.	<i>tamiin</i>	<i>fakeeni</i>	<i>keeneen</i>	<i>deemani</i>	<i>sirbitu,² sirbini</i>
	‘eat’	‘open’	‘bring’	‘go’	‘sing’

Bilin *gäbnä-li* ‘we do not refuse’, and in part as “indefinite” tenses in Awngi alone, as well as in numerous subordinate forms, whilst the affirmative main-verb tenses use a different “auxiliary” from a root ‘be’, e.g. Bilin *gäbnäk^wən* ‘we refuse’ (see Appleyard 1992).

An interesting, third type of verb inflexion occurs in a small number of L. E. Cush. languages (‘Afar-Saho, Somali), with possible traces elsewhere, in the so-called Stative conjugation of adjectival verbs (see Table 5.9.), which has been compared with the Akkadian “permansive” etc., Cushitic having no trace of *-kV* 1sg. marker, only *?V* and the oblique pronoun *yV*.

Tab. 5.9: Stative conjugation

	Saho	Somali		Saho	Somali
1 sg.	<i>ʕadiyo</i>	<i>ʕusbi</i>	1 pl.	<i>ʕadino</i>	<i>ʕusbin</i>
2 sg.	<i>ʕadito</i>	<i>ʕusbid</i>	2 pl.	<i>ʕaditin</i>	<i>ʕusbidin</i>
3 sg.	<i>ʕado</i>	<i>ʕusub</i>	3 pl.	<i>ʕadon</i>	<i>ʕusub</i>
	‘be white’	‘be new’			

3. Concluding remarks

The discussion has deliberately focused on inflexional morphology as it is here that the most identifiable links between Cushitic and Semitic (and indeed the rest of Afroasiatic) can be readily described, in addition to the fact that morphology is usually thought of as being one of the more conservative areas of linguistic analysis. The lexicon also shows parallels, but perhaps less so overall than in morphology, and even between the different branches of Cushitic the amount of shared lexicon is not impres-

sive. It is in the area of syntax, though, that Cushitic most differs from Semitic, insofar as the family is generally pervaded by a head-final, SOV syntax. In addition, in most languages syntax is further dominated by discourse factors such as topicalisation and focalisation which can influence case marking, agreement and forms of the verb.

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II. Reconstructing Proto-Semitic and Models of Classification

6. Proto-Semitic Phonetics and Phonology

- 1. Consonantism
- 2. Vocalism
- 3. Stress
- 4. References

Abstract

This chapter provides an overview of the reconstruction of the Proto-Semitic phoneme system and its representation in the individual Semitic languages.

1. Consonantism

1.1. Canonical reconstruction

In its traditional reconstruction, the PS consonantal system comprises 29 phonemes, as shown in Table 6.1.

Tab. 6.1: Traditional reconstruction of the Proto-Semitic consonantal system

	Obstruents						resonants		
	stops			fricatives					
	voiceless	emphatic	voiced	voiceless	emphatic	voiced			
bilabial	p		b					w	m
dental	t	ṭ	d					r	n
interdental				ṯ	ṯ̣	ḏ			
hissing				s	ṣ	z			
hushing				š					
lateral				ṣ̌	ṣ̣̌			l	
palatal								y	
velar									
uvular	k	ḳ	g	ḫ		ʁ			
pharyngeal				ḥ					
laryngeal		ʾ		h					

**talg*- ‘snow’ > Akk. *šalgu*, Hbr. *šālāg*, Syr. *talgā*, Arb. *talǧ*-, Jib. *talg* (AHw. 1147, HALOT 1503, LSyr. 825, Lane 350, JL 284);

**lV'VI-*, **la'lab-* 'fox' > Akk. *šēlebu*, Hbr. *šū'āl*, Syr. *ta'lā*, Arb. *tu'āl-*, *la'lab-*, Jib. *it'él* (SED II No. 237);

**part-* 'food in the stomach' > Akk. *paršu*, Hbr. *päräš*, Syr. *pertā*, Arb. *farṭ-*, Tna. *färsi*, Mhr. *farṭ*, Soq. *fört* (SED I No. 221).

1.2.2. *d

**uḡn-* 'ear' > Akk. *uznu*, Ugr. *'udn*, Hbr. *'ōzān*, Syr. *'ednā*, Arb. *'uḡn-*, Sab. *'ḡn*, Gez. *'əzn*, Jib. *'idén*, Soq. *'idihēn* (SED I No. 4);

**ḡkr* 'to remember' > Akk. *zakāru*, Hbr. *zkr*, Syr. *dkr*, Arb. *ḡkr*, Sab. *ḡkr*, Gez. *zakara*, Mhr. *ḡēkər*, Soq. *dekir* (AHw. 1503, HALOT 269, LSyr. 153, Lane 968, SD 38, CDG 636, ML 80, LS 127);

**ḡVb(V)b-* 'fly' > Akk. *zubbu*, Hbr. *zəbūb*, Syr. *debbābā*, Arb. *ḡubāb-*, Amh. *zəmb*, Mhr. *ḡəbbēt*, Soq. *'edbíboh* (SED II No. 73).

1.2.3. *t

**tīpr-* 'nail' > Akk. *šupru*, Hbr. *šippōrān*, Syr. *teprā*, Arb. *ḡifr-*, Gez. *ṣəfr*, Amh. *taḡər*, Mhr. *ḡfēr*, Soq. *tīfer* (SED I No. 285);

**tīll-* 'shadow' > Akk. *šillu*, Ugr. *tl*, Hbr. *šēl*, JPA *ṭwlh*, Arb. *ḡill-*, Gez. *ṣəlālot*, Amh. *ṭəla*, Har. *čāy* (AHw. 1101, DUL 1002, HALOT 1024, DJPA 224, Lane 1915, CDG 555, AED 2083, EDH 52);

**nṭr* 'to look, to watch' > Akk. *naṣāru*, Ugr. *nṭr*, Hbr. *nṣr*, Syr. *nṭr*, Arb. *nḡr*, Sab. *nṭr*, Gez. *naṣṣara*, Mhr. *nəḡāwr* (AHw. 755, DUL 624, HALOT 718, LSyr. 426, Lane 2810, SD 102, CDG 406, ML 283).

1.2.4. *s

**'sr* 'to tie' > Akk. *esēru*, Ugr. *'sr*, Hbr. *'sr*, Syr. *'sr*, Arb. *'sr*, Sab. *'s₃r*, Gez. *'asara*, Amh. *assārā*, Jib. *'ésór* (AHw. 249, DUL 114, HALOT 75, LSyr. 37, Lane 57, SD 8, CDG 44, AED 1664, JL 4);

**sās-*, **sūs-* 'moth, worm' > Akk. *sāsu*, Hbr. *sās*, Syr. *sāsā*, *sūstā*, Arb. *sūs-*, *sās-*, Amh. *šūš*, Har. *sūs*, Mhr. *sust* (SED II No. 198);

**ḡsr* 'to lose, to be deficient': Ugr. *ḡsr*, Hbr. *ḡsr*, Syr. *ḡsr*, Arb. *ḡsr*, Min. *ḡs₃r*, Gez. *ḡasra*, Mhr. *ḡasōr*, Soq. *di-hósir*, perhaps Akk. *ḡesēru* 'to chip off' (DUL 410, HALOT 338, LSyr. 248, Lane 736, LM 44, CDG 265, ML 449, LS 184, AHw. 329).

1.2.5. *z

**gzz* 'to cut, to shear, to divide' > Akk. *gazāzu*, Ugr. *gzz*, Hbr. *gzz*, Syr. *gzz*, Arb. *ḡzz*, Sab. *gzz*, Tgr. *gāzzā*, Mhr. *gəz*, Soq. *gez(z)* (AHw. 284, DUL 315, HALOT 186, LSyr. 111, Lane 416, SD 53, WTS 596, ML 128, LS 105);

**‘inz-* ‘goat’ > Akk. *enzu*, Ugr. *‘z*, Hbr. *‘ēz*, Syr. *‘ezzā*, Arb. *‘anz-*, Sab. *‘nz*, Jib. *’ɔz*, perhaps Cha. *anž* ‘heifer’ (SED II No. 35);

**zmr* ‘to emit musical sounds’ > Akk. *zamāru*, Hbr. *zmr*, Syr. *zmr*, Arb. *zmr*, Gez. *zammara* (AHw. 1508, HALOT 273, LSyr. 199, Lane 1250, CDG 639).

1.2.6. *š

**ʷšbV-* ‘finger’ > Ugr. *’ušb’*, Hbr. *’āšba’*, Syr. *šeb’ā*, Arb. *’išba’-*, Gez. *’ašbā’t*, Tgr. *čəb’at*, Har. *aṭābiñña*, Jib. *’išbá’* (SED I No. 256);

**šby* ‘to soak, to dye’ > Akk. *šabû*, Hbr. *šb’*, Syr. *šb’*, Arb. *šby*, Gez. *šabḥa* (AHw. 1082, HALOT 998, LSyr. 620, Lane 1647, CDG 546);

**šyd*, **šwd* ‘to prowl, to hunt, to fish’ > Akk. *šādu*, *šayyādu*, Ugr. *šd*, Hbr. *šwd*, *šayid*, Syr. *šwd*, *šaydā*, Arb. *šyd*, Mhr. *əštəyūd*, Soq. *šóde* (AHw. 1073, 1075, DUL 778, HALOT 1010, 1020, LSyr. 623, 626, Lane 1752, ML 369, LS 349).

1.2.7. *š

**lišān-* ‘tongue’ > Akk. *lišānu*, Ugr. *lšn*, Hbr. *lāšōn*, Syr. *leššānā*, Arb. *lisān-*, Sab. *ls₁n*, Gez. *læssān*, Jib. *elšén*, Soq. *léšin* (SED I No. 181);

**šim-* ‘name’ > Akk. *šumu*, Ugr. *šm*, Hbr. *šēm*, Syr. *šmā*, Arb. *’ism-*, Sab. *s₁m*, Gez. *səm*, Cha. *šəm*, Mhr. *ham*, Jib. *šum*, Soq. *šem* (AHw. 1274, DUL 882, HALOT 1548, LSyr. 784, Lane 1435, SD 126, CDG 504, EDG 545, ML 158, JL 262, LS 418);

**bšl* ‘to be ripe, to cook’ > Akk. *bašālu*, Ugr. *bšl*, Hbr. *bšl*, Syr. *bšl*, Arb. *bsl*, Sab. *m-bs₁l*, Gez. *basala*, Tgr. *bäšlä*, Amh. *bässälä*, Mhr. *bəhēl*, Jib. *béšəl*, Soq. *béhel* (AHw. 111, DUL 242, HALOT 164, LSyr. 99, TA 28 84, SD 32, CDG 109, WTS 283, AED 896, ML 45, JL 30, LS 83).

1.2.8. *š

**kariš-* ‘stomach’ > Akk. *karšu*, Hbr. *kārēš*, Syr. *karsā*, Arb. *kariš-*, Gez. *karš*, Amh. *kärs*, Mhr. *kīrəš* (SED I No. 151);

**‘ašr-* ‘ten’: Akk. *ešer*, Ugr. *‘šr*, Hbr. *‘āšār*, Syr. *‘sar*, Arb. *‘ašr-*, Sab. *‘s₂r*, Gez. *‘ašr-u*, Tna. *‘assärtä*, Mhr. *’ōšar*, Jib. *’ššar*, Soq. *‘āser* (AHw. 253, DUL 188, HALOT 894, LSyr. 537, Lane 2052, SD 21, CDG 73, TED 1859, ML 32, JL 17, LS 331);

**šayb(-at)-* ‘grey hair’ > Akk. *šibtu*, Ugr. *šbt*, Hbr. *šēb*, Syr. *saybātā*, Arb. *šayb-*, Gez. *šibat*, Har. *šibāt*, Mhr. *šayb*, Jib. *šub* (SED I No. 66).

1.2.9. *š

**‘arš-* ‘earth’ > Akk. *eršetu*, Ugr. *’arš*, Hbr. *’ārāš*, Syr. *’ar’ā*, Arb. *’arḏ-*, Sab. *’rš*, Jib. *’erž* (AHw. 245, DUL 106, HALOT 90, LSyr. 51, Lane 48, SD 7, JL 4);

**rhš* ‘to wash’ > Akk. *raḥāšu*, Ugr. *rhš*, Hbr. *rhš*, Off. Arm. *rhʿ*, Arb. *rhḍ*, Sab. *rhš*, Wol. *raṭā*, Mhr. *rəḥāz*, Soq. *rāḥaḏ* (AHw. 942, DUL 738, HALOT 1220, DNWSI 1072, Lane 1052, SD 116, EDG 528, ML 322, LS 398);

**šbt* ‘to seize’ > Akk. *šabātu*, Ugr. *m-šbt-m*, Hbr. *šbt*, Arb. *ḍbt*, Gez. *abaṭa*, Sod. *ṭābbāṭā*, Mhr. *ḏāybət*, perhaps Mnd. *abt* ‘to bind, take captive’, JBA ‘*bṭ* ‘to seize’ (AHw. 1066, DUL 585, HALOT 997, CDG 148, EDG 611, ML 472, DM 3, DJBA 840).

1.2.10. *ḥ

**naḥīr*- ‘nostril’ > Akk. *naḥīru*, Hbr. *nəḥīrayim*, Syr. *nḥīrē*, Arb. *nuḥrat*-, Mhr. *nəḥrīr*, Soq. *nāḥrīr* (SED I No. 198);

**warḥ*- ‘moon, month’ > Akk. *warḥu*, Ugr. *yrḥ*, Hbr. *yārēaḥ*, Syr. *yarḥā*, Sab. *wrḥ*, Gez. *warḥ*, Amh. *wār*, Har. *wāhri*, Mhr. *warḥ* (AHw. 1466, DUL 979, HALOT 438, LSyr. 309, SD 162, CDG 617, AED 1499, EDH 159, ML 430);

**ḥamiš*- ‘five’ > Akk. *ḥamiš*, Ugr. *ḥmš*, Hbr. *ḥāmēš*, Syr. *ḥameš*, Arb. *ḥams*-, Sab. *ḥms*₁, Gez. *ḥams*, Tna. *ḥammāštā*, Mhr. *ḥāyməḥ*, Jib. *ḥīš*, Soq. *ḥāmoš* (AHw. 317, DUL 396, HALOT 331, LSyr. 242, Lane 810, SD 61, CDG 262, TED 174, ML 443, JL 302, LS 181).

1.2.11. *γ

**γārib*-, **γurāb*- ‘raven’ > Akk. *āribu*, *ēribu*, Hbr. ‘*ōrēb*, Syr. ‘*urbā*, Arb. *γurāb*-, Mhr. *yə-γəráyb*, Soq. ‘*áreb* (SED II No. 89);

**γby* ‘to be thick’ > Akk. *ebû*, Ugr. *γb-n*, Hbr. ‘*ābā*, Syr. ‘*bī*, Arb. ‘*aybā*, *γabiyy*-, *γabā*‘-, Gez. ‘*abya* (AHw. 183, DUL 316, HALOT 777, LSyr. 507, Lane 2228, Dozy 2 201, CDG 55);

**γpr* ‘to cover’ > Akk. *apāru*, Ugr. *γprt*, Arb. *γfr*, Gez. ‘*afara*, *māʿfart*, Mhr. *γəfūr*, Jib. *γóḥr* (AHw. 57, DUL 323, Lane 2273, CDG 58, ML 135, JL 84).

1.2.12. *ḥ

**ḥVmt*- ‘lower belly’ > Akk. *emšu*, Ugr. *ḥmt*, Hbr. *ḥōmāš*, Gez. *ḥəms*, Amh. *əms*, Mhr. *ḥamt* (SED I No. 122);

**šah(a)r*- ‘dawn, morning’ > Akk. *šēru*, Ugr. *šhr*, Hbr. *šəḥar*, JPA *šəḥrā*, Arb. *saḥar*-, Jib. *šhor* (AHw. 1218, DUL 812, HALOT 1466, DJPA 545, Lane 1317, JL 261);

**niḥnu* ‘we’ > Akk. *nīnu*, Hbr. ‘*ānaḥnū*, Syr. *ḥnan*, Arb. *naḥnu*, Gez. *nəḥna*, Amh. *əñña*, Mhr. *nəḥā*, Soq. *ḥan* (AHw. 791, HALOT 71, LSyr. 242, LA 13 527, CDG 395, AED 1254, ML 291, LS 182).

1.2.13. *ʿ

*ʿ*aṭm*- ‘bone’ > Akk. *eṣemtu*, Ugr. ‘*ṭm*, Hbr. ‘*āšām*, Syr. ‘*aṭmā*, Arb. ‘*aḍm*-, Gez. ‘*ašm*, Amh. *aṭənt*, Mhr. ‘*āḍəmət* ‘back’ (SED I No. 25);

**tiš*^ʕ- ‘nine’ > Akk. *tiše*, Ugr. *tš*^ʕ, Hbr. *tēša*^ʕ, Syr. *tša*^ʕ, Arb. *tis*^ʕ-, Sab. *ts*₁^ʕ, Gez. *tas*^ʕ-*u*, Tna. *täš*^ʕ*attä*, Mhr. *sē*, Jib. *sɔ*^ʕ, Soq. *sé*^ʕ*eh* (AHw. 1362, DUL 880, HALOT 1802, LSyr. 838, Lane 306, SD 148, CDG 580, TED 1254, ML 338, JL 220, LS 289);

**tawli*^ʕ(-at)- ‘worm’ > Akk. *tūltu*, Hbr. *tōlē*^ʕ*ā*, Syr. *tawl*^ʕ*ā*, Amh. *təl*, Jib. *təb*^ʕ*ólót* (SED II No. 230).

1.2.14. **h*

**muhr*- ‘foal’ > Akk. *mūru*, Syr. *muhrā*, Arb. *muhr*-, Sab. *mhr*t, Tna. *məhir* (SED II No. 149);

**hadad*- ‘thunder’ > Akk. *adad*, *addu*, Ugr. *hd*, *hdd*, Arb. *hāddat*-, Tgr. *hadud*, *hədud*, Tna. *hadädä*, Mhr. *həd*, Jib. *hid* (Schwemer 2001, 34–58, DUL 334, Lane 2883, WTS 26, TED 50, ML 152, JL 94);

**V-bhān*- ‘thumb’ > Akk. *ubānu*, Hbr. *bōhän*, Arb. *ʾibhām*-, Mhr. *hābén* (SED I No. 34).

1.2.15. *ʾ

**ʾanp*- ‘nose’ > Akk. *appu*, Ugr. *ʾap*, Hbr. *ʾap*, Syr. *ʾappē*, Arb. *ʾanf*-, Gez. *ʾanf*, Har. *ūf* (SED I No. 8);

**šʾl* ‘to ask’ > Akk. *šālu*, Ugr. *šʾil*, Hbr. *šʾl*, Syr. *š(ʾ)el*, Arb. *sʾl*, Sab. *s*₁^ʾ*l*, Gez. *saʾala*, Amh. *salä*, Mhr. *söl*, Jib. *šēl*, Soq. *hoʾol* (AHw. 1151, DUL 795, HALOT 1371, LSyr. 748, Lane 1282, SD 121, CDG 480, AED 441, ML 338, JL 220, LS 139);

**ʾarḥ*- ‘heifer’ > Akk. *arḥu*, Ugr. *ʾarḥ*, Arb. *ʾarḥ*-, Tna. *ʾarḥi*, Soq. *ʾarḥ* (SED II No. 12).

1.3. Phonetic realization of PS consonants

1.3.1. The emphatics

1.3.1.1. Phonetic realization of the ‘emphatics’ in modern Semitic languages

Two types of phonetic realization of the emphatic consonants are attested in modern Semitic:

- (a) Glottalized stops and affricates are typical of ES (cf. Faber 1980, 124–130 for Amharic; Fre Woldu 1988 for Tigrinya). This realization has been known since the earliest European descriptions of modern ES, but opinion is divided as to whether it is original or imported from Cushitic (Cantineau 1951–1952, 92–93; Ullendorff 1955, 151–157; Faber 1980, 155–156).

Glottalized emphatics in Jibbāli, discovered by Fresnel in 1838 (Lonnet 1991, 68–69), were ignored for many decades (with the exception of Yushmanov 1930, 383). Glottalization in MSA (also outside Jibbāli) was rediscovered in Johnstone 1975b (with no mention of Fresnel, cf. Steiner 1977, 22; 1982b, 192) and is now

generally acknowledged in MSA linguistics (Lonnet–Simeone-Senelle 1983, 191 and 1997, 348–349; Lonnet 1993, 47). The existence of glottalized emphatics in Mehri has been recently put to doubt by Watson and Bellem (2010), for whom this articulation is feasible only for the velar *ḳ*. The present author's observations from his fieldwork on Soqatra are in agreement with this claim.

- (b) In spoken Arabic, the emphatics have been variously described as pharyngealized, velarized, uvularized or backed (Faber 1980, 116–122, 168; Zemánek 1996, 1–15; Roman 1983, 148–155).
- (c) Velarized or pharyngealized emphatics coupled with backing of the adjacent vowels and spread of the emphasis to the neighboring consonants have been described in Eastern Neo-Aramaic (Hoberman 1985; Odisho 1988, 49–50, 114–119; Fox 1997, 13–14; Younansardaroud 2001, 1963; Khan 1999, 21–24, 39–40; 2002, 27; 2004, 22–23; Talay 2008, 84–86). For Hoberman (1997, 316), 'the 'emphatic' co-articulation is identical, both phonetically and phonologically, to the same phenomenon which is familiar in Arabic'. Tsereteli's isolated report of 'abruptive' emphatics *p̣*, *ṭ*, *ḳ* and *č̣* among Soviet Assyrians (1978, 37–38; reproduced in Dolgopolsky 1977–1999, 29; Bomhard 1988, 115; cf. Diakonoff 1991–1992, 63–64) raises questions of recent influence from Georgian or Armenian (cf. Krotkoff 1982, 11, Faber 1980, 135, Diakonoff 1991–1992, 63–64). Velarized emphatics are also typical of Tūrōyo (Jastrow 1993, 3–7) as well as of the Western Neo-Aramaic of Ma'lūla (Arnold 1990, 16).

Which of the two realizations has to be postulated for PS? The supporting arguments fall into two categories: evidence from ancient Semitic languages and structural evaluation of the PS consonantal system.

1.3.1.2. Glottalized emphatics in Ancient Semitic Languages

Glottalized emphatics have been postulated for Akkadian. Thus, 'Geers' Law' stipulates that two etymological emphatics are not compatible within an Akkadian root: *šabātu* 'to seize' < **šḅt*, *kaṭānu* 'to be thin' < **kṭn*, *kašāru* 'to bind' < **ḳṣr*, *siāku* 'to be narrow' < **šyk*, etc. (Geers 1945, GAG § 51e). Dissimilation of this type is more likely if the emphatics were glottalized (Faber 1980, 145–147; Huehnergard 1997, 438). The same is true of the dissimilation *kaḳḳadu* > *kaḳḳadu* 'head' and *kaḳḳaru* > *kaḳḳaru* 'land', mostly in OB and NA (Knudsen 1961).

The verb *našā'u* (**nš'*) 'to lift' displays peculiar behavior in MA and NA. Whenever *š* and *'* are in contact, the outcome is spelled as ŠV: *it-ta-ŠU* 'they have brought' < *itaš'ū* etc. (Parpola 1974). Since *š* was likely pronounced as [s] in Assyrian (see 1.5.1.4.), this process can be described as [s] + ['] = [s']. The ŠV spelling of [s'] indicates that *š* was realized as [s'] (or, better, [c']) in Assyrian (Aro 1977, 8, Voigt 1986).

Forms of the verbs *mašā'um* 'to be sufficient', *wašā'um* 'to go out', *kašā'um* 'to be cold' and *nadā'um* 'to lay down' often avoid the expected broken spellings indicating a post-consonantal glottal stop: *i-ta-ša-am* 'he went out to me' instead of *i-ta-aš-a-am* or *i-dā* 'lay down!' instead of *id-a* (Kouwenberg 2003, unrecognized in Diakonoff 1991–1992, 62). In structurally similar forms of other verbs broken spellings are regular (*ta-am-a-am* rather than ***ta-ma-am* 'swear to me!'). The spelling *i-ta-ša-am* reflects the combination [s'] + ['] (= [s'']), simplified into [s'], whereas *i-dā* renders a glottalized [t'] emerging from [d] + ['].

Outside OA, glottalization may explain non-etymological gemination in forms like *hiṭṭu* ‘sin’ or *kuṣṣu* ‘cold’ ([ḥitʔu] > [ḥittʔu], Huehnergard 1997, 437).

Akkadian emphatics have no backing effect on the neighboring vowels, which would be expected if they were pharyngalized (Knudsen 1961, 89–90, cf. Faber 1980, 146).

Pharyngalized realization of Akkadian emphatics has been inferred from the assimilation *-kṭ-* > *-ḳṭ-* in MA and NA (*iḳṭibi* ‘he said’, GAG §§ 29e, 96f), but the relevance of this feature has been dismissed (Faber 1980, 146; Kouwenberg 2003, 84; cf. Huehnergard 1997, 438 for a possible CS influence).

Evidence from ancient WS is scarce. According to Faber (1980, 140–141), the assimilation **-ṣt-* > *-ṣṭ-* in the Dt stem in Hebrew (*hiṣṭaddēk* ‘he declared himself righteous’) suggests backing rather than glottalization. The same assimilation is attested in Aramaic (*yiṣṭabbaʿ* ‘he will be moistened’ in Da 4:12, Bauer / Leander 1927, 33) and in Arabic (Fischer 1987, 25–26).

1.3.1.3. Structural arguments for glottalization in PS

There are structural arguments in favor of glottalization and against backing in PS:

- (a) Glottalization is cross-linguistically common, whereas pharyngalization and velarization are rare (Cantineau 1951–1952, 92; Faber 1980, 164–165).
- (b) The triadic organization of stops and affricates agrees with the glottalic hypothesis: while backed consonants can be both voiceless and voiced, glottalized consonants can only be voiceless (Moscatti 1954a, 25; Dolgopolsky 1977, 3, 1999, 29; Faber 1980, 157; Bomhard 1988, 116).
- (c) Transformation of backing into glottalization is difficult, but the reverse is easily conceivable (Haudricourt 1950; Cantineau 1951–1952, 93; Moscatti 1954a, 26; Dolgopolsky 1977, 6–7; Faber 1980, 160–162; Tropper 2000a, 97).
- (d) Lack of reliably reconstructed emphatic labial **p* (cf. 1.4.1.) agrees with the (physiologically motivated) cross-linguistic rarity of the glottalized bilabial stop (Martinet 1953, 69–70; Bomhard 1988, 116).

In view of these arguments, glottalized emphatics are usually postulated for PS (Haupt 1890, 252–254; Bergsträsser 1983[1928], 4; Vilenčik 1930, 89–90; Cantineau 1951–1952, 93; Martinet 1953; Moscatti 1964, 23–24; Dolgopolsky 1977; Faber 1980, 154–167; Diakonoff 1988, 35; Bomhard 1988, 115–117; Stempel 1999, 64–67; objections in Garbell 1954, 234–236 and Lipiński 1997, 105–106 are mostly groundless). Its shift to backing has been considered a CS innovation (Faber 1980, 162–163; cf. Huehnergard 2005a, 165–166).

1.3.2. The affricate hypothesis and **š*

The traditional PS reconstruction has no affricates, but according to a growing consensus this realization is to be ascribed to at least some of the traditional sibilants. Three varieties of the ‘affricate hypothesis’ can be detected: narrow, middle and broad (Steiner 1982a, 1–5). Within the narrow variety, the emphatic **š* becomes [c] The middle variety extends to the non-emphatic sibilants: **s* and **z* become [c] and [ɟ]. The broad variety subsumes lateral sibilants and interdentals.

1.3.2.1. The narrow variety of the affricate hypothesis

The narrow variety is the most persuasive and popular hypothesis. Its classic exposition is Steiner 1982a.

1.3.2.1.1. Geez

PS *š appears as a glottalized affricate [ç] in the traditional pronunciation of Geez. As shown by Cardona (1968, 8–9), Steiner (1982a, 82–83) and Podolsky (1991, 18), this pronunciation is assured already for the Aksumite period by Greek renderings with τ and τς for the toponym *šayāmo* (RIÉ 188:4) = Τιαμῶ (RIÉ 270:4), Τιάμαα (RIÉ 277:6), Τζιαμω (Bernard/Drewes/Schneider 1991, 380) and the royal name 'l'šbh (RIÉ 191:7–8, 192:7), referred to as 'Ελατςβάας by Cosmas Indicopleustes (Wolska-Conus 1968, 369). In modern ES, the affricate realization of š is (*contra* Ullendorff 1955, 112, 117–118) assured by experimental phonetics (Palmer 1956, 146; Sumner 1957, 5–9). Besides, a hushing affricate ç is attested throughout modern ES (Ullendorff 1955, 129–157; Podolsky 1991, 34–47) as an outcome of palatalization of *š (cf. 1.5.4.2.). In Southern ES, *š usually shifts to ʃ unless palatalized (Strelcyn 1968; Ullendorff 1955, 117–123; Podolsky 1991, 22–24).

1.3.2.1.2. Hebrew traditions

The affricate ʕ in (pre-)modern traditions of Hebrew has been extensively dealt with in Steiner 1982a, 11–40. The grapheme ʕ renders affricates of early New Persian (ʕ for čē ‘what’, צמה for *žāmah* ‘material’, Steiner 1982a, 13–15), Karaim and Old Osmanli Turkic (נצון for *nūcūn* ‘why’, צלבי for *čelebi* ‘gentleman’, *ibid.* 19–20), Old Italian (צנמו for *cennamo* ‘cinnamon’, לנצא for *lancia, lanza* ‘lance’, *ibid.* 25), Old Czech (פיוצ' for *pijěvicě* ‘leeches’, צטוירט for *čtvrť* ‘quarter’, *ibid.* 27), Middle High German (הולצ for *holz* ‘wood’, ציט for *zit* ‘time’, *ibid.* 27–28), and Old French (נוציש for *noces* ‘nuptials’, בירציל for *bercel* ‘cradle’, *ibid.* 30). Similarly, Hebrew ʕ was rendered by the Old French affricates *c, z* (*cedek* for צדק, *arez* for ארץ, *ibid.* 28–29). In the Cyrillic alphabet, the Slavic affricates [c] and [č] are rendered by the graphemes Ц and Ч borrowed from ʕ and ʕ̣ respectively (*ibid.* 17–18).

1.3.2.1.3. Pre-medieval Hebrew and Phoenician/Punic

There is some evidence for the ‘affricated *šade*’ in pre-medieval Hebrew and Phoenician / Punic.

In Phoenician personal names of Egyptian origin, š renders the Egyptian affricate *ḏ* (Muchiki 1999, 47–50, cf. *ibid.* 53 for *t*): *ḥrws* = *ḥr-wḏ(š)* ‘Horus is prosperous’, *šh'* = *ḏ(d)-ḥ(r)* ‘The face speaks’, *šhpmw* = *t(šy)-ḥp-(i)m.w* ‘Apis can seize them’, *šksnmw* = *t(šy)-ḥns(w)-(i)m.w* ‘Khons can seize them’ (Muchiki 1999, 24, 41; Benz 1972, 192–193).

The same is true of Egyptian proper names and loanwords in Biblical Hebrew (Muchiki 1999, 261, 263–264, 267): *šī* ‘ship’ < *d(ʔ)y* (HALOT 1020), *šāpənāt pa’nēah* (the Egyptian name of Joseph in Gn 41:45), probably = *df(ʔ.ī)-nṯ(r) p(ʔ)-nh* ‘My provision is god, the living one’, *šō’an* ‘Tanis’ (HALOT 1042) = *d’n(.t)* (cf. already Olshausen 1879, 568–569).

The name of the Hebrew letter **ש** (*šādē*) appears as *τιαδη* in the Vatican codex of LXX (Cantineau 1950, 88; Steiner 1982a, 40–41; Beyer 1994, 37).

The Punic term **hāšīr* ‘plant, herb’ (cf. Hbr. *hāšīr*, HALOT 343–344) is transcribed as *αστειρ*, *ατειρ*, *ασιρ* and *atir* in Greek and Latin (Lów 1881, 404–405; Steiner 1982a, 60–61; Friedrich/Röllig 1999, 26). The same applies to the Punic plant name *αμουτιμ*, which corresponds to **hāmūšīm* (Lów 1881, 402; Steiner 1982, 61–62).

In Latino-Punic inscriptions from Tripolitania, *š* is rendered by a special sign (conventional transcription *ç*) which represents a ligature of *s* + *t* (Cardona 1968, 10; Steiner 1982a, 63; Friedrich/Röllig 1999, 28; cf. Kerr 2007, 81–85).

According to Cardona (1968, 11), affricated realization of Punic *š* can be inferred from Sardinian *mittsa*, *mintsa* ‘spring, fountain’, going back to a form similar to Hbr. *mōšā’* ‘source’ (Wagner 1957, 105–106; Friedrich 1957, 223; cf. Steiner 1982a, 63–64).

The letters *san* and *sampi* of early Hellenic scripts are possibly derived from **ש** and render sounds which, on etymological grounds, are to be interpreted as affricates (Steiner 1982, 65; Diakonoff 1991–1992, 51; cf. Brixhe 1991, 324–335; Krebernik 2007, 129–130). Diakonoff surmises the same origin for *ψ* (*psi*) and believes that *ψ* renders Semitic **š* in *γύψος* ‘gypsum’, borrowed from a Semitic source like Akk. *gaššu* or Syr. *gaššā* (Frisk 1960, 336; CAD G 54, LSyr. 129, for *-i-* cf. Arb. *ǧiṣṣ-*, Lane 428). According to Steiner (1982a, 66), the use of double *σσ* for *š* in *βύσσος* ‘linen’ (cf. Hbr. *būš*, HALOT 115; Frisk 1960, 278) and *κασσία* ‘cassia’ (cf. Hbr. *kāšī’ā*, HALOT 1122) points to an affricate *š* in the source language, as *σσ* is the reflex of etymological affricates in early Greek. The name of the Phoenician city known as *Šumur* in EA and *Šimirra* in NA is rendered as *ξύμυρα* by Strabo (Wild 1973, 284, Steiner 1982, 69). Note, finally, *š* – *στ* in Greek *στύραξ* ‘storax’, borrowed from a WS source like Hbr. *šōrī* (Frisk 1960, 814; HALOT 1055; cf. Vitestam 1987–1988; Sima 2000, 270).

1.3.2.1.4. Ugaritic

Ugr. *mḥš* ‘to kill’ is realized as *mḥš* before the 1 sg. suffix *-t*: *mḥšt* ‘I killed’ (DUL 540–541). As seen already by Held (1959), this phenomenon is inseparable from the shift *maršu* > *marštu* in Akkadian (cf. 1.3.2.2.1) and should be interpreted as de-affrication of [ç] before *t* (Tropper 2000a, 105–106).

1.3.2.1.5. Aramaic

Evidence for an affricate *š* in Aramaic is assembled in Steiner 1982, 45–59. Aramaic loanwords and proper names with *š* are spelled with the affricate *c* in Old Armenian (Hübschmann 1892, 229; Cardona 1968, 5; Steiner 1982a, 47–48; Dolgopolsky 1999, 32): *com* ‘fast’ (Syr. *šawmā*, LSyr. 623, Hübschmann 1892, 239; 1897, 306), *crar* ‘bundle’

(Syr. *šrārā*, LSyr. 636, Hübschmann 1892, 239, 1897, 306), *cur* ‘Tyre’ (Syr. *šūr*, PS 3388, Hübschmann 1897, 293), *nacr-ac^{hi}* ‘Christian’ (Syr. *nāšrāyā*, LSyr. 444, Hübschmann 1892, 245; 1897, 312).

The Aramaic name of the letter 𐤆 appears as *cadey* in early Georgian manuscripts (Steiner 1982a, 45–47).

Aramaic-based Middle Iranian orthographies use 𐤆 to render *č* (Cardona 1968, 5; Steiner 1982a, 52–53; Skjærvø 1996, 516). In Aramaic loanwords in Middle Iranian, *č* renders *š* (GVG 208; Cardona 1968, 5; Steiner 1982a, 55): Christian Sogdian *člyb*’, NP *čalipā* ‘cross’ (Syr. *šlibā*, LSyr. 629), MP *gač* ‘lime’ (Syr. *gaššā*, LSyr. 129). And *vice versa*, *č* is rendered by *š* in Iranian loanwords in Aramaic (Olshausen 1879, 570; Vilenčik 1931, 506; Steiner 1982a, 54; Ciancaglini 2008, 81): JBA *šhr* / *šhr* ‘four’ (MP *čahār*, Steiner 1982a, 53; cf. DJBA 514), Syr. *’ešārē* ‘condiments, spices’ (NP *āčār*, LSyr. 44; Ciancaglini 2008, 115), *dāršīnī* ‘cinnamon’ (NP *dār-čīnī*, LSyr. 168; Ciancaglini 2008, 158), *šāngā* ‘cymbal’ (NP *čang*, LSyr. 632; Ciancaglini 2008, 244), *šandal* ‘sandalwood’ (NP *čandal*, LSyr. 633; Ciancaglini 2008, 245), Mnd. *šinga* ‘claw’ (NP *čang*, MD 394).

In Steiner 1982a, 57, the letter 𐤆 rendering *č* of Central Asian Turkic is described (*yytynš* = *yitinč* ‘seventh’, *syšk’n* = *sičqan* ‘mouse’).

PS **š* is rendered by *ts* in the Aramaic texts of Papyrus Amherst 63 (Steiner/Nims 1983, 263; Kottsieper 2003, 91). Steiner 1982a, 57–59 deals extensively with *tsp3n3* designating the divine mountain Šāpōn (cf. Vleeming / Wesselius 1985, 55; Hoch 1994, 409). More examples are found in DNWSI 1252–1266: *tsyry3* (18:5) ‘the emissaries’ (DNWSI 1263; = Hbr. *šīr*, HALOT 1024), *n3tsyn* (20:4) ‘quarreling’ (DNWSI 1261; = JPA *n3y*, DJPA 359), *tsw3rt3hn* (6:15) ‘their necks’ (DNWSI 1263; = Syr. *šawrā*, LSyr. 625), *ts3Bk3* (10:12) ‘righteous’ (DNWSI 1263; = Hbr. *šaddīk*, HALOT 1001). This spelling agrees with Arm. *š* = Eg. *d* in Egyptian personal names and titles (Steiner 1982a, 59): *wšhwr* = *wḏ(3)-hr* ‘May Horus be prosperous’, *phykšš* = *p(3)-ḥy-(r)-k-(3y)-d(3)-d(3)* ‘He who ascends to the high head’, *šmhḡ* = *d(d)-mh(y.t)* ‘the North speaks’, *pšhmšnwty* = *p(3)-šh-mḏ(3.t)-nṯ(r)* ‘The scribe of the god’s book(s)’ (Muchiki 1999, 77, 110, 140, 170).

In the Aramaic incantation from Wadi Ḥammamat, Aramaic *š* is rendered by the Egyptian affricate *ṭ*: *By.t* = *šydt* ‘Huntress’ (Steiner 2001, 267).

The Old Persian rendering *n-b-u-ku-(u)-d-r-č-r* of the Akkadian royal name *Nabû-kudurrî-ušur* has been used as an argument for an affricate *š* in Akkadian (Olshausen 1879, 568–569; Haupt 1890, 262; Vilenčik 1930, 93; Cardona 1968, 5; Diakonoff 1980, 10), but an Aramaic intermediary is likely (Steiner 1982a, 50, 70–71).

1.3.2.1.6. Arabic

As observed by Vilenčik (1931, 505) and Cardona (1968, 11–12), Arabic *š* renders *č* in loanwords and proper names from a variety of Oriental languages. Persian loanwords are prominent in Steiner 1982a, 75–77: *šanār*- ‘plane tree’ < *čanār*, *šarm*- ‘hide’ < *čarm*, *šawlažān*- ‘polo stick’ < *čawgān*, *šin*- ‘China’ < *čīn*- (Eilers 1971, 590, 607–608). For Steiner (1982a, 76, 79–81), most of this evidence is inconclusive because of the possibility of an Aramaic intermediary.

Outside the Iranian domain, note perhaps *šūfu l-baḥri* ‘sea-weed’ (Lane 1748), which has been considered a loanword from Coptic ⲭⲟⲟⲩⲩ ‘papyrus’ (Wb. V 359, Steiner 1982:76; for Eg. *twfy* see further Muchiki 1994:252, Ward 1974).

According to Yushmanov (1998[1940], 144), alternations between *š* and *k*, *q*, *ṣ* as the third root consonant observed in Colin 1934 (*trš* / *trṣ* ‘to be strong’, LA 7 11, TA 5 438 or *bḥš* / *bḥq* ‘to pick out (one’s eye)’, LA 7 4, 10 15) may point to an affricate *š*, which would be phonetically close to the affricate *ṣ* and palatalized (> affricate) allophones of *k* and *q*.

Egyptian Arabic ص may render Coptic affricates *č* and *ṣ*: *bašrōš* ‘oats’ < πι-χροωχ, πε-σοος ‘seed’, *šīr* ‘salt fish’ < χιρ (Behnstedt 1981, 84; Vycichl 1983, 331)

Hypothetic affricate realization of ص contrasts with its description by native grammarians (notably, Sibawayhi), to whom only a fricative ص was known (Steiner 1982a, 79).

1.3.2.1.7 Latin -st- and Greek -στ- rendered as *š* in Hebrew, Aramaic and Arabic

Hebrew, Aramaic and Arabic *š* may render Latin -st- and Greek -στ- (Cardona 1968, 11): Arb. *qašr*- ‘castle’ < Greek *κάστρα* < Latin *castra* (Jeffery 1938, 240–241) or Arb. *širāt*- < Greek *στράτα* < Latin *strata* (Jeffery 1938, 195–196). For Steiner (1982a, 42), these examples are irrelevant in view of the similar *t*-excrescence in such transcriptions as Μεστραυμ and Βόστρα for *misrayim* and *bosrā* (Vitestam 1987–1988, 33), but the similarity is only partial: in *castra* and *strata*, -t- is already present in the source-word and disappears rather than emerges in the Semitic forms. Since in all pertinent examples *st* = *š* appears before *r*, Steiner’s doubts may still be not unfounded, but it is remarkable that a realization [st] for ص has been described for some varieties of Yemenite Arabic (Behnstedt 1987, 7–9; Watson/Bellem 2010, 351).

1.3.2.1.8. Egyptian *d* is rendered by ŠV signs in Neo-Assyrian and Neo-Babylonian

Egyptian *d* is rendered by ŠV signs in NA and NB Akkadian (Ranke 1910, 93): ŠI-*nu* = *d*^c*n* ‘Tanis’ (Ranke 1910, 34; Borger 1996, 20; Vergote 1973, 97–98), ŠI-*ḥa-a* = *d*(*d*)-*ḥ*(*r*) (Ranke 1910, 34; Borger 1996, 21; Vergote 1973, 98), *u*-ŠI-*ḥa-an-ša* = *w**d**ṣ*-*ḥnsw* (Ranke 1910, 36; Johns 1901, 537), *ga*-ŠU-ŠU = *k**ṣ**j*-*d**ṣ* (Vittmann 1984, 65), ŠU-*u-a*-ŠU = *d*(*d*)-*w**ṣ**d**j*(*t*) (Ranke 1910, 34).

1.3.2.2. The narrow variety of the affricate hypothesis

The narrow variety proven (*contra* Moscati 1964, 33), structural considerations may prompt one to think that if **š* was an affricate, the non-emphatic members of the **s* – **š* – **z* triad were affricates as well. Steiner (1982a, 84–89) rightly warns against this extrapolation. If the PS emphatic were glottalized (1.3.1), an affricate realization of **š* is nearly inevitable given the cross-linguistic rarity of glottalized sibilants (Martinet 1953, 71; Steiner 1982a, 84–89) and has no bearing on the phonetic identity of **s* and **z*. Affrication can be genuine for the whole triad: its preservation in the ‘emphatic’ member being secured by glottalization (Vilenčik 1930, 92; Martinet 1953, 71–72), but

the reverse is also possible: glottalization may secondarily induce affrication into an originally fricative sound (cf. Voigt 1986, 55–56).

The middle variety must therefore be supported by independent evidence.

1.3.2.2.1. Akkadian

The affricate interpretation of Akkadian *s*, *z* and *š* is now generally accepted (W. Sommerfeld in GAG § 30). Its pillars are laid by Diakonoff (1980; 1991–1992, 36–55) and Faber (1985a), followed by Girbal 1997, Tropper 1996 and Streck 2006. The available evidence can be subdivided into internal and external sources.

Internal evidence comes from phonotactic rules affecting the sibilants in early Akkadian orthography.

- (a) When pronominal enclitics in *š*- are attached to forms ending in a dental, the outcome is spelled as (VZ)ZV: *mu-ZA/mu-UZ-ZA* ‘her husband’ < **mut-ša*, *aš-ša-ZU/aš-ša-AZ-ZU* ‘his wife’ < **ašsat-šu*, *il-ma-ZI* ‘he knew her’ (all examples, after Streck 2006, 228–230, are from CH). As observed in Streck (2006, 231–232) and Westenholz (2006, 253, 258), the same spelling characterizes the combinations of *š*- with word-final *s*, *z* and *š* (*iḫ-ḫa-AZ-ZI* ‘he will take her’ < **iḫḫaz-ši*, Streck 2006, 232).

It fell to Diakonoff (1980, 11 and 1991–1992, 52) and Faber (1985a) to explain this phenomenon in terms of the affricate hypothesis: the combination dental + sibilant becomes an affricate and is spelled with the corresponding signs (cf. already Goetze 1958, 148; Hecker 1968, 63). Since double spellings (like *mu-UZ-ZA*) are common in some OB corpora, the affricate was probably geminated ([mucca]), although the origin of the doubling is uncertain (Girbal 1997, Streck 2006, 230).

As observed by Goetze (1958, 142–143; cf. Westenholz 2006, 253), when pronominal suffixes in *š*- are attached to forms ending in *-š* in the ‘northern’ OB orthography, the outcome may appear as ZV (*er-re-ZA* ‘her tenant farmer’ < **errēš-ša*, CH, Streck 2006, 239) instead of SV, which is more common in such cases (*lu-la-bi-SI* ‘I will clothe her’ < **lulabbiš-ši*, Sippar, Westenholz 2006, 259). The emergence of an affricate from the contact of two plain sibilants ([šš] or [ss] > [c(c)]) is hard to explain (Buccellati 1997, 29; Streck 2006, 242).

- (b) Before the feminine suffix *-t*-, there is a shift of *š*, *s* and *z* to *š*: *maršu* ‘sick’, fem. *maruš-t-u*, *naplasu* and *naplaš-t-u* ‘look, glance’, *manzazu* and *manzaš-t-u* ‘position’. Since the sign *ÁŠ* used in such cases belongs to the SV series (Streck 2006, 216–217), the outcome of the shift is actually *-st*- rather than *-št*-. This phenomenon has been plausibly interpreted by Diakonoff (1991–1992, 53) as de-affrication: [ʔst], [ʔšt], [ʔzt] > [st] (cf. already Knudsen 1982, 7 as well as Tropper 1996, Girbal 1997, Streck 2006, 216–218). Outside this morphological position, cf. *eldu* (= **ešdu*) ‘reaped’ < *ešēdu* ‘to harvest’ (CAD E 338). In Knudsen 1961, 7 and Streck 2000, 230, the same explanation is proposed for the WS onomastic element *ia-AŠ-du-uḫ/ia-ÁŠ-du-uḫ* (instead of the expected *ia-AZ-du-uḫ*) < **šdḫ* ‘to be just’.
- (c) According to Diakonoff (1991–1992, 52), Tropper (1996, 648) and (Streck 2006, 218), assimilation of the reflexive marker *t* to the first radical *š*, *s* and *z* (*issaḫar* ‘he turned’) favors the affricate realization of these consonants. While the [ʔst]

cluster in *[i-ʰs-ta-ħar] is certainly unwelcome, the assimilation [ʰst] > [ʰss] is (*contra* Diakonoff) hardly a natural way of resolving such a cluster (as observed by Streck, such a development would be radically divergent from the phonetically justified shift [ʰst] > [st] discussed in section b). More attractive is, therefore, the reconstruction *[i-t-ʰsaħar], with the *t*-marker prefixed rather than infix (as against *i-p-ta-ras* in the regular paradigm; the contrast is explicit in the infinitive *ti-šbutum* vs. *pi-t-rusum*, GAG § 18a). Within such a reconstruction, the assimilation *[i-t-ʰsaħar] > [iʰsaħar] is indeed quite natural. It is thus the unusual prefixed position of *t* – be it an archaism or a secondary metathesis (Diem 1982, 73–74; Huehnergard 1997, 440–441) – that is relevant for the affricate hypothesis: verbs *primae* *s*, *s* and *z* behave like verbs *primae* *d* or *t* (cf. *iddakaš* ‘it separated itself’, *ti-dkušat* ‘it is separated’, CAD D 34), with which they share the dental onset, but differ from verbs *primae* *š* (cf. *i-š-ta-pak* ‘he poured’, *ši-t-pukum* ‘to pour’), which is a plain sibilant (cf. Streck 2006, 227–228, 241).

- (d) The shift *š* > *l* discussed in 1.3.3.14. is best known to occur before dentals, but also affects *šs* and *šz*: *ulziz* (< *ušziz*) ‘he established’, *ilsi* (< *išsi*) ‘he shouted’ (GAG § 301). Since the lateral realization of *š* is elsewhere conditioned by the following dental, its presence before *s* and *z* favors their affricate realization (a dental onset).

Some of the above phenomena are attested already in Sargonic (Hasselbach 2005, 143–144), whereas the OA picture is largely identical to that of OB (Hecker 1968, 59–66).

External evidence for the affricate realization of the ZV series comes from non-Semitic languages which used Akkadian cuneiform.

The best known example is Hittite (Albright 1946, 318; Haudricourt 1951–1954, 37–38; Martinet 1953, 71; Diakonoff 1980, 10 and 1991–1992, 42–43), where the affricate value [c] for ZV is assured by the rules of IE historical phonology (Friedrich 1974, 32, Vanséveren 2006, 45–46).

The ZV series renders the affricate *t* in Egyptian words in EA: *pa-ZI-t[e]* ‘vizier’ (EA 71:1) < *p(š)-t(š)t(y)* (CAD P 221, Muchiki 1999, 300), *ZA-ab-na-ku-u* ‘a vessel’ (EA 14 III 54) < *t(š)b-n-k(š)* (CAD Z 9, Ranke 1910, 20, Vergote 1973, 101, Muchiki 1999, 303).

The signs ZA, ZÍ, AZ, IZ render the Old Iranian affricates *č* and *ž* in Elamite (Paper 1955, 28–29; Tavernier 2010), *da-ZA-ra*, *da-IZ-ZA-ra(-um)* = *tačara-* ‘palace’, *ha-ra-an-ZA-na-um* = *āraṇžanam* ‘color’, *ba-ZÍ-iš* = *bāžiš* ‘tax’ (Tavernier 2007, 36). An affricate value of the ZV series in Akkadian has been often deduced from this practice (Vilenčik 1931, 506; Diakonoff 1980, 10 and 1991–1992, 44; cf. Steiner 1982a, 49–50, 71–72).

1.3.2.2.2. Early Canaanite

Early Canaanite reflexes of **s*, **z* and **š* are rendered by the Egyptian graphemes *t* (for **s*) and *ḏ* (for **z* and **š*):

**a-ti₂-ra* ‘prisoner’ – Hbr. *ʾašīr*; *ku-ti₂* ‘cup’ – Hbr. *kōš*; *ku-ti₂-ta* ‘cloth’ – Hbr. *kāsūt*; *tu-pi₂-r* ‘scribe’ – Hbr. *sōpēr*; *ti₂-pa-ra* ‘bowl’ – Hbr. *sēpāl*; *t-t-t* ‘siege ramp’ – Hbr. *sōlālā*; *tu₂-ru₂-ta* ‘groats’ – Hbr. *sōlāt* (Hoch 1994, 45, 338–339, 341, 364, 368–369, 369–370; HALOT 73, 466, 488, 767, 764, 757, 758);

ḥaṣṣiḏa ‘to hurry’ – Hbr. *ḥfz*, Arb. *ḥfz*; *ḥiḏiḏa* ‘sow’ – Hbr. *ḥāzīr*, Arb. *ḥinzīr*; *ḏiṣṣu* ‘olive’ – Arb. *zayt*-, Hbr. *zayit* (Hoch 1994, 225, 254, 395; HALOT 339, 302, 268; Lane 601, 732, 1274);

kaṣṣa ‘gypsum’ – Akk. *gaṣṣu*, Arb. *ḡiṣṣ*-, *daḥḡaḡa* ‘dunking, soaking’ – Arb. *ṣby*, Hbr. *ṣb* (Hoch 1994, 307–308, 383–384; AHw. 282; Lane 428, 1647; HALOT 998).

Since Eg. *t* and *d* were affricates ([č] and [ʒ] or [č] and [č] respectively, Vergote 1945, 48–57; Vycichl 1990, 45–47, 65–66; Schenkel 1990, 39–40; cf. Hoch 1994, 408, 429–430), the Egyptian spellings provide a solid piece of evidence for an affricate realization of *s* and *z* in early Canaanite (Albright 1928, 232 and 1946, 318; Vilenčik 1930, 91–92; Steiner 1982a, 68–69; Hoch 1994, 408).

Some time later, the affricate realization of Canaanite *s* [c] and *z* [ʒ] was lost. For Tropper (1994, 22; 1995b, 511), Phoenician 𐤓 as the rendering of the ‘general sibilant’ of various non-Semitic languages (Friedrich/Röllig 1999, 27–28) means that 𐤓 was unsuitable for this purpose and, hence, still an affricate until ca. mid-3rd century B.C. (cf. already Garbini 1971, Gumpertz 1942, 115; Garbell 1954, 237). However, as pointed out in Albright (1928, 232), Steiner (1982, 68–89) and Dolgopolsky (1999, 61) the use of Egyptian *s* (instead of earlier *t*) to render Canaanite *s*, attested since ca. 1000 B.C., suggests that already at the turn of the 1st millennium B.C. the affricate realization of 𐤓 was lost (cf. Woodhouse 2003, 273). The explanation of the Phoenician picture is, therefore, to be sought in the phonetic nature of the ‘general sibilant’ of the non-Semitic languages in question, probably closer to 𐤓 [ʒ] than to 𐤓 [s] (cf. Lipiński 1997, 122).

1.3.2.2.3. Modern South Arabian ‘nine’

Throughout MSA, *t*- in the reflexes of PS **tiš*- ‘nine’ is lost: Mhr. *sē*, Jib. *soʿ*, Soq. *seʿeh* (ML 338, JL 220, LS 289). Incidentally, these forms display the shift PS **š* > *s*, which is unusual for the basic strata of the MSA vocabulary, where *š*, *ṣ* or *h* are expected (cf. 1.5.5.). Taken together, these two peculiarities point to *š* = [s] and *s* = [c] in proto-MSA (Testen 1998, SED I p. XCI and cf. already Yushmanov 1934, 102): PS **[tiš-]* > proto-MSA **[tsaʿ]* (**[caʿ]*) > Jib. *soʿ*. Neat structural parallels are found in Neo-Aramaic, where the numeral ‘nine’ exhibits *č* (otherwise atypical for the genuine lexicon of these languages) instead of *tš*: Tur. *čaʿ* (Tezel 2003, 122–123), Jewish Neo-Aramaic (Sulemaniyya, Köy Sanjak) *ʿičʿa* (Khan 2004, 596; Mutzafi 2004, 213), M. Mnd. *ečča* (Macuch 1965, 20). Tigre *soʿ* ‘nine’ (WTS 311), obviously explainable in the same way, is not relevant for the affricate hypothesis since **š* and **s* are not distinguished in ES.

1.3.2.2.4. West Semitic loan words in Armenian

According to Dolgopolsky (1999, 33), in the older stratum of Semitic loanwords in Armenian the reflexes of PS **s* and **z* appear as affricates: *čʰecʰ* ‘moth’ (Hbr. *sās*, Syr. *sāsā*, SED II No. 198, cf. Hübschmann 1892, 251 and 1897, 317), *ʒetʰ* ‘olive, oil’ (Hbr.

zayit, Syr. *zaytā*, HALOT 268, LSyr. 195, Hübschmann 1892, 243 and 1897, 309–310), *zivt^h* ‘pitch’ (Hbr. *zāpūt*, Syr. *zeptā*, HALOT 277, LSyr. 203, cf. Hübschmann 1897, 185, 310), *xənžor* ‘apple’ (Syr. *ḥazzūrā*, LSyr. 226, cf. Hübschmann 1892, 238; 1897, 305).

1.3.2.2.5. Letter of the Greek alphabet

The Greek letter Σ for [s] goes back to 𐤓 rather than 𐤔, which is unexplainable if the traditional values [š] and [s] for 𐤓 and 𐤔 are maintained. Similarly unclear is 𐤔 as the source of Ξ [ks]. Conversely, the values [s] and [c] for 𐤓 and 𐤔 provide a suitable background for both adaptations (Diakonoff 1991–1992, 51; Tropper 1995b, 510; Krennik 2007, 128–129, 156).

1.3.2.2.6. Punic

For Cardona (1968, 10) and Tropper (1999, 735), the use of σδ and *sd* in the Greek and Latin renderings of the Punic name ‘*zrbʿl*’ (Ασδρουβας, (*H*)*asdrubal*, Friedrich / Röllig 1999, 45) points to an affricate *z* ([ʒ]) in the source-form. This is probably not the case (Steiner 1982, 41–43; Dolgopolsky 1999, 153): the dental ‘excrescence’ in such cases is conditioned by *r* and seems to affect manifest plain sibilants as well (Ἰστρονίλ = *yīštrāʿēl*).

1.3.2.2.7. Arabic

There is no evidence for an affricate س in Arabic (Steiner 1982a, 7–8, 81). *Contra* Corriente 1976, 76, Old Spanish affricates *ç* and *z* rendering س do not prove that it was an affricate, since Old Spanish *s*, phonetically far removed from [s], was unsuitable to render a plain hissing sibilant.

Summing up, there is sufficient independent evidence for the affricate realization of PS **s* and **z*. The middle variety can be considered proven, as witnessed by its growing authority in modern Semitic linguistics (Cantineau 1960[1941], 46; Dolgopolsky 1999, 27–28, 32–35; Stempel 1999, 51–54; Tropper 2000a, 102; Huehnergard 2004, 142–143).

1.3.2.3. The phonetic interpretation of *š

The middle variety bears on the phonetic interpretation of *š. As soon as **s* becomes an affricate, there emerges an unusual phonological system, with [š] as the widely used ‘general sibilant’ and [s] missing altogether. Cross-linguistic improbability of such a system (Faber 1980, 211–213; Dolgopolsky 1999, 33) prompts one to interpret *š either as a hissing [s] (Garbini 1984, 54–55), or an intermediate hissing-hushing alveolar phone typical of languages with only one plain sibilant, such as Peninsular Spanish, Modern Greek or Finnish (Yushmanov 1998[1940], 153; Martinet 1953, 73; Faber 1986,

169; Krebernik 2007, 129). Furthermore, according to Faber (1985b, 67–72) the shift [s] > [h] (cf. 1.5.6.) is more plausible than [š] > [h].

This reinterpretation contradicts the joint evidence of Neo-Aramaic and MSA (where the realization [š] for *š is attested synchronically), as well as the most widespread reading tradition of *š in Biblical Hebrew and the widely accepted phonetic reconstruction of *š in OB Akkadian (cf. 1.5.1.3.). The contradiction is usually solved by postulating an independent push-chain shift triggered by de-affrication of *s [c]: the natural outcome of de-affrication is [s], which can either merge with the old [s], or displace it from its original phonetic slot to a hushing [š] (Faber 1980, 202–203, 219, 224–225; 1985b, 66, 82–83, 86, 108–112; Voigt 1987, 56–57).

The shift [s] > [š] is to be postulated for Hebrew, Aramaic, MSA and OB Akkadian. The merger of [s] and [c] took place in ES and Arabic.

In Arabic, the outcome of the merger was likely a hissing-hushing sibilant rather than a pure [s] (Martinet 1953, 73; Murtonen 1966, 138; less probably a pure [š] advocated in Beeston 1962a and Lipiński 1997, 124; cf. Voigt 2001–2002, 169). This realization is probably reflected in the Maghrebi tradition of the *Abjad* alphabetic order, where س (traditional [s]) corresponds to Hebrew / Aramaic ש [š] rather than to ס [s]. The latter's equivalent is the emphatic ص [š], whereas ش (traditional [š]) is relegated to the end of the list (McDonald 1974). The same correspondences (س – ש vs. ص – ס) are common in early Aramaic borrowings into Arabic (Murtonen 1966, 137–138; McDonald 1974, 41; contrast Blau 1970, 100–104 and Diem 1980, 75–82). Last but not least, it was Aramaic ש (rather than ס) that gave origin to the Arabic letter س (McDonald 1974, 41).

1.3.2.4. Problems of the push-chain solution

The main problem of the otherwise highly persuasive push-chain shift solution is that [š] sometimes coexists with a still affricate [c]. Thus, in the Southern OB norm, the reflex of *s was still an affricate [c], but the 'general sibilant' is the same as in the rest of OB, viz. [š] (cf. 1.5.1.3.). Similarly, the 'general sibilant' of early Canaanite is rendered by Egyptian š, presumably identical to its Coptic reflex [š], but, incidentally, there is clear Egyptian evidence for an affricate *s [c] (cf. 1.3.2.2.2.). It means that the presence of an affricate *s [c] does not necessarily presuppose a hissing *š [s] in the reconstructed sibilant systems of ancient Semitic languages, *contra* Knauf (1994, 118), Voigt (1998, 181) and Sima (2001, 251) who oppose the 'affricate' Sabaic system *[s] – *[š] – *[c] to the 'de-affricate' Hadramitic system *[š] – *[š] – *[s] (cf. the Minaean system *[š] – *[š] – *[c] unanimously accepted by Knauf, Voigt and Sima).

As an alternative to the push-chain shift solution, a reverse sequence of events is tentatively postulated in Dolgopolsky (1999, 60–61), where the shift [s] > [š] is ascribed to the common WS stage and thought to trigger the de-affrication [c] > [s] independently in individual WS languages (cf. also Stempel 1999, 53). But this solution is even more problematic: there is no reason for the spontaneous shift [s] > [š] in PWS; SV spelling of the 'general sibilant' in WS personal names in OB Akkadian sources (cf. 1.5.2.1.) is not compatible with [s] > [š] already in PWS; de-affrication must have started many centuries after the emergence of its alleged trigger; a fully identical shift [s] > [š] in OB Akkadian is disregarded.

1.3.2.5. Secondary emergence of affricates?

Reliable PS reconstructions with *s [c] in the basic lexicon are not many, and those with *z [ʒ], exceedingly rare (Faber 1985b, 118–129). PS *š [c] is not treated by Faber, but its rarity is even more conspicuous (Stempel 1999, 51–52). Faber's claim about the secondary emergence of these phonemes at some pre-PS stage is, therefore, theoretically sound, even if difficult to substantiate.

1.3.2.6. The broad variety of the affricate hypothesis

The broad variety extends the affricate articulation to the traditional interdental and lateral sibilants. Thus, Vilenčik (1930, 93) reinterprets *t – *t̥ – *d as hushing affricates *č – *č̥ – *ǰ (so also Martinet 1953, 46; Diakonoff 1980, 9–10 and 1991–1992, 6; Roman 1983, 697–705; Stempel 1999, 46–50; cf. Cuny 1908, 16). A different (but still affricate) realization for the same triad is postulated in Voigt (1979, 98; 2001–2002, 173–176). Cantineau (1960[1941], 54), Martinet (1953, 71, 77), Voigt (1979, 104), Diakonoff (1980, 9, 1991–1992, 6) and Stempel (1999, 59) reinterpret the lateral sibilants *š and *ʃ as lateral affricates *č̣ and *ǰ̣.

The broad variety has been mostly supported by structural arguments: if the PS emphatics were glottalized (cf. 1.3.1.), an emphatic lateral sibilant or interdental becomes improbable (Steiner 1977, 156). The affricate realization is then extrapolated on the non-emphatic members of each triad.

The available material evidence mostly pertains to the emphatic lateral *ṣ̌. Its reflex is realized as an affricate in Jibbali (cf. 1.3.3.1.), whereas Μάτλια = *ʃmθ* (cf. 1.3.3.24.) suggests an affricate realization of ṣ̌ in early Geez (Weninger 1998, 14: 'd = τλ'). In fact, Greek τλ does not necessarily render affrication, since tl is well attested in foreign spellings of non-affricate lateral sibilants as well (Steiner 1977, 18, 23). Rodinson (1981, 104–111) spends considerable attention to ι in the Greek form (with no trace in the Geez original) and believes that τλ renders palatalization (*mouillure*) due to a 'latent' y. For Rodinson, τλ in Μάτλια is a forerunner of č̣ in modern toponyms presumably related to *ʃmθ* (such as *Dämba Məčč*), but it is more likely that ι in τλ renders affrication (cf. τ in τιαδη = *šādē*, cf. 1.3.2.1.3.).

According to Streck (2006, 245–247), the 'general sibilant' ṣ̌ in Akkadian was realized as a lateral affricate [č̣]. This reconstruction explains why the combination 'dental + ṣ̌-' yields a double Z (VZ-ZV = [cc]) in the script (Buccellatti 1997, 29): if ṣ̌ was an affricate, gemination of the dental onset becomes self-evident (Streck 2006, 245). At the same time, this reconstruction creates an unusual phonological system with no plain sibilants at all and the lateral affricate č̣ as one of the most frequent phonemes.

1.3.3. The lateral hypothesis

The necessity of reconstructing two lateral sibilants – the unvoiced *ṣ̌ [ɬ] and the emphatic *ṣ̣̌ [ɬ'] – has been demonstrated in Steiner 1977 and 1991. Although the lateral interpretation of the traditional *š and *ṣ̣̌ (GVG 128; Moscati 1964, 28, 34) is older than 1977 (Cantineau 1960[1941], 54–55 and 1951–1952, 84–87; Diakonoff 1965,

20–22), Steiner's contribution was decisive for the hypothesis' wide recognition today (Bomhard 1988, 128–129; Lipiński 1997, 129–132; Dolgopolsky 1999, 18; Stempel 1999, 56–60).

1.3.3.1. Modern South Arabian

The unvoiced lateral *ɬ is preserved in MSA (Lonnet / Simeone-Senelle 1997, 348). The reflex of *ɬ also preserves its lateral articulation throughout MSA, although its exact realization has been controversially described. According to Johnstone (ML XII, HL XIII, JL XIV, 1984, 390), *ɬ has become a non-emphatic voiced lateral sibilant ẓ in Mehri (but cf. Watson/Bellem 2010, 346) and Soqotri and a non-emphatic voiced lateral affricate ȝ in Jibbali (for the non-emphatic affricate in Mehri see also Lonnet / Simeone-Senelle 1983, 197). The non-emphatic realization of *ɬ in Jibbali was observed already by Fresnel (Lonnet 1991, 69; Yushmanov 1930, 384; Steiner 1977, 2, 13, 41), but according to Dolgopolsky (1994, 5, 1999, 30–31) the Jibbali phone is clearly glottalized. The Soqotri reflex of *ɬ is reported to be an ejective in Simeone-Senelle 1996, 312–313. A special feature of Central Jibbali is the voiced ẓ as a palatalized allophone of *l* (JL XIV), correctly described by Fresnel (Lonnet 1991, 64–65; Yushmanov 1930, 385; Steiner 1977, 14, 21, 32–34).

1.3.3.2. Arabic ض according to the native grammarians

A major fundament of the lateral theory is the lateral pronunciation of Arabic ض (*ḍād*) in the native grammatical tradition (Steiner 1977, 57–67 and 1991, 1503; Versteegh 1999, 273–274). Steiner deals extensively with the description of ض by Sībawayhi, for whom ض is articulated *min bayni 'awwali ḥāffati l-lisāni wa-mā yalihi mina l-'aḍrās* 'between the beginning of the tongue's edge and the corresponding molars' (Bravmann 1934, 52; Cantineau 1960[1941], 55; Steiner 1977, 60; cf. Roman 1983, 170–176).

1.3.3.3. Early North Arabian

The earliest piece of evidence for a lateral *ɬ in a North Arabian idiom comes from the name of an Arabian deity whose image was restored to the Arabs by Esarhaddon (Moscati 1964, 28; Steiner 1977, 92–94). This name, spelled as *ru-ul-da-a-a-u* in cuneiform (Borger 1956, 129), was identified by Ryckmans (1956, 1) and Borger (1957) with the North Arabian theonym *rdw / rdy* (Teixidor 1977, 70), vocalized as *ruḍa*ⁿ in later sources (Lane 1100). Borger successfully explained the correspondence *ld* – *ḍ* by the lateral articulation of *ḍ*. According to Teixidor 1977, 69, the same prototype is behind the theonym *Orotalt* reported by Herodotus (Steiner 1991, 1503–1504).

1.3.3.4. Arabic loanwords

Lateral ض is reflected in Arabic loanwords in several geographic areas (Steiner 1977, 68–91, Yushmanov 1926, 43):

- (a) Arabic ض is rendered as *dl* or *l* in three Arabisms in Spanish (Colin 1930, 101, Cantineau 1960[1941], 56, Giese 1964, Steiner 1977, 68–73, Corriente 1977, 46, 1989, 97–98, Versteegh 1999, 277–278, cf. Roman 1983, 194–199): *alcalde* ‘judge, mayor’ < *’al-qād(ī)*, *albayalde* ‘white lead’ < *’al-bayād*, *arrabal* (Portuguese *arrabalde*) ‘suburb’ < *’ar-rabaḍ* (Corominas 1987, 127, 116, 345). According to Corriente 1989, 98, ظ is rendered by *l* in Andalusian Arabic *nicayāl* / *cayālt* ‘to spend the summer’ = *qāyaḍa* (Lane 2579), which implies a merger of ض and ظ into one lateral sound in the source-dialect.
- (b) Arabisms with *ḍ* > *dl* or *l* are found in Malay (Steiner 1977, 75, Versteegh 1999, 280–283): *dloha* ‘morning’ (Favre 1875, 826, Wilkinson 1955, 700) < *ḍuḥā*, *dla’if* / *la’if* ‘weak’ (Favre 1875, 826, Wilkinson 1955, 639) < *ḍa’if*. The same is true for etymological *ḍ* (ظ): *lalim* / *dlalim* ‘tyrannical’ (Wilkinson 1955, 643, Favre 1875, 831) < *ḍālim*, *dlil* ‘shadow’ (Favre 1875, 831) < *ḍill* (Steiner 1977, 75).
- (c) Lateral ض is common in Arabic loanwords in West African languages, such as Hausa, Kanuri and Fula (Steiner 1977, 81–89, Versteegh 1999, 278–279): Hausa *la’īfī* ‘impotent’ (Bargery 1934, 712; Abraham 1962, 608) < *ḍa’if*, *lamūri* ‘personal pronoun’ (Bargery 1934, 718; Abraham 1962, 613) < *ḍamīr*, *larūra* ‘necessity’ (Bargery 1934, 721; Abraham 1962, 615) < *ḍarūra*, *haila* ‘menstruation’ < *ḥayḍ* (Bargery 1934, 436; Abraham 1962, 361).
- (d) In East Africa, Arabisms with *ḍ* > *l* are found in Somali (Steiner 1977, 90; cf. Reinisch 1903, 12): *ārli* ‘country’ < *’ard* (Reinisch 1902, 38; Agostini 1985, 24), *hayl* ‘menstruation’ < *ḥayḍ* (Reinisch 1903, 230; Agostini 1985, 630), *rāalli* ‘content’ < *rādī* (Agostini 1985, 510, *rāli* ‘grace, favour’ in Reinisch 1902, 323), *la’īf* ‘weak’ (Reinisch 1902, 272; Agostini 1985, 382), *faral* < *farḍ* ‘religious precept’ (Agostini 1985, 219; cf. Reinisch 1902, 155).

The attestations of *ld*-Arabisms in Spanish range from 1062 (*alcalde*) to 1439 (*albayalde*), but the lateral ض was hardly preserved until these very late dates: the relevant words must have entered the spoken language much earlier (Steiner 1977, 71). Most *dl/l*-loanwords in Malay are recorded from the 19th century onwards (Steiner 1977, 74–80), in earlier sources ض is usually represented by *d*. This suggests a source-dialect which preserved a lateral ض (< ظ) until quite recently. As for the small group of more ancient Arabisms with ض > *l* (*hil* ‘menstruation’ < *ḥayḍ*, *ramalan* ‘Ramadan’ < *ramadān*, Steiner 1977, 76–77), they must be due to earlier contacts with Southern Arabia (van den Berg 1886, 102). The same is true of Arabic loanwords with *dl/l* for ض/ظ in Southern Mindanao and Sulu (*lad* ‘the letter ض’ < *ḍād*, *ramadlan* ‘Ramadan’ < *ramadān*), which must go back to an early Malay intermediary (Steiner 1977, 78–79). The relevant Arabisms in West African languages are almost impossible to date (cf. Steiner 1977, 83–84).

The geographical source of diffusion of the lateral ض seems to be South Arabia (Corriente 1977, 46; Garbini 1984, 149–150; Versteegh 1999, 284; 2006, 545). The Yemenite roots of Andalusian Arabic are widely acknowledged (Colin 1930, 101–102; Corriente 1989, Steiner 1977, 71–72; Rodinson 1981, 103). In Malay, introduction of the lateral ض/ظ in recent loanwords is due to the influx of Hadrami immigrants, which does not predate the 19th century (van den Berg 1886, 105–122; Steiner 1977, 76), whereas the earlier stratum must derive from a South Arabian source as well (Colin 1930, 102; Steiner 1977, 78; Versteegh 1999, 280). The South Arabian origin of *l*-Arabisms in Somali is a feasible probability. Steiner’s evidence for the South Arabian origin of

ض > *l* in West Africa (1977, 87–88) is slim, but a South Arabian origin of sub-Saharan Bedouin Arabic, from which this feature possibly derives, has been advocated in Kampffmeyer 1889 and Corriente (1977, 46; 1978b, 155).

1.3.3.5. *l/d* lexical doublets

Laterality of *d* is assured by *l/d* lexical doublets collected in Corriente 1978b (cf. Colin 1930, 102–103; Yushmanov 1998 [1933–1934], 84; [1940]148–149; Cantineau 1960 [1941], 55–56; Steiner 1977, 95–98). Corriente's impressive evidence leaves some questions unanswered (Steiner 1977, 95–96). Are we always faced with the shift *d* > *l*, as in *ddd* (III) → *ldd* 'to overcome in litigation' (Lane 1775, 2656) or does *l* also shift to *d*, as in *lhb* 'to flame, to blaze' → *dhb* 'to roast' (Lane 2674, 1807)? Can we differentiate between widely attested roots (like *lmm* – *dmm* 'to collect, to gather', Lane 3013, 1801) and (dialectal) occasionalisms (like *'ilṭaṣa'a* instead of *'idṭaṣa'a* 'he lay down on his side' or *ṣadd-* instead of *ṣald-* 'hard', Kofler 1940, 97)? Are there any phonetic conditions triggering the emergence of the doublets, as seems to be the case in *'ilṭaṣa'a* and *ṣald-*, where *d* is preceded by a dental stop?

1.3.3.6. Incompatibility of *d* and *l*

Since Cantineau 1960[1946], 200, laterality of *d* has been tested by its (in)compatibility with *l*. Cantineau (and Fischer 1968, 59) raised doubts over laterality because the incompatibility between *d* and *l* is not absolute, but Greenberg's more elaborate results (1950) prompt one to reconsider the issue: roots combining *d* and *l* are 11, as against 22,9 statistically expected. For Greenberg, these data 'do not lend much support to the lateral theory' but, as shown by Steiner (1977, 109–110), they actually do: compare the statistics for *l* + *ṣ* (40 attested vs. 32 expected) or *d* + *n* (29 attested vs. 22 expected). Destructive criticism of Steiner's results in Beach / Daniels (1980, 220) and Beeston (1979, 267) is unfounded (cf. Steiner 1991, 1504–1506).

1.3.3.7. Arabic dialects

Lateral ض is lost in most Arabic dialects, where it merges with ط (for Arab grammarians' descriptions of this merger, cf. Steiner (1977, 71), Versteegh (1999, 275), Brown 2007; for North Yemenite dialects where they are still kept apart v. Behnstedt (1987, 5–6). The outcome of the merger is either [d] or [ḍ], the former in 'urban' dialects and the latter, in 'Bedouin' / 'rural' ones (Cantineau 1960[1941], 56; Fischer 1968, 55; Corriente 1978a, 50–51; Brown 2007, 335–336). The opposition ض [d] vs. ط [ḍ] in the reading tradition of Classical Arabic is thought to be artificial and irrelevant for the original pronunciation of ض (Fischer 1968, 55; Steiner 1977, 36–37).

Lateral ض has been reported for Arabic dialects of South Arabia, such as Hadramaut, Dathina and Dhofar (Cantineau 1960[1941], 56; Landberg 1901, 637; van den Berg 1886, 239; Rhodokanakis 1911, 82; Steiner 1977, 18–19, 23), although it seems that Arabic dialects of the area were not always properly distinguished from MSA (cf.

Steiner 1977, 15). Preservation of laterality may be due to the phonological conservatism of these dialects, but substratum / adstratum MSA influence is also conceivable (cf. Corriente 1978a, 50, 52; Versteegh 1999, 284; Brown 2007, 343–345). Several examples of *l* for ض are found in the wordlists of sub-Saharan Bedouin dialects in Kampffmeyer (1889, 148–163: *lúfdu* ‘frog’, *mārāla* ‘sick’ = *difdī-*, *mrđ*), where *r* and *r* (= غ) for ض are also attested (*rāifu*, *raif* ‘guest’, *ābiar* ‘white’ = *ḡayf-*, *abyaḡ-*, *báir* ‘egg’ = *bayḡ-*), see further Kampffmeyer 1889, 196, 204. Lateral ض in the reading tradition of Classical Arabic has been reported for Mauritania and Turkey (cf. Cohen 1963, 11; Rabin 1951, 33; Brown 2007, 337–338; Versteegh 1999, 276–277).

1.3.3.8. Phonetic realization of ش according to Arab grammarians

PS *š yields ش in Arabic. Its exact phonetic nature as described by Arab grammarians has been hotly debated (Bravmann 1934, 49–52; McDonald 1974, 42–43; Beeston 1962a, 223–224; 1979, 267; Faber 1980, 183–186; Roman 1983, 144–147). For Corriente (1976, 76; 1978a, 50–51), both ض and ش ‘are clear laterals’ in Sībawayhi’s description, whereas Steiner (1977, 99, 101) believes that ‘Sībawayhi ... knows nothing of a lateral ش and ‘everyone agrees ... that it [Sībawayhi’s account of ش] does not describe a lateral’ (see also *ibid.* 36, 54, 66).

1.3.3.9. Further evidence for the lateral ش in early Arabic

According to Steiner (1977, 95, following Cantineau 1960[1941], 63), a direct piece of evidence for the lateral ش in early Arabic comes from the pair of doublets *qišdat-* / *qildat-* ‘sediment of butter’ (LA 3 433, 451) reported by 9th century Arab grammarian al-Kisāʿī. The same scholar relates that Rabīʿites and Yemenites ‘make *šin* into a *ḡād*’ (*yaḡʿalūna š-šina ḡādan*, Kofler 1940, 92; Steiner 1977, 99–101). Laterality of ض being established, one can infer from this report that ش in Rabīʿites’ and Yemenites’ speech shared with it this feature. For Steiner, lateral ش in the speech of the ‘Mesopotamian tribe of Rabīʿa’ (cf. Kindermann 1995, 353) demonstrates that it is not bound to South Arabia, but cf. Beeston 1979, 267 for whom Rabīʿa is a ‘southern’ dialect.

1.3.3.10. *ḡ* > š in the Koran

Cantineau (1960[1941], 46), Corriente (1976, 76) and Roman (1983, 203–204) report the reading tradition *li-baʿš šaʿnihim* for *li-baʿḡi šaʿnihim* in the Koran (24:62). The assimilation *ḡ* > š points to a close phonetic similarity between ش and ض, since ض does not assimilate to any other consonant.

1.3.3.11. *ḡ*/š lexical doublets

Phonetic proximity between ش and ض is deduced from *ḡ*/š lexical doublets (Steiner 1977, 102–107). Already Rabin (1951, 33) explained ‘*illawḡ-* / ‘*illawš-* ‘jackal’ (cf. LA

6 385, 7 216) and *nāḍa* / *nāša* ‘to carry’ by the laterality of ش and ض. Both lexemes are traditionally associated with Yemen (but cf. al-Selwi 1987, 162, 210), which restricts their validity for Classical Arabic (Fischer 1968, 59). However, more examples with no apparent Yemenite connections are found in Yushmanov (1998[1933–1934], 84; [1940], 148–149), Maizel (1983, 159), Fischer (1968, 59–60), Kuryłowicz (1972, 28–29) and Steiner (1977, 105). The relevance of these doublets is uneven (Steiner 1977, 103–105), and the queries raised in 1.3.3.5. are also valid here: the direction of the shift has not been clarified (*ḍ* > *š* seems to be typical, as in *bayyada* / *bayyaša* ‘to whiten’, Lane 282, LA 6 323); semantically close, but clearly independent lexemes (*šarr*- ‘evil’ – *ḍarr*- ‘harm’, Lane 1524, 1776 or *mšy* ‘to walk’ – *mḍy* ‘to pass’, Lane 3020, 3021) are not separated from occasional deviations (*šummaḥr*- / *ḍummaḥr*- ‘corpulent; arrogant’, LA 4 497, 569); conditions triggering the shifts are not investigated. Steiner (1977, 105) is, nevertheless, correct to assert that ‘there are enough unassailable doublets to justify a claim that ض and ش were phonetically similar’.

1.3.3.12. š// lexical doublets

A more straightforward set of doublets, viz. *š*//*l*, can be found in Yushmanov (1998 [1933–1934], 84 and [1940], 148–149): *šakis*- / *lakis*- ‘stubborn’ (LA 6 523), *kšḥ* ‘to bear enmity’ / *klḥ* ‘to look fierce’ (WKAS K 205, 315), *tašš*- / *tall*- ‘fine rain’ (Lane 1853, 1862).

1.3.3.13. Incompatibility of ش and /

Laterality of ش is deduced from its incompatibility with *l* (Steiner 1977, 108–109; cf. Cantineau 1951–1952, 87 and 1960 [1946], 200): 19 existing roots vs. 40,2 statistically expected, sharply contrasting with *š* and *n* (50 attested vs. 39 expected) or *l* and *s* (63 attested vs. 51 expected).

The repeatedly observed absolute incompatibility between *š* and *ḍ* (Cantineau 1951–1952, 87; 1960 [1946], 200; Kuryłowicz 1972, 28; Stempel 1999, 58) has no bearing on the lateral hypothesis, as *ḍ* is not compatible with other sibilants either (Steiner 1977, 5–6; Roman 1983, 205–206): thus, the only root with *ḍ* and *s* in Arabic is the primary noun *ḍirs*- ‘molar tooth’ (Greenberg 1950, 174).

1.3.3.14. The shift št > lt in Akkadian

A remarkable argument for the laterality of *š comes from the shift *št*, *šd*, *št* > *lt*, *ld*, *lt* in Akkadian (Yushmanov 1998[1940], 149; Gumpertz 1942, 114; Diakonoff 1965, 22; 1980, 11; Steiner 1977, 144–148; Swiggers 1980; Streck 2006, 238, 243–251). Regular from MB on, this shift may have some precedents in OB (*il-ta-nu-um* ‘north’, *lil-di* ‘butter’, *gi-il-tu-ú* ‘cross-bar’; Lieberman 1977, 8; Streck 2006, 238, contrast Keetman 2009, 449–451) and is attested already in Ebla (Krebernik 1982, 200, 217; Conti 1990, 14). The Ebla examples are disregarded in Keetman 2006, 370–377 (but cf. now Keetman 2009), whose thesis about the non-genuine (presumably Chaldaean) origin of the

št > *lt* shift in Akkadian is unacceptable (Streck 2008, 251). Laterality of *š* in Akkadian is the best (perhaps the only) way of explaining this shift (Hoch 1994, 404 *contra* Faber 1985b, 88), but its implications are rather problematic: PS **š* must have absorbed **ṣ̌* (more frequent and less marked), producing a peculiar consonantal system with the lateral *š* as the ‘general sibilant’ (Diakonoff 1988, 38), but no *s* or *ṣ̌* whatsoever (Beach/Daniels 1980, 221; Keetman 2006, 270; cf. Steiner 1977, 146 and Faber 1985b, 73). As a palliative, a positional distribution has been postulated, with **š* absorbing **ṣ̌* before dentals, but *vice versa* elsewhere (Steiner 1977, 146–147; Fales 1978, 97; Streck 2000, 217). The lateral allophone must have also been preserved after *l*, as shown by the assimilation *lš* > *šš* in *a-ap-pa-aš-šu* < *appal-šu* ‘I will satisfy him’ or *a-ka-šu* < *akal-šu* ‘his bread’ (Swiggers 1980; Streck 2006, 238).

1.3.3.15. Lateral traces of Proto-Semitic **ṣ̌* in Akkadian

Steiner (1977, 158, cf. SED I p. LXXIII) tentatively proposed that PS **ṣ̌* also left a lateral trace in Akkadian, supposedly reflected in the shift **št* > *lt* in such examples as *maršu* ‘sick’, fem. *marultu* (< PS **mrṣ̌*) or *emšu* ‘sour’, fem. *emiltu* (< PS **hmṣ̌*). The improbability of this hypothesis was recognized by Steiner himself: there is no direct shift from **št* to *lt*, but rather a three-stage development **št* > *šṭ* > *lt* (**marušṭu* > *marušṭu* > *marultu*), which affects every *š* independently of its origin, cf. *ḫālištu* ‘female wool-comber’ (CAD H 43) < PS **hlṣ̌* (Arb. *hlš* ‘to be free from admixture’, II ‘to clarify’, Lane 785).

There may be a different piece of evidence for a lateral *ṣ̌* in early Akkadian. Akk. *arallû* ‘Netherworld’ (CAD A₂ 226) goes back to Sumerian *arali* (PSD A₁ 136–140), with no transparent internal etymology. Could the Sumerian word be borrowed from an early Semitic **arṣ̌*- ‘earth’, whose reflexes commonly denote the Netherworld in Akkadian, Ugaritic and Hebrew (CAD E 308, DUL 106, HALOT 91)? Phonetically, PS **arṣ̌*- > Sum. *arali* would be very close to Arb. **ard*- > Somali *árli* ‘country’ (cf. 1.3.3.4.). The OB *e*-form *eršetum* is clearly not a suitable source for the borrowing, but the Sargonic *a*-form *ar-ša-tim* (Westenholz 1974, 98) is much more so. The feminine marker *-t* in Akk. *eršetum* is a secondary addition (Lipiński 1997, 230), cf. *napiš-t-um* ‘soul’ < PS **napṣ̌*-, *ešem-t-um* ‘bone’ < PS **ašṃ*-, *iš-āt-um* ‘fire’ < PS **iṣ̌*- and the corresponding forms without *-t* in the personal name *tu-tá-na-ap-šum* ‘She has found life’ (George 2003, 153), *ešem-šēru* ‘backbone’ (CAD E 343) and the theonym *išum* (Roberts 1972, 40–41).

1.3.3.16. Incompatibility between *ṣ̌* and *l* in Hebrew

Low compatibility between *ṣ̌* and *l* in Hebrew has been considered as proof of the laterality of *ṣ̌* (Koskinen 1964, 45–47, followed by Kuryłowicz 1972, 28), but the difference between the attested and the expected number of roots with *ṣ̌* and *l* (5 vs. 10,7) is hardly relevant statistically (Steiner 1977, 6).

1.3.3.17. Proto-Semitic *šhk ‘to laugh’

Close proximity between *š and *s̥ is deduced from the history of the PS root for ‘to laugh’ (Steiner 1977, 110–120; Hetzron 1972, 37; Kuryłowicz 1972, 29; cf. Diakonoff 1965, 22). This root, reconstructible as *šhk (SED I No. 69_v, following Steiner 1977, 119), displays a complex evolution. Ugr. *šhk* and *thk* (DUL 782), Hbr. *šhk* (HALOT 1019) and Gaf. *šakā* (Leslau 1956, 236) are immediately traceable to the prototype. More often, one of the two types of dissimilation (*šhk > *šhk or *šhk > *shk) is attested: Mnd. *ahk* (MD 9), Arb. *dhk* (Lane 1771), Mhr. *žəhāk* (ML 475, v. JL 325, LS 361 for other MSA) vs. Hbr. *šhk* (HALOT 1315), Htr. *šhk* (DNWSI 1121; cf. Beyer 1998, 74, 185), Mnd. *shk* (MD 320), Gez. *šahaqa* (CDG 528). As shown by Hbr. *šhk* and Gez. *šahaqa*, the outcome of the second type of dissimilation is s̥ – the non-emphatic partner of the lateral emphatic š.

Both dissimilated forms might be traced to common prototypes already in PS (Diakonoff 1965, 22; Hetzron 1972, 37). This would assure the laterality of *s̥ in PS, but not in individual Semitic languages. If, conversely, dissimilation took place independently in Hebrew, Mandaic and ES, a lateral s̥ must have existed in these languages, too. Within the Biblical corpus, both *šhk* and *shk* are attested, most of the s̥-forms being comparatively recent (Steiner 1977, 116–117; cf. Blau 1982, 4–5). Does it mean that the emphatic lateral š still existed as an independent phoneme in Biblical Hebrew behind the polyphonic grapheme ש (Steiner 1977, 112, 117)? Such an explanation is, at any rate, unsuitable for the *šhk / *shk doublet pair in Mandaic (Steiner 1977, 115): already in proto-Aramaic *š became [kx'] (cf. 1.5.2.7.2), from which no sibilant s̥ could have evolved via dissimilation.

1.3.3.18. βάλαμον

The laterality of *s̥ is suggested by Greek βάλαμον, which denotes the tree *Commiphora opobalsamum* and its aromatic sap. The Semitic origin of βάλαμον is clear (Frisk 1960, 217), but the origin of λ has long remained puzzling (Masson 1967, 77–78): no -l- is apparent in Hbr. *bōšām*, *bāšām* (HALOT 163), Syr. *besmā* (LSyr. 80) or Arb. *bašām* (Lane 209). As suggested by Steiner (1977, 123–129, following Gumpertz 1942, 114), -λσ- renders a lateral s̥, which finds now a splendid confirmation in the Neo-Babylonian spelling *ba-al-tam-mu* (Jursa 2009, 156–157). Steiner asserts that the source-language of βάλαμον was Hebrew or Phoenician (which implies a polyphonic ש in the Phoenician alphabet; Steiner 1977, 129; Dolgopolsky 1999, 18, 30), but does not exclude a South Arabian origin (cf. Beach/Daniels 1980, 221; Lipiński 1997, 129).

1.3.3.19. Jewish Babylonian Aramaic ‘arslā

JBA ‘arslā ‘hammock’ (DJBA 165) / ‘watching hut’ (Steiner 1977, 132–135) is identified with PS *‘ars- ‘bed’ in Steiner (1977, 130–136), represented by Akk. *eršu*, Ugr. ‘rš, Hbr. ‘ārāš, Syr. ‘arsā ‘bed’ (CAD E 315, DUL 185, HALOT 889, LSyr. 549) and Arb. ‘arš- ‘booth, shed; throne’ (Lane 2000). As suggested by Steiner, -sl- in ‘arslā is due to a meta-analysis of a lateral *s̥.

A similar process may explain the origin of the pan-Aramaic verbal root **slk* ‘to go up’ (Kogan 2005b, 525). Since Arb. *tasallaqa* ‘to climb’ is highly isolated and probably not genuine (LSyr. 477, *contra* Nöldeke 1903, 419), Common Arm. **slk* can be plausibly compared to PS **šky* ‘to be high’ (Haupt 1910, 712–713), represented by Akk. *šaḫû* ‘to grow high’ (CAD Š₂ 19) and Arb. *šqy* ‘to grow’, *šāqi* ‘high, inaccessible’ (LA 14 539).

1.3.3.20. The ethnonym *Kaldu*

For Steiner (1977, 137–143; cf. Yushmanov 1998 [1940], 149), the Akkadian name of the Chaldaeans, *kaldu* (Edzard 1976–1980, 291–297), suggests that *š* was a lateral in the Chaldeans’ native tongue. Steiner’s treatment of the Chaldean problem was criticized by Beeston (1979, 265–267; cf. Steiner 1991, 1507–1509 and Keetman 2006, 373–377), but the dilemma is linguistic rather than historical: does the *-l-* of *kaldu* render the Chaldean lateral *š*, or does it represent the genuinely Akkadian shift *šd > ld* (Steiner 1977, 141; Edzard 1976–1980, 296; Keetman 2006, 372–373)? The proto-form **kašdu* is not attested (*contra* Gumpertz 1942, 114), and it may be doubted that the shift *šd > ld* was still operative when Akkadian speakers became acquainted with Chaldeans (Edzard 1976–1980, 296). Still, at least one Aramaic loanword in NA and NB – *kinaštu* / *kinaltu* ‘priesthood’ (CAD K 369) – is indeed affected by the shift (Keetman 2006, 373).

1.3.3.21. Early Aramaic theonyms in *ilt-*

The early Aramaic theonym *il-te-eḫ-ri-* (Zadok 1977, 42) goes back to PS **šahr-* ‘moon’: Syr. *sahrā*, Arb. *šahr-*, Sab. *sḥr* (LSyr. 462, Lane 1612, SD 132). Similarly, *il-ta-meš-* (Zadok 1977, 39–42) reflects PS **šamš-* ‘sun’ (peculiarly, in its Arabian rather than NWS form, viz. with *š-* instead of *š-*, cf. Beyer 1984, 102, 715). The onomastic element *il-ta-gi-bi* has been identified (Zadok 1977, 103; cf. Lipiński 1975, 104–108) with Hbr. *šgb* ‘to be exalted’ (HALOT 1305). According to Zadok (1977, 42, 102–103), the segment *il-* represents PS **il-* ‘god’, either as the subject of a nominal sentence (*il-ta-gi-bi* ‘god is exalted’), or as an incorporated element of the theonym itself (**il + *šahr*). Within this approach, early Aramaic *š* in these forms is rendered by *t* (Lipiński 1975, 104–108; Zadok 1976, 229–230; Beyer 1984, 100). For Fales (1978; followed by Steiner 1991, 1506 and Lipiński 1997, 130), it is rather *ilt-* that is a complex rendering of a lateral *š*, alternating with *t*-spellings like *te-ri-*, *tam-meš-* and *taš-gi-bi*. Fales’ attractive hypothesis is not compelling for IL-*ta-meš-* and IL-*te-eḫ-ri-*, since incorporation of **il-* ‘god’ into theonyms is well attested in the cuneiform tradition (Schwemer 2001, 32–33) and easily explains the ‘phonetic’ spellings with IL instead of the expected ĪL = DINGIR (which predominate elsewhere in theophoric names in Zadok 1977, 361–363). It is more persuasive for *il-ta-gi-bi* (Fales 1978, 92–93), but no full certainty is possible in this case either.

1.3.3.22. The Moabite name *ka-ma-as-ḥal-ta-a*

The NA rendering *ka-ma-as-ḥal-ta-a* of a Moabite personal name is interpreted as **Kamoš-ʿašā* ‘(the god) Kamosh has made’ in Knauf/Maáni (1987, 93; accepted in Lipiński 1997, 129; Berlejung 2000, 600). The verb *ʿšh* ‘to do, make’, actually attested in Moabite (DNWSI 890), is common in Hebrew theophoric names (BDB 795), and NA *ḥ* does render WS ʿ (Zadok 1977, 245–247). Knauf’s interpretation is thus attractive. The use of *-lt-* for *š* points to the lateral sibilant as an independent phoneme in Moabite.

1.3.3.23. Μάτλια

As demonstrated by Rodinson (1981) and Weninger (1998), the Greek rendering Μάτλια for the place name *ῥῥ* in epigraphic Geez (RIÉ 185 I 15, II 16, 185bis I 16, II 14 for Geez, 270:26, 270bis:22 for Greek; read differently and therefore unrecognized in Littmann 1913, 8–17) is clear proof of the lateral pronunciation [ç] for *ῥ* (traditional *ḍ*).

1.4. Hypothetic proto-phonemes outside the canonical system

1.4.1. The emphatic labial **p̣*

Absence of **p̣* from the traditional PS reconstruction is justified, since glottalized bilabial stops are uncommon cross-linguistically (Martinet 1953, 69–70; Stempel 1999, 44–45). The emphatic bilabial *p̣* is, however, attested in Geez. Most of its occurrences are in Greek borrowings (Podolsky 1991, 13), but already Dillmann (1907, 57) was able to detect *p̣*-words elsewhere in the Geez lexicon. Voigt’s attribution of such lexemes to Cushitic influence is unsuccessful: only one among five supposed Cushitisms (Voigt 1989, 635) has a tentative Cushitic etymology (SED I, pp. CXI–CXII).

For Dillmann, Geez *p̣* mostly corresponds to *b* elsewhere in Semitic: Gez. *hepa* ‘to strike, to pierce’ – Arb. *hbb* ‘to cut’ (LLA 16–17, CDG 221, Lane 2873) or *ḳoppōn* ‘boot’ – Arb. *qabqāb-* ‘clog’ (LLA 472, CDG 438, Lane 2479). Many of Dillmann’s etymologies are to be rejected as unreliable, like *məḡʷənpā* ‘quiver’ – Arb. *ḡaʿbat-* id. (LLA 1182, CDG 198, Lane 428).

A list of Geez *p̣*-words supposed to substantiate a regular correspondence between Gez. *p̣*, Arb. *b*, Hbr. *p* and Arm. *p* is found in Grimme (1914, 261–262). Most of these 16 examples are unreliable: Gez. *ganpala* ‘to distort’ – Arb. *qlb* ‘to invert’ (LLA 1182, CDG 198, Lane 2552), Gez. *məḡʷənpā* ‘quiver’ – Arb. *ḡulbat-* ‘a piece of skin enclosing an amulet’ (LLA 1182, CDG 198, Lane 440), Gez. *ʾakraḡa* ‘to scratch’ – Hbr. *ḥlp* ‘to cut through’, Syr. *ḥāloptā* ‘knife’ (CDG 293, HALOT 321, LSyr. 237), Gez. *karapa* ‘to work’ – Arb. *krb* ‘to plow’ (CDG 293, WKAS K 111, omitting Syr. *krb* ‘to plow’, LSyr. 342), Gez. *ʾanpāʾānpē* ‘ulcers’ – Arb. *ʾunbūbat-* ‘node, knot’ (CDG 30, Lane 2752, omitting Hbr. *ʾābaʿbūʾōt* ‘ulcers’, HALOT 9, compared in LLA 780). Only two examples are relatively exact illustrations of the proposed set of correspondences: Gez. *sarapa* ‘to sip’ – Syr. *srp* id. – Arb. *šrb* ‘to drink’ (CDG 514, LSyr. 500, Lane 1525)

and Gez. *ḥarṣapa* ‘to be rebellious’ – Hbr. *ḥrp* ‘to taunt’ – Arb. *ḥrb* ‘to be angry’ (CDG 243, HALOT 355, Lane 540).

This evidence is clearly insufficient for a reliable PS reconstruction. As an alternative, a slightly different set of correspondences, not involving the problematic Geez phoneme, has been postulated in Grimme (1914, 262–263), viz. PS **ḥ* > Gez. *b* (‘weakened’ from *p*), Arb. *b*, Hbr. *p*, Arm. *p*. Most of the reliable examples (as well as their geographic distribution) were known already to Barth (1893, 23–29): Hbr. *pšṭ*, Syr. *pšṭ* – Arb. *bsṭ*, Mhr. *abōsəṭ* ‘to spread’ (HALOT 980; LSyr. 611; Lane 203; ML 55; Grimme 1914, 261; SED I, p. CXIII), Akk. *perša’u*, Hbr. *par’ōš*, Syr. *purta’nā* – Arb. *buryūt* ‘flea’ (Grimme 1914, 262, SED II No. 185), Akk. *šalāpu*, Hbr. *šlp*, Syr. *šlp* – Arb. *slb*, Gez. *salaba*, Mhr. *səlōb* ‘to draw, to pull out’ (AHw. 1144; HALOT 1543; LSyr. 783; Lane 1398; CDG 498; ML 348; Grimme 1914, 263; SED I, p. CXIV). Grimme’s own convincing examples are rare: Hbr. *pā’ā* ‘to moan’, Syr. *p’ā* ‘to bleat’ – Arb. *bḡy* ‘to bleat’ (HALOT 949, LSyr. 585, Dozy 1 100), Hbr. *nāpās* ‘driving storm’ – Arb. *nbḍ* ‘to sprinkle’ (BDB 658, Lane 2830), Hbr. *šāpa’* ‘abundance’, Syr. *šp’* ‘to be abundant’ – Arb. *sbḡ* ‘to be complete, full’ (HALOT 1634, LSyr. 796, Lane 1298), Akk. *zappu*, JBA *zīpā*, Syr. *zaptā* – Arb. *zabb-* ‘hair’ (SED I No. 297). Much more often, Grimme’s examples are questionable or wrong (SED I, pp. CIX–CX): Hbr. *pll* (hitpa.) ‘to pray’ – Gez. *bəhla* ‘to say’, Arb. *bhl* (VIII) ‘to supplicate’ (HALOT 933, CDG 89, Lane 267), Hbr. *tpš* – Arb. *bš* ‘to seize’ (HALOT 1779, Lane 218), Hbr. *p’r* ‘to glorify’ – Gez. *barha*, Arb. *bhr* ‘to shine’ (HALOT 908, CDG 103, Lane 265, omitting Hbr. *bahārūt* ‘white spot’, HALOT 112). It is therefore not surprising that Grimme’s reconstruction was met with utmost skepticism (Ullendorff 1955, 109; Moscati 1954a, 26–27; 1964, 24–25; Voigt 1989, 635; Cantineau 1951–1952, 80–81). Critical remarks against Grimme’s etymologies are scattered throughout Möller 1916, but most of Möller’s own comparisons, supposed to substantiate the reconstruction of PS **ḥ* > Gez. *p/b*, Hbr. *b*, Arm. *b*, Arb. *b*, are also extremely weak.

The existence of PS **ḥ* has been nevertheless admitted by many Russian Semitists (Vilenčik 1930; Yushmanov 1998[1940], 145–146, 151–152; Militarev 1976; Diakonoff 1988, 35; 1991–1992, 11–12, 59). Militarev (1976) provides some additional examples, such as Hbr. *z’p*, Syr. *z’p* – Arb. *z’b* (V) ‘to be angry’ (HALOT 277, LSyr. 202, Lane 1230) or Akk. *šapāku*, Hbr. *špk*, Syr. *špk* – Arb. *sbk* (also *sfk*!), Gez. *sabaka* ‘to pour’ (AHw. 1168, HALOT 1629, LSyr. 795, Lane 1300, 1374, CDG 483). A few other (mostly debatable) cases are discussed in SED I, pp. CXV–CXVI.

Only an exhaustive etymological analysis of Semitic roots with labials will enable one to decide whether the reliable examples of *b/p* fluctuation are due to an accidental phonological variation (Voigt 1989, 636; cf. Dolgopolsky 1999, 30) or represent regular reflexes of **ḥ* (A. Militarev in SED I, pp. CV–CXVI and SED II, pp. LX–LXI). A few examples with geographic distribution different from that postulated by Grimme and Militarev suggest that the former view is correct: cf. Ugr. *bṭn*, Arb. *baṭan-* vs. Syr. *patnā* ‘snake’ (SED II No. 63) or Akk. *šibāru* vs. Hbr. *šippōr*, Syr. *šepṛā*, Arb. *šāfir-* ‘bird’ (SED II No. 212).

1.4.2. The labiovelars

The labiovelars *k^w*, *g^w*, *k^w*, *ḡ^w* are typical of Geez and most of modern ES. The uvular *ḡ^w* is rare and scarcely opposed to *ḡ*, but *k^w*, *g^w* and *k^w* are clearly independent phonemes (Ullendorff 1955, 76): *sakaya* ‘to flee’ – *sak^waya* ‘to go astray’, *gadala* ‘to strive’ –

g^wadala ‘to be missing’, *ḵaraba* ‘to draw near’ – *ḵ^waraba* ‘to receive Holy Communion’, *baḵl* ‘mule’ – *baḵ^wl* ‘plant’ (CDG 498, 182, 440, 100–101).

Labiovelars are common in Geez words whose Semitic cognates display velars followed (more rarely, preceded) by *ṣ* or *w* (Dillmann 1907, 51–54): Gez. *k^wall-* – Hbr. *kōl*, Arb. *kull-* ‘all’ (CDG 281, HALOT 474, WKAS K 292), Gez. *g^warn* ‘threshing floor’ – Hbr. *gōrān*, Arb. *ḵurn-* (CDG 203, HALOT 203, Lane 414), Gez. *k^walfat* – Arb. *qulfat-* ‘foreskin’ (CDG 472, Lane 2992), Gez. *k^wanfəz* – Arb. *qunfuḍ-* ‘hedgehog’ (SED II No. 133), Gez. *k^wərr* ‘cold’ – Hbr. *ḵōr*, Syr. *ḵurrā*, Arb. *qurr-* (CDG 443, HALOT 1128, LSyr. 689, Lane 2500), Gez. *k^wərḵat* ‘bald patch’ – Hbr. *ḵorḥā*, Arb. *qurḥat-* (SED I No. 38v), Gez. *bak^wr* ‘first-born’ – Akk. *bukru*, Hbr. *bəḵōr*, JPA *bwkrh* (CDG 94, AHW. 137, HALOT 131, DJPA 102), Gez. *k^wəlīt* ‘kidney’ – JPA *kwlyyh*, Arb. *kulyat-*, Jib. *kužēt* (SED I No. 156), Gez. *ḵaḵ^we* ‘hip, loin’ – Arb. *ḵaqw-*, Sab. *ḵḵw-nhn* (SED I No. 113), Gez. *ləg^wat* ‘abyss, depth, pool’ – Arb. *lužḵat-* (CDG 308, WKAS L 216), Gez. *ənḵ^w* ‘precious stone’ – Akk. *unqu* ‘ring, stamp-seal’ (SED I No. 15). The same conditions are observed in borrowed lexemes: *k^wəryāk* < Κυριακός (LLA 1420), *k^wərbān* ‘offering, Eucharist’ < Syr. *ḵurbānā* (CDG 440, LSyr. 692), *k^wəḥl* < Syr. *kuḥlā*, Arb. *kuḥl-* (CDG 38, LSyr. 324, WKAS K 73), *rəḵ^wām* ‘marble’ < Arb. *ruḥām-* (CDG 470, Lane 1060), *k^wəds* ‘sanctuary, Jerusalem’ < Arb. *quds-* (CDG 423, Lane 2497), *k^wəṭn* ‘silk’ < Arb. *quṭn-* (CDG 454, LA 13 421), *targ^wama* ‘to translate’ < Hbr. *targūm* (CDG 579, Jastrow 1695).

Dillmann’s observations (refined in Kuryłowicz 1933 and Voigt 1989, 639–640) do not explain why the conditional factors are so often not apparent (paradigmatic diffusion – **ḵurr-* > *k^wərr* ‘cold’ > *k^warara* ‘to be cold’ – discussed in Kuryłowicz 1933, 42 can be valid for just a few examples), whereas Dillmann’s ‘general preference in the language for such sounds’ (1907, 53) is by no means a serious argument.

For some scholars, the problem becomes less acute if Cushitic influence is considered as a major factor in the emergence of the labiovelars (GVG 124; Moscati 1954a, 57; 1964, 38; Podolsky 1991, 14; Voigt 1989, 639; cf. Ullendorff 1951, 81–82; 1955, 83–86), but note the objections against the ‘substratum theory’ in Klingenberg (1959, 34–36, 40–41).

The traditional concept has been rejected (partly on good grounds) in Grimme 1901, where an alternative theory has been developed: PS labiovelars, lost elsewhere in Semitic, are preserved intact in ES. Grimme’s arguments rarely withstand critical scrutiny, first of all because the regularity of phonetic and/or semantic correspondences tends to be drastically neglected, as shown by equations such as Gez. *ṣəgg^w* – Hbr. *ḥūṣ* ‘street’, Gez. *taḵ^wlā* ‘wolf’ – Arb. *ta‘lab-* ‘fox’, Gez. *g^wəmə* – Syr. *ōnūtā* ‘melody’, Gez. *g^wagg^wə’a* ‘to hurry’ – Hbr. *ḥargōl* ‘locust’ (1901, 417, 420, 422, 441).

Grimme’s reconstruction has been categorically rejected by most Semitists (GVG 124; Kuryłowicz 1933, 37; Ullendorff 1951, 71; 1955, 75, 83; Klingenberg 1959, 35), but hardly ever critically analyzed. In recent decades, labiovelars have been included into the PS consonantal inventory by Diakonoff (1970; 1988, 34; 1991–1992, 22–28) and Militarev (SED I, pp. CXX–CXXIII, SED II, pp. LXI–LXV). None of the two theories seems convincing (L. Kogan in SED I, pp. CXXIII–CXXIV, SED II, pp. LXII).

1.4.3. The lateral sibilant *ṣ_x

Hebrew *ṣ* may correspond to *ṣ* in Arabic, instead of the expected *s* (cf. 1.5.2.4.2.). The same irregularity has been observed between Arabic and MSA (Leslau 1937, 217):

Soq. *šwb*, *šbb* ‘to heat’ – Arb. *šbb*, *šbw* ‘to burn’ (LS 410, Lane 1492, 1501). According to Diakonoff (1988, 34–38; 1991–1992, 15–18) and Militarev (SED I, pp. XCIX–CV), the correspondence Hbr. *š* – Arb. *š* – MSA *š* represents a hitherto unrecognized PS lateral sibilant **š_x*, contrasting with the ‘traditional’ **š* (> Hbr. *š* – Arb. *š* – MSA *š*). Within the affricate hypothesis (1.3.2), **š* and **š_x* are opposed as [č] (lateral affricate) and [š] (lateral sibilant).

While bilateral Hebrew-Arabic cognate pairs with *š* are not rare (cf. 1.5.2.4.2.), reliable MSA-Arabic examples are scarce and hard to separate from recent Arabisms (Leslau 1937, 215–217). For this reason, hypothetic PS roots with **š_x* attested in Hebrew, Arabic and MSA are extremely few. The most remarkable case is Hbr. *šāmāš* – Arb. *šams* – Jib. *šum*, Soq. *šam* ‘sun’ (HALOT 1589, Lane 1597, JL 267, LS 418, SED I, p. CI, Faber 1984, 215–219, 1986). Reconstruction of **š_x* is, therefore, highly problematic.

1.4.4. The emphatic lateral **š*

In the traditional PS reconstruction, only two lateral sibilants are postulated: **š* and **ṣ̌*. The voiced member of the lateral triad is often supplanted by **l* (Yushmanov 1998[1940], 145, 148; Steiner 1977, 156; cf. Martinet 1953, 77–78), but this is not universally accepted (Cantineau 1951–1952, 87; 1960[1941], 16, 54–55; Voigt 1979, 95–96, 104–105; 1992, 50). In Voigt 1992, the existence of the PS voiced lateral **ṣ̌* is deduced from the spelling variation of the traditional reflex of **ṣ̌* in Egyptian Aramaic: *k*-spellings supposedly reflect PS **ṣ̌* (**rk* ‘land’ < **arṣ̌*), whereas ‘-spellings point to **ṣ̣̌* (**l* ‘rib’ < **ṣ̣̌ila*’, *rḥ* ‘to wash’ < **rḥṣ̣̌*). Voigt’s hypothesis is hard to accept: the supporting evidence is meager (Stempel 1999, 60), whereas alternative ‘-spellings are known for most of the *k*-lexemes (Muraoka/Porten 2003, 8–9). That no *k*-variants are attested for **l* and *rḥ* is not surprising given the rarity of these lexemes in the extant textual corpus (and see, moreover, cf. 1.5.2.7.2. for *rṣ̌hk* ‘to wash’ in Papyrus Amherst 63, 3:10–11).

1.4.5. The sibilant *s_x*

In the ‘southern’ orthographic norm of OB Akkadian (cf. 1.5.1.3.1.), the SV series is exceptionally used for the following lexemes (Goetze 1958, 140–141): *sebe* ‘seven’, *sādidu* ‘foraying party’, *sadāru* ‘to arrange’, *salīmu* ‘peace’, *sāmu* ‘red’ / *sūmu* ‘red spot’, *bussurtu* / *tabsirtu* ‘tidings’, *mansū* ‘leader’, *šasū* ‘to call’ (AHw. 1033, 1022, 1000, 1015, 1019, 1058, 142, 1299, 619, 1195). According to Goetze, this orthographic peculiarity reflects an unrecognized PS sibilant **s_x*. Goetze’s solution has been unanimously rejected (Aro 1959, 332–335; GAG § 30a; Steiner 1977, 48–51; SED I, pp. LXXII–LXXIII) with no persuasive alternative explanation (cf. Westenholz 2006, 254).

The sibilant in the pertinent lexemes has no uniform correspondences elsewhere in Semitic, which makes Goetze’s hypothesis *a priori* unlikely.

PS **š* and **ṣ̌* are behind *s* in *sebe* (< **šaḅ*-, CDG 482), *salīmu* (< **šlm*-, CDG 499) and *bussurtu* (< **bšr*-, CDG 110). The presence of *s* (instead of the expected *š*) in these lexemes throughout Babylonian is even more puzzling than the unusual SV spellings

in the ‘southern’ OB orthography, but there are other Akkadian words displaying the same feature (SED I, pp. LXXII–LXXIII, Faber 1986, 166, cf. SED II, p. LVII): Akk. *sa’ālu* – Syr. *š’al*, Sab. *s₁’l* ‘to cough’ (SED I No. 61, Faber 1986, 166), Akk. *silītu* – Hbr. *šilyā*, Syr. *šlītā* ‘afterbirth’ (SED I No. 246, Faber 1986, 166), Akk. *sābu* – Hbr. *š’b* ‘to draw water’ (AHw. 1000, HALOT 1367, Faber 1986, 166), Akk. *salāku* – Syr. *šlak* ‘to boil’ (AHw. 1014, LSyr. 784). In one such case, PS **t* is involved: Akk. *samāne* ‘eight’ – Arb. *ṭamānī*” (AHw. 1017, Lane 355, cf. Streck 2008).

Akk. *mansû* is a Sumerism (< MAŠ.SUD, Lieberman 1977, 388–389), the remaining Goetze’s lexemes are etymologically problematic: *sādidu* (with Streck 2000, 112–113, probably a WS loanword, cf. Hbr. *šdd* ‘to despoil’, HALOT 1418), *sadāru* (Hbr. *sēdār* is an Akkadism and, therefore, etymologically irrelevant, with Aro 1959, 331, Westenholz 2006, 254 and *contra* Streck 2006, 224), *sāmu* (comparable to Ugr. *šmt* ‘reddish shade’, Hbr. *šōham* ‘carnelian’, with DUL 831 and HALOT 1424, but cf. Bulakh 2003, 7–8), *šasû* (perhaps related to Gez. *šā’šā’a* ‘to speak clearly’, CDG 524).

As supposed by Aro (1959, 331; cf. Steiner 1977, 50–51; Faber 1985, 105–106; 1986, 167–168), the emergence of ‘Goetze’s sibilant’ is to be explained in phonetic terms: the ‘general sibilant’ [s] occasionally preserves its old value without shifting to [š]. Such a preservation is easily conceivable for one specific morphophonemic environment (Goetze 1959, 148; Kogan/Markina 2006, 569) such as the juncture of -š and š- (*re-SA* < *rēš-ša* ‘her head’, *li-pu-SU-um* ‘let him do for him’, Goetze 1959, 141), but is more difficult to explain as far as a few scattered lexical items are concerned. WS influence may be responsible for *salīmu* (cf. the regular *šalāmu* ‘to be sound’, Edzard 1985, 125; Diakonoff 1991–1992, 41; Streck 2000, 115–116) and *sādidu* (Streck 2000, 112–113), whereas in *sadāru* the shift [s] > [š] may be blocked by the contact with *d* (Streck 2006, 224; 2008, 250–251). An explanation by paradigmatic analogy has been proposed for *sebe* and *samāne* in Streck 2008, 252.

1.4.6. The emphatic uvular **χ*

Ever since GVG 128, the irregular correspondence Arb. *ḥ* vs. Akk. *ḥ* (cf. 1.5.9.2.) – ca. 50 examples according to Huehnergard (2003, 106) – has been explained by the influence of the adjacent consonants. According to Tropper 1995a, the irregularity is observed in the presence of sonorants, sibilants and glides, as well as in roots *mediae geminatae*. As shown in SED I, pp. LXXIV–LXXV and Huehnergard (2003, 107–109), these conditioning factors are too numerous and heterogeneous. Moreover, there are many examples of PS **ḥ* yielding Ø in Akkadian in spite of the presence of sonorants, sibilants and glides (like *edēšu* ‘to be new’ < **ḥdṣu* or *erēšu* ‘to till’ < **ḥrt*).

Huehnergard’s alternative approach (2003, 113–117; cf. already Yushmanov 1989[1940], 145–146) implies the reconstruction of a new PS phoneme **χ* (a glottalized uvular affricate, i.e. the emphatic partner of **ḥ* and **γ*). This attractive solution prompts some reservations. Persuasive statistical evaluation of ‘regular’ and ‘irregular’ examples requires an exhaustive etymological analysis of all Akkadian roots with **ḥ* in the prototype, which is still a desideratum (50 *ḥ*-roots vs. 80–90 Ø-roots in Huehnergard 2003, 109 is just a preliminary approximation; cf. Tropper 1995a, 61). Unmotivated variation of *ḥ* and *ḥ* is not unknown outside Akkadian (Kogan 1995, 159–160; Hueh-

nergard 2003, 111), cf. Ugr. *ḥdr* – Arb. *ḥidr*-, Sab. *ḥdr* ‘room’ (DUL 355, Lane 708, SD 59). Last but not least, pharyngeal *ḥ* as a reflex of the glottalized uvular affricate **χ* is phonetically unusual (the (post-)velar emphatic *ḳ* would be more expected).

1.5. Proto-Semitic consonantism as reflected in individual languages

1.5.1. Proto-Semitic sibilants in Akkadian

1.5.1.1. Ebla

Orthographic representation of PS sibilants in Ebla has been studied by Krebernik (1983, 211–218) and Conti (1990, 9–16). Three sign series are opposed, viz. SV for **š* and **ṣ*, ŠV for **t* and **d*, ZV for **s*, **z*, **ṣ*, **ṭ* and **ṣ*:

SI-*nu-u[m]* = Sum. ZU.URUDU ‘tooth’ (VE 174) – Arb. *šinn*-, Akk. *šinnu* (Krebernik 1983, 6, SED I No. 249), *nu-pù-UŠ-tum* = Sum. ZI ‘soul, life’ (VE 1050) – Arb. *naṣf*-, Akk. *napištu* (Krebernik 1983, 37, SED I No. 46_v), SI-*tum* = Sum. Û.DI ‘sleep’ (VE 1131) – Arb. *wsn*, Akk. *šittu* (Krebernik 1983, 40, SED I No. 82_v).

kār-SU-um = Sum. ŠÀ.GAL ‘stomach’ (VE 576) – Arb. *kariš*-, Akk. *karšu* (Krebernik 1983, 22, SED I No. 151), *kā-SA-tum* = Sum. GIŠ.TIR ‘wood’ (VE 400) – Mhr. *ḱəṣnūt*, Akk. *ḱištu* (Krebernik 1983, 15, ML 242, AHw. 923), SI-*bù-um* = Sum. NÌ.UL ‘grey hair, old age’ (VE 108) – Akk. *šibu*, Arb. *šayb*- (Conti 1990, 79, SED I No. 66_v).

ŠU-*ba-tum* = Sum. GAR.DÜR ‘residence’ (VE 88) – Sab. *wṭb*, Akk. *wašābu* (Krebernik 1983, 4, SD 165, AHw. 1480), *i-ŠA-wu* = Sum. A.GÁL ‘to be’ (VE 624) – Ugr. *’iṭ*, Akk. *išū* (Krebernik 1983, 24, DUL 123, AHw. 402), IŠ₁₁-*kà-um* = ŠE.GEŠTIN ‘cluster of grapes’ (VE 660) – Arb. *’iṭkāl*-, Hbr. *’uškol* (Conti 1990, 177, Lane 21, HALOT 95).

ŠA-*ḱá-núm* = Sum. SU₆.DÜ ‘beard’ (VE 199) – Arb. *ḱaqan*-, Akk. *ziḱnu* (Krebernik 1983, 8, SED I No. 63), ŠÈ-*na-bù* = Sum. KUN ‘tail’ (VE 1371) – Arb. *ḱanab*-, Akk. *zibbatu* (Krebernik 1983, 44, SED I No. 64), ŠA-*la-um* = Sum. ŠE.MAR ‘to sow’ (VE 659) – Ugr. *dṛ*-, Akk. *zēru* (Krebernik 1983, 26, DUL 280, AHw. 1521).

ḥa-ZI-ZU-*um* = Sum. GÈŠTU ‘ear’ (VE 389) – Arb. *’al-ḥasīsāni*, Akk. *ḥasīsu* (Krebernik 1983, 15, SED I No. 115), *kà-ZA-pù* (VE 104) = Sum. NÌ.KU₅.GAR ‘to break in pieces’ – Akk. *kasāpu*, Arb. *ksf* (Conti 1990, 78, WKAS K 190, AHw. 453), *ku₈-ZI-tum* TÚG ‘a garment’ (ARET 2 14 *passim*) – Hbr. *ḱəsūt*, Akk. *ḱusītu* (Fronzaroli 1984, 168, HALOT 488, AHw. 514).

wa-ZA-núm = Sum. GIŠ.MÁḤ ‘to weigh’ (VE 409a) – Arb. *wzn* (Krebernik 1983, 16, Lane 3052), *ar-ZA-tum* = Sum. GIŠ.NUN.SAL ‘cedar’ (VE 471) – Arb. *’arz*- (Krebernik 1983, 17, Lane 47).

wa-ZI-lu-um = Sum. BAḤAR ‘potter’ (VE 1012) – Arb. *šwr*, Akk. *ešēru* (Krebernik 1983, 36, Lane 1744, AHw. 252).

ZA-*ba-a-tum* = Sum. DĀRA.MAŠ.DĀ ‘gazelle’ (VE 1191) – Arb. *ḱaby*-, Akk. *ṣabītu* (Krebernik 1983, 42, SED II No. 242), *a-ZA-mu-um* = Sum. GIŠ.GI.NA ‘bone’ (VE 417) – Arb. *’aḱm*-, Akk. *eṣemtu* (Krebernik 1983, 16, SED I No. 25), *na-ZA-lum* = Sum. EN.NUN.AG ‘to watch’ (VE 34) – Sab. *nṭr*, Akk. *našāru* (Krebernik 1983, 34, SD 102, AHw. 755).

wa-ZA-um = Sum. ŠU.DU ‘to go out’ (VE 507) – Sab. *wšʔ*, Akk. *wašû* (Krebernik 1983, 18, SD 156, AHw. 1475), *ʾà-me-ZU* = Sum. NINDA.AD₆ ‘leavened bread’ (VE 128) – Arb. *ḥmḍ*, Akk. *emēšu* (Conti 1990, 83, Lane 644, AHw. 214), *i-ZU ba-ne* = Sum. GIŠ.ŠINIG ‘tamarisk tree’ (VE 395) – Arb. *ʿiḍat-*, Akk. *išu* (Krebernik 1983, 15, Lane 2076, AHw. 390).

The sign AŠ seems to be attested only before dentals (AŠ-*tár* = Sum. DINGIR.IN-ANNA in VE 805, *tá-AŠ-tá-me-lum* = Sum. LÚ.ME.II in VE 1377, *tá-AŠ-tá-NI-lum* = Sum. IGI.TUR in EV 0130), a curious reversal of the OB practice described in 1.5.1.3.

1.5.1.2. Sargonic Akkadian

The use of sibilant signs in Sargonic Akkadian is similar to that practiced in Ebla, although **d* is written with the ZV series as in later Akkadian: *aḥ-ZA-nim* ‘take for me’ (Di 4:9) < **ḥḍ*, *zu-kú-na* ‘bearded’ (Di 4:10) < **ḍakan-*. Hasselbach (2005, 72–73) assumes a true merger of **d* and **z* into *z*, whereas for Krebernik (1985, 58) only a change of scribal habits is involved. There are, indeed, some indications that *d* was still a separate phoneme in Sargonic. The forms *āḥuz* / *īḥuz* / *līḥuz* ‘I took’ / ‘he took’ / ‘let him take’ are spelled with the sign EŠ in MAD 5 8:12, 13, 15, 32, MAD 1 127:8 and Gir 3:9, whereas SU (instead of the expected ZU) is found in *u-ša-ḥi-SU-ni* ‘he made them take’ (RIME 2.1.1.1:101) < **yušāḥiḍ-šunī* (Westenholz / Westenholz 1977, 208; Edzard 1991, 261–262). The verb *izuzzu* ‘to stand’, possibly going back to **dwd* (Streck 1997–1998: 321–322, Huehnergard 2002, 178), is twice spelled with the sign VD instead of VZ: *i-za-AD* (RIME 2.1.5.6 II 5) and *li-zi-ID* (RIME 2.1.4.26 IV 10).

The ŠV series renders PS **l*, whereas the outcome of the merger of **š* and **ṣ* is spelled with the SV series. In the wake of von Soden/Röllig 1991: XXI, SV signs for the ‘general sibilant’ in Sargonic are often transcribed as ŠV. As shown by W. Sommerfeld in GAG § 30 (cf. Streck 2008, 251), this conventional device creates much confusion, since *š* is the traditional Semitological notation for the PS lateral sibilant **š* (cf. Blau 1977, 88, 90, 106; Diem 1974, 248; Steiner 1977, 146), which has never been a separate phoneme in Akkadian (for a possible lateral allophone of *š* in Akkadian cf. 1.3.3.14.).

The ŠV–SV opposition in Sargonic is less stable than in Ebla. Orthographic deviations in both directions are attested, probably reflecting phonological mergers. ŠV spellings tend to be used correctly in Sargonic royal inscriptions (including OB copies): *a-ša-rí-šu* ‘its places’ (RIME 2.1.1.1:98) < **aṭar-* (Arb. *ʾaṭar-*, Lane 18), *ša-ni-am* ‘other’ (RIME 2.1.4.3 V 33), *iš₁₁-ni-a-ma* ‘they did for the second time’ (RIME 2.1.4.6 III 23) < **tīn-ā* (Ugr. *tn*, DUL 918), *tám-ši-il-šu* ‘his monument’ (RIME 2.1.4.23:15) < **mīl* (Arb. *timṭāl-*, LA 11 730), *ša-bir₅* ‘one who destroys’ (RIME 2.1.4.30:8) < **tbr* (Ugr. *tbr*, DUL 897). True exceptions are rare and mostly involve SI and IŠ instead of ŠI and IŠ₁₁: *IŠ-ni-a-ma* (RIME 2.1.1.3:24), *tám-SI-il-šu* (RIME 2.1.4.1001:10), *li-IŠ-bir₅* (RIME 2.1.1.2:128).

Outside royal inscriptions, etymologically correct use of ŠV is also well attested: *u-ša-ab* ‘he resides’ (Gir 35:7) < **wṭb* (Sab. *wṭb*, SD 165), *ʾà-ra-šē* ‘cultivators’ (Di 10:14) < **ḥrt* (Ugr. *ḥrt*, DUL 371), *ši-na-tim* ‘urine’ (MAD 5 8:16) < **tīn-at-* (Ugr. *tn*, DUL 924), *iš₁₁-kú-lu* ‘he paid’ (MAD 5 65:34) < **tql* (Arb. *ṭql*, Lane 343). However, SV instead of ŠV is quite frequent in this corpus: *tu-SA-bu* ‘you will sit’ (Ad 12:16), *a-SA-ká-al* ‘I will pay’ (Eš 3:21), *e-ra-SI-iš* ‘in order to cultivate’ (Ga 3:23), *tá-SA-bi-ir* ‘you

will break' (OSP 1 7 I 5'), *i*-SU 'he has' (MAD 5 21:5) < **ytw* (Ugr. *'it*, DUL 123). And, conversely, ŠV can be found instead of the expected SV: *ú*-ŠU-*ri-dam* 'he led down' (MAD 4 10:4), *ma-ḥa-ar*-ŠU-*nu* 'in front of them' (OAIC 8:16, 12:16), *è-rí*-ŠU-*kà* 'they will request from you' (Ki 1:10) < **rš* (Hbr. *'ārāšūt*, HALOT 92), ŠU-*up-ra-am-ma* 'send me' (Ki 1:16) < **špr* (Arb. *sfr*, Lane 1370), [*u-š*]A-*ti-kú-ni* 'that he made cross' (MC 4 73:18), *la tá-pá-ŠA-ḥi-ni* 'you will not find peace' (MAD 5 8:38) < **pšh* or **pšh* (Huehnergard 1991, 694).

The reflexes of PS **s*, **z*, **š*, **t* and **š* are uniformly rendered by ZV signs.

1.5.1.3. Old Babylonian

The opposition **š*/**š* – **t* is lost in OB. The outcome is rendered by ŠV signs – the new 'general sibilant' which absorbed the reflexes of **š*, **š* and **t*. As plausibly argued in Streck (2000, 217), the phonetic value of *š* in OB was [š], with a lateral allophone [š̺] in some environments (cf. 1.3.3.14.). The [š̺] realization agrees well with the regular use of ÁŠ [as] instead of AŠ [aš] before dentals in CH (Streck 2006, 233–237, Sommerfeld 2007, 368), to be interpreted as assimilation: *ik-ta-ÁŠ-da-am* [sd̺] 'he reached' vs. *AŠ-ku-un* [šk̺] 'I placed'. A similar opposition between UŠ [us] vs. ÚŠ [uš] and IŠ₇ [is] vs. IŠ̺ [iš̺] is postulated by Streck for the OB Mari corpus. The value [s] for OB *š* (Troppe 2000b, 738–741) is not compatible with the bulk of the available evidence.

The [š̺] realization may look undesirable for the affricate hypothesis, as [s] is more suitable to account for the shifts VT + ŠV > (VZ-)ZV, VŠ + ŠV > (VŠ-)SV and VZ + TV > VS/VŠ-TV described in 1.3.2.2.1. (Streck 2006, 243). This contradiction is, however, only apparent, as these shifts do not belong to the synchronic phonology of OB, but to an older stage when the outcome of the blend of **š* and **š* was still pronounced as [s] and rendered by SV signs (Faber 1985, 105; cf. Streck 2006, 231).

The orthographic shift from SV in Sargonic to ŠV in OB implies the phonetic shift [s] > [š̺], which presents a difficulty (cf. Streck 2006, 248): ŠV is much rarer than SV in Sargonic, and it is SV that most usually evolves from the merger of SV and ŠV described in 1.5.1.2. Why did ŠV (= [š̺]) become the 'general sibilant' in such conditions? Streck connects this unexpected shift with de-affrication of *s* [c]: the outcome of de-affrication is [s], of necessity spelled with SV signs and, in a push-chain shift, relegating the 'general sibilant' to [š̺], spelled as ŠV (Haudricourt 1951–1954, 37). However, the 'general sibilant' is spelled with ŠV also in 'southern' OB, where *s* [c] was still an affricate (Keetman 2006, 367–368). Furthermore, ŠV spellings for the 'general sibilant' are common in Ur III Akkadian (Hilgert 2002, 128–133), where de-affrication of *s* [c] is hardly apparent (Hilgert 2002, 680–681; duly acknowledged in Streck 2006, 225), and already in Sargonic ŠV spellings instead of the expected SV are not to be underestimated (cf. 1.5.1.2. and Kogan 2011).

Whereas the use of ŠV for the 'general sibilant' is normal for all varieties of OB, the behavior of PS **s* and the use of the SV series are not uniform. Since Goetze 1958, two main orthographic varieties ('southern' and 'northern') are distinguished.

1.5.1.3.1. South Old Babylonian orthography

Within the 'southern' norm, **s* is always spelled with ZV signs: *a-ZU-ur-ra-šu* = *asur-rašu* 'its foundation', *pi-ZA-an-na-šu* = *pisannašu* 'its drainpipe' (RIME 4.2.13a.2:29,

33, royal inscription, Larsa), *ka-ZA-am*, *ka-ZI-im* = *kāsam*, *kāsim* ‘cup’, *ḥa-AZ-ra* = *ḥasrā* ‘they are chipped’, *pi-ZI-il-tum* = *pisiltum* ‘misadventure’, *ik-ZU-UZ* = *iksus* ‘it consumed’ (CT 5 4–6:5, 20–21, 16, 46, 68, oil omina). In this two-member sibilant system, ŠV renders the ‘general sibilant’ and ZV is used for *s*, *z* and *ṣ*. In phonetic terms, [s] shifted to [š] (as in the rest of OB), but the affricate [c] was preserved. The SV series is thus unnecessary and out of use. A sibilant system with *š* but no *s* was, however, inherently unstable, and it was probably for that reason that the phone [s] (and the SV sign series) did not disappear completely, but are preserved in some words and morphological positions (cf. 1.4.5.). This archaic feature is fundamentally different from the use of SV in the ‘northern’ system: ‘southern’ *s* is not connected with de-affrication and goes back to *š or *ṣ rather than *s.

1.5.1.3.2. North Old Babylonian orthography

‘Northern’ orthography makes use of each of the three sibilant series and is thus a three-member system. ŠV signs render the ‘general sibilant’, ZV is used for *z* and *ṣ*. As for *s*, it is spelled with ZV and SV following a positional distribution elicited by Goetze (1937), Sommerfeld (GAG § 30; 2007, 372–373) and Westenholz (2006, 253–254). ZV is used when *s* is word-initial or geminated, SV appears elsewhere: *ZA-ar* = *sar* ‘he is a liar’, *i-na-ZA-aḥ* = *inassaḥ* ‘he will tear out’, *in-na-AZ-ZA-aḥ* = *innassaḥ* ‘he will be torn out’ vs. *pa-ra-SI-im* = *parāsim* ‘to cut’, *ri-ik-SA-tim* = *riksātīm* ‘agreement’ (all examples, after Streck (2006, 218–224), are from CH). Streck (2006, 218–224) provides some refinements for this rule: ZV may occur for intervocalic non-geminated *s* (*i-ZA-ak-ki-il* = *isakkil* ‘she acquires illegally’); syllable-final *s* is rendered by ÁŠ and UŠ (*ir-ta-ka-ÁŠ* = *irtakas* ‘he bound’, *ip-ru-UŠ* = *iprus* ‘he decided’) and, unexpectedly, by IZ (*ik-ki-IZ* = *ikkis* ‘he cut’), although in Mari a special sign ĪŠ may be used instead (on syllable-final *s* see further Sommerfeld 2007, 367). As convincingly suggested by Sommerfeld and Streck, the SV spellings reflect [s] as an outcome of de-affrication of [c]. The emergence of the new [s] in opposition to the ‘general sibilant’ [š] re-establishes a balanced system of sibilants which persisted throughout the history of Babylonian.

1.5.1.4. Assyrian

According to a broad consensus, the ‘general sibilant’ was pronounced as [s] in MA and NA, but spelled with ŠV signs as in Babylonian (Parpola 1974; Kaufman 1974, 140–142; Huehnergard 1997, 439–440; Kouwenberg 2003, 86). This realization explains, in particular, such MA spellings as *UZ-bat* ‘she is dwelling’ (vs. *tu-ŠA-ab* ‘she will dwell’) or *UZ-bal-ki-it* ‘he has changed’: instead of the problematic shift *-šb- > -sb-* (GAG § 30d, Mayer 1971, 21), a straightforward assimilation *-sb- > -zb-* is postulated (Girbal 1997; *contra* Girbal, this specifically Assyrian phenomenon is not to be extrapolated for 2nd millennium Akkadian as a whole).

Parpola and Kouwenberg ascribe the ŠV = [s] realization to a comparatively late sound change, thus assuming that the OA pronunciation was the same as in OB (viz. [š] or [ṣ]). For Kouwenberg, lack of *ṣ*-forms of the verb *našā’u* ‘to lift’ (1.3.1.2) in OA

excludes the realization [s] for ŠV in this period. There is, nevertheless, some evidence in its favor (Kogan/Markina 2006, 571–572).

- (a) The set of signs for the ‘general sibilant’ in OA is heterogeneous: ŠA = ša, ŠU = šu, but SI = šī (Hecker 1968, 59). If the ‘general sibilant’ was [š], its special behavior before *i* as opposed to *a* and *u* is hard to explain (cf. Woodhouse 2003, 277), but if it was [s], the difference can be plausibly ascribed to the palatalizing effect of *i* ([si] > [ši]). The combination [ši] is rendered by the sign SI from the SV series, a default set of signs otherwise out of use in the two-member sibilant system of the OA orthography.
- (b) When pronominal enclitics in š- are attached to forms ending in -š, the outcome is spelled as ŠV (*ru-pu-ŠU* ‘its breadth’, *e-pu-ŠU-um* ‘do for him’, Hecker 1968, 65) – differently from OB, where SV signs are used in this position (cf. 1.3.2.2.1.). The [s] realization for the ŠV series in OA allows one to harmonize the evidence of the two dialects in this important morphophonemic environment.

ŠV = [s] is thus an archaic feature of the Assyrian dialect as a whole (Hecker 1968, 63–64; Goetze 1958, 137; Friedrich 1974, 32; Diakonoff 1988, 38; Huehnergard 1997, 439; Hasselbach 2005, 234; cf. Keetman 2006, 366–367 and *contra* GVG 136, Faber 1985b, 88–89). In OA, the ‘general sibilant’ [s] was still opposed to the affricate [c]. In later Assyrian, the affrication of [c] was lost, but the expected push-chain shift [s] > [š] did not occur: it was rather the outcome of de-affrication that shifted to [š], as proven by foreign transcriptions (Parpola 1974, 4). The phonetic background of the shift [c] > [š] is admittedly problematic (cf. Faber 1985b, 86–88; Huehnergard 1997, 440; Keetman 2006, 366–367).

1.5.2. Proto-Semitic sibilants in North-West Semitic

1.5.2.1. Early second millennium BC

The earliest evidence comes from WS personal names in OB Akkadian documents. The set of cuneiform signs used to spell these names differs from the contemporary OB system, but is largely identical to the Sargonic one (Streck 2000, 221–222; 2006, 249): SV for the ‘general sibilant’ (< *š, *ṣ), ŠV for *t, and ZV for *s, *z and *ṣ (Streck 2000, 214–218, 221–230). In phonetic terms, it means that *s was still an affricate [c], the ‘general sibilant’ was realized as [s] and the reflex of *t was a separate phoneme. There is no trace of *š, *ṣ and *t (cf. Tropper 2000b, 743 for Streck’s attempt to detect a separate rendering of *ṣ in *yṣ* ‘to go out’). A certain amount of *d*-spellings for *d (including *d/z* doublets like *za-ki-ru-um* / *da-ki-ru-um* < PS *d_{kr} ‘to mention, to remember’) point to a separate status of this phoneme (Streck 2000, 209–214).

1.5.2.2. Late second millennium BC: Egyptian transcriptions

PS *ṣ is rendered by Egyptian š (Sivan/Cochavi-Rainey 1992, 21–22; Hoch 1994, 410): *ra=bi=ša=ya* ‘leather armour’ – Ugr. *lbš*, Hbr. *lbš* ‘to wear’; *ru₂=ša* ‘peak, summit’ – Ugr. *r’iš*, Hbr. *rō(‘)š* ‘head’; *ša=a=r* ‘price’ – Hbr. *ša’ar*, Arb. *sīr*; *ši₂=b=da₂* ‘staff,

rod' – Sab. *s₁bṭ* 'to beat', Hbr. *šēbāt*; *ša-m*^ε 'to hear' – Ugr. *šm*^ε, Hbr. *šm*^ε; *ša-m*^ε*ša* 'sun' – Hbr. *šāmāš* (contrast Arb. *šams*-); *ša-ra-ma*₄ 'peace' – Hbr. *šālōm*, Arb. *salām*-; *ša-ha-ka* 'dust cloud' – Hbr. *šahak*, Arb. *shq* 'to pulverize' (Hoch 1994, 202, 209, 273, 276–278, 279, 280, 285, 287–288; HALOT 519, 1164, 1618, 1388, 1570, 1589, 1506, 1464; DUL 492, 724; SD 123; Lane 1363, 1415, 1318).

PS **t* is rendered by Egyptian *s* (Sivan / Cochavi-Rainey 1992, 23–24, Hoch 1994, 402–405): *a₂-r-ka-bi-sa* 'a precious stone' – Ugr. *'algbṭ*, Hbr. *'ālgābīš*; *as-pa₂-ta* 'quiver' – Ugr. *'utpt*, Hbr. *'ašpā*; *ha-da-sa-ta₅* 'new' – Ugr. *ḥdt*, Hbr. *ḥādāš*; *sa-ra-ku₂* 'snow' – Arb. *talž*-, Hbr. *šālūg*; *sa-pa-ta* 'to judge' – Ugr. *tpt*, Hbr. *špṭ* (Hoch 1994, 30, 40–41, 238–239, 264–265, 278; HALOT 51, 96, 294, 1503, 1622; DUL 54, 126, 355, 926; Lane 350).

PS **š* is also thought to be rendered by Egyptian *s*, but reliable examples are scanty (Cochavi-Rainey / Sivan 1992, 21, Hoch 1994, 409): *sa-ʿa-ra-ta* 'wool' (Hoch 1994, 256) – Arb. *šār*-, Hbr. *šēʿār* (SED I No. 260), perhaps *sa-ʿa-ru₂*, *sa-ʿa-r* 'barley (field)' (Hoch 1994, 255) – Arb. *šār*-, Hbr. *šēʿārā* (Lane 1561, HALOT 1345), *sa-ga* 'sackcloth' (Hoch 1994, 269) – Hbr. *šak* (HALOT 1349).

Exceptions to these rules are rare and uncertain (Rainey 1998, 452).

The best known example of Eg. *š* rendering PS **t* is *ša-ʿa-ra*, *ša-r-ʿa* 'gate' (Hoch 1994, 273–274; contrast Rainey 1998, 448–449; Quack 1996, 511) – Ugr. *tṛr*, Hbr. *šāʿar* (DUL 901, HALOT 1614). The same deviation is found in *ha₂-d-ša-ta* 'new' (Hoch 1994, 238–239, contrast *ha-da-sa-ta₅* above), *šu₅-ʿa-ru₂-ta* 'vixen' (Hoch 1994, 274, cf. Vittmann 1997, 285; Rainey 1998, 449) – Arb. *luʿāl*-, Hbr. *šūʿāl* (SED II No. 237), *ša-pa-ta*, *š-f-ta* 'to judge' (Hoch 1994, 278, contrast *sa-pa-ta* above and cf. Rainey 1998, 449).

PS **š* is rendered by Eg. *s* in *gas-mu* 'storm' (Hoch 1994, 354; cf. Rainey 1998, 450; Woodhouse 2003, 281) – Ugr. *gšm*, Hbr. *gāšām* (DUL 310, HALOT 205).

The reflex of **ḏ* has been supposed to differ from **z* in that it can be rendered by either *ḏ* or *t* (Hoch 1994, 387, 405, 408), but reliable examples are rare (Sivan / Cochavi-Rainey 1992, 23; Quack 1996, 513): *'i-ti₂* 'which' – Hbr. *'ē-zā* (BDB 32) < PS **ʾayyu ḏayu* (Hoch 1994, 43; cf. Rainey 1998, 436–437), *ti₂-ku-ra* 'to remember' (in the PN *ti₂-ku-ra b-ʿ-ʿa* 'Baal remembered', Hoch 1994, 372–372; cf. Rainey 1998, 451) – Arb. *ḏkr*, Hbr. *zkr* (Lane 968, HALOT 269), *u-ḏi₄-r* 'helper' (Hoch 1994, 88; cf. Rainey 1998, 438–439) – Ugr. *ḏr*, Sab. *ḏr*, Hbr. *ōzēr* (DUL 153, SD 13, HALOT 810).

Contra Hoch 1994, 201 and 405 (cf. Sivan/Cochavi-Rainey 1992, 22–23), there is hardly any evidence for a separate status of **t*, which is rendered by *ḏ* in both reliable examples: *u-r-ḏu₂-t* 'terrifying' (Hoch 1994, 78) – Ugr. *rṭ*, Hbr. *rš* (DUL 185, HALOT 888) and *da-ma-t* 'thirsty' (Hoch 1994, 386) – Arb. *ḏm*^ε, Hbr. *šm*^ε (SED I No. 79_v). The only *t*-rendering (Hoch 1994, 201; Rainey 1998, 451) seems to be *ra-wi₂-ti₂* 'runner' (as a PN) – Ugr. *rṭ*, Hbr. *rāš* (DUL 750, HALOT 1207).

PS **š*, rendered by *ḏ* (Hoch 1994, 405), does not differ from **š*: *hu₄-ma-ḏa* 'vinegar' – Arb. *ḥmd*, Hbr. *ḥōmāš*; *ḏa-bi-ʿi* 'army' – Sab. *šb*^ε, Hbr. *šābā*(^ε); *ḏi₄-ra-ʿ-tu* 'plank' – Arb. *ḏila*^ε-, Hbr. *šēlā*^ε (Hoch 1994, 228, 382, 394; HALOT 329, 994, 1030; Lane 644; SD 40; SED I No. 272).

1.5.2.3. Late second millennium BC: Amarna Canaanite

Cuneiform renderings of Canaanite words in EA are mostly irrelevant for the sibilant problem, as the ŠV series is used indiscriminately for **š*, **t* and **š* (Diem 1974, 238):

ma-al-ba-ši ‘garment’ (EA 369:9; Sivan 1984, 243) – Ugr. *lbš*, Hbr. *lbš* (HALOT 519, DUL 492), *nu-ḥu-uš-tu₄* ‘copper’ (EA 69:28; Sivan 1984, 255) – Hbr. *nəḥōšāt*, Arb. *nuḥās-* (HALOT 691, Lane 2775), *ru-šu-nu* ‘our head’ (EA 264:18; Sivan 1984, 265) – Hbr. *rō(ʿ)š*, Arb. *raʿs-* (SED I No. 225), *šu-lu-uh-ta* ‘shipment’ (EA 265:8; Sivan 1984, 275) – Ugr. *šlh*, Hbr. *šlh* (DUL 816, HALOT 1511);

ka-aḥ-šu ‘chair’ (EA 120:18; Sivan 1984, 235) – Ugr. *khṭ* (DUL 434), *ša-aḥ-ri* ‘gate’ (EA 244:16; Sivan 1984, 281) – Ugr. *tyr*, Hbr. *šaʿar* (DUL 901, HALOT 1614), *aḥ-ri-šu* ‘I am cultivating’ (EA 365:11; Sivan 1984, 225) – Ugr. *hrṭ*, Hbr. *hrš* (DUL 371, HALOT 357), *ši-ip-ṭi-^dIM* ‘Judgment of DN’ (personal name, EA 330:3; Hess 1993, 143–144) – Ugr. *tpṭ*, Hbr. *špṭ* (HALOT 1622, DUL 926);

du-ma-aš-ka ‘Damascus’ (EA 107:28; ‘correction’ to *-as-* in Sivan 1984, 50 is wrong) – Hbr. *dammāšāq*, Arb. *dimašq-* (HALOT 227).

A remarkable exception is provided by the EA letters from Jerusalem (EA 285–290), where Canaanite words can be spelled with both SV and ŠV (Harris 1939, 34–35, 62–63; Diem 1974, 239; Moran 1975, 152; Steiner 1977, 146; Sivan 1984, 50; Rainey 1996, 16):

ú-ru-sa-lim (EA 287:25, 46, 61, 63, 290:15; Sivan 1984, 284) = *yərūšālayim* (HALOT 437), É *sa-a-ni* (EA 289:20; Sivan 1984, 271) = *bēt šaʿān* (HALOT 1375), *l[a-k]i-si* = *lākīš* (EA 288:43; Sivan 1984, 240; *la-ki-ši* in EA 289:13, adduced as a variant in Diem (1974, 239), is interpreted as *la-ki-ši* ‘they took it’ in Knudtzon (1915, 873) and Moran (1992, 332);

še-e-ri (EA 288:26; Sivan 1984, 277) = *šēʿīr* (HALOT 1342), *ša-de₄-e* ‘field’ (EA 287:56; Sivan 1984, 277) = *šādā* (HALOT 1307), *ša-ak-mi* (EA 289:23; Sivan 1984, 1494) = *šakām* (HALOT 1495).

The SV series seems to be used when etymology (as well as Egyptian transcriptions) point to *š: *ú-ru-sa-lim* = PS *šlm ‘to be complete’, *sa-a-ni* = Eg. *ša-ar* (Albright 1934, 40) and perhaps = PS *šʿn ‘to be quiet’ (HALOT 1374–1375), *l[a-k]i-si* = Eg. *ra-ki-ša* (Albright 1934, 48). The ŠV series is used for *š and *t: *še-e-ri* = Hbr. *šēʿīr*, Eg. *sa-ʿi-r* (Rainey / Notley 2006, 109), *ša-de₄-e* = Hbr. *šādā*, *ša-ak-mi* = Eg. *sa-ka-ma* (Albright 1934, 55) and perhaps = PS *takm- ‘back, shoulder’ (SED I No. 281, cf. Dolgopolsky 1999, 64).

1.5.2.4. Ugaritic and Canaanite: lateral sibilants

1.5.2.4.1. Proto-Semitic *š

PS *š yields *š in Phoenician and Hebrew. In Ugaritic, *š > š is also normal: *ʾarš* ‘earth’ < *ʾarš-, ‘š ‘tree’ < *iš-, *šʿin* ‘small cattle’ < *šaʿn- (DUL 106, 186, 775). Reliable t-examples are *tṭi* ‘go out!’ (KTU 1.12 I 14, 19) < *wšʿ and *yṭhk* ‘he laughed’ (KTU 1.12 I 12) < *šhk (Tropper 2000a, 93). In view of another phonological peculiarity of KTU 1.12 (for which cf. 1.5.2.5.2.), Tropper is right that the twofold (cf. *ʾarš* ‘earth’ < *ʾarš- in KTU 1.12 I 3) reflexation of *š in this archaic text points to *š as a still independent phoneme in early Ugaritic (cf. Blau 1968, 525; 1977, 78; Steiner 1977, 48).

Supposed examples of *š > t outside KTU 1.12 (Tropper 1994, 22–23; 2000a, 93–94) are unreliable (Blau 1977, 78–79). Thus, *tṭu* ‘secretion, excrement’ (DUL 1003) does not belong to *wšʿ ‘to go out’ (cf. SED I No. 286), whereas *ḥṭr* ‘mansion’ (DUL

382) is not to be separated from PS **hV_lVr-* ‘sheepfold, courtyard’ in favor of Arb. *ḥḍr* ‘to stay, to be present’ (Blau 1977, 78). Ugr. *ṭrw* ‘balsam’ (DUL 1006) does correspond to Sab. *ṣrw* and Arb. *ḍirw-* (Sima 2000, 269–270), but the variant root **ṭirw-* (Blau 1977, 79) is preserved in JPA as *ṭrw* (DJPA 230, Kutscher 1976, 25).

1.5.2.4.2. Proto-Semitic **š*

PS **š* yields *š* in Phoenician and Ugaritic. In Hebrew, the opposition between **š* and **s* is preserved in the Masoretic pointing: the grapheme **שׁ** appears as **שׁ** when pronounced as **š*, but as **שׂ** when pronounced as *s* (Steiner 1996). According to the traditional concept, in early Hebrew *š* was an independent phoneme, for which no special sign was available in the Phoenician alphabet (Kutscher 1965, 41; Blau 1977, 87–88; Steiner 1977, 41–47; 1991, 1501–1503). The Hebrew grapheme **שׁ** was thus polyphonic. Later on, *š* began to merge with *s*, as witnessed by numerous **שׁ/שׂ** doublets in the consonantal text of the OT (Blau 1970, 23–25, 114–125). By the Masoretic period the merger of **שׁ** and **שׂ** in the traditional pronunciation of Hebrew was complete (Steiner 1996, 174).

According to the opposite theory, the distinction between **š* and **s* was alien to Hebrew (not unlike Phoenician and Ugaritic) and was secondarily introduced by Masoretes under the influence of their spoken tongue (Aramaic), where **š* and **s* are indeed opposed as *s* and *š* (Diem 1974). A serious advantage of Diem’s presentation in comparison to its predecessors in Garbini (1960, 41–48, 1984, 132–133 and 1988, 105–107) is that **š* is not excluded from the PS consonantal inventory: for Diem, **š* and **s* were opposed in PS, but this opposition was lost in Hebrew (so already Moscati 1954a, 35–38, 54).

Diem’s arguments against the traditional concept are mostly of theoretical nature: preservation of *š* in Hebrew is inconsistent with its loss in Phoenician and Ugaritic (Diem 1974, 223), whereas the merger of **š* and **t* into *š* – which must precede the merger of **š* and **s* within the traditional concept – is phonetically unlikely (the supposedly more natural merger of **t* and **š* into *š*, in its turn merging with **š*, is postulated instead, Diem 1974, 225–227, 247).

Both of Diem’s arguments are subject to serious objections.

- (a) Phonological evolution of Hebrew need not be identical to that of its sister tongues: preservation of **š* can be one of several ‘non-Canaanite’ features in the Hebrew grammar and lexicon (cf. Kogan 2006, 251–252). More disturbing for the traditional concept (Beyer 1969, 12) is the [š] pronunciation of **שׁ** in the Samaritan tradition (Ben-Hayyim 2000, 35–37), but, as argued in Steiner (1977, 43), it may reflect Northern Hebrew phonetics which probably differed from that current in more Southern areas, such as Jerusalem (cf. also Diem 1974, 225).
- (b) The phonetic values of **š*, **s* and **t* in early Canaanite cannot be ascertained with the degree of precision necessary for a reliable typology of phonetic shifts and, at any rate, the shift *t > š* is actually attested elsewhere in Semitic (Blau 1977, 105; 1998, 103). Egyptian and Jerusalem Amarna renderings may suggest that reflexes of **t* and **š* were phonetically similar, but tell nothing about their merger (Blau 1977, 105; Marrassini 1978, 174). The uniform rendering of **t* and **š* in proto-

Sinaitic inscriptions (Diem 1974, 236, 241) is potentially more relevant, but the available evidence is too scarce for a definite conclusion (Sass 1988, 24). Last but not least, the phonetically ‘natural’ shift [t] > [s] expected by Diem was not possible in early Canaanite, where the reflex of PS *s was still an affricate [c] (Blau 1977, 106; cf. Diem 1974, 222, 226, 247).

As far as more concrete arguments are concerned, Hebrew š-words with no Aramaic cognates have been in the focus of the debate. Indeed, how could the Masoretes ascertain that ש was to be read as [s] when no cognate lexeme was present in their usual guide, Aramaic? In Kutscher (1965, 40), five relevant Hebrew words are adduced: *šyš* ‘to rejoice’, *šmḥ* id., *šimlā* ‘garment’, *šrr* ‘to rule’, *šrd* ‘to escape’ (HALOT 1314, 1334, 1337, 1362, 1353). Blau (1977, 101–102) expands this list with *šādā* ‘field’, *šy* ‘to do’ and *šʿr* ‘to know’ (HALOT 1307, 889, 1344). A few additional examples can be found in Marrassini 1978, 163.

Kutscher’s argumentation is by no means blameless either.

- (a) Firstly, our knowledge of the early Aramaic lexicon is not exhaustive. Some lexemes missing from (or poorly represented in) the extant sources could be known to the speakers in the Masoretic period (Diem 1974, 246). Blau’s rejoinder to this claim (1977, 101) is reasonable: exceedingly rare Aramaic words are not expected to influence widely used Hebrew ones. Still, a deeper inquiry into the Aramaic lexicon is desirable. Thus, *šādā* is, for Blau, ‘an extraordinary frequent Hebrew word ... altogether absent from Aramaic’, for which no Aramaic cognate ‘has ... yet been detected and perhaps never will’ (1977, 101). Now, at least two unambiguous attestations of Mandaic *sadia* ‘field, open space, plain, desert’ are registered in MD 310!
- (b) Secondly, Kutscher and Blau hardly ever provide etymological evidence for PS *š in Hebrew words spelled with ש. However, the very existence of Hebrew lexemes with ש and no Aramaic parallels is not sufficient: one has to show that ש in such words is etymologically justified. Indeed, if the Masoretes were normally guided by Aramaic cognates, their pointing must have become more or less chaotic when such cognates were not available: at least some lexemes with PS *š could be spelled with ש and *vice versa*.

True, PS *š in *šimlā*, *šrd* and *šʿr* is assured by Arb. *šamlat-*, *šrd* and *šʿr* (Lane 1600, 1531, 1559). But for *šyš*, *šmḥ* and *šrr* there are no cognates pointing to PS *š – unless one accepts semantically remote comparisons with Arb. *šawšāʿ* ‘swift she-camel’ (Lane 1618, Nöldeke 1904, 43) and Arb. *šmḥ* ‘to be high’ (Lane 1595, Greenfield 1958). The only reliable witness for *š in *šādā* comes, paradoxically, from Mnd. *sadia*, as the translations ‘mountain’ or ‘cultivated land’ for Sab. *s₂dw* (SD 131) are hardly justified (Sima 2000, 309). But the most problematic case is *šy* ‘to do’, whose only straightforward cognate – ESA *s₁y* ‘to do’ (SD 20, LM 16, LIQ 125) – overtly contradicts the traditional rules (ESA *s₁* = Hbr. *š* ≠ Hbr. *š*).

Diem’s examples of Hbr. *š* = Arb. *š* in the absence of Aramaic cognates (1974, 246–247; after Yahuda 1903, 707–713) are notoriously infelicitous (Blau 1977, 103–104), as they exhibit more than one sibilant in the root (Hbr. *šahaš* ‘pride’ – Arb. *šḥš* ‘to be raised, elevated’, HALOT 1463, Lane 1516), other consonantal irregularities (Hbr. *šns* ‘to gird’ – Arb. *šnš* ‘to be bound’, HALOT 1607, LA 7 55), or metathesis (Hbr. *nāḥāš* – Arb. *ḥanaš-* ‘snake’, cf. SED II No. 159). The same is true of the majority of

cases adduced in Magnanini 1974 (cf. Marrassini 1978, 168–173). More persuasive examples are, nevertheless, not lacking. Thus, as Blau (1977, 92, 95, 104) admits, Hbr. *tšūkā* ‘desire, longing’ (HALOT 1801) = Arb. *šwq* ‘to excite one’s desire’ (Lane 1620) is convincing (after Barth 1893, 46 and *contra* Marrasini 1978, 172). Another Barth’s example (1893, 47–48) is Hbr. *šgʿ* ‘to be mad’ (HALOT 1415) – Arb. *ʾašjaʿ* ‘mad’ (Lane 1508). Further possible cases include Hbr. *ḵš* – Arb. *ʿqš* ‘to twist’ (HALOT 875, TA 17 271, Magnanini 1974, 407; cf. Blau 1977, 95), Hbr. *ḵārāš* ‘wooden plank’ – Arb. *qrš* ‘to cut’ (HALOT 1149, TA 17 323, Magnanini 1974, 407; cf. Blau 1977, 95), Hbr. *šwṭ* ‘to roam about’ – Arb. *šwṭ* (II) ‘to make a long journey’ (HALOT 1439, Lane 1619, Magnanini 1974, 406; Blau 1977, 95). However, Blau is right to observe (*contra* Diem 1974, 246) that Hbr. *š* – Arb. *š* is also attested when Aramaic cognates are available: Hbr. *ntš* – Syr. *ntš* – Arb. *ntš* ‘to pull, tear away’ (HALOT 737, LSyr. 453, Lane 2762, Magnanini 1974, 407; Blau 1977, 95; Marrassini 1978, 169) or Hbr. *šābīb* ‘spark’ – Syr. *šbībā* id. – Arb. *šbb* ‘to burn’ (HALOT 1392; LSyr. 750; Lane 1492; Barth 1893, 50; Magnanini 1974, 405; Blau 1977, 95; Marrassini 1978, 168).

Both approaches to the *š* problem are often presented as axiomatic in modern Semitics (contrast Hoch 1994, 416–418 and Beyer 1984, 102–103; Krebernik 2007, 128), but the question should remain open before a complete and unbiased etymological analysis of all Hebrew words with *š* is carried out.

1.5.2.5. Ugaritic and Canaanite: interdentals

1.5.2.5.1. Reflexes of Proto-Semitic **t* in Ugaritic

PS **t* is preserved in Ugaritic (Tropper 2000a, 107). Ugr. *t* may apparently also reflect PS **š*, but pertinent examples (Tropper 1994, 37–42; 2000a, 108–113) are rarely compelling (Blau 1977, 73–78). Thus, *gtr* as a title of deified royal ancestors (DUL 314) need not be related to Arb. *žsr* ‘to be courageous’ (Lane 424; Blau / Greenfield 1970, 12–13; Blau 1977, 75). The form *dt* in *ydt mʿkbk* (KTU 1.18 I 19) may be related to Arb. *dyt* ‘to be soft’ rather than to *dws* ‘to tread’ (DUL 283, Blau 1977, 75–76). Identification of *ytn* ‘old’ with Arb. *snn* ‘to become old’ (Tropper 2000a, 109) is conjectural (Blau 1977, 77), and even more so (Blau 1956, 243) are the equations Ugr. *tlhn* ‘table’ – Arb. *salḥ* ‘skin, hide’ (Lane 1403) and Ugr. *tnn* ‘type of soldier’ – Arb. and Gez. *snn* ‘to be sharp’ (Lane 1436, CDG 507). Ugr. *ktr* I ‘skilful’ and *ktr* II ‘vigour’ (DUL 471) are hard to dissociate from Arb. *ktr* ‘to be numerous’ (WKAS K 60), which assures **t* in PS in spite of the irregular *š* in Aramaic (Wagner 1966, 68). *Contra* Testen (2000, 86) and Tropper (2000a, 111; cf. Blau 1972a, 58–61), the PS prototype of Ugr. *ʾil* ‘there is’ (DUL 123) is to be reconstructed as **yṭw* (cf. Arm. *ʾūay*, Beyer 1984, 509 and *i-ŠA-wu* = Sum. A.GÁL, AN.GÁL in VE 624, 789, Krebernik 1983, 24). Ugr. *ngt* and *ngš* (‘to pursue’ and ‘to make one’s way’ respectively in DUL 623–624, cf. Tropper 2000a, 109) are semantically difficult and therefore unsuitable for safe diachronic conclusions (Blau 1977, 76–77). Ugr. *trm* ‘to eat’ (DUL 931) has been connected with Syr. *šrm* and Arb. *šrm* ‘to slit’ (LSyr. 809, LA 12 333), but, apart from the semantic difference, there is also Arb. *trm* ‘to break (the teeth)’ (LA 12 88; cf. Blau 1977, 77; Tropper 2000a, 110).

For Blau (1977, 73–75), the only persuasive case of Ugr. *t* < PS *š is *ḥtb*, *ḥtbn* ‘bill, account’ (DUL 377) – Hbr. and Syr. *ḥšb*, Arb. *ḥsb* ‘to reckon’ (HALOT 359, LSyr. 260, Lane 564). But even this example is problematic given the uncertain relationship between the Semitic root and Eg. *ḥsb* (already in the Pyramid texts, Wb. III 166). Also probable is, *contra* Blau (1977, 75), Ugr. *mṭk* ‘to take (by the hand)’ (DUL 605) – Arb. *msk* ‘to maintain, to withhold’ (Lane 3019). In any case, this meager evidence is too scarce for a true phonological irregularity.

1.5.2.5.2. Reflexes of Proto-Semitic *d in Ugaritic

PS *d yields *d* in Ugaritic (Troppe 2000a, 101): *ḥd* ‘to take’ < **ḥd* (Arb. *ḥd*), *dkr* ‘male’ < **dakar*- (Arb. *dakar*-), *dḥn* ‘beard’ < **dakan*- (Arb. *daqan*-), *dbḥ* ‘to sacrifice’ < **dbḥ* (Arb. *dbḥ*), etc. (DUL 36, 269, 278, 261, Lane 28, 969, 953, SED I No. 63). In the syllabic transcriptions, etymological *d is spelled with DV signs: *da-ab-ḥu* ‘sacrifice’, *da-ka-rù* ‘male’ (Huehnergard 1987, 223–224).

In a few lexemes *d is preserved (Troppe 2000a, 116–117): *dnb* ‘tail’ (DUL 288) < **danab*- (Arb. *danab*-, SED I No. 64), *dr* ‘arm’ (DUL 288) < **dirā*- (Arb. *dirā*-, SED I No. 65), *dr* ‘to help’, *drt* ‘help’ (DUL 153; syllabic *i-zi-ir[-tu₄]*, Huehnergard 1987, 224) < **dr* (Sab. *dr*, SD 13), *ḥd(d)* ‘downpour’ (DUL 387) < **ḥidīd*- (Arb. *ḥindīd*-, LA 3 598). Sometimes *d/d* doublets are attested: *dr/dr* ‘grain, seed’ (DUL 280; syllabic *mi-dā-ar-ū*, Huehnergard 1987, 224) < **dar*- (Ebla *ša-la-ū*, *šar-ū*, Sab. *mḍr*‘t, Krebernig 1983, 26, SD 40), *mḍr* ‘vow’, *ndr* ‘to promise’ (DUL 529, 621) < **ndr* (cf. 1.5.2.5.4.), perhaps *ḍbt* ‘company, band’, *db* ‘to prepare, arrange’ (DUL 148, 152) < **ḍb* (Sab. *ḍb*, SD 12).

In the archaic text KTU 1.12 (cf. 1.5.2.5.1.), PS **ḥd* and **db* appear as *ḥd* (ll. 31–35) and *db* (l. 26), but the relative pronoun **dū* appears as *d* in l. 3 (*ygmḍ* ‘he rejoiced’ in l. 13 is etymologically obscure). Conversely, in KTU 1.24:45 **d* is preserved precisely in the relative pronoun (contrast *dt* in ll. 38, 43; Troppe 2000a, 235–236).

The background of the double reflexation of **d* is uncertain (Blau 1968). For Gordon (1965, 26–27), preservation of *d* is conditioned by *r* as a root consonant, whereas Troppe (2000a, 116) expands the list of conditioning factors with *n*, *m* and *b*. Nevertheless, many regular *d*-lexemes display the same phonetic environments (Kogan 2000, 721–722): *dkr* ‘male’, *dḥn* ‘beard’, *dry* ‘to winnow’, *udn* ‘ear’.

1.5.2.5.3. Reflexes of Proto-Semitic *ṭ in Ugaritic

PS *ṭ is usually preserved in Ugaritic (Troppe 2000a, 113): *ṭby* ‘gazelle’ (DUL 1003) < **ṭaby*-, *ṭl* ‘shadow’ (DUL 1003) < **ṭill*-, *ṭm* ‘bone’ (DUL 197) < **aṭm*-.

On several occasions, *ṭ yields Ugr. *ḡ* (Segert 1988). Three examples are certain (Troppe 2000a, 94): *nḡr* ‘to pay attention; to guard’ (DUL 624) < **nṭr*, *ḡm* ‘to be thirsty’ (DUL 322) < **ṭm*, *ḡr* ‘mountain’ (DUL 324) = Hbr. *šūr* (HALOT 1016), Syr. *ṭūrā* (LSyr. 272) < **ṭVrr*- ‘flint’ (Fronzaroli 1968, 271). Also probable is *yḡḡ* ‘to be alert’ (*’išm’ w tḡḡ udn* ‘listen and let (your) ear be alert’, KTU 1.16 VI 42) < **yḡṭ* (Arb. *yqd*, LA 7 527).

Alternative etymologies for these roots implying $*\gamma$ in PS (Blau 1977, 70–72) are rarely convincing. Thus (*contra* Blau 1977, 72), there is no reason to follow Rössler (1961, 165–167) who dissociated Ugr. γr ‘mountain’ from its NWS cognates in favor of Arb. γawr - ‘lowland’ (Lane 2308). Ugr. $n\gamma r$ (syllabic $na\text{-}hi\text{-}ru$, $ni\text{-}ih\text{-}rù$) is inseparable from PS $*n\gamma r$, *contra* Loewenstamm (1980, 362–365, 433–439) and Rössler (1961, 164–165), see Huehnergard (1987, 153). Aistleitner’s explanation of $t\gamma$ as ‘to incline’ (1963, 279) = Arb. $\gamma\gamma$ (Lane 1692) is phonologically unacceptable (Blau 1977, 71). Finally, scribal errors assumed by Rössler for γm ’ and $y\gamma$ are just hard to imagine (Blau 1977, 70).

Other examples of PS $*t >$ Ugr. γ are admittedly more problematic (Troppe 1994, 24–25). Thus, $m\gamma$ ‘to come’ (DUL 533) is not to be derived from PS $*m_t$ since ‘ does not yield γ in Ugaritic (Blau 1972a, 67–72; 1977, 72). Similarly, Ugr. γlmt ‘darkness’ (DUL 320) need not be related to PS $*t\gamma lm$ in view of Hbr. lm ‘to conceal’ (Blau 1977, 72, cf. HALOT 834–835). It is remarkable that both $*m_t$ and $*t\gamma lm$ have regular Ugaritic reflexes with t (m_t ‘to meet’ and $t\gamma lm$ ‘darkness’, DUL 608, 1004) but, *contra* Blau 1977, 72, this argument is not decisive, as γm ‘to be thirsty’ also has a regular t -doublet $m\gamma m’a$ (DUL 609).

There is no convincing explanation for the split of PS $*t$ into γ and t in Ugaritic.

Gordon (1965, 27–28) reconstructs a hitherto unknown PS phoneme, but this unlikely solution has rightly been rejected in Rössler 1961, Blau (1977, 70) and Troppe (2000a, 96). Blau’s ‘composite character of the dialectal structure of Ugaritic’ and ‘dialect mixture’ (1977, 70) are scarcely helpful either, as is Blau’s attribution of this phenomenon to the ‘weak sound change’ (within this approach, Ugr. γm ‘to be thirsty’ is treated as a ‘blend’ of PS $*t\gamma m$ with the ‘bilateral root γm ’, represented by Arb. γamy ‘fainting’ and γym ‘to be clouded’, both of which supposedly to go back to an original meaning ‘to be covered’, from which ‘both fainting and thirst’ must have developed!). For Troppe (2000a, 96), the shift $*t > \gamma$ is due to the influence of sonorants, but in five (out of nine) regular examples one or two sonorants are also involved.

1.5.2.5.4. Reflexes of Proto-Semitic interdentals in Hebrew

PS interdentals merge with sibilants in Hebrew ($*t > \text{š}$, $*d > z$, $*t > \text{š}$), but $*d$ is thought to yield d instead of z in some lexemes. The fullest collection of potentially relevant examples can be found in Rabin 1970 (cf. also Garbini 1960, 194–196).

Most of Rabin’s 32 examples do not withstand critical scrutiny (Blau 1977, 110). Some comparisons are semantically far-fetched: Hbr. $d^{\text{š}}$ ‘to be anxious’ (HALOT 207) – Arb. $d^{\text{š}}$ ‘to inflate a vessel in order to check whether it is broken or not’ (LA 2 320), Hbr. $k\dot{d}\dot{o}n$ ‘scimitar’ (HALOT 472) – Arb. $k\dot{a}dat$ - ‘upper thigh’ (WKAS K 426), Hbr. $\dot{a}d\dot{a}r$ ‘herd’ (HALOT 793) – Arb. $\dot{i}d\dot{a}r$ - ‘a mark on a camel’s cheek’ (Lane 1986), Hbr. $\dot{e}d\dot{u}t$ ‘testimony’ (HALOT 790) – Arb. γdy ‘to feed’ (Lane 2236), Hbr. $d\dot{a}g$ ‘fish’ (HALOT 213) – Arb. $d\dot{a}ža$ ‘to drink’ and ‘to move quickly’ (TA 5 586). In a few other lexemes there is an additional phonological irregularity: Hbr. $s\dot{u}s$ $d\dot{o}h\dot{e}r$ ‘dashing horse’ (HALOT 214) – Arb. $d\dot{u}hl\dot{u}l$ - ‘a swift horse’ (Lane 984), Hbr. $h\dot{a}p$ ‘to push’ (HALOT 239) – Arb. $h\dot{d}f$ ‘to reject’ or $h\dot{d}f$ ‘to hasten’ (Lane 535, 712), Hbr. $\text{š}dd$ ‘to devastate, despoil’ (HALOT 1418) – Arb. $\text{š}dd\dot{a}d$ - ‘people apart from their companions’ (Lane 1522), Hbr. $\text{š}h\dot{a}d$ ‘bribe’ (HALOT 1457) – Arb. $\text{š}h\dot{d}$ ‘to beg im-

portunately', Hbr. *škd* 'to watch' (HALOT 1638) – Arb. *šqd* 'to be awake' (Lane 1580).

Potentially more reliable examples are scanty: Hbr. *ndr* 'to make a vow' (HALOT 674) – Arb. *ndr* id. (Lane 2781; Rabin 1970, 294; Blau 1977, 80), Hbr. *kdr* 'to be dark' (HALOT 1072) – Arb. *qdr* 'to be dirty' (Lane 2498; Rabin 1970, 295; Blau 1977, 80), *kipṣōd* 'hedgehog' (HALOT 1117) – Arb. *qunfuḍ* id. (Lane 2569; Rabin 1970, 296; Blau 1977, 81–82), Hbr. *ḥdl* 'to cease' – Arb. *ḥdl* 'to neglect' (Lane 713, Rabin 1970, 293, Blau 1977, 80), Hbr. *dll* 'to be little', *dal* 'poor' (HALOT 223, 221) – Arb. *dll* 'to be low, vile' (Lane 972; Rabin 1970, 292; Blau 1977, 81), Hbr. *dlk* 'to set on fire' (HALOT 223) – Arb. *dlq* 'to give light' (Lane 974; Rabin 1970, 292; Blau 1977, 81).

Various factors have been considered in order to account for different lexemes from this heterogeneous group, such as the influence of liquids (Rabin 1970, 297; Blau 1977, 81) and labials (Rabin 1970, 297), and contamination or dialect mixture (Blau 1977, 81). *Contra* Rabin 1970, 297, Aramaic influence is not to be excluded in some cases (cf. Wagner 1966, 102, 42–43 for *kipṣōd* 'hedgehog' and *d'b / dwb* 'to pine away', Blau 1977, 110 for *paḥad* 'thigh'). A detailed etymological inquiry into Hbr. *ndr* 'to vow' and *nzr* 'to consecrate' (Boyd 1985) reveals a complex interplay of **ndr* / **nḏr* / **nzr* within and outside Hebrew. The same may be true of *kipṣōd* / *kipṣōz* (Wagner 1966, 102; Blau 1977, 81) and *dll* / *zll* (Blau 1977, 81).

1.5.2.6. Canaanite sibilants and interdental: a summary

When the history of **š*, **s̥* and **t̪* in Canaanite is investigated, evidence in foreign scripts (cuneiform and Egyptian) should be carefully distinguished from data in native alphabets.

Both cuneiform and Egyptian scripts have only two sets of sibilant signs (*ŠV* vs. *SV*, *š* vs. *s*). They are, therefore, *a priori* unsuitable for rendering three different sibilant phonemes. These scripts can provide valuable information about the separate existence of certain sibilants, but they cannot be conclusive concerning sibilant mergers (Diem 1974, 228–230).

Conversely, native alphabets (such as Ugaritic and Phoenician) were with all likelihood specifically designed for the consonantal systems of the respective languages (Diem 1974, 237; Knauf/Maáni 1987, 91; Krebernik 2007, 112, 126; contrast Hoch 1994, 414–418) and can provide direct evidence about their sibilant inventories.

The OB renderings of NWS personal names suggest that **t̪* (rendered by *ŠV* signs) was a separate phoneme in the first half of the 2nd millennium BC. The use of the *SV* series for both **š* and **s̥* does not necessarily imply their merger. This evidence is thus compatible with all sibilant systems of later periods.

The Egyptian renderings suggest that **š* (= Eg. *š*) was different from **t̪* and **s̥* (= Eg. *s*) in the second half of the second millennium BC. But they are not helpful in deciding whether **t̪* and **s̥* merged into one phoneme (Diem 1974, 234, 242; Hoch 1994, 402). If they did, this system is not compatible with the traditional Hebrew one, where **s̥* is opposed to **š*. If they did not, it can be considered as an immediate forerunner of the Hebrew system. The same is true of the evidence from the Jerusalem Amarna letters (Diem 1974, 239–241).

The Egyptian and Jerusalem Amarna systems are incompatible with the Ugaritic one, where **ṭ* is kept apart and **š* merges with **ṣ*. They are equally incompatible with the ‘short’ Ugaritic alphabet, where one symbol is used for **ṣ*, **š* and **ṭ* (Tropper 2000a, 73, 77), which suggests a complete sibilant merger (as later in Phoenician).

Since the three systems (Egyptian/Jerusalem Amarna, ‘long Ugaritic’ and ‘short Ugaritic’) are largely contemporary, the evolution of PS sibilants in early Canaanite could not be uniform. In the North, either complete sibilant merger (Ugaritic ‘short alphabet’ = (proto-)Phoenician; Tropper 2000a, 79–80; Rainey 1998, 452–453) or the shift **š* > **ṣ* (Ugaritic ‘long alphabet’) are attested. In more Southern (and more inland) areas, the merger either affected **ṭ* and **š* in opposition to **ṣ* (Diem 1974), or there was no merger at all (Blau 1977). It is to such ‘Southern’ dialects that the Egyptian renderings should be traced (but cf. Hoch 1994, 415, 482–486).

Phonetic interpretation of **š* in early Canaanite is debatable. The Egyptian renderings with *š* suggest a hushing [ʃ] – the value commonly ascribed to Eg. *š* (Schenkel 1990, 38; Peust 1999, 125; cf. Faber 1985b, 48). SV-spellings in Jerusalem Amarna letters do not contradict this reconstruction in view of the Assyrian-like features of this subcorpus (Moran 1975, 152–155): SV = [ʃ] is a well established Assyrian peculiarity (cf. 1.5.1.4.). According to Streck (2006, 249), de-affrication of *š* [c] into *š* in Ugr. *mḥšt* ‘I killed’ (< *mḥs*) suggests that Ugr. *š* was pronounced as [s]. But if Ugr. *s* was still an affricate [c], the ‘general sibilant’ *š* – be it realized as [s] or [ʃ] – was the only possible outcome of de-affrication (cf. Tropper 2000a, 105). The realization [ʃ] for early Canaanite *š* is thus a feasible possibility (Tropper 2001, 630–632; contrast Streck 2002, 186–187; 2006, 250), at least partly confirmed by the fact that foreign ‘general sibilant’ (presumably [s]) is normally rendered by *ṭ* and not by *š* in Ugaritic (Tropper 2000, 111–113).

1.5.2.7. PS lateral sibilants in Aramaic

1.5.2.7.1. Reflexes of Proto-Semitic **š* in Aramaic

PS **š* was rendered by the polyphonic grapheme 𐤔 in OArm. (Degen 1969, 36): *šm* ‘he put, erected’ < **šym* (KAI 201:1), etc. The same spelling predominates in EArm. and BArm. (Muraoka/Porten 2003, 6–7; Bauer/Leander 1927, 26) as well as in some later traditions (Beyer 1984, 102–103). In the cuneiform Uruk incantation, **š* is rendered by ŠV signs ([*n*]a-šá-ṛa-a-ta₅ ‘you raised’ < **nš*?, šá-am-lat ‘dress’ < **šamlat*-, TCL 6 58:1, 20) and differs from **s* = SV (*si-ip-pa-a* ‘threshold’ < **sapp*-, *a-si-ir* ‘bent’ < **sr*, ḥa-as-si-ir-ta-a ‘deficient’ < **ḥsr*, TCL 6 58:2, 5, 15).

The shift **š* > *s* becomes apparent in EArm. and BArm. (Muraoka/Porten 2003, 6–7, Bauer/Leander 1927, 27). In Papyrus Amherst 63, *s*-spellings are regular (Steiner/Nims 1984, 93; 1985, 67–68; Vleeming/Wesselius 1983–1984, 124; 1985, 26–27): *sḥr* ‘moon’ < **šahr*- (11:13, Steiner/Nims 1983, 265), *nšt* ‘she raised’ < **nš*? (9:18, DNWSI 1261), *bšmb* ‘it was pleasing’ < **bšm* (18:11, DNWSI 1254), *bšsr* ‘meat’ < **bašar*- (6:6, DNWSI 1254), *sḥthy* ‘I put him’ < **šym* (19:2, DNWSI 1261). Exceptional *š*-spellings found in DNWSI 1252–1266 are *yšrp* ‘he will burn’ < **šrp* (20:10) and *škg* ‘large’ < **šg*? (21:1, cf. *sḥk* in 19:10).

The merger is complete from Middle Aramaic onwards (PS **ʿašr-* ‘ten’ > Syr. *ʿesrā*, LSyr. 537, Mnd. *asra*, MD 30, Mal. *ʿasra*, GNDM 7), but historical orthography with *š* may persist for some lexemes (cf. DJPA 421 and DJBA 884 for 𐤌𐤍𐤕 ‘ten’).

The shift **š* > *s* assures the independent status of **š* in early Aramaic (Steiner 1977, 38), since other sources of the polyphonic 𐤌 behave differently in later periods: OArm. 𐤌 = PS **š* yields *š* (*šmʿ* ‘he heard’ in KAI 201:4 > Syr. *šmaʿ*, LSyr. 786), OArm. 𐤌 = PS **t* yields *t* (*yšbr* ‘he will break’ in KAI 222A:38 > Syr. *tbar*, LSyr. 815).

1.5.2.7.2. Reflexes of Proto-Semitic **š* in Aramaic

PS **š* yields *ʿ* from Middle Aramaic on: **ʿarš-* ‘earth’ > Syr. *ʿarʿā*, Tur. *arʿo* (LSyr. 51, LTS 157), **šaʿn-* ‘small cattle’ > Syr. *ʿānā*, Tur. *wono* (LSyr. 533, LTS 157), **šamr-* ‘wool’ > Syr. *ʿamrā*, Tur. *ʿamro* (LSyr. 533, LTS 156).

In Old Aramaic, the reflex of **š* is rendered by *k* (Degen 1969, 36–37): *ʿrk* ‘land’ < **ʿarš-* (KAI 202B:26), *rḫh* ‘to placate’ (KAI 224:6) < **ršy*, *mrk* ‘disease’ (KAI 309:9) < **mrš*. The grapheme 𐤌 was thus polyphonic (Steiner 1977:38). The earliest *ʿ*-spellings (*mr* ‘wool’, *ʿrʿ* ‘land’) go back to the end of the 6th century B.C. (Beyer 1984, 101).

Spellings with *k* still predominate in EArm. (Folmer 1995, 63–69; Muraoka / Porten 2003, 8–9), but *ʿ*-variants may occur even within a single document (*l-ʿrʿ* / *l-ʿrk* ‘to meet’). In BArm. *ʿ* is ubiquitous except for *ʿarkā* / *ʿarʿā* in Jer. 10:11 (Bauer/Leander 1927, 26). Orthographic vs. phonetic nature of this variation is disputed (Beyer 1984, 101, 420, 1994, 42, Muraoka/Porten 2003, 9–10).

Historical orthography accounts for the use of *k* in three **š*-lexemes in Mandaic: *aḵamra* ‘wool’, *aḵna* ‘small cattle’ (also *amra* and *ana*) and *arḵa* ‘earth’ (MD 23, 33; 24, 34; 39; Nöldeke 1875, 72–73; Macuch 1990, 228–230; Beyer 1984, 44, 420). The reflexes of **šamr-* and **šaʿn-* did not survive in modern Mandaic, whereas **ʿarš-* becomes *ara* (Macuch 1965, 95–96).

According to a growing consensus, the OArm. reflex of **š* is to be interpreted as a glottalized velar or uvular affricate ([kxʷ] or [qxʷ]). According to Steiner (1991, 1499–1501), this realization is suggested by the 𐤌/𐤌𐤓(QÍ) variation in cuneiform spellings of Aramaic personal names (*ra-ḫi-a-nu* / *ra-qi-a-nu* < **ršy* ‘to be glad’; Zadok 1977, 262; Beyer 1984, 101). Since etymological **γ* is always rendered by 𐤌V and not by QV (*ba-ḫi-a-nu* < **bγy* ‘to wish, to desire’; Beyer 1984, 101; Zadok 1977, 247), [kxʷ] (< **š*) was likely opposed to [γ] (< **γ*) at least before 600 B.C. (Beyer 1984, 101, 420; 1994, 42). But it seems that the two phonemes were still unmerged even much later: in Papyrus Amherst 63, **š* can be rendered by *ḫ* and *ḥ* (Steiner/Nims 1984, 93; Steiner 1991, 1500; Kottsieper 2003, 104–105), as in *ḥn-hn* ‘their flocks’ < **šaʿn-* (6:4) and *ṛḥ* ‘earth’ < **ʿarš-* (15:3), but also by *k* (Vleeming/Wesseliuss 1983–1984, 122; Kottsieper 2003, 104–105), as in *ṛḫḫk* ‘to wash’ < **ṛḫš* (3:10–11, DNWSI 1264) and *ṛrk(ʿ)* ‘earth’ (22:7 and 17:6, 11, DNWSI 1254). Now, *ḫ* and *ḥ* are used also for **γ* (cf. 1.5.10.), but *k* is not.

The background of the famous ‘correspondance du *qād* arabe au ‘*ayn* araméen’ (Yushmanov 1926) can thus be summarized as follows (Steiner 1977, 40–41; 1991, 1501; Voigt 1979, 101–102; Dolgopolsky 1994; 1999, 31–32; cf. Vilenčik 1930, 95):

PS	pre-Old Aramaic	Old Aramaic	Official Aramaic	Middle Aramaic
[tʰ]	[kʰ]	[kxʷ]	[γ]	[ʔ]

The shift *š > ʿ is not without exceptions: in some lexemes, PS *š yields Arm. š. Reliable examples (GVG 135, 236; Yushmanov 1998[1940], 149; Blau 1970, 61–62; Steiner 1977; 149–151) include Syr. *šmad* – Arb. *dmd* ‘to bind’, Syr. *maš* – Arb. *ymd* ‘to close one’s eyes’, Syr. *hmaš* – Arb. *hmd* ‘to be sour’, Syr. *šrak* – Arb. *darik* ‘poor’, Syr. *šerā* – Arb. *dar* ‘breast’, Syr. *raš* – Arb. *rd* ‘to break’, Syr. *npaš* – Arb. *nfd* ‘to shake’, Syr. *šarwā* – Arb. *dirw* ‘aromatic resin’, Syr. *rš* – Arb. *rd* ‘to occur’, Qumran Aramaic *n’s* ‘to prick’ – Arb. *nu’d* ‘a thorny tree’ (LSyr. 632, 530, 241, 637, 638, 742, 437, 637, 549, 435, Beyer 1994, 382; Lane 1802, 2296, 644, LA 10 557, Lane 1095, 2830, 1787, 1790, 2002, LA 7 269). For some lexemes, ʿ-doublets are attested (Yushmanov 1998[1940], 150): Syr. *ʿera* ‘to occur’, *hma* ‘to be fermented’, *ra* ‘to break’ (LSyr. 51, 240, 737). The earliest example of *š > š (Degen 1969, 37; Steiner 1977, 150) is *hšr* ‘grass’ in KAI 222A:28, identical to Hbr. *hāšir* (HALOT 343) and going back to PS **hšr* ‘to be green’ (Arb. *hḍr*, Lane 754). Steiner (1977, 150) further adduces *šr* ‘enemy’ from the Samalian inscription KAI 214 (as well as its hypothetical cognate in Mnd. *šara*, MD 388), but the reading *šry* in KAI 214:30 is disputed (cf. Tropper 1993, 93).

While some of the exceptional examples can be attributed to Akkadian or Canaanite influence (Blau 1970, 61–62), others look genuine and could be explained by the dissimilatory effect of sonorants and/or ʿ and *h*, incompatible with ʿ < *š (GVG 135, 237; Blau 1977, 69–70; Steiner 1977, 149–154). According to Yushmanov (1998[1940], 150, following Vollers 1893, 147 and Zimmern 1898, 27), the double reflexation of *š in Aramaic may reflect two separate PS phonemes, but this is hard to accept. Blau’s suggestion that *š > š was regular in some (non-documented) Aramaic dialects (1970, 63) is similarly improbable (Diem 1980, 83–84).

1.5.2.8. Proto-Semitic interdentals in Aramaic

PS **t*, **d* and **ṭ* yield *t*, *d* and *ṭ* from Middle Aramaic on: **tawr* ‘bull’ > Syr. *tawrā*, Tur. *tawro* (SED II No. 241), **dirā* ‘arm’ > Syr. *drā*, Tur. *dru’o* (SED I No. 65), **ṭn* ‘to load’ > Syr. *ṭen*, Tur. *ṭon* (LSyr. 283, LTS 182).

In Old Aramaic, *š*, *z* and *ṣ* regularly appear instead (Degen 1969, 35–36):

yšb ‘to sit’ (DNWSI 474) < **wṭb* (Sab. *wṭb*, Ugr. *yṭb*, Syr. *yūteb*, SD 165, DUL 994, LSyr. 311), *šbr* ‘to break’ (DNWSI 1106) < **tbr* (Sab., Ugr. *tbr*, Syr. *tbar*, SD 149, DUL 897, LSyr. 815), *šb* ‘to return’ (DNWSI 1114) < **twb* (Sab., Ugr. *twb*, Syr. *tāb*, SD 151, DUL 895, LSyr. 817), *šr* ‘place’ (DNWSI 125) < **aṭar* (Sab. *ʿtr*, Ugr. *ʿatr*, Syr. *ʿatrā*, SD 9, DUL 127, LSyr. 55), *šwrh* ‘cow’ (DNWSI 1118) < **tawr-at* (Sab., Ugr. *tr*, Syr. *tōrtā*, SED II No. 241), *šʿt* ‘ewe’ (DNWSI 1094) < **taʿw-at* (Arb. *taʿw-at*, Mnd. *tata*, SED II No. 236), *šʿl* ‘fox’ (DNWSI 1179) < **tV(V)l* (Arb. *tuʿāl*, Syr. *taʿlā*, SED II No. 237), *lyš* ‘there is not’ (DNWSI 576) < **layṭ* (Ugr. *ʿit*, Syr. *layt*, DUL 123, LSyr. 366), *šlšn* ‘thirty’ < **talātūna* (Arb. *talātūna*, Syr. *tlātūn*, Lane 348, LSyr. 826).

zhl ‘to be afraid’ (DNWSI 309) < **dhl* (Syr. *dhel*, LSyr. 148), *ʿhz* ‘to take’ < **ḥd* (Arb. *ḥd*, Syr. *ʿhad*, Lane 28, LSyr. 11), *zkn* ‘to grow old’ < **daḳan* ‘beard’ (Arb. *daḳan*, Syr. *daḳnā*, Lane 967, LSyr. 164), *zkrn* ‘memory’ < **dkr* (Arb. *dkr*, Syr. *dkīr*, Lane 968, LSyr. 153), *zhb* ‘gold’ < **dahab* (Arb. *dahab*, Syr. *dahbā*, Lane 983, LSyr. 142).

rš ‘to run’ (DNWSI 1065) < **rwṭ* (Ugr. *rṭ*, Syr. *rhet*, DUL 750, LSyr. 716), *nšr* ‘to guard’ (DNWSI 754) < **nṭr* (Sab. *nṭr*, Arb. *nḍr*, Syr. *nṭar*, Lane 2810, SD 102, LSyr.

426), *ḥṣ* ‘arrow’ (DNWSI 397) < **hVṭt-* (Ugr. *ḥṭ*, Mnd. *hiṭia*, DUL 382, MD 143), *kys* ‘summer’ (DNWSI 1020) < **ḳayṭ-* (Sab. *kyṭ*, Ugr. *ḳṭ*, Syr. *ḳayṭā*, SD 112, DUL 722, LSyr. 664), *ḥpṣ* ‘affair’ (DNWSI 396) < **ḥipt-* (Arb. *ḥifḍ-*, Syr. *ḥuptā*, LA 7 498, LSyr. 250), *šby* ‘gazelle’ (DNWSI 958) < **ṭaby-* (Ugr. *ṭby*, Arb. *ḍaby-*, Syr. *ṭabyā* (SED II No. 242).

In the OArm. inscription from Tell Fakhariyye PS **t* is rendered by *s*: ‘*sr* ‘wealth’ (KAI 309:2) < **tr* (Syr. ‘*tar*, LSyr. 554), *ysb* ‘dwelling’ (ibid. 5, 16) < **wṭb*, *ḥds* ‘anew’ (ibid. 11) < **ḥdt*, *sʿwn* ‘ewes’ (ibid. 20), *swr* ‘cattle’ (ibid. 20).

OArm. *š*, *z* and *ṣ* which do not go back to PS interdentals never yield *t*, *d* and *ṭ* in later periods. Therefore, the corresponding OArm. graphemes were polyphonic and the reflexes of **t*, **d* and **ṭ* were preserved as independent phonemes (Degen 1969, 32–36).

The only exceptional dental spelling in OArm. seems to be *w-ʿl yrt* ‘he will not inherit’ (< **wrt*) in KAI 222C:24 (cf. DNWSI 471; Blau 1972a, 73; Fitzmyer 1995, 120; *btn* ‘snake’ < **baṭan-* in KAI 222A:32 proposed in Fitzmyer 1995, 89 is hard to accept). This single case is not sufficient to substantiate Beyer’s dating (1984, 100) of the loss of interdentals to the 9th or even 10th century B. C. (Muraoka / Porten 2003, 3–5).

Reliable dental spellings of PS interdentals are attested since the middle of the 7th century B. C. (*yḥtb* ‘he will send back’ < **twb* in KAI 233:11, Beyer 1984, 100).

Distribution of sibilant vs. dental spellings for **d* in EArm. is discussed in Beyer (1984, 100), Folmer (1995, 49–63) and Porten/Muraoka (2003, 3–9): *z* predominates, but *d* is widely attested (especially in word-middle and word-final positions) and *z/d* doublets are known for some lexemes (*zhb* / *dhb* ‘gold’ < **dahab-*). The phonetic reality behind this picture is debated. Reflexes of **t* and **ṭ* are regularly spelled with *t* and *ṭ* (Folmer 1995, 70–74; Muraoka/Porten 2003, 7–9), which points to their definitive loss.

Dental spellings are regular in Papyrus Amherst 63: *dḥḥb* ‘gold’ < **dahab-* (9:11, DNWSI 1255), *ḥwʾryʾnʾ* ‘our bulls’ < **tawr-* (9:12, DNWSI 1166), perhaps *yʾmʾḥnʾ* ‘may he cause to reach us’ in 11:14 (Kottsieper 1988, 231; cf. Steiner/Nims 1983, 266; Vleeming/Wesselius 1985, 56) < **mṭ* (Syr. *mṭā*, Ugr. *mṭ*, LSyr. 381, DUL 608). Two exceptional sibilant spellings – *nʾṣʾbʾḥ* ‘we shall sacrifice’ (12:2, DNWSI 1256, Vleeming/Wesselius 1985, 64) = **ḍbh* (Syr. *ḍbh*, Arb. *ḍbh*, LSyr. 138, Lane 953) and *yʾṣʾḥ* ‘council’ (11:15, DNWSI 1257) = **wṭ* (JPA *yṭ*, ‘*yṭh*, Arb. *wṭ*, DJPA 243, 403, Lane 2953) – are probably Hebraisms (Steiner/Nims 1983, 267; Vleeming/Wesselius 1982, 507; 1985, 56; Kottsieper 1988, 232–233; note the expected ‘*ṣḥt* ‘advice’ in 18:11, DNWSI 1262).

Doublet *z/d* spellings for **d* are characteristic of Mandaic: *zahba/dahba* ‘gold’, *zikna/dikna* ‘beard’, *zikra/dikra* ‘beard’, *zinibta/dinipta* ‘tail’, *haizin/haidin* ‘this’ (Nöldeke 1875, 43–44; Macuch 1965, 66–68; 1990, 225–226). The purely orthographic nature of this orthography is evident (Beyer 1984, 44, *contra* GVG 134).

1.5.3. Proto-Semitic sibilants in Epigraphic South Arabian

1.5.3.1. Epigraphic South Arabian ḥ (*s*₁), ẓ (*s*₂) and ẖ (*s*₃)

The graphemes ḥ (*s*₁), ẓ (*s*₂) and ẖ (*s*₃) correspond to Hebrew and MSA *š*, *ṣ* and *s* respectively (Cantineau 1935–1945; Stehle 1940; Beeston 1951, 14; LaSor 1957):

Sab. *ls₁n* – Hbr. *lāšōn* – Soq. *lēšin* ‘tongue, language’ (SED I No. 181), Sab. *s₁nt* – Hbr. *šēnā* – Mhr. *šēnēt* ‘sleep’ (SED I No. 82_v), Min. *tys₁* – Hbr. *tayiš* – Soq. *teš* ‘buck’ (SED II No. 231);

Sab. *ʿšr* – Hbr. *ʿāšār* – Jib. *ʿšār* ‘ten’ (SD 21, HALOT 894, JL 17), Sab. *h-s₂b^c* – Hbr. *šb^c* – Mhr. *šība* ‘to be sated’ (SD 131, HALOT 1302, ML 370), Sab. *s₂hr* – Hbr. *šahārōn* – Mhr. *šēhār* ‘moon, month’ (SD 132, HALOT 1311, ML 376);

Sab. *ʿs₃r* – Hbr. *ʿsr* – Jib. *ʿésór* ‘to bind, to take captive’ (SD 8, HALOT 75, JL 4), Min. *hs₃r* – Hbr. *hšr* – Mhr. *hšōr* ‘to decrease; to pay’ (LM 44, HALOT 338, ML 449), Sab. *ks₃w* – Hbr. *kāsā* – Mhr. *ksū* ‘to clothe’ (SD 79, HALOT 487, ML 216).

As seen by Blau (1977, 90–92), Beeston (1977) and Marrassini (1978, 163) and confirmed by a detailed etymological analysis of all pertinent ESA roots in Okhotin 1999, probable exceptions are (*contra* Magnanini 1974) very few: Sab. *ʿs₁y* – Hbr. *ʿāšā* ‘to do’, Sab. *s₁f_{rt}* ‘extent’ – Hbr. *mispār* ‘quantity’, Sab. *s₁ʿd* ‘to bestow a favor’ – Hbr. *sʿd* ‘to support’, Sab. *fs₂ʿ* ‘contagious’ – Hbr. *pāšā* ‘to spread (disease)’, Sab. *h-ws₂ʿ* ‘to grant a favor’ – Hbr. *hōšīaʿ* ‘to help, save’ (SD 20, 125, 121, 46, 163; HALOT 889, 607, 761, 979, 448).

The PS values *š*, *ṣ* and *s* could thus reasonably be ascribed to *ḥ*, *ṣ* and *ṣ̣* (Leslau 1937, 214; Cantineau 1935–1945, 323; Beeston 1951, 26). However, the early Sabaeo-logical tradition was not oriented towards the three-sibilant systems of Hebrew and MSA, but rather to the two-sibilant Arabic system (Beeston 1951, 15): *ḥ* and *ṣ* were ascribed the phonetic values of their Arabic etymological counterparts (viz. *s* and *š*), whereas *ṣ̣*, with no Arabic parallel at all, was rendered by *š*. The latter choice was especially infelicitous, since *š* is widely used in Semitic philology to denote the unvoiced lateral sibilant (Hbr. *š*). The phonetically neutral numerical notation (*ḥ* = *s₁*, *ṣ* = *s₂*, *ṣ̣* = *s₃*) introduced in LS 15 is thus warranted, but the traditional renderings (*ḥ* = *s*, *ṣ* = *š*, *ṣ̣* = *š*) are still widely employed (e.g. Sima 2000, Stein 2003).

1.5.3.2. Further observations on sibilants and interdentals in Epigraphic South Arabian

A few other problems related to the reflexes of sibilants and interdentals in ESA are to be mentioned.

- (a) The shift *s₃* > *s₁* in Late Sabaic (*ms₃nd* > *ms₁nd* ‘inscription’, *s₃n* > *s₁n* ‘towards’, SD 138, 127, 139; Stein 2003, 26–27, 213; Sima 2001) has been interpreted by Voigt (1998, 176–177) as deaffrication [c] > [s]. The reverse shift *s₁* > *s₃*, also attested in Late Sabaic (*hs₁s₁* > *hs₁s₃*, *hs₃s₃* ‘(to) damage’, *s₁s₁lt* > *s₁s₃lt* ‘chain’, SD 62, 127) is explained by Voigt (1998, 177–180) as secondary affrication [s] > [c] (rejected in Sima 2001, 259).
- (b) The merger of *ṭ* and *s₃* in Hadramitic (Beeston 1984, 68; Voigt 1998, 175) is usually thought to be operative in both directions: *ṭny* > *s₃ny* ‘two’ vs. *ms₃nd* > *mṭnd* ‘inscription’ (Beeston 1962b, 14). However, according to Frantsouzoff (2001, 46, 50; 2007, 33, 36) *ṭ* tends to replace *s₃* in early monuments, whereas in the inscriptions dated to the end of the 1st millennium B.C. and originating from Raybūn and other sites of Inland Hadramawt (as opposed to the capital Shabwa and the Hadrami colony Sumhuram) the reverse is normal. In Frantsouzoff’s view, this merger

is part of a more general trend towards the loss of PS interdentals in Hadramitic. On this problem see further Priolella 2006, 254–256.

- (c) PS **t̤* yields *ṣ* in Sabaic documents inscribed on wood (Kogan / Korotayev 1997, 223; Stein 2003, 27–28; Brown 2007, 341–343): *ṣbyt* ‘a bag’ < PS **t̤abyat*- ‘gazelle’ (Ryckmans/Müller/Abdallah 1994, 54 and 87, l. 6), *mṣʷw* ‘they came’ = monumental *mṣ* (ibid. 57 and 91, l. 2), *mṣṣr* ‘a measure of capacity’ = monumental *mṣṣr* (ibid. 59 and 93, l. 1).
- (d) The shift **t̤* > *ṣ* sometimes postulated for Middle Sabaic (Beeston 1984, 8; Lipiński 1997, 121) is a purely orthographic phenomenon with no phonological basis (Kogan/Korotayev 1997, 223; Sima 2000, 168; Stein 2003, 28).

1.5.4. PS sibilants and interdentals in Ethiopian Semitic

1.5.4.1. Geez *ḥ* = *s* and *ṣ* = *ṣ*

The presence of two sibilant graphemes (*ḥ* = *s* and *ṣ* = *ṣ*) in the Geez alphabet suggests that the corresponding phonemes were opposed to each other in the language for which it was designed. The contrast is regular in early Geez inscriptions (Littmann 1913, 80): *samāy* ‘heaven’ (RIÉ 189:1), *saraḳomu* ‘he stole from them’ (ibid. 12), *ys-tywm* ‘he will let them drink’ (RIÉ 185bis II 16) vs. *ḥaṣar* ‘straw’ (RIÉ 189:19), *ṣalastu* ‘three’ (RIÉ 187:32), *ṣmnh* ‘we established it’ (RIÉ 185 II 23).

Geez. *s* goes back to **š*, **s* and **t̤*, whereas Geez. *ṣ* reflects **ṣ* (Voigt 1989, 641): Geez. *ṣors* – Sab. *ʿṣrs*₁, Jib. *māṣṣrēš* ‘molar tooth’ (SED I No. 275), Geez. *ḥasen* – Ugr. *ḥsn* ‘kind of insect’ (SED II No. 105), Geez. *ḥaddis* – Ugr. *ḥdt*, Arb. *ḥadīt*- ‘new’ (CDG 225, DUL 355, Lane 529) vs. Geez. *karṣ* – Hbr. *kārēš*, Arb. *kariš*- ‘stomach’ (SED I No. 151).

Voigt (1994a) collected several Geez lexemes with *ṣ* < **t̤*: Geez. *ʿaṣar* – Arb. *ʿaṭar*- ‘trace’ (CDG 45, LLA 739, Lane 18), Geez. *ḥamṣ* – Ugr. *ḥmt*, Mhr. *ḥamt* ‘lower belly’ (LLA 76, SED I No. 122), Geez. *ṣena* – Ugr. *tnt*, Arb. *maṭānat*- ‘to urinate’ (LLA 264, SED I No. 77_v). In a few other lexemes with **t̤* variation between *s* and *ṣ* is attested: Geez. *samra* / *ṣamra* ‘to be pleased’ – Arb. *tmr*, Sab. *tmr* ‘to be fruitful’ (CDG 503, Lane 352, SD 150), Geez. *sor* / *ṣor* – Ugr. *tr*, Arb. *tawr*- ‘ox’ (CDG 511, SED II No. 241), Geez. *losa* / *loṣa* – Arb. *lwṭ* ‘to knead, to mix’ (LLA 53, CDG 321, Lane 2677). Voigt explains this phenomenon as sporadic lateralization conditioned by *r*, *ḥ* or *ʿ* as root consonants. In view of the extensive confusion of sibilant signs in Geez manuscripts (cf. 1.5.4.2.), Voigt’s hypothesis is difficult to prove (SED I pp. LXXX–LXXXI), the more so since *s/ṣ* variation also affects roots with **s* and **š* in the prototype (like *ʿasara* / *ʿašara* ‘to bind’ < **sr*, LLA 747, CDG 44, Voigt 1994a, 105, 113–114). Besides, many PS roots which combine **t̤* with *r*, *ḥ* and *ʿ* are never spelled with *ṣ* (e.g. *ḥarasa* ‘to plow’ < **ḥrt*, Voigt 1994a, 107, 110–111). It is nevertheless remarkable that two of Voigt’s examples seem to be attested epigraphically: *yṣmr* ‘it pleases?’ (RIÉ 204:1–2) and *ṣ-r*- ‘ox’ (RIÉ 193 I 9).

1.5.4.2. Development of *ḥ* and *ṣ* in Ethiopian Semitic

The traditional pronunciation of Geez does not distinguish between *ḥ* and *ṣ*: both are realized as [s] and extensively confused in the manuscript tradition (Ullendorff 1955,

113; v. *ibid.* 114 for the doubtful reports about the interdental realization of $\mathfrak{w}$ in the traditional pronunciation). Incorrect sibilant spellings are sporadically attested already in late epigraphy (cf. Steiner 1977, 36): *ngs* ‘king’ (RIÉ 194:1, 8), *mngsty* ‘my rule’ (*ibid.* 10) instead of *ngš*, *mngšty*, *zay-s-nəyani* ‘who made good for me’ (RIÉ 193 I 12) instead of *zay-š-nəyani*. Thus, at some stage of the development of ES a complete merger of *s* and *š* must have occurred, giving way to a one-member sibilant system (Ullendorff 1955, 113–114; Podolsky 1991, 22).

A two-member system (*s* vs. *š*) is, however, re-established throughout modern ES. The emergence of the ‘new’ *š* is thought to be conditioned by palatalization, the shift *s* > *š* being structurally identical to *d* > *ḏ*, *t* > *ṭ*, *ṭ* > *ṣ*, *š* > *ṣ*, *z* > *ḏ*, *n* > *ṇ* and *l* > *y* (Bergsträsser 1983 [1928], 113; Podolsky 1991, 34; Faber 1985b, 58, 96). Palatalization is triggered by the presence of *y*, *i* and *e* (Ullendorff 1955, 129) as well as by the gutturals (Podolsky 1991, 38) in the underlying form: Tgr. *šäyābā* ‘to have grey hair’, *šibat* ‘gray hair’ – Gez. *šeḃa*, *šibat* (SED I No. 66_v), Tna. *šänā* ‘to urinate’, *šanti* ‘urine’ – Gez. *šena*, *šant* (SED I No. 77_v), Amh. *ašen* ‘butterfly’ – Gez. *ḥasen* (SED II No. 105), etc.

Quite often, however, none of the aforementioned triggers is apparent (SED I pp. LXXXV–LXXXVI): Tgr. *šākām* ‘burden’, Amh. *täšäkkāmā* ‘to carry’ < $*_{\mathfrak{t}}Vkm-$ (SED I No. 281), Tgr. *nākšā* ‘to bite’ < $*nkt$ (WTS 333, CDG 402), Tgr. *bāšlā* ‘to boil’ < $*bšl$ (WTS 283, CDG 109), Tgr. *šāktā* ‘to fall, to be lost’ < $*škt$ (WTS 223, CDG 497), Tgr. *šāmṭā* ‘to tear off’ < $*šmṭ$ (WTS 210, HALOT 1557), Tgr. *šākrā* ‘to get drunk’ < $*škr$ (WTS 222, CDG 497), Tgr. *māšəffal* ‘lower slope’ < $*špl$ (WTS 230, HALOT 1631), Tna. *šābāṭṭ* ‘abbālā’ ‘to hit’ < $*šbt$ (TED 843, CDG 485), Tgr. *šānkā* ‘to strangle’ < $*šnk$ / $*šnk$ (WTS 218, Jastrow 1607, Lane 1606), Tgr. *šāfkā* ‘to be dense’ < $*špk$ (WTS 231, SD 131, HALOT 1349).

The clearest manifestation of this phenomenon is the so-called ‘sibilant anomaly’ in the Tigrinya numerals (Yushmanov 1937). Throughout modern ES, the numerals of the first decade display only *s*, but in Tigrinya both *s* and *š* are in evidence: *sälästā* ‘3’, ‘assärtā’ ‘10’ vs. *ḥammuštā* ‘5’, *šədduštā* ‘6’, *šob’attā* ‘7’, *šāmmontā* ‘8’, *təš’attā* ‘9’. According to Yushmanov, this distribution is diachronically conditioned: PS $*š$ is preserved, whereas $*š$ and $*_{\mathfrak{t}}$ merge into *s* (*š* in *šāmmontā* ‘8’ < $*_{\mathfrak{t}}māniy-$ is supposed to arise secondarily under the influence of *šob’attā* ‘7’). Yushmanov’s hypothesis (implicit in Müller 1983, 243 and Lipiński 1997, 124, 126) has been rejected by Ullendorff (1955, 134–137) and Voigt (1988), who ascribe the emergence of *š* to the palatalizing effect of the labials and/or the high-central vowel *ə* (both missing from *sälästā* and ‘assärtā’).

Contra Ullendorff (1955, 135), there is nothing *a priori* unsound in Yushmanov’s assumption that the behavior of PS sibilants in modern ES can be different from their fate in (late) Geez. However, this hypothesis can only be verified through an exhaustive etymological analysis of all *s*- and *š*-lexemes of modern ES. The evidence available at present does not seem to favor it: in the *š*-lexemes treated above, at least three PS sibilants ($*bšl$, $*špk$, $*_{\mathfrak{t}}Vkm-$) can be detected. Even more problematic is Meparišvili’s claim (1983; 1987) that modern ES *š* corresponds to PS $*š$: all of her examples are either transparent Arabisms or easily explainable by palatalization.

1.5.4.3. Reflexes of Proto-Semitic $*_{\mathfrak{t}}$ and $*š$

PS $*š$ and $*_{\mathfrak{t}}$ merge into *š* ($\mathfrak{z}$) in Geez, whereas PS $*š$ is preserved as *š* (θ). Several examples of $*_{\mathfrak{t}}$ rendered by θ (or $\mathfrak{z}/\theta$ variation) can be found in Voigt 1994a: Gez.

haṣaya ‘to betroth’ – Arb. *ḥḍw* ‘to be beloved (of one’s husband)’ (LLA 140, Lane 596), Gez. *haṣe* ‘majesty’ – Arb. *ḥiḍwat-* ‘high rank’, Sab. *ḥṭy* ‘favor’ (LLA 226, Lane 596, SD 75), Gez. ‘*aṣm* / ‘*aṣm* ‘bone’ – Arb. ‘*aḍm-* (LLA 1025, SED I No. 25), Gez. *lamṣ* / *lamṣ* – Arb. *lamaḍ-* ‘white spot, leprosy’ (LLA 37, SED I No. 179). In Voigt’s view, such cases are due to sporadic lateralization, but this hypothesis is liable to the objections exposed in 1.5.4.1.

1.5.4.4. Development of **ṣ** and **ṭ** in Ethiopian Semitic

The opposition between **ṣ** and **ṭ** is consistent in early epigraphy (Littmann 1913, 80; *contra* Podolsky 1991, 13): *baṣaḥku* ‘I came’ (RIÉ 189:28), ‘*anṣāra* ‘in front of’ (RIÉ 189:40), *yṣawəro* ‘he carries it’ (RIÉ 189:50) vs. ‘*amaḥṣanku* ‘I put under protection’ (RIÉ 189:48–49), *waṣṣu* ‘they went out’ (RIÉ 187:18), *ṣar* ‘enemy’ (RIÉ 185 II 4). Only in late monuments some confusion is attested: *mṣ* ‘he came’ instead of *maṣ’a* (DAE 13:7, RIÉ 194:1), *ṣaḥaḥkəwo* ‘I wrote it’ instead of *ṣaḥaḥkəwo* (RIÉ 202:1), *ṣ-w-k-* ‘I took booty’ instead of *ṣ-w-k-* (RIÉ 193 I 33–134).

There is no distinction between **ṣ** and **ṭ** in the traditional pronunciation of Geez (both are realized as [ç]). The merger is complete throughout modern ES (> *ṣ/ç* in Tigre and Tigrinya, *t/ç* in SES).

Hetzron and Habte Mariam (1966, 19) claimed that PS *ṣ may yield *d* in Western Gurage: Cha. *daḳä* ‘to laugh’ < *ṣḥk, *dämädä* ‘to join’ < *ṣmd, *adüdä* ‘to mow’ < *ṣd (EDG 216, 208, 15). This hypothesis was rejected in Goldenberg (1977, 464–466), EDG (216, 208, 15) and Podolsky (1991, 13). At any rate, Hetzron’s ‘*daḳä*, in which *d* comes from the deglottalization of *ḳ*’ (1966, 19) has little to do with the laterality of *ṣ (cf. Steiner 1977, 113).

Separate reflexes of *ṣ (> *s*) and *ṣ (> *ç*) claimed for the Tigrinya dialect of Akkele Guzay (Cohen 1931, 10) are not well-founded (Ullendorff 1955, 115; Goldenberg 1977, 466; Podolsky 1991, 13; cf. Rodinson 1981, 108; Voigt 1988, 533). The same is true of the reports about an interdental realization of **ṭ** in the traditional pronunciation of Geez (Ullendorff 1955, 114; cf. Voigt 1994a, 115; Tropper 1994, 24).

1.5.5. PS *ṣ in Modern South Arabian

1.5.5.1. Reflexes of Proto-Semitic *ṣ

PS *ṣ is reflected as *ṣ* or *s* in MSA. In Mehri and Soqotri *ṣ* often shifts to *h*, whereas in Central Jibbali it may yield a peculiar labialized phone transcribed as *ṣ̣* by Johnstone (JL XIV, Johnstone 1984, 389; for Fresnel’s early description v. Lonnet 1991, 67).

The comparatively rare *ṣ* (*h*, *ṣ̣*) reflexes (ca. 50 roots altogether) are concentrated in the most basic lexical layers (Leslau 1937, 213–214; 1988 [1939–1944], 37–38; Beeston 1951, 7–8; unrecognized in Rendsburg 1986, 256): anatomy and physiology (Jib. *ṣēn* < PS *ṣam- ‘fat’, SED I No. 248; Jib. *ṣnīn* < PS *ṣinn- ‘tooth’, SED I No. 246; Mhr. *ṣū*, Jib. *ṣṣ*, Soq. *ṣēh* < PS *ṣit- ‘buttocks, genitals’, SED I No. 255; Mhr. *ṣənēt*, Jib. *ṣónút*, Soq. *ṣínoh* < PS *ṣinat- ‘sleep’, SED I No. 82_v; Mhr. *ṣwṣēn*, Jib. *ṣṣēn*, Soq. *ṣṣin* < PS *liṣān- ‘tongue’, SED I No. 181; Mhr. *ḥōḥāl*, Jib. *ṣṣāl*, Soq. *ṣṣāl* ‘belly’

< PS *špl ‘to be low’, SED I No. 271; Mhr. *hə-rōh*, Jib. *rēs*, Soq. *rēh* < PS *raʿš- ‘head’, SED I No. 225; Hrs. *mešhāwt*, Jib. *šhōt*, Soq. *šhoh* < PS *šahāt- ‘armpit’, SED I No. 240; Jib. *məžrēs*, Soq. *māžrəh* < PS *širš- ‘molar tooth’, SED I No. 275; Mhr. *ʾawtəh*, Jib. *ʾšōš*, Soq. *ʾētoš* < PS *ʿtš ‘to sneeze’, SED I No. 4_v, Mhr. *nəfh*, Soq. *nəfoš* < PS *npš ‘to breathe’, ML 284, LS 271, SED I No. 46_v), numerals of the first decade (Mhr. *hāymah*, Jib. *hīš*, Soq. *hāmoš* < PS *hamiš- ‘five’, Mhr. *hət*, Jib. *šāt*, Soq. *hūte* < PS *šidt- ‘six’, Mhr. *hōba*, Jib. *šō*, Soq. *hōbeḥ* < PS *šab^c-, SED I p. XCI), animal names (Mhr. *nōhər*, Jib. *nūšər*, Soq. *nóyhir* < PS *našr- ‘eagle’, SED II No. 166; Mhr. *táyh*, Jib. *tuš*, Soq. *teš* < PS *tayš- ‘buck’, SED II No. 231), nature and time (Mhr. *kəšēṭ*, Jib. *qəšūṭ* ‘rainbow’ < PS *kaš-t-, ML 242, JL 153, HALOT 1155; Jib. *šhamúm* < PS *šhm ‘to be dark’, JL 261, LSyr. 769; Jib. *šhan* < PS *šhn ‘to be warm’, JL 264, HALOT 1462; Mhr. *yəməšē*, Jib. *ʾəməšin*, Soq. *ʾimšin* < PS *ʾamš- ‘yesterday’, ML 6, JL 3, LS 65, HALOT 68; Jib. *šhor* < PS *šahr- ‘dawn’, JL 261, HALOT 1466), varia (Mhr. *ham*, Jib. *šum*, Soq. *šem* < PS *šim- ‘name’, ML 158, JL 262, LS 418, CDG 504; Mhr. *bəhēl*, Jib. *bēšəl*, Soq. *bēhel* < PS *bšl ‘to cook’, ML 45, JL 30, LS 83, CDG 109; Mhr. *nəhū*, Jib. *nšē*, Soq. *nēše* < PS *nšy ‘to forget’, ML 290, JL 195, LS 276, HALOT 728; Mhr. *həkū*, Jib. *šéké*, Soq. *héže* < PS *šky ‘to irrigate’, ML 155, JL 262, LS 142, CDG 511; Mhr. *hərūk*, Jib. *šérók*, Soq. *héraḳ* < PS *šrk ‘to steal’, ML 159, JL 263, LS 146, CDG 514; Mhr. *hīma*, Jib. *šr*, Soq. *hémaḥ* < PS *šm^c ‘to hear’, ML 157, JL 262, CDG 501; Mhr. *hšūl*, Jib. *hšəl* < PS *hšl ‘to break, crush’, ML 451, JL 307, AHw. 333, HALOT 362; Jib. *šəb* < PS *šb ‘to fetch water’, JL 265, HALOT 1367; Jib. *mašh* ‘clarified butter’ < PS *mšh, JL 175, HALOT 643; Soq. *šéte* ‘woven material’ < PS *šty, LS 423, HALOT 1669).

Elsewhere, PS *š corresponds to MSA *s*. For Leslau (1988 [1939–1944], 38–39) and Beeston (1951, 9–10), this ‘irregular’ reflexation is due to the massive influx of Arabic loanwords. Gradual ousting of š-reflexes (Faber 1992, 6–7; SED I p. XCIII) could be illustrated by such doublets as Mhr. *sakf*, Jib. *sekf* – Jib. *šekf*, Soq. *hékaf* ‘roof’ (ML 347, JL 227, 261, LS 146) < PS *šakp- (Hbr. *šākāp*, Sab. *s₁kf*, HALOT 1645, SD 127), Jib. *dəbs* – Mhr. *dabh*, Jib. *dabš* ‘honey’ (JL 34, ML 63) < PS *dibš- (Hbr. *dabaš*, Sab. *dbs₁*, HALOT 212, SD 35), Mhr. *səkāwt*, Jib. *sókót* – Mhr. *həkāwt*, Jib. *šókót*, Soq. *hkt* ‘to be worthless, to get lost’ (ML 348, 155, JL 228, 261, LS 146) < PS *škt ‘to fall, to get lost’ (Hbr. *škt*, HALOT 1641), Mhr. *sōfəl*, Jib. *sfəl* – Soq. *hfl* ‘to be low, worthless’ (ML 342, JL 224, LS 145) < PS *špl (Hbr. *špl*, Sab. *s₁fl*, HALOT 1631, SD 124), Mhr. *sōl* – Jib. *šēl*, Soq. *hoʾol* ‘to demand payment’ (ML 338, JL 220, LS 139) < PS *šl ‘to ask’ (Hbr. *šl*, Sab. *s₁l*, HALOT 1371, SD 121).

The main deficiency of Beeston’s explanation is that *s*-words are not restricted to the cultural vocabulary expected to be borrowed (Cantineau 1932, 187; 1939–1945, 319–320), as shown by Mhr. *libas*, Jib. *lās* ‘to wear’ (ML 251, JL 159) < PS *lbš (Hbr. *lbš*, Sab. *lbs₁*, HALOT 519, SD 81) or Mhr. *səbəlēt*, Soq. *sebóleh* ‘ear of grain’ (ML 340, LS 280) < PS *šunbul-at- (Hbr. *šibbōlūt*, Sab. *s₁blt*, HALOT 1394, SD 123, Faber 1992, 5–7). Moreover, a given PS root may be not attested in Arabic with the relevant meaning: Mhr. *kənsīd*, Jib. *kənséd* ‘shoulder’ < PS *kišād- ‘neck’ (Akk. *kišādu*, Gez. *kəsād*, SED I No. 147), Mhr. *səbūt*, Jib. *sót* (ML 340, JL 222) < PS *šbt (Hbr. *šēbāt*, Sab. *s₁bt*, HALOT 1388, SD 123), Soq. *ʾenes* ‘to be small’ (LS 68) < PS *nš ‘to be weak’ (Hbr. *nš*, HALOT 73). Especially disturbing in this sense (Yushmanov 1934, 102; Cantineau 1935–45, 319–320; Faber 1985b, 68; Voigt 1987, 56–57; SED I p. XCIV) are the 3rd person feminine personal pronouns (Jib. *sē* ‘she’, *sen* ‘they’), whose Arabic cognates display *h*- (*hiya*, *hunna*).

1.5.5.2. The split of *š in Mehri and Jibbali

As shown by Faber (1985b, 63–63, 96–99; cf. Faber 1992, 5–6), the split of *š into š and *h* in Mehri and the split of *š into š and *š* in Jibbali are mutually related: Mhr. š usually corresponds to Jib. š (Mhr. *šanēt* – Jib. *šónút* ‘sleep’, Mhr. *əwšən* – Jib. *əlšén* ‘tongue’, Mhr. *kəšēt* – Jib. *kəšūt* ‘rainbow’, Mhr. *hšūl* – Jib. *hšəl* ‘to break’), whereas Mhr. *h* is paralleled by Jib. š (Mhr. *hə-rōh* – Jib. *rēš* ‘head’, Mhr. *háyماه* – Jib. *hīš* ‘five’, Mhr. *táyh* – Jib. *tuš* ‘he-goat’, etc.). According to Faber, the Soqotri split is identical to the Mehri one, but this conclusion is premature in view of numerous exceptions displaying Jib. š – Soq. š – Mhr. *h* (SED I p. XCV).

The diachronic background of these splits is uncertain (Cantineau 1932, 187, Edzard 1984, 255–256). Since Jib. š and Mhr. š are known to go back to palatalized **k* (cf. 1.5.7.), it is tempting to suppose that here, too, we are faced with palatalization of PS *š (presumably realized as [s] in proto-MSA; cf. Yushmanov 1937, 85; Edzard 1984, 253; Faber 1985b, 64–65; Voigt 1987, 57). Palatalizing factors, such as **i* or **ay* preceding or following the sibilant, are indeed apparent in some cases (*šin-at- ‘sleep’, *lišān- ‘tongue’, *amš-ay(-n) ‘yesterday’, cf. Voigt 1987, 55), but do not surface in a few others (Mhr. *hšūl*, Jib. *hšəl* ‘to break’, etc.).

In Soqotri, š and *h* can alternate morphophonemically: *hérok* ‘he stole’ – *išúraq* ‘he will be stolen’, etc. (Leslau 1937, 213). A deeper inquiry into the positional factors of these alternations may be helpful for eliciting the history of the š/*h* – š/š split.

1.5.6. PS *š > *h*/*ʔ* in non-lexical morphemes

In four non-lexical morphemes, š (*s*) in some Semitic languages corresponds to *h* (*ʔ*) in others: personal pronouns of the 3rd person (Voigt 1987; 1994b, 19–24); the causative marker (Voigt 1994b, 24–27); the conditional particle (Voigt 1995); the locative-terminative marker (Diakonoff 1965, 58; Faber 1985b, 70–71; Tropper 2000a, 320). The etymological priority of the sibilant is not in doubt for each of the four morphemes (Voigt 1987; 1995; Faber 1985b, 67–72), but factors triggering the shift and the distribution of sibilant vs. guttural reflexes are still poorly understood.

The only consistent š-language is Akkadian: *šū* ‘he’ – *u-ša-pris* ‘he made (someone) cut’ – *šumma* ‘if’ – *-iš* ‘towards’. Systematic *h*-/*ʔ*-reflexation characterises most of WS: Hbr. *hū* ‘he’ – *hi-mlik* ‘he made (someone) rule’ – *ʔim* ‘if’ – *-ā* (< **-ah*, cf. Ugr. *-h*) ‘towards’. Mixed systems are attested in Ugaritic (*hw* ‘he’ – *ʔa-š-hlk* ‘I will let go’ – *hm/ʔim* ‘if’ – *-h* ‘towards’, Tropper 2000a, 151–152), ESA (Qat. *s₁w* ‘he’ – *s₁-hdt* ‘he renewed’ – *hm-w* ‘if’, LIQ 158, 61, 46) and MSA (Jib. *še* ‘he’, *se* ‘she’, *-hum* ‘them’ – Jib. *ε-nsim* ‘he breathed’ – Mhr. *hām* ‘if’, Johnstone 1975, 117–118, 106, 119).

Diakonoff’s attempts to detect the š – *h* correspondence in lexical morphemes (such as Akk. *bašmu* ‘snake’ – Hbr. *bəhēmā* ‘beast’, Diakonoff 1980, 9 or Akk. *bašū* ‘to be’ – Arb. *bhw* ‘to be well-shaped’, Diakonoff 1991–1992, 15) are not successful (in both cases it is evidently **ṭ* that underlies Akk. š). Similarly improbable (Edzard 1984, 8; Garbini 1984, 32–33; Faber 1985b, 68–72; Dolgopolsky 1999, 19; Voigt 1987, 52–53) is Diakonoff’s reconstruction of a separate PS sibilant (1965, 21; 1991–1992, 6, 15, 36, accepted in Gelb 1969, 172–173) supposedly accounting for this shift.

1.5.7. The origin of Modern South Arabian š (š) and palatalization in Modern South Arabian

A characteristic feature of MSA is the glottalized affricate [č] (Johnstone 1975b, 155; Steiner 1982b, 190–191; for Fresnel's affricate description v. Lonnet 1991, 68), usually transcribed as š (Central Jibbali š) in MSA studies (Lonnet / Simeone-Senelle 1997, 350–351; Lonnet 1993, 48–49). As seen already by Johnstone (1975a, 100) and recently confirmed by Frolova (2005), the background of š in individual MSA languages is not identical. In Jibbali, it usually goes back to *k: 'ešyét 'pigeon' – pl. 'ékéb (JL 11, cf. Arb. 'uqāb- 'eagle', Lane 2102), šúši 'he drank' – yāštéke 'he drinks' (JL 262, from PS *šky), šīh 'to be disappointing' – ekūh 'to disappoint' (JL 146, cf. Mhr. kátmah, Arb. qmh, ML 231, Lane 2561). The same may be true of Soqotri (šádher 'pot' – Mhr. kādər, Arb. qidr-, HL 73, ML 224, Lane 2496), but the available evidence is scarce. Conversely, the main source of š in Mehri seems to be š: mišhərrəwh 'little finger' – Jib. mənšəhərrət, Arb. hīnsir- (SED I No. 143), kəšəwb 'to break' – Jib. kəšəb, Arb. qšb (ML 243, JL 151, Lane 2528), šəbā' 'finger' – Jib. 'iṣbā', Arb. 'iṣba'- (SED I No. 256). It is, therefore, not surprising that there is no common MSA root displaying š in each of the languages (Lonnet 1993, 48; Lonnet/Simeone-Senelle 1997, 350). *Contra* Swiggers (1981, 359), *š is thus not to be reconstructed as a proto-MSA phoneme.

The emergence of š (š) is part of a more general process of palatalization (Johnstone 1975a, 99–101; Steiner 1982b, 190–191; Lonnet/Simeone-Senelle 1997, 350–351). Its triggers are, presumably, ĩ and y, which, however, may be hard to detect even diachronically. The shift *k > š (š) is common in Jibbali (šínūt 'louse', pl. kúnúm < PS *kVnVm-, SED II No. 116, šīrs 'belly', pl. ekréš < PS *kariš-, SED I No. 151), more sporadic in Soqotri (kībšib 'star' < PS *kabkab-, béše 'to weep' < *bky and further examples in LS 24) and practically non-existent in Mehri (the only reliable case is šəbdūt 'liver' < PS *kabid-at-, SED I No. 141). The shift *g > ž (ž) is well attested in Jibbali (əždirət 'kind of insect' < PS *gVdVr-, SED II No. 81) and Soqotri (žid 'nerve' < PS *gīd-, SED I No. 72), but not in Mehri. For š (š) as a possible output of palatalization of *š [s] cf. 1.5.5.2.

1.5.8. PS *w and *y in Akkadian and North-West Semitic

1.5.8.1. *y in Akkadian

Word-initial *ya- is not preserved in Akkadian, probably without exceptions (for yāti 'me', yā'um 'mine' reinterpreted as iyāti, iyā'um, see Kouwenberg 2006, 153). In most lexemes *ya- shifts to i- (idu 'hand' < *yad-, imnu 'right' < *yamin-, išaru 'straight' < *yašar-), but in the infinitives of verbs Iy it yields e (ešeru 'to be straight' < *yašār-), probably by paradigmatic analogy (Huehnergard 1994, 4; Kogan 2004a, 347; exceptions: idū 'to know' < *yadāc- and iṣū 'to have' < *yaṭāw-).

The semi-vowel before word-initial i (and e) was still preserved in Sargonic (Hasselbach 2005, 87–89), spelled with special signs: [yi] (= I) and [ye] (= È) as opposed to [(')i] (= Ì) and [(')e] (= E). The same contrast is observed for [yu] (= U) vs. [(')u] (= Ú or Û).

The shift **ya-* > *yi* (spelled with I) is well attested in Ebla (Krebernik 1982, 219–221; Conti 1990, 19): *ma-ḥa-ṣi i-da* = Sum. ŠU.ŠU.RA ‘to strike the hands’ (VE 531a) < **yad-*, *i-ša-wu* = Sum. A.GÁL ‘to be’ (VE 624) < **yaṭāw-*, *i-sa-lum* = Sum. SI.SÁ ‘straight’ (VE 1119) < **yašār-*. Sometimes *ya-* was apparently preserved (spelled with A): *a-mi-nūm*, *a-mi-tum* (also *i-mi-tum*) = Sum. Á.ZI ‘right hand’ (VE 534) < **yamin-*, *i-ṭa-um a-bi-iš-tum* = Sum. ENGUR.UD ‘dry asphalt’ (VE 1269) < **yabiš-*.

1.5.8.2. The shift **w-* > *y-* in North-West Semitic

The shift **w-* > *y-* is a hallmark of NWS: Hbr. *yālādā* ‘she bore’ < **waladat*, cf. *hiwwālēd* ‘to be born’ and *hōlīd* (**hawlīd*) ‘he begot’ (BDB 408). In Biblical Hebrew this rule has practically no exceptions, but in Ugaritic two verbal forms with *w-* are attested: *wld* ‘to bear’ and *wpt* ‘to spit’ (Tropper 2000a, 153). According to Tropper, these are D-stem infinitives (**wullad-* and **wuppat-*, cf. DUL 962–963) and preservation of *w-* is conditioned by *-u-*. Word-initial *w-* is sporadically attested in Middle Aramaic: JPA *wālād* ‘womb, newborn’, *wwšt* ‘throat’, *wwtrn* ‘benevolent’, *wly* ‘fitting’ (DJPA 169–170), JBA *waldā* ‘fetus’, *waršišā* ‘chick’, *wašṭā* ‘oesophagus’ (DJBA 395–396), Syr. *wālē* ‘fitting’, *wa’dā* ‘appointed time’, *wārīdā* ‘artery’ (LSyr. 185–186).

One wonders whether the shift **w-* > *y-* in NWS is somehow connected with the extreme rarity of PS roots with word-initial *y-* (Yushmanov 1998 [1940], 155), which scarcely exceed half a dozen: **yad-* ‘hand’, **yamVn-* ‘right (side)’, **yawm-* ‘day’, **yšr* ‘to be straight’, **ynk* ‘to suck’ (Kogan 2004a, 346).

1.5.9. Proto-Semitic gutturals in Akkadian

According to the traditional concept, PS gutturals other than **ḥ* are lost in Akkadian. PS **ʾ* and **h* leave no trace, whereas **ʿ*, **γ* and **ḥ* change the neighboring **ā* into *ē* (GAG § 9a, §§ 23–25, Moscati 1964, 41–42): *ammātu* ‘elbow, cubit’ < **ʾamm-at-* (SED I No. 6), *pāšu* ‘axe’ < **paʿš-* (Arb. *faʿs-*, AHw. 846, Lane 2325); *alāku* ‘to go’ < **hlk* (Ugr. *hlk*, AHw. 31, DUL 337), *nāru* ‘river’ < **nah(a)r-* (Arb. *nahr-*, AHw. 748, Lane 2858); *ešemtu* ‘bone’ < **ʿaṭm-* (SED I No. 25), *pēmu* ‘thigh’ < **paʿm-* (SED I No. 207); *emu* ‘father-in-law’ < **ḥam-* (Arb. *ḥam-*, AHw. 215, Lane 650), *rēmu* ‘womb’ < **raḥm-* (SED I No. 231); *eṭū* ‘to be dark’ < **γṭw* (Arb. *ṭw*, AHw. 266, Lane 2272), *ešū* ‘to be confused’ < **γty* (Arb. *ṭy*, AHw. 259, Lane 2230); *aḥāzu* ‘to take’ < **ḥd* (Arb. *ḥd*, AHw. 18, Lane 28), *naḥīru* ‘nostril’ < **naḥīr-* (SED I No. 198).

1.5.9.1. Irregular *e*-coloring

E-coloring can be missing in roots with etymological **ʿ* (Kogan 1995, 156–157): *adi* ‘until’ < **ʿaday* (Ugr. *d*, Sab. *d(y)*, AHw. 12, DUL 146, SD 12), *šartu* ‘hair’ < **šaʿr-* (SED I No. 260), *rādu* ‘rainstorm’ < **raʿd-* (Arb. *raʿd-*, AHw. 941, Lane 1105), *ašāšu* ‘moth’ < **ʿVīVt-* (SED II No. 45), *akbaru* ‘jerboa’ < **akbar-* (SED II No. 30). WS influence could explain such forms as *akbaru* and *ašāšu*, whereas PS doublets with **ʾ*

can be surmised in a few other cases (for Hdr. *ʿd* and Jib. *ʿed* ‘until’ v. JL 1, LM 20, Sima 1999–2000, SED II p. 336). But fully reliable examples like *šartu* remain enigmatic.

More often, *e*-coloring is present in roots with etymological *ʾ and *h (Rosén 1978, 450–451; Huehnergard 1994, 5; Kogan 1995, 157–158): *šumēlu* ‘left hand, side’ < **šimʾāl*- (SED I No. 265), *rēšu* ‘head’ < **raʾš*- (SED I No. 225), *šēnu* ‘small cattle’ < **šaʾn*- (SED II No. 219), *pērūrūtu* ‘mouse’ < **paʾr*- (SED II No. 170), *enēšu* ‘to be weak’ < **nš* (Hbr. *ʾnš*, AHw. 217, HALOT 73), *esēpu* ‘to collect’ < **ʾsp* (Hbr. *ʾsp*, AHw. 248, HALOT 74), *esēru* ‘to bind’ < **ʾsr* (Arb. *ʾsr*, AHw. 249, Lane 57), *mēšu* ‘to despise’ < **mʾš* (Hbr. *mʾs*, Arb. *maʾs*- ‘despised person’, AHw. 649, HALOT 540, LA 6 257; with an irregular sibilant correspondence), *eršetu* ‘earth’ < **ʾarš*- (Arb. *ʾard*-, AHw. 245, Lane 45), *šēpu* ‘foot’ < **šaʾp*- (Soq. *šaʾfi*, SED I No. 269), *šēnu* ‘shoe’ < **šaʾn*- (Gez. *šāʾn*, AHw. 1213, CDG 524), *epû* ‘to bake’ < **ʾpy* (Ugr. *ʾpy*, AHw. 231, DUL 92); *sēru* ‘back’ < **ṭahr*- (SED I No. 284), *ewû* ‘to be’ < **hwy* (Syr. *hwā*, AHw. 266, LSyr. 173), *erû* ‘to be pregnant’ < **hry* (SED I No. 20_v). Most of the above examples have sonorants (Huehnergard 1994, 5; 2005b, 592) or glides (Rössler 1959, 131) among their root consonants. Remarkably, *e*-coloring is missing in some of these lexemes in pre-OB sources: Sargonic *rāšu*, *šānu* (Gelb 1957, 232, 241), *aršatu* (Westenholz 1974, 98) and *šāpu* (George 2011; Markina 2010); Ebla *za-lum* = Sum. MURGU (EV 0357, Krebernik 1983, 47) and *sa-na* = Sum. E.LAK 173 (Fronzaroli 1984, 180); early Mari *sá-né-en* (ARM 19 300:2, CAD Š₂ 289).

1.5.9.2. Proto-Semitic *h > Akkadian *ḥ

PS *h may yield Akk. ḥ. One example codified by GAG (§ 8i) is *raḥāšu* – Arb. *raḥ*, Ugr. *raḥ* ‘to wash, to bathe’ (AHw. 943, Lane 1052, DUL 738), references to other cases are scattered over Assyriological literature (Huehnergard 2003, 102–103), the largest collections being GVG 127–128; Edzard 1959, 298–299; Salonen 1975; Kogan 1995; Tropper 1995a; SED I, pp. LXXIII–LXXV; SED II, p. LVII and Huehnergard 2003.

Reliable examples include *ḥepēru* – Arb. *ḥfr* ‘to dig’ (AHw. 340, Lane 600, GVG 128, Salonen 1975, 294), *nabāḥu* – Arb. *nbḥ* ‘to bark’ (AHw. 694, Lane 2755, GVG 128, Salonen 1975, 294), *mašāḥu* – Arb. *msh* ‘to measure’ (AHw. 623, Lane 2713, Tropper 1995a, 64), *ḥiāṭu* ‘to watch’ – Arb. *ḥwt* ‘to guard’ (AHw. 343, Lane 670, Huehnergard 2003, 105), *puḥālu* ‘to breed an animal’ – Ugr. *phl* ‘donkey’, Arb. *fahl* ‘stallion’ (GVG 128, Salonen 1975, 294, SED I No. 210), *paḥallu* ‘thigh, genitals’ – Mhr. *fēḥal* ‘penis’ (SED I No. 210, Durand 2002, 136–137), *nuḥḥutu* – Arb. *nḥt* ‘to trim, clip’ (CAD N₂ 318, Lane 2773, Tropper 1995a, 59–61), *ḥašû* ‘lung’ – Arb. *ḥašaʾ* ‘entrails’ (SED I No. 128), *šalāḥu* – Ugr. *šlh*, Hdr. *s₁lh* ‘to send, to dispatch’ (SED I, p. LXXIII, CAD Š₁ 193, DUL 816, Pirenne 1990, 107), *ḥalû* ‘black mole’ – Arb. *ḥalaʾ* ‘pustule’ (SED I No. 116).

Less compelling are *ḥabābu* ‘to caress’ – Arb. *ḥbb* ‘to love’ (CAD H 2, Lane 495, Westenholz 1975, 289), *ḥubūru* ‘din’ – Arb. *ḥubūr* ‘joy’ (AHw. 352, Lane 499, Huehnergard 2003, 104), *ḥasīsu* ‘ear’ – Arb. *ʾal-ḥasīs-āni* ‘ear cartilages’ (SED I No. 127), *ḥarbu* ‘plough’ – Ugr. *ḥrb* ‘knife, sword’ (AHw. 325, DUL 367, Tropper 1995a, 64), *ḥulmiṭtu* – Arb. *ḥamāṭīṭ* ‘a reptile’ (SED II No. 99), *ḥurbabillu* – Arb. *ḥirbāʾ* ‘chameleon’ (Salonen 1975, 294, SED II No. 101), *ḥarsapnu* ‘larva’ – Arb. *ḥaršaf* ‘small of

animals' (Salonen 1975, 294, SED II No. 105), *meḥû* 'storm' – Arb. *maḥwat*- 'northern wind' (AHw. 642, LA 15 315), *ḥarāmu* 'to separate', *ḥarimtu* 'prostitute' – Arb., Sab. *ḥrm* 'to be forbidden' (AHw. 323, 325; Lane 553; SD 70; Salonen 1975, 293; Tropper 1995a, 62; Kogan 1995, 159).

Many examples supposed to illustrate this correspondence are not reliable.

- Akkadian lexemes attested predominantly in OB Mari, NA and NB are suspect as possible WS borrowings: *ḥuṣannu* 'sash, belt' (NB), *ḥaṣānu* 'to hug, to protect' (mostly NA) – Arb. *ḥiḏn*- 'lap, bosom' (SED I No. 129, Albright 1919, 183, Salonen 1975, 294; Tropper 1995, 62), *ḥaṣāru* (OB Mari, NB, Streck 2000, 94–95) – Arb. *ḥiḏār*-, Ugr. *ḥṭr* 'enclosure' (AHw. 331, Lane 595, DUL 382, Tropper 1995, 62; cf. rather *iṣāru* 'outbuilding', CAD I 206), *matāḥu* 'to lift' (mostly NA) – Arb. *mṭḥ* 'to pull, to draw' (AHw. 632; Lane 2688; Salonen 1975, 294; Tropper 1995, 62), *ḥalābu* (NA) – Arb. *ḥlb* 'to milk' (AHw. 309, Lane 623, Salonen 1975, 293). An unambiguous evaluation can be difficult in some cases, cf. different approaches to *ḥakāmu* 'to understand' < PS **ḥkm* in Edzard (1959, 298), Salonen (1975, 293), Durand (1987), Tropper (1995, 62), Kogan (1995, 159), Streck (2000, 90–91) and Huehnergard (2003, 109–110).
- Other examples are problematic for semantic reasons: *ḥarāšu* 'to bind' – Ugr. *ḥrš* 'artisan' (AHw. 324, DUL 370, Tropper 1995, 62; cf. SED I, p. LXXV and Huehnergard 2003, 106, where *eršu* 'wise', AHw. 246, is compared instead), *riāḥu* 'to remain' – Arb. *rawaḥ*- 'wideness' (AHw. 979, Lane 1180, Huehnergard 2003, 104), *mallaḥtu* 'a grass' – Arb. *milḥ*- 'salt' (AHw. 596; Lane 2732; Salonen 1975, 294; Tropper 1995, 62; cf. rather *miḥu* 'saltpetre', AHw. 653), *palāḥu* 'to fear, to revere' – Arb. *flḥ* 'to till' (AHw. 812, Lane 2438, Tropper 1995, 63), *maḥû* 'to go into a trance' – Arb. *mḥw* 'to efface' (CAD M₁ 115, Lane 3018, Tropper 1995, 64), *šāḥu* 'to laugh' – Arb. *šyḥ* 'to shout' (AHw. 1096, Lane 1759, Tropper 1995, 64), *teḥû* 'to approach' – Arb. *ṭḥw* 'to go away' (AHw. 1384, Lane 1832, Tropper 1995, 64).

Ø- and *ḥ*-reflexes may apparently co-exist (cf. Huehnergard 2003, 110, Tropper 1995, 62–63): Arb. *laḥy*- 'jaw', Ugr. *lḥ* 'jaw, cheek' – Akk. *lētu* 'cheek' (OA, OB on) and *lahû* 'jaw' (MB, SB) (SED I Nos. 177 and 178) or Ugr. *ḥbl*, Arb. *ḥabl*- 'rope' – Akk. *eblu* 'rope' (OB on) and *ḥabālu* 'to bind', *ḥābilu* 'trapper', *naḥbalu* 'snare' (OB on) (DUL 353, Lane 504, AHw. 183, 302, 305, 714).

Different attempts to account for this correspondence are discussed in 1.4.6.

1.5.9.3. Proto-Semitic **γ* in Akkadian

According to Rössler 1959, 130, there are only ten Akkadian lexemes involving PS **γ*, but the actual number seems to amount to 20–25 examples (Kogan 2001; 2002).

As shown by Rössler, the traditional reflex (**γ* > Ø with *e*-coloring) is quite uncommon: to *eṭû* 'to be dark' < **γṭw* and *ešû* 'to be confused' < **γṭy* one can add *ebû* 'to be thick' – Ugr. *γbn* 'well-being', Arb. *'aybā*, *γabiyy*- 'dense', *γabā*- 'denseness' (AHw. 183; DUL 316; Lane 2228; Dozy 2 201; Rössler 1959, 131; Kogan 2001, 266; 2002, 315) and *ebētu* 'to be tied, girt' – Arb. *γubṭat*- 'a strap' (AHw. 774, Lane 2226, Kogan 2001, 267). There are, furthermore, two examples of **γ* > Ø where *e*-coloring is missing or cannot surface: *šabû* 'to soak' – Arb. *šby* 'to dip, to dye' (AHw. 1082;

Lane 1647; Rössler 1959, 131; Kogan 2001, 266) and *urullu* – Arb. *yurlat*- ‘prepuce’ (SED I No. 108; Kogan 2001, 266–267).

More often, PS **γ* is reflected (permanently or occasionally) as *ḥ*: *ṣeḥēru* – Ugr. *ṣyr*, Arb. *ṣyr* ‘to be small’ (AHw. 1087; DUL 780; Lane 1691; Rössler 1959, 130–131; Kogan 2001, 269), *ḥalāpu* ‘to cover’ – Ugr. *γlp* ‘husk’, Arb. *γlf* ‘to put in a sheath’ (AHw. 310; DUL 321; Lane 2283; Hecker 1968, 270; Westenholz 1978, 162; Kogan 2001, 269–271), *lašḥu* ‘inner jaw’ – Arb. *laṭaḡat*- ‘mouth, lip’ (SED I No. 182), *ḥarāšu* – Arb. *γrs* ‘to plant trees’ (CAD H 95; Lane 2247; Kogan 2001, 272); *āribu*, *ēribu*, *ḥēribu* – Arb. *γurāb*-, Mhr. *γā-γāryāb* ‘crow’ (SED II No. 89; Rössler 1959, 131; Kogan 2001, 278–279), *apāru*, *epēru*, *ḥepēru* ‘to cover one’s head’ – Arb. *γfr*, Mhr. *γāfūr* ‘to cover, to hide’, Ugr. *γprt* ‘a garment’ (AHw. 57; Lane 2273; ML 135; Rössler 1959, 131; Kogan 2001, 279), *adāru*, *ḥadāru* ‘to be obscured; to be worried’ – Arb. *γdr* ‘to be obscure’, IV and VII ‘to be worried’ (AHw. 11; Lane 2232; Dozy 2 202; Rössler 1959, 131; Westenholz 1978, 162; Kogan 2001, 279–280), *aparrû*, *ḥaparrû* ‘having wiry hair’ – Ugr. *γprt* ‘a garment’, Arb. *γafar*- ‘hair on the body’ (SED I No. 99; DUL 323; Kogan 2001, 280–281; 2002, 316), *urnīku*, *ḥurnīku* – Arb. *γurnīq*- ‘crane’ (SED II No. 91; Kogan 2001, 281), *ullu*, *ḥullu* – Arb. *γull*- ‘(neck) ring’ (AHw. 354, 1410; Lane 2278; Kogan 2001, 281–282), *aru*, *eru*, *ḥaru* ‘leaf’ – Arb. *γār*- ‘leaf of grapevine’ (AHw. 71; Lane 2308; Kogan 2001, 282), *uzālu*, *ḥuzālu* – Arb. *γazāl*- ‘(young of) gazelle’ (SED II No. 92; Westenholz 1978, 162; Kogan 2001, 282), *aruppu*, *uruppu*, *ḥuruppu* ‘neck, hump’ – Arb. *γārib*-, Mhr. *γōrāb* ‘camel’s back and neck’ (SED I No. 107; SED II p. 340; Weszeli 1999; Steiner 1982a, 13; Kogan 2001, 267–268).

PS **γ* can also be reflected as ‘strong aleph’ (cf. 1.5.9.4): *bu”û* – Arb. *bḡy* ‘to search’ (AHw. 145; Lane 231; Rössler 1959, 131; Kogan 2001, 275), *peršā’u* – Arb. *buryūt*- ‘flea’ (SED II No. 185; Rössler 1959, 131; Kogan 2001, 275), *ru”tu* ‘spittle, mucus, sap’ – Arb. *ruḡwat*- ‘froth’ (SED I No. 229; Westenholz 1978, 162; Kogan 2001, 276), *lu”u* ‘throat’ – Hbr. *lōā’* ‘gullet’, Syr. *lō’ā* ‘jaw’, Arb. *luḡn*- ‘flesh under the ears and jaws’, *luḡ-at*- ‘language’ (WKAS L 902; Kogan 2001, 276–278; SED I Nos. 176, 177; cf. Nöldeke 1910, 161–162; contrast Testen 2001), *per’u* ‘shoot’ – Mhr. *fōrāy* ‘to grow up’, *fātrāy* ‘to bloom’, Syr. *per’ā* ‘shoot’ (AHw. 856, ML 98, LSyr. 603; Kogan 2007, 272), *ša’āru* ‘to win’ – Arb. *tḡr* ‘to break’ (AHw. 1118; Lane 338; Kogan 2002, 315–316).

This evidence suggests that **γ* in Akkadian behaves differently from other PS gutturals, notably from *^c (Moscatti 1964, 39; Westenholz 1978, 162; Kogan 2001, 292–293; Keetman 2004, 7–8; Kouwenberg 2006, 152; *contra* Steiner 2005, 231). Many details remain, however, obscure. Are we faced with different renderings of a still-existing phoneme (Westenholz 1978, 162) or with multiple reflexes of a lost one? The former solution appears more likely: Ø-reflexes are more common in later periods, which suggests a gradual weakening and disappearance of a once-existing separate phoneme (Kogan 2001, 287–290).

1.5.9.4. The ‘strong aleph’ in Akkadian

From MB on, the Akkadian syllabary employs a special ʾ-sign for the unexpectedly preserved glottal stop (von Soden/Röllig 1991, 45–56). In earlier periods, ḤV signs or ‘broken spellings’ were used in such cases (GAG § 23e, f): OB *im-šu-ḥulim-ta-aš-ú* vs.

SB *i-maš-ša-ʾú* < *mašāʾu* ‘to plunder’ (CAD M₁ 360–362). The etymological background of the ‘strong aleph’ remains to be investigated. PS **γ* seems to be one of its major sources (Kouwenberg 2006, 152; 2010, 520–525), but is certainly not the only one (Westenholz 1978, 162), cf. *daʾāmu* – Arb. *dhm* ‘to be dark’ (AHw. 146, Lane 925), *laʾbu* ‘fever’ – Arb. *lahab* ‘flame’ (AHw. 526, Lane 2675), *raʾābu* – Arb. *rhb* ‘to tremble, to fear’ (AHw. 932, Lane 1167); *daʾāpu* – Hbr. *dhp* ‘to push’ (AHw. 146, HALOT 219); *naʾāru* – Arb. *nʾr* ‘to roar, to shout’ (AHw. 694, Lane 2815), *saʾālu* – Arb. *sʾl* ‘to cough’ (SED I No. 61_v). Regrettably, many of the pertinent lexemes are etymologically obscure, like *eʾēlu* ‘to bind’, *mašāʾu* ‘to plunder’, *naʾādu* ‘to care’ or *naʾarruru* ‘to come to help’ (AHw. 189, 624, 692, 694).

1.5.9.5. Proto-Semitic gutturals in Ebla, Sargonic Akkadian and Old Assyrian

The system of correspondences provided above is best applicable to OB and SB. What follows is an outline of the specific features of PS gutturals in Ebla, Sargonic and OA.

1.5.9.5.1. Proto-Semitic gutturals in Ebla and Sargonic Akkadian

In Ebla, the sign É (ʾà) is used for **ḥa* and **ha* (Krebernik 1985, 58; 1982, 220–221, Conti 1990, 16–18): ʾà-da-ru₁₂ = Sum. É.TUR ‘room’ (VE 337, Krebernik 1983, 14) < **ḥadr*- (Ugr. *ḥdr*, DUL 355), ʾa-ʾà-núm = Sum. ŠE.ÀR.ÀR ‘to grind’ (VE 656, Krebernik 1983, 25) < **ṭhn* (Ugr. *ṭhn*, DUL 888), ʾi-ʾà-mu = Sum. ŠÀ.GI₄ ‘spleen’ < **ṭilḥām*- (SED I No. 278, SED II p. 344); ʾà-rí-tum = Sum. ŠÀ×MUNUS ‘pregnant’ (VE 594) < **hry* (Krebernik 1983, 286, SED I No. 20_v), ba-ʾà-núm = Sum. ŠU.DAGAL.GAL ‘finger’ < **bahān*- (Krebernik 1983, 18, SED I No. 34), ʾà-la-GÚM = Sum. DU.DU ‘to go’ (VE 1000, Krebernik 1983, 35) < **hlk* (Ugr. *hlk*, DUL 337). The same practice is attested in Sargonic (Krebernik 1985, 57; Hasselbach 2005, 78–81, 125–135): ʾà-ru-uš ‘cultivate’ (Gir 19:4, 15), ʾà-ra-šè ‘cultivators’ (Di 10:14) < **hrt* (Ugr. *hrt*, DUL 371), tá-la-ʾà-mu ‘you will eat’ (Ad 12:13) < **lhm* (Ugr. *lhm*, DUL 495); ʾà-wa-tim ‘word’ (Di 10:12) < **hawat*- (Ugr. *hwt*, DUL 349). Since **ḥa* and **ha* have different reflexes in later Akkadian (*e* vs. *a*), **h* and **h* must have been separate phonemes in Ebla and Sargonic (Westenholz 1978, 161–162). In Sargonic, note furthermore the use of Á for **ha* (Hasselbach 2005, 79): á-ni ‘behold’ (Um 3:17) < **hannay* (Ugr. *hn*, DUL 342), á-lí-ik ‘going’ (RIME 2.1.2.4 Caption 2’ 2) < **hlk*, á-ra-ab-šu-nu ‘their fugitives’ (RIME 2.1.2.4:25, Westenholz 1996, 120) < **hrb* (Arb. *hrb*, Lane 2889).

In Ebla, the signs I and U₉ render **hi* / **hi* and **hu* / **hu* respectively (Krebernik 1983, 219–221, Conti 1990, 16–18): ká-ma-u₉ = Sum. MA₈ ‘to grind’ (VE 169, Krebernik 1983, 6) < **kḥm* (Ugr. *kḥm*, DUL 702), tal-tá-i-bù = Sum. NĪ.KAR.KAR ‘to drag’ (VE 74, Conti 1990, 74) < PS **šhb* (Arb. *shb*, Lane 1314). The same signs render **yi* and **yu* (Conti 1990, 19), but neither **i* / **i* nor **u* / **u*.

In both Ebla (Krebernik 1983, 209) and Sargonic (Westenholz 1978, 162, Sommerfeld 2003, 412–413), MÁ is used for **maʾ* / **maʾ*: má-ma-du = Sum. GIŠ.AD.ÚS ‘support’ (Conti 1990, 140) < **md* (Ugr. ‘*md*’, DUL 163–164); ù-má ‘I swear’ (Gir 19:29) < **wmʾ* (Arb. *wmʾ* ‘to make a sign’, Lane 2968), áš-má-ma ‘I heard’ (Gir 37:3) < **šmʾ*. Similarly, SÁ renders **šaʾ* and **šaʾ* (Sommerfeld 2003, 413), but this usage is not sys-

tematic: *sá-ul-tum* = Sum. AL.ËN.TAR (VE 987), but *sa-il-tum* = Sum. EN.LI (VE 90), both < *šʾl ‘to ask’ (Krebernik 1983, 34, 36); *u-sá-rí-ib* (RIME 2.1.4.28:31), but *u-sa-rí-ib* (RIME 2.1.4.9:18) ‘he brought’ < *rb; *u-sá-ḥi-ṣu-ni* ‘he made them take’ (RIME 2.1.1.1:101) < *ḥd, but also *u-sá-dì-in* ‘he caused to give’ (Gir 17:6) < *ndn. Since *aʾ and *aʿ have different reflexes in later Akkadian (*ā* vs. *ē*), *ʾ and *ʿ must have been opposed to each other in Ebla and Sargonic (Westenholz 1978, 161–162).

The preservation of gutturals in Sargonic is not uniform. The complex picture of their occasional loss and the emergence of the *e*-coloring is analyzed in Hasselbach (2005, 73–85, 125–135). For comparable phenomena in Ebla cf. Conti (1990, 28–34).

PS *γ is spelled with HV signs in Ebla and Sargonic: *ḥa-rí-bù* = UGA.MUŠEN ‘crow’ (VE 295) < *γārib- (Krebernik 1983, 13), *ḥu-lu*, *ḥu-li* ‘yoke’ < *γull- (Pasquali 1995); *ša-ḥa-ar-tim*, *ša-aḥ-ra* ‘small’ (PBS 9 20:4, Di 4:10) < *šyr, *ru-úḥ-ti* ‘sap’ < *ruγw-at- (MAD 5 8:12), *ḥu-ʾulʾ-lum* ‘ring’ (Tutub 47 I 1) < *γull-. Variant spellings with GV (= [kv], Kogan 2001, 276, 285–286) include *GA-rí-bù* ‘crow’ (VE 295) and *ru-GA-tim* ‘spittle’ (MAD 5 8:12). Sporadic QV-spellings for *γ-lexemes are known from later periods as well (Deller 1987, 231; Kogan 2001, 285–286): *kullu* ‘ring’ (AHw. 926, Stol 2000, 628), *ḳāribu* ‘crow’ (AHw. 903, Wasserman 1999, 345–347), *ḳalmu* ‘small’ < PS *γalm- (AHw. 895, DUL 319, Lane 2286).

1.5.9.5.2. Proto-Semitic gutturals in Old Assyrian

As indicated by ‘broken spellings’, PS *ʾ, *h, *ʿ and *ḥ are not reduced to Ø in Old Assyrian (Hecker 1968, 161): OA *malāʾum* ‘to be full’ = OB *malūm* < *mlʾ, OA *patāʾum* ‘to open’ = OB *petūm* < *pth, OA *šamāʾum* = OB *šemūm* < *šmʾ. Do such spellings reflect a merger of all gutturals into glottal stop? As shown in Kouwenberg (2006, 161–176), the reflexes of *ʾ and *ʿ do not behave in the same way as those of *h and *ḥ. In the former case, post-consonantal ‘broken spellings’ are normal (*ki-il₅-a* ‘detain!’, *šī-im-a-ni* ‘listen to me!’, *im-i-id* ‘it became numerous’); in the latter case, ‘glide spellings’ often appear instead (*li-ḳi-a* ‘take!’, *pī-ti-a* ‘open!’), or the guttural is not reflected at all (*li-ti-na* ‘let them grind’). In Kouwenberg’s opinion, *ʾ and *ʿ have merged into ʾ, whereas *h and *ḥ are either lost or shifted to y. In both cases, *e*-coloring triggered by *ʿ and *ḥ must have preceded the merger: *tab-e-lu* [tabʾelu] ‘you disposed of’ < *tabʿelu < *tabʿalu, *tē-i-tim* [tē(y)ittim] ‘female grinder’ < *tēḥittim < *tāḥittim.

Unlike OB, *e*-coloring in OA applies to the combinations *ḥi and *i (Hecker 1968, 26): *emārum* ‘donkey’ < *ḥimār-, *ešum* ‘wood’ < *iṣ- (cf. OB *imērum*, *išum*).

1.5.10. Proto-Semitic gutturals in North-West Semitic

In the Phoenician alphabet, *ḥ and *γ are rendered by the same graphemes as *h and *ʿ: *ḥmš* ‘five’ < *ḥamiš-, *šʿr* ‘small’ < *šyr (DWNSI 385, 971). If the alphabet was created to render adequately the Phoenician consonantal inventory (cf. 1.5.2.6.), *ḥ and *γ must have shifted to *h and *ʿ in that language (and in its forerunner in the ‘short’ Ugaritic alphabet; Dietrich/Loretz 1988, 299–300; Tropper 1998; Steiner 2005, 230–231, 259–261). But this need not be true for other NWS idioms using the Phoenician

alphabet: in these languages 𐤍 and 𐤎 may have been polyphonic and render both uvulars and pharyngeals, still unmerged. It seems that this was indeed the case in most of early Aramaic and Canaanite.

- (a) In the New Kingdom Egyptian transcriptions, **h*, **ḥ*, and **ʕ* are rendered by the corresponding Egyptian graphemes, whereas for **γ* Egyptian *k* and *g* are used (Moscati 1954a, 57–58; 1964, 40; Sivan/Cochavi-Rainey 1992, 11–13; Hoch 1994, 411–414):

man=ḥ-ta ‘gift, tribute’ – Arb. *minḥat-*, Hbr. *minḥā* (Lane 2737, HALOT 601, Hoch 1994, 128), *mu₂-ra=ḥ-mu* ‘salt workers’ – Arb. *milḥ-*, Hbr. *mālāḥ* ‘salt’ (Lane 2732, HALOT 588, Hoch 1994, 140), *ḥu₄-ma=ḏa* ‘vinegar’ – Ugr. *ḥmš*, Hbr. *ḥōmās* (DUL 364, HALOT 329, Hoch 1994, 228);

n=ḥ-z-r ‘wady’ – Ugr. *nḥl*, Hbr. *naḥal* (DUL 629, HALOT 686, Hoch 1994, 193), *ḥa-z-r-ba* ‘desert’ – Ugr. *ḥrb*, Hbr. *ḥrb* (DUL 403, HALOT 349, Hoch 1994, 249), *ḥi-ḏi₄-ru₂-ta* ‘sow’ – Arb. *ḥinzīr-*, Hbr. *ḥāzīr* (Lane 732, HALOT 302, Hoch 1994, 254);

ʕa-ma=di ‘to stand’ – Arb. *ʕmd*, Hbr. *ʕmd* (Lane 2151, HALOT 840, Hoch 1994, 70), *ʕa-ga-ra=ta* ‘wagon’ – Arb. *ʕāḡalat-*, Hbr. *ʕgālā* (Lane 1965, HALOT 785, Hoch 1994, 83), *ʕu-ḏi₄-r* ‘helper’ (Hoch 1994, 88, cf. Rainey 1998, 438–439) – Ugr. *ḏr*, Sab. *ḏr*, Hbr. *ʕōzēr* (DUL 153, SD 13, HALOT 810);

ḡu₄-r-na=ta ‘foreskin’ – Arb. *ḡurlat-*, Hbr. *ʕorlā* (SED I No. 108, Hoch 1994, 302), *ḏa-ba-k-ba-k*, *ḏa-ba₂-ga₂-ya*, *ḏa-ba₂-ga₂-ba₃-ka* ‘soaking’ – Arb. *šby*, Hbr. *šbʕ* (Lane 1647, HALOT 998, Hoch 1994, 383), *ma-ga-ra=ta*, *ma-k-ra=tu₂* ‘cave’ – Arb. *maḡārat-*, Hbr. *māʕārā* (Lane 2307, HALOT 615, Hoch 1994, 172).

Exceptions are rare: *ša-a-ra*, *ša-r-a* ‘gate’ – Ugr. *tyr*, Hbr. *šāʕar* (Hoch 1994, 273–274, rejected in Rainey 1998, 448–449, Quack 1996, 511), *ḥ-z-r-ya*, *ḥar-z* ‘excrement’ – Ugr. *ḥrʕu*, Arb. *ḥarʕ-*, Hbr. *ḥārʕīm* (Hoch 1994, 232–233, SED I No. 136).

- (b) In the Aramaic texts of Papyrus Amherst 63, **ḥ* and **γ* can each be rendered by either Eg. *ḥ* or *ḡ* (Steiner/Nims 1983, 263; 1984, 92–93; Kottsieper 2003, 90; Steiner 2005, 235–237):

yḥḥsīr ‘will (not) leave unfulfilled’ (11:15–16, DNWSI 1257) < **ḥsr* (Syr. *ḥsr*, Ugr. *ḥsr*, Arb. *ḥsr*, LSyr. 248, DUL 410, Lane 736), *mīḥr* ‘tomorrow’ (11:18, Steiner/Nims 1983, 268; Vleeming/Wesselius 1985, 59) < **maḥar-* (Syr. *mḥār*, Sab. *mḥr*, LSyr. 381, SD 84), *ḥmr* ‘wine’ (17:16, DNWSI 1257) < **ḥamr-* (Syr. *ḥamrā*, Ugr. *ḥmr*, Arb. *ḥamr-*, LSyr. 241, DUL 395, Lane 808), *yīmḥ* ‘he shall smite’ (5:7, DNWSI 1259) < **mḥš* (Syr. *mḥā*, Sab. *mḥš*, LSyr. 380, SD 84);

ḥrm ‘lads’ (10:8, Vleeming / Wesselius 1990, 67) < **ḡalm-* (Syr. *ʕaymā*, Ugr. *ḡlm*, Arb. *ḡulām-*, LSyr. 528, DUL 319, Lane 2286), *sḥyrn* ‘small’ (19:11, 21:2, DNWSI 1256) < **ḡyr* / **zḡr* (Syr. *zʕorā*, Ugr. *ḡyr*, Arb. *ḡayīr-*, LSyr. 202, DUL 780, Lane 1692), *hnhīrw* ‘they brought’ (18:2, DNWSI 1263) < **ḡll* (Syr. *ʕal*, Arb. *ḡll*, LSyr. 524, Lane 2277).

Conversely, PS **h* and **ʕ* are rendered by Eg. *ḥ* and *ʕ* respectively:

ḡḥt ‘under’ (6:8, DNWSI 1266) < **taḥt-* (Syr. *ḡet*, Arb. *taḡta*, LSyr. 821, Lane 298), *nḥḥšīn* ‘bronze’ (17:11, DNWSI 1260) < **nuḥāš-* (Syr. *nḥāšā*, Arb. *nuḥās-*, LSyr. 424, Lane 2775), *rḥm-h* ‘its bread’ (17:15, DNWSI 1259) < **laḥm-* (Syr. *laḥmā*, Ugr. *lḥm*, LSyr. 364, DUL 496);

b'r 'lord' (11:18, Steiner / Nims 1983, 269) < **ba'l-* (Syr. *ba'lā*, Arb. *ba'l-*, LSyr. 83, Lane 228), *yšs'bn* 'may he sustain us' (11:14, DNWSI 1621) < **s'd* (JPA *s'd*, Arb. *s'd*, DJPA 384, Lane 1360), *'pr* 'earth' (17:11, DNWSI 1262) < **apar-* (Syr. *'aprā*, Arb. *'afar-*, LSyr. 539, Lane 2090).

- (c) In Hebrew personal names transcribed by LXX, **h* and **ʿ* appear as Ø, whereas **h* and **γ* are rendered by χ and γ respectively (GVG 125; Wevers 1970; Blau 1982; Steiner 2005; *contra* Garbini 1960, 51–53; Moscati 1954, 58–59; 1964, 40): *'āhī'āzār* – αχιεζεο (Ugr. *'ah* 'brother', DUL 34), *rāhēl* – ραχηλ (Arb. *raḥīl-* 'ewe', SED II No. 188), *'āhāz* – αχαζ (Ugr. *'hd* 'to take', DUL 36); *lāhām* – βηθλεεμ (Ugr. *lhm*, DUL 496), *rāhōbōt* – ρωβως (Ugr. *rḥb* 'to be wide', DUL 736), *hāmōr* – εμμορ (Ugr. *hmr* 'donkey', SED II No. 98); *'azzā* – γαζα 'Gaza' (Arb. *γazzat-*, LA 5 452), *mā'ārōt* – μαγαρωθ (Arb. *mayārat-* 'cave'), *'āšyōn gābār* – γασωνγαβεο (Arb. *γada'* 'a shrub', Lane 2269); *yīšmā'ēl* – ισμαηλ (Ugr. *šm'* 'to hear', DUL 823), *ba'al* – βααλ, βεελ (Ugr. *b'l* 'lord', DUL 206), *tōlā'* – θωλα (Jib. *t'bólāt* 'worm', SED II No. 230). The evidence for **γ* = γ is rather restricted (cf. Dolgopolsky 1999, 65–69, 154), and most of the examples are etymologically opaque toponyms. Circular reasoning is, therefore, to be thoroughly avoided. Thus, *'āmōrā* – γομορρα and *šib'ōn* – σεβεγων are confidently derived from **γmr* and **šby* in Blau (1982, 34) and Wevers (1970, 101), but according to HALOT 849 the former term has no certain etymology, whereas for the latter only **šb'* is postulated *ibid.* 999. Last but not least, a few transparent exceptions (like *'ōrēb* – ωρηβ < **γārib-* 'crow', Blau 1982, 18) are not to be neglected.

- (d) The velar spirant *x* appears as either *h* or *k* in Iranian loanwords in Aramaic (Telegdi 1935, 197–202; Ciancaglini 2008, 80):

EArm. *hphpt* 'guardian of the seventh part of the kingdom' < OP **haftaxvapātā* (DNWSI 292, Muraoka/Porten 2003, 343), BArm. *'āhašdarpan* 'satrap' < OP *xšaθrapāvan-* (HALOT 1811), Syr. *ḥawdā* 'helmet' < OP **xauda-* (LSyr. 219, Ciancaglini 2008, 179), Syr. *naḥšīrā* 'hunting' < OP **naxačarya-* (LSyr. 424, Ciancaglini 2008, 213);

JBA *taktākā* 'chair' < MP *taxtag* (DJBA 1207, Telegdi 1935, 202), JBA *kar* 'donkey' < MP *xar* (DJBA 598, Telegdi 1935, 202), JBA *karbūz* 'oryx' < MP *xarbuz* (DJBA 598, Telegdi 1935, 202), JBA *'akwānā* < MP *xwān* (DJBA 129, Telegdi 1935, 202), Syr. *pdkšr* 'governor' < MP *padixšar* (Ciancaglini 2008, 228).

According to Telegdi and Ciancaglini, *h*-forms belong to an earlier stratum of Iranian loanwords, whereas *k*-forms characterize a later stratum (from ca. 200 C.E. on). Telegdi's conclusion (1935, 198) is that *h*-renderings were possible as long as 𐤠 was polyphonic and could be used for both *h* and *ḥ* (the latter more or less identical with Iranian *x*). When *ḥ* shifted to *h*, 𐤠 was no longer suitable to render *x*, so a new orthography with 𐤡 had to be introduced.

According to an alternative explanation, this orthographic shift is due to the emergence of [x] as an allophone of *k* (cf. Telegdi 1935, 200–202). The dilemma, closely connected with the controversial dating of the spirantization of *bgdkpt* (Beyer 1984, 126–128; Steiner 2005, 257–259), is difficult to solve, as one can see from different approaches to a similar dichotomy in the Phoenician spellings of Egyptian *ḥ* and *h*, for which both 𐤠 and 𐤡 can be used. According to Steiner (2005, 230), the use of 𐤡 is due to the loss of *ḥ* in Phoenician, whereas for Muchiki (1994),

this practice reflects spirantization $k > x$. It is nevertheless remarkable that most Phoenician k -spellings are postvocalic, which is not the case in Aramaic, where k -spellings do not seem to be positionally restricted.

1.5.11. Proto-Semitic gutturals in Ethiopian-Semitic

1.5.11.1. *ʔ, *ʕ, *h, *ħ and *ḥ in Geez

The Ethiopic alphabet has special signs for five out of six PS gutturals ($\mathbf{h} = *ʔ$, $\mathbf{o} = *ʕ$, $\mathbf{u} = *h$, $\mathbf{a} = *ħ$, $\mathbf{ʾ} = *ḥ$), which suggests their separate existence in early Geez. In late epigraphy, confusion between $*h$ and $*ḥ$ is sporadically attested (Littmann 1913, 82), but other guttural oppositions are fairly stable. The interchange of $*ʔ$ with $*ʕ$ and $*h$ with $*ħ$ and $*ḥ$, common in the manuscript tradition, cannot reflect the situation in late spoken Geez, but must be due to the influence of the scribes' native language(s), predominantly Amharic (Podolsky 1991, 24).

1.5.11.2. *ʔ, *ʕ, *h, *ħ and *ḥ in modern Ethiopian Semitic

In Tigre and Tigrinya, $*ʔ$, $*ʕ$ and $*h$ are preserved, whereas $*ħ$ and $*ḥ$ merge into $ħ$: Gez. *warħ*, Tgr. *wärħ*, Tna. *wärhi* 'month, moon' (CDG 617, WTS 433, TED 1723), Gez. *hoṣā*, Tgr. *huṣa*, Tna. *hoṣa* 'sand, gravel' (CDG 266, WTS 101, TED 300), Gez. *ḥammastu*, Tgr. *haməs*, Tna. *ḥammuštā* 'five' (CDG 262, WTS 61, TED 174).

In Southern ES, $*ʔ$, $*ʕ$ are usually lost, although preservation of $*ʕ$ has been reported for the T'ollaha variety of Argobba (Wetter 2006, 900–901): 'of 'bird', *sämmäʕ* 'he heard', *säwʕa* '70' (for an apparently non-etymological $ʕ < *ʔ$ v. 'assär 'he tied', cf. Gez. 'asara, CDG 44). In Harari, $*ʔ$, $*ʕ$ may shift to $ħ$ (SED I pp. LXXXVII–LXXXVIII, SED II p. LIX): *ḥəṭa* 'die' – Gez. 'əṣā (SED I No. 24), *ḥənḳəfti* 'obstacle' – Gez. 'əḳəft (EDH 85, CDG 67), *anḳurāraḥti* 'frog' – Tgr. 'anḳorəʕ (SED II No. 137), *ḥiffiñ* 'vipper' – Gez. 'afʕot (SED II No. 10), *ḥarbāñño* 'hare' – Gez. 'arnab (SED II No. 14), *ḥarat* 'four' – Gez. 'arbaʕtu (EDH 83, CDG 46).

PS $*h$, $*ħ$, $*ḥ$ merged into h in early Amharic, which subsequently became $\emptyset$ in the modern language (Ullendorff 1955, 38–45; Podolsky 1991, 27–29). In Harari, these phonemes merge into $ħ$ (EDH 7): *ħal* 'there is' – Gez. *hallo*, *ḥamād* 'ashes' – Gez. *ḥamad*, *ḥarās* 'woman in childbed' – Gez. *ḥarās* (EDH 82, 83, 87). The same seems to be true of the T'ollaha variety of Argobba (Wetter 2006, 900–901; cf. Leslau 1997, 3). For $h < *h$, $*ħ$, $*ḥ$ in Gurage v. CDG LXIV.

New light on the early history of PS gutturals in Southern Ethiopian Semitic comes from the recently discovered XIVth century Arabic-Ethiopian glossary (Varisco / Smith 1998, 217–219). In this source, South Ethiopian gutturals are generally rendered by etymologically correct Arabic letters: 'nst 'woman' = Gez. 'anəst, Amh. *anəst*, 'iḣ 'hand' = Gez. 'əd, Amh. *əḣḣ*, 'iṣbaʕt 'finger' = Gez. 'aṣbaʕt, Amh. *ṭat*, *baʕar* 'ox' = Gez. *bəʕar*, Amh. *bäre*; *lahm* 'cow' = Gez. *lahm*, Amh. *lam*, *nhūḣ* 'sesame' = Tgr. *nəḣig*, Amh. *nug*; *ḥanbart* 'navel' = Gez. *ḥənbart*, Amh. *ənbart*, *warəḥ* 'moon' = Tgr. *warəḥ*, Amh. *wär*. Exceptions to this rule are infrequent: *ḥəḣḣs* 'new' = Gez. *ḥaddis*, Amh. *addis* or 'abd 'mad' = Gez. 'abd, Amh. *abd*.

1.5.11.3. Proto-Semitic * γ in Ethiopian Semitic

PS * γ is traditionally thought to yield ʿ in Geez (GVG 123, Moscati 1964, 39), but according to Voigt (1989, 640–641; 1994a, 103) the only example typically adduced for this correspondence – Gez. ʿ*arba* vs. Arb. *ṛb* ‘to set (sun)’ (CDG 69, Lane 2240) – is unreliable since related forms with ʿ are known from Sabaic and Ugaritic (SD 18, DUL 179), where * γ is normally preserved. In Voigt’s opinion, the true Geez reflex of * γ is **ḥ*, attested in *rḥba* – Ugr. *ṛḥb*, Arb. *ṛḥb* ‘to be hungry’ and *ṣḥḥa* – Arb. *ṣḥḥ*, Mhr. *ṣḥūḥ* ‘to dye’. Weninger (2002) reestablishes the traditional concept and considers *rḥba* and *ṣḥḥa* to be sporadic exceptions due to the influence of *b*.

A complete etymological investigation of Geez, Tigre and Tigrinya roots with * γ is Kogan 2005c, where reliable or promising examples of both * γ > ʿ and * γ > *ḥ* are collected.

The former group (33 examples) can be illustrated by Gez. ʿ*abya* ‘to be big’ – Ugr. *ḡbn* ‘opulence’, Arb. ʿ*aybā*, *ḡabiyy-* ‘dense’, *ḡabā-* ‘denseness’ (CDG 55, DUL 316, Lane 2228, Dozy 2 201), Gez. ʿ*abā*, Tna. ʿ*iba* ‘dung’ – Mhr. *ḡab* ‘to defecate’ (SED I No. 103), Gez. ʿ*ašša* ‘to deprive’ – Arb. *ḡdd* ‘to diminish’ (CDG 58, Lane 2264), Tna. ʿ*afaf* – Arb. ʿ*afa* ‘chaff’ (TED 1952, Lane 2276), Tna. ʿ*affānā* – Mhr. *ḡātḡan* ‘to cover’ (TED 1950, ML 134), Gez. ʿ*allala*, Tna. ʿ*allälä* ‘to dye’ – Ugr. *ḡll*, Arb. *ḡll* ‘to insert, to plunge’ (CDG 60, TED 1823, DUL 319, Lane 2277), Tgr. ʿ*alaf* ‘cover for a bowl’ – Ugr. *ḡlf* ‘sheath’, Arb. *ḡlf* ‘to hide’ (WTS 454, DUL 321, Lane 2283), Gez. ʿ*ammala*, Tna. ʿ*ammälä* – Arb. *ḡml* ‘to get mouldy’ (CDG 63, TED 1831, Lane 2297), Gez. ʿ*arf* ‘spoon’ – Arb. *ḡrf*, Mhr. *ḡrōf* ‘to fetch water’ (CDG 70, Lane 2249, ML 141), Tgr. ʿ*arät* – Arb. *ḡurraṭ-* ‘white spot’ (WTS 458, Lane 2237), Tgr. ʿ*ars* ‘leather’, Tna. ʿ*arsi* ‘skin from a calf’s head’ – Arb. *ḡirs-* ‘fetal membrane’ (WTS 458, TED 1844, Lane 2247), Tna. ʿ*tāʿazārä* – Arb. *ḡzr* ‘to be abundant’ (TED 1909, Lane 2254), Tgr. ʿ*māʿasä* ‘to tan’ – Arb. *ḡyt* (TWS 136, Lane 2725), Gez. ʿ*saʿara* ‘to destroy, violate’ – Arb. *ṭyr* ‘to break’ (CDG 481, Lane 338), Gez. ʿ*tāʿwā* – Arb. *ṭayḡ-, ṭayḡä* ‘calf’ (SED II No. 234), Gez. ʿ*tazāwāʿa* ‘to talk’, Tgr. *zuʿ* ‘speech’ – Ugr. *zy* ‘to low, bellow’, Arb. *zyw* ‘to shout’ (CDG 645, WTS 503, DUL 1000, TA 10 193).

The latter group (19 examples) includes such terms as Gez. *balḡa* ‘to be sharp’, *balḡ* ‘sharp edge’, *balliḡa kāl* ‘eloquent’ – Arb. *bly* ‘to reach the point’, *mablay-* ‘extremity’, *balīy-* ‘sharp in tongue’ (CDG 97, Lane 250), Gez. *dāmāḡ* ‘head, skull’ – Arb. *dimāy-* ‘brain’ (SED I No. 52), Tgr. *ḡadār* – Arb. *ḡadar-* ‘virgin soil’ (WTS 95, Lane 2232), Gez. *rḡba* – Ugr. *ṛḡb*, Arb. *ṛḡb* ‘to be hungry’ (SED I No. 59_v), Gez. *sāḡsḡa* – Arb. *ṣḡṣḡ, ṣḡṣḡ* ‘to move backward and forward’ (CDG 494, LA 8 516, 518), Gez. *ṣḡḡa* – Arb. *ṣḡḡ*, Mhr. *ṣḡūḡ* ‘to dye’ (CDG 546, Lane 1647, ML 339), Gez. *wḡḡa* ‘to be small, little, inferior’ – Arb. *wḡd* ‘to be weak, stupid’ (CDG 611, Lane 2954), Gez. *wḡḡa* – Arb. *ḡwt*, Mhr. *ḡṭ* ‘to gulp down’ (CDG 611, Lane 2309, ML 144).

There seems to be a distributional rule between the two reflexes (Dolgopolsky 1999, 19): ca. 76% of ʿ- reflexes are word-initial, whereas ca. 65% of *ḡ*- reflexes are word-middle (cf. 1.5.9.3. for a similar distribution in Akkadian).

The joint evidence of Ugaritic, Arabic, ESA and MSA (where * γ is explicitly preserved) as well as Akkadian, ES, Hebrew and Aramaic (where it displays traces which are different from those of * γ) assures the independent status of * γ in PS. Its allegedly secondary emergence in individual Semitic languages (Růžička 1954; Petráček 1953; 1964; 1979; Garbini 1984, 103) is not to be accepted (Cantineau 1951–1952, 88; Moscati

1954, 40; 1964, 39; Wevers 1970; Blau 1982, 6; Weninger 2002, 289). The high proportion of PS lexemes combining $*\gamma$ and $*r$ may still suggest a conditioned split from $*\epsilon$ at some stage of the development of PS (cf. Kogan 2001, 293; Steiner 2005, 231). Such a hypothesis, however, does not belong to the phonological reconstruction of Proto-Semitic as such, but only to the internal reconstruction of the proto-language.

1.5.12. Proto-Semitic uvulars in Soqotri

The shifts $*\gamma > \epsilon$ and $*\text{ħ} > \text{h}$ took place in the Soqotri varieties described by early observers and codified by LS. In other dialects the uvulars are present (Naumkin / Porkhomovsky 1981, 6–7; Lonnet / Simeone-Senelle 1997, 348): *ħtē* ‘night’ (Simeone-Senelle 1996, 312) – *ħte* (LS 194), *γāža* ‘woman’ (Naumkin / Porkhomovsky 1981, 7) – *aže* (LS 307). According to Naumkin and Porkhomovsky, this feature is probably imported from continental MSA and may not represent any genuine phonological archaism.

2. Vocalism

2.1. Traditional reconstruction

The PS vocalic inventory consists of six members ($*a$, $*ā$, $*i$, $*ī$, $*u$, $*ū$), all of them preserved in Akkadian, Arabic and Ugaritic (Moscati 1964, 46–47).

2.1.1. Akkadian

In Akkadian this inventory was expanded with *e* and *ē*, which emerged out of the influence of the gutturals (1.5.9), contraction of $*ay$ (in Sargonic and Assyrian) and Sumerian loanwords. Synchronically, these vowels are phonemic (with Gelb 1955, 97; Diakonoff 1991–1992, 123; Huehnergard 1994; Stempel 1999, 35 and *contra* GAG § 8b), as shown by minimal pairs like *ešer* ‘ten’ (*e-še-er*, AHw. 253) vs. *išir* ‘a payment (st. const.)’ (*i-ši-ir*, CAD I 262) vs. *ašar* ‘where’ (*a-ša-ar*, CAD A₂ 413), *egrum* ‘twisted’ (*e-eg-ra-am*, CAD E 47) vs. *igrum* ‘wages’ (*i-gi-ir*, CAD I 44) vs. *agrum* ‘hireling’ (*ag-ra-am*, CAD A₁ 151); *šērum* ‘dawn’ (*še-e-ru-um*, CAD Š₂ 331) vs. *širum* ‘flesh’ (*ši-i-ru-um*, CAD Š₃ 113) vs. *šārum* ‘wind’ (*ša-ru-um*, CAD Š₃ 133); *šaḫēm* ‘to drink (gen.)’ (*ša-ḫé-e-em*, CAD Š₂ 27) vs. *šaḫī(m)* ‘high (gen.)’ (*ša-ḫí-i*, CAD Š₂ 17).

The extra-long vowels (*â*, *ê*, *î*, *û*) in Babylonian Akkadian go back to contracted triphthongs ($*VwV$, $*VyV$, $*VHV$). At least word-finally, they are regularly spelled *plene* (*ša-mu-û* / *ša-me-e* ‘heaven’) and must have been opposed to ordinary long vowels by some phonemic feature, whether quantity or stress (Diakonoff 1991–1992, 98, 104, 110–111; Kogan 2004c, 379–380; Kogan/Loesov 2005, 744–747; Worthington 2010; *contra* Buccellati 1996, 21; Greenstein 1977, 81–87; 1984, 39–40; Izre’el/Cohen 2004, 5, 10–11, 31). The three-moraic status of these vowels is confirmed by the fact that $C\hat{V}$ syllables are permitted in verse-final position in Akkadian metrics (Hecker 1974, 104; von Soden 1981, 172).

2.1.2. Canaanite

PS **ā* shifts to *ō* in Canaanite. Early manifestations of this phenomenon are found in Egyptian and cuneiform renderings of Canaanite words: *ʾa-n-ru₂na* (Hbr. *ʾallōn*) ‘oak’, *ʾu₂di₄-r* (Hbr. *ʾōzēr*) ‘helper’, *k₂-n₂nu₂ru₂* (Hbr. *kinnōr*) ‘lyre’, *mak₂ma₂ru₂ta* (Hbr. **mīkmārōt*) ‘nets’ (Hoch 1994, 423–424, 23, 88, 324, 168); *zu-ru-uh* (Hbr. *zərōa*) ‘forearm’ (EA 286:12), *ḥu-mi-tu* (Hbr. *ḥōmā*) ‘wall’ (EA 141:44), *ṣú-ki-ni* (Hbr. *sōkēn*) ‘official’ (EA 256:9), *a-nu-ki* (Hbr. *ʾānōkī*) ‘I’ (EA 287:66).

The shift is regular in Hebrew (*lāšōn* ‘tongue’ < **lašān-*, *ʾōlām* ‘eternity’ < **ālam-*, *ḥāmōr* ‘donkey’ < **ḥimār-*) and Phoenician. For the latter, both *ō* and *ū* are found in Greek and Latin transcriptions (αδουν [ʾadūn] ‘lord’, sanuth [šanūt] ‘years’, salus [ša-lūs] ‘three’, con [kōn] ‘he was’, dobrim [dōbrīm] ‘they say’ (Friedrich/Röllig 1999, 41–43). If **ā* results from contraction, the shift may be blocked in Hebrew (*qām* ‘he stood’ < **kawama*, *bānā* ‘he built’ < **banaya*), but not in Phoenician (*ḥīrōm* ‘My-brother-is-high’ < **rayama*, con [kōn] ‘he was’ < **kawana*), *avo* [ḥawō] ‘he lived’ < **hawaya*, Friedrich / Röllig 1999, 42–43).

The ‘Canaanite shift’ is often thought to affect only stressed **ā* (GVG 142–143, Harris 1939, 43; Blau 1976, 35), but this is debatable (Birkeland 1940, 47–48; Dolgopolsky 1999, 141–142, 160).

Other diachronic developments in Hebrew and Phoenician vocalism are summarized in Friedrich–Röllig (1999, 38–47), Birkeland (1940), Cantineau (1950, 107–118), Blau (1976, 30–37) and Dolgopolsky (1999, 107–151).

2.1.3. Aramaic

A full account of the history of PS vocalism in Aramaic can be found in Beyer 1984, 77–147 (with additions in 1994, 37–56).

2.1.4. Ethiopian Semitic

PS long vowels **ā*, **ī* and **ū*, as well as the short **a*, are preserved in Geez, whereas **i* and **u* merge into *ə* (IPA [i]): *ʾəzn* ‘ear’ < **ʾudn-*, *sənn* ‘tooth’ (SED I Nos. 4 and 249), which, in its turn, is scarcely opposed to Ø (cf. Podolsky 1991, 57–60). PS **aw* and **ay* often contract into *o* and *e* (Huehnergard 2005c, 30–35): *sor* ‘bull’ < **tawr-*, **arwe* ‘animal’ < **arway-* (SED II Nos. 241 and 17). In most of modern ES, this seven-member system is preserved, but the quantity opposition *a* : *ā* is transformed into a quality opposition *ä* (IPA [ə], [e] or [ɛ]) : *a* (Correll 1984, Diem 1988). See further Ullendorff (1955, 158–188), Voigt (1983), Podolsky (1991, 56–77).

2.1.5. Modern South Arabian

Diachronic phonology of MSA has never been systematically investigated and, at present, little can be said about its relationship to the reconstructed PS system (for some provisional remarks v. Johnstone 1975a, 102–104).

2.2. Semitic vocalism: morphology vs. lexicon

Grammatical and lexical morphemes in Semitic differ with respect to the regularity of vocalic correspondences.

2.2.1. Grammatical morphemes

In grammatical morphemes, the reflexes of PS short vowels and the long **ā* are fairly regular throughout Semitic (Kogan 2005a, 132):

**a* – in the base of the prefix conjugation of the intensive stem (Akk. *u-parris*, Arb. *yu-qattil*, Hbr. *yə-qaṭṭēl*, Gez. *yə-kattəl*); in the adjectival patterns $C_1aC_2(C_2)\check{V}C_3$ - (Akk. *pars-*, Hbr. *kāṭīl* < **kaṭīl*-, Arb. *qatīl*-, Gez. *ḳatīl*); in the feminine suffix *-at*- (passim);

**i* – as the thematic vowel of derived stems (Akk. *u-parris*, Arb. *yu-qattil*, Hbr. *yə-qaṭṭēl* < **yu-kaṭṭil*, Gez. *yə-kattəl* < **yu-ḳattil*); in the active participle of the basic stem (Akk. *pāris-*, Arb. *qatīl*-, Arm. *kātēl* < **kaṭīl*-, Hbr. *ḳōṭēl* < **kaṭīl*-, Tgr. *ḳatəl* < **kaṭīl*-); in the genitive case marker *-i* (passim).

**u* – as the prefix vowel in the prefix conjugation of the intensive and causative stems (Akk. *u-parris*, Arb. *yu-qattil*, Hbr. *yə-qaṭṭēl* < **yu-kaṭṭil*, Gez. *yə-kattəl* < **yu-ḳattil*); in the infinitive patterns (Akk. *purrus-*, Hbr. *kaṭōl* < **kuṭul*, Arb. *taqattul*-, Gez. *ḳattəlo* < **kattul*-); in the nominative case marker *-u* (passim).

**ā* – in the infinitive patterns (Akk. *parās-*, Arm. *kaṭṭālā*, Hbr. *kaṭōl* < **kaṭāl*, Arb. *ʾiqṭāl*-); in the active participle of the basic stem (Akk. *pāris-*, Arb. *qatīl*-, Arm. *kātēl* < **kaṭīl*-, Hbr. *ḳōṭēl* < **kaṭīl*-, Tgr. *ḳatəl* < **kaṭīl*-); in the nominal derivation suffix **-ān*- (passim).

As for the long vowels **ū* and **ī*, fully reliable PS reconstructions among the grammatical morphemes are difficult to find (cf. Kogan 2005a, 132).

2.2.2. Lexical morphemes

On the lexical level, PS vocalic reconstruction deals with primary nominal and verbal roots.

2.2.2.1. Nominal roots

A theoretical framework for PS reconstruction of primary nouns as consonantal-vocalic roots was laid down by Fronzaroli (1963; 1964, 11–12) and developed by Diakonoff (1970), Fox (1998; 2003, 61–87) and Kogan (2005a, 134–138). At present, ca. 120 primary nouns can be traced back to PS in full agreement with the rules of vocalic correspondences as outlined above. In most cases, short vowels are involved:

**dam*- ‘blood’ (SED I No. 50), **kapp*- ‘palm’ (SED I No. 148), **šab*- ‘seven’ (Fox 2003, 77), **daḳan*- ‘beard’ (SED I No. 63), **raḥil*- ‘ewe’ (SED II No. 188), **kabkab*- ‘star’ (Fox 2003, 87);

**ʾil*- ‘god’, **iṣ-ān*- ‘fire’, **iṣ*- ‘tree’ (Fox 2003, 73), **šinn*- ‘tooth’ (SED I No. 249), **riʾm*- ‘aurochs’ (SED II No. 186), **kabid*- ‘liver’ (SED I No. 141);

**mut*- ‘man, husband’ (Fox 2003, 74), **muḥḥ*- ‘brain’ (SED I No. 187), **šurr*- ‘navel’ (SED I No. 254), **γull*- ‘yoke, ring’ (HALOT 827), **uḡn*- ‘ear’ (SED I No. 4), **gurn*- ‘threshing floor’ (Fronzaroli 1969, 26), **γurl-at*- ‘foreskin’ (SED I No. 108), **ḥupn*- ‘hollow of the hand’ (SED I No. 125), **mušy-at*- ‘evening’ (Fronzaroli 1965, 147).

Among the long vowels, only **ā* is in evidence, and even this is comparatively rare:

**atān*- ‘donkey mare’ (SED II No. 19), **šamāy*- ‘heaven’ (Fronzaroli 1965, 144), **ḥimār*- ‘donkey’ (SED II No. 98), **kišād*- ‘neck’ (SED I No. 147), **tihām-at*- ‘sea’ (Fox 2003, 85), **tamāniy*- ‘eight’ (Fox 2003, 87).

Reliable reconstructions of primary nouns with **ī* and **ū* are at best sporadic (cf. Kogan 2005a, 137).

2.2.2.2. Verbal roots

In the verbal domain, reconstruction of PS lexical vocalism is restricted to the thematic vowel of the short form of the prefix conjugation (-C₁C₂VC₃-), whose non-motivated nature was put forward as evidence by Fronzaroli (1963) and Kuryłowicz (1972, 34, 43), *contra* Diakonoff (1988, 47; 1991–1992, 65–66) and Fox (2003, 45). Comparison between the relevant forms in Akkadian and Arabic (the only Semitic languages where each of the three short vowels are preserved in this morphological position) carried out by Fronzaroli (1963), Aro (1964), Kuryłowicz (1972, 54–59) and Belova (1993) and summarized in Frolova 2003 and Kogan (2005a, 145–153) reveals for PS ca. 40 transitive *u*-verbs (*-*ʾkul*- ‘to eat’, *-*ḏkur*- ‘to remember’, *-*ḥnuḵ*- ‘to strangle’, *-*ktum*- ‘to cover’, *-*lḳuṭ*- ‘to collect’, *-*nkub*- ‘to perforate’, *-*nṭur*- ‘to watch’, etc.) and 11 transitive *i*-verbs (*-*ʾsir*- ‘to shut in’, *-*ḏib*- ‘to leave’, *-*ḥpir*- ‘to dig’, *-*ḥrim*- ‘to cover’, *-*kšīṭ*- ‘to cut’, *-*ntip*- ‘to tear’, *-*pḳid*- ‘to care about’, *-*pšid*- ‘to split’, *-*ptil*- ‘to plait’, *-*šriḵ*- ‘to steal’, *-*šrim*- ‘to split’). No reliable reconstruction for intransitive verbs seems possible in view of the profound differences between Akkadian and WS in this segment of verbal morphology.

2.2.2.3. Unstable vocalic elements of nominal roots

PS primary nouns with regular reflexes throughout Semitic are by no means in the majority. More often, full regularity of the consonantal skeleton is in glaring contrast with a wide variety of unpredictable deviations in the vocalic domain. Such deviations can be conveniently classified into sporadic vocalic mutation and morphological rebuilding.

Sporadic mutation is postulated when disagreement in the vocalic structures of primary nouns is at least potentially attributable to phonological factors, such as influence of neighboring consonants (Kogan 2005a, 138–141). Quite often, such conditions are hard to detect: Akk. *išku*, Arb. *ʾiskat*- – Ugr. *ʾušk* – Hbr. *ʾāšāk* (< **ʾašk*-) ‘testicle’ (SED I No. 11), Akk. *uṣṣu* – Hbr. *ḥeš* (< **ḥitt*-) – Gez. *ḥašš* ‘arrow’ (Fox 2003, 78), Akk. *kalītu* – Hbr. *kilyā* – Arb. *kulyat*-, Gez. *kʷəlīt* ‘kidney’ (SED I No. 156), Akk. *šurru*, Hbr. *šōr* (< **ṭurr*-) – Arb. *ḏirr*- ‘flint’ (Fronzaroli 1968, 287), Arb. *ḥinṭat*-, Hbr. *ḥittā* – Akk. *uṭṭetu* ‘wheat, grain’ (Fox 2003, 80). In others cases, they are rather obvious, as it happens with the shift of **a* and **i* into **u* in the presence of labial consonants

(Fox 2003, 108–109; Huehnergard 2005c, 26–29; Kogan 2005a, 138–139): Hbr. *šēm* (< **šim*-) – Akk. *šumu* ‘name’ (Fox 2003, 73), Hbr. *’ēm* (< **’imm*-) – Akk. *ummu*, Arb. *’umm*- ‘mother’ (Fox 2003, 79), Akk. *matnu*, Arb. *matn*-, Gez. *matn* – Hbr. *mōtān* (< **mutn*-) ‘hip, sinew’ (SED I Nos. 191, 192), Akk. *emšu* (< **hamt*-) – Hbr. *hōmāš* (< **humt*-), Gez. *hāmš* (< **humt*-) ‘lower belly’ (SED I No. 122). But in the latter case, too, the shift remains sporadic and unpredictable (Huehnergard 2005c, 28–29): in no Semitic language is there a phonological rule prescribing that every **a* and **i* would become *u* in the presence of *b*, *p* and *m* (contrast Stempel 1999, 36).

Morphological rebuilding is a complete structural replacement of the original morphological shape, which becomes impossible to retrieve (Fronzaroli 1964, 12; Fox 2003, 70; Kogan 2005a, 141–143): Akk. *ilku* – Hbr. *’ālūkā* – Arb. *’alakāt*- ‘leech’ (SED II No. 32), Akk. *zubbu* – Hbr. *zābūb* – Arb. *ḡubāb*- – Syr. *debbābā* ‘fly’ (SED II No. 73), Hbr. *šā’ōrā* – Arb. *šā’īr*- – Gez. *šā’r* ‘barley, straw’ (Fox 2003, 85), Akk. *imnu* (< **yamin*-) – Hbr. *yāmīn*- – Arb. *yamīn*-, *yaman*- ‘right hand’ (SED I No. 292), Akk. *lab’u* – Hbr. *lābī’* – Arb. *luba’at*-, *labu’at*- ‘lion(ess)’ (SED II No. 144).

2.2.2.4. Unstable vocalic elements of verbal roots

The vocalic elements of primary verbal roots are similarly unstable. Frolova (2003) and Kogan (2005a, 152–153) analyze 21 PS verbal roots with *-u-* in Akkadian vs. *-i-* (or vacillation between *-i-* and *-u-*) in Arabic (like **-prVs-* ‘to break’), as well as 17 verbal roots with *-u-* in Akkadian vs. *-i-* (or vacillation between *-u-* and *-i-*) in Arabic (like **-nkVp-* ‘to push, to gore’). In both groups verbs with labials as root consonants are prominent, and it is likely that the original **i* shifted to *u* under their influence. The matter is, however, by no means certain and alternative, purely morphological, explanations have also been proposed (Kuryłowicz 1972, 59).

2.2.3. Low functional load of lexical vocalism

The peculiar fate of lexical vocalism in Semitic is undoubtedly motivated by its low functional load (Kogan 2005a, 153–163; *contra* Lipiński 1997, 152): neither nominal, nor verbal roots were normally opposed by their vocalic elements in PS. Thus, contrasting pairs like **γarab*- ‘willow’ – **γārib*- ‘raven’ or **ḡar*‘- ‘seed’ – **ḡirā*‘- ‘elbow’ are difficult to find, and those which seem available are rarely fully satisfactory. The same applies, *mutatis mutandis*, to most of the attested Semitic languages as well.

2.3. Proto-Semitic vocalic reconstruction: non-traditional models

Numerous irregularities in the vocalic reflexes of PS primary nouns have brought about alternative models of PS vocalic reconstruction. Within these models, primary nouns are treated as a closed, highly archaic sub-system whose vocalic inventory may not coincide with the traditional six-member system.

2.3.1. Diakonoff's bivocalic reconstruction

Diakonoff's bivocalic reconstruction derives from three postulates about the vocalism of PS primary nouns (1970, 456; 1991–1992, 68–97): absence of long vowels; allophonic nature of **u*, which only appears in contact with labials and, more rarely, velars and glottal stop; high prominence of sonorants, semivowels and glottal stop as second and/or third root consonants. In the output, there emerges a bivocalic system **a : *ə* (cf. already Bergsträsser 1983 [1928], 5; Yushmanov 1998 [1933–1934], 86) and an expanded consonantal inventory including syllabic sonorants **l*, **m*, **n*, **r* and labiovelars **kʷ*, **gʷ*, **kʷ* (Diakonoff 1988, 39–40). None of Diakonoff's postulates is groundless, but none is without exceptions either. One hesitates to accept his reconstruction as a system in view of numerous internal contradictions and rather incomplete supporting evidence (Kogan 2005a, 143–145).

2.3.2. Gazov-Ginzberg's monovocalic theory

Low functional load of the vocalic element(s) in primary nouns is the main foundation of Gazov-Ginzberg's monovocalic theory (1965a; 1965b; cf. already Yushmanov 1998 [1933–1934], 86), which denies the existence of phonemically relevant vowels in the earliest strata of PS and relegates them to undetermined vocalic elements whose only purpose was to facilitate the pronunciation. Gazov-Ginzberg's concept, based on a very restricted body of evidence and overtly disregarding numerous primary nouns with fairly regular reflexes, is difficult to accept (Diakonoff 1970, 455; Kogan 2005a, 163–164).

3. Stress

3.1. Traditional reconstruction

PS accentual patterns are poorly understood, partly because there is no direct evidence about the stress rules in the majority of ancient Semitic languages. PS stress is usually thought to be non-phonemic and fall on the third mora from the end of the word, final length not counted (Harris 1939, 50; Diakonoff 1991–1992, 109; Huehnergard 2004, 145). This reconstruction is identical to the accentual pattern of modern reading of Classical Arabic (Birkeland 1954, 5–6; Fischer 1987, 19–20). The antiquity of this tradition (standard in European scholarship since the beginning of the 17th century) cannot be verified (Lambert 1897; Sarauw 1939, 35–36; Blau 1972b, 476; Knudsen 1980, 7–10), but it finds a cross-linguistic parallel in Latin (Stempel 1999, 38) and may correlate with the 'trochaic ending rule' of Akkadian metrics (Landsberger 1926, 371–372): the penultimate syllable of every verse is long (C $\bar{V}$ or CVC) which, in the common perception at least, amounts to its being stressed (Knudsen 1980, 14; Greenstein 1977, 46–52; 1984, 24–26).

Phonemically relevant accentual oppositions sporadically attested in individual Semitic languages (like Hbr. *kāmā* ‘she stood’ vs. *kāmā́* ‘she stands’) are usually considered to be secondary and have no bearing on the PS reconstruction (Knudsen 1980, 15; Huehnergard 2004, 145).

3.2. Accentual oppositions in PS?

It has nevertheless been maintained that words and forms could be opposed accentually in PS.

3.2.1. **yáktul* ‘he killed’ vs. **yaqtúl* ‘let him kill’

Accentual opposition between **yáktul* ‘he killed’ vs. **yaqtúl* ‘let him kill’ is postulated in Hetzron 1969, mostly on the basis of contrasting pairs like *wa-yyákom* ‘he stood’ (**yákom*) – *yākóm* ‘let him stand’ (**yakúm*) in Hebrew. Hetzron’s arguments from Akkadian and Geez are less convincing (Greenstein 1977, 51), but further support for his theory may come from Soqotri, where the jussive is one of the few forms which display word-final stress in spite of the general retraction to the penultimate (Johnstone 1975a, 104).

3.2.2. **tabára*

As argued by Kogan (SED I pp. CXXVII–CXXVIII) and Stroomer (*apud* Fox 2003, 110), a form like Mehri *təbūr* ‘he broke’ cannot be derived from a standard Arabic-like proto-form **tábara*, but only from **tabára*, which finds remarkable parallels elsewhere in WS (including many ancient and modern Arabic dialects, GVG 85, Birkeland 1954, 22–24; Blau 1972b, 476): Hbr. *šābārū* ‘they broke’ (pausal), Arm. *yəhábū* ‘they gave’, Gez. *nagára* ‘he said’, *nagáru* ‘they said’ (Mittwoch 1926, 52). It means that the third mora rule was not always operative in proto-WS.

3.2.3. Accentual oppositions involving Proto-Semitic primary nouns

An elaborated system of accentual oppositions involving PS primary nouns has been proposed by Dolgopolsky (1978; 1986; 1999, 89–107) in order to account for some irregular vocalic correspondences. Within Dolgopolsky’s reconstruction, most of the traditional *nomina segolata* (**C₁VC₂C₃-*) are reinterpreted as bi-syllabic stems stressed on the first syllable (**C₁VC₂VC₃-*), thus **kárīm-* ‘vineyard’, **rá’iš-* ‘head’, **’ábun-* ‘stone’, **’áluṣ-* ‘thousand’, **gábar-* ‘man’, **’áṭam-* ‘bone’, instead of **karm-*, **ra’š-*, **abn-*, **alp-*, **gabr-*, **aṭm-*, etc. These structures are opposed to the traditional bi-syllabic reconstructions **C₁VC₂VC₃-*, which, according to Dolgopolsky, were stressed on the second syllable (**C₁VC₂VC₃-*).

The first postulate is intended to explain, *inter alia*, numerous unexpected *C₁əC₂C₃* nouns in Geez (*kərm* ‘vineyard’, *rə’s* ‘head’, *’əbn* ‘stone’, *’əlp* ‘thousand’), where *ə* (< **i* or **u*) instead of *a* is thought to be due to accommodation to the posttonic **i* or **u* (**kárīm-* > **kérim-* > **kirm-* > *kərm*, etc.). The second postulate explains, via pretonic vocalic reduction, the almost regular shift of PS **C₁aC₂aC₃-* to *C₁iC₂aC₃-* in Akkadian (**zakánum* > **ziḳánum* > **ziḳanum* > *ziḳnum* ‘beard’). Dolgopolsky’s theory provides

a wealth of insights into the history of Semitic vocalism, but cannot be accepted in its entirety because of numerous inconsistencies, factual errors and lack of attention to alternative explanations (Diakonoff 1991–1992, 105–106; Fox 2003, 13; Kogan 2004b, 486–490; 2005a, 145; Huehnergard 2005c, 27–28).

Abbreviations of lexicographic tools

- AED: T. L. Kane. *Amharic-English Dictionary*. Wiesbaden, 1990
- AHw.: W. von Soden. *Akkadisches Handwörterbuch*. Wiesbaden, 1965–1981
- BDB: F. Brown, S. R. Driver, Ch. A. Briggs. *A Hebrew and Aramaic Lexicon of the Old Testament*. Oxford, 1951
- CAD: *The Assyrian Dictionary of the Oriental Institute, the University of Chicago*. Chicago, 1956–2010
- CDG: W. Leslau. *Comparative Dictionary of Ge'ez (Classical Ethiopic)*. Wiesbaden, 1987
- DJBA: M. Sokoloff. *A Dictionary of Jewish Babylonian Aramaic of the Talmudic and Geonic Periods*. Ramat-Gan/Baltimore, 2002
- DJPA: M. Sokoloff. *A Dictionary of Jewish Palestinian Aramaic of the Byzantine Period*. Ramat-Gan, 1990
- DNWSI: J. Hoftijzer, K. Jongeling. *Dictionary of the North-West Semitic Inscriptions*. Leiden/New York/Köln, 1995
- Dozy: R. Dozy. *Supplément au dictionnaires arabes*. Paris, 1927
- DRS: D. Cohen. *Dictionnaire des racines sémitiques ou attestées dans les langues sémitiques*. La Haye, 1970–
- DUL: G. del Olmo Lete, J. Sanmartín. *A Dictionary of the Ugaritic Language in the Alphabetic Tradition*. Leiden/Boston, 2003
- EDG: W. Leslau. *Etymological Dictionary of Gurage (Ethiopic)*. Vol. III. Wiesbaden, 1979
- EDH: W. Leslau. *Etymological Dictionary of Harari*. Berkeley/Los Angeles, 1963
- Freytag: G. W. Freytag. *Lexicon arabico-latinum*. Halle, 1833
- GAG: W. von Soden. *Grundriss der akkadischen Grammatik*. Roma, 1995
- GNDM: G. Bergsträsser. *Glossar des neuaramäischen Dialekts von Ma'lûla*. Leipzig, 1921
- HALOT: L. Koehler, W. Baumgartner, J. J. Stamm. *The Hebrew and Aramaic Lexicon of the Old Testament*. Leiden/New York/Köln, 1994–2000
- HL: T. M. Johnstone. *Ḥarsūsi Lexicon*. Oxford, 1977
- Jastrow: M. Jastrow. *A Dictionary of the Targumim, the Talmud Babli and Yerushalmi, and the Midrashic Literature*. New York, 1996
- JL: T. M. Johnstone. *Jibbāli Lexicon*. Oxford, 1981
- LA: Ibn Maḡdūr. *Lisānu l-'arab*. Bayrūt, 1990
- Lane: E. W. Lane. *Arabic-English Lexicon*. London, 1867
- LIQ: S. D. Ricks. *Lexicon of Inscriptional Qatabanian*. Roma, 1989
- LLA: A. Dillmann. *Lexicon linguae aethiopicae*. Leipzig, 1865
- LM: M. Arbach. *Le maḡābien: lexique, onomastique et grammaire d'une langue de l'Arabie méridionale préislamique*. T. 1. *Lexique maḡbien*. Aix-en-Provence, 1993
- LS: W. Leslau. *Lexique Soqotri (Sudarabique moderne) avec comparaisons et explications étymologiques*. Paris, 1938
- LSP: F. Schulthess. *Lexicon syropalaestinum*. Berlin, 1903
- LSyr.: C. Brockelmann. *Lexicon Syriacum*. Halle, 1928
- LTS: O. Jastrow. *Lehrbuch der Ṭuroyo-Sprache*. Wiesbaden, 1992
- MD: E. S. Drower, R. Macuch. *A Mandaic Dictionary*. Oxford, 1963
- ML: T. M. Johnstone. *Mehri Lexicon*. London, 1987
- PS: R. Payne Smith. *Thesaurus Syriacus*. Oxford, 1879–1901
- SD: A. F. L. Beeston, M. A. Ghul, W. W. Müller, J. Ryckmans. *Sabaic Dictionary (English-French-Arabic)*. Louvain-la-Neuve, 1982

- SED I: A. Militarev, L. Kogan. *Semitic Etymological Dictionary*. Vol. 1. Anatomy of Man and Animals. Münster, 2000
- SED II: A. Militarev, L. Kogan. *Semitic Etymological Dictionary*. Vol. 2. Animal Names. Münster, 2005
- TA: az-Zabīdī. *Tāj al-ʿarūs*. Kuwayt, 1965–2001.
- TED: T. L. Kane. *Tigrinya-English Dictionary*. Springfield, 2000
- WKAS: M. Ullmann. *Wörterbuch der klassischen arabischen Sprache*. Wiesbaden, 1957–2001
- WTS: E. Littmann, M. Höfner. *Wörterbuch der Tigre-Sprache. Tigre-deutsch-englisch*. Wiesbaden, 1956

Abbreviations of texts quoted

- ARET 5: D. O. Edzard. *Hymnen, Beschwörungen und Verwandtes aus dem Archiv L. 2769*. 1984. Roma: Missione archeologica italiana in Siria (Archivi reali di Ebla, Testi. Vol. 5)
- CH: E. Bergmann. *Codex Hammurabi. Textus primigenius*. Roma, 1953
- Deir Alla: The plaster inscription from Tell Deir Alla. Quoted after J. A. Hackett. *The Balaam Text from Deir ʿAllā*. 1984. Chico: Scholars
- EA: el-Amarna tablets. Quoted after J. A. Knudtzon. *Die El-Amarna-Tafeln*. Leipzig, 1915
- EV: Estratti di vocabulari (di Ebla). Quoted after G. Pettinato. *Testi lessicali bilingui della biblioteca L. 2769*. 1982. Naples: Istituto universitario orientale di Napoli
- Gilgamesh Epic – The Standard Babylonian Gilgamesh Epic. Quoted after A. George. *The Babylonian Gilgamesh Epic*. 2003. Oxford: OUP.
- GNDM: G. Bergsträsser. *Glossar des neuaramäischen Dialekts von Maʿlūla*. Leipzig, 1921
- Ja – A. Jamme. *Sabaeen Inscriptions from Maḥram Bilqīs (Mārib)*. 1962. Baltimore: The Johns Hopkins Press, 1962
- KAI: H. Donner, W. Röllig. *Kanaanäische und aramäische Inschriften*⁵. Wiesbaden, 2002.
- KTU: M. Dietrich, O. Loretz, J. Sanmartín. *The Cuneiform Alphabetic Texts from Ugarit, Ras Ibn Hani, and Other Places (KTU: Second, enlarged edition)*. 1995. Münster: Ugarit
- LTS: O. Jastrow. *Lehrbuch der Turoyo-Sprache*. Wiesbaden, 1992
- MAD 5 – I. J. Gelb. *Sargonic Texts from the Ashmolean Museum, Oxford*. 1970. Chicago: the University of Chicago (Materials for the Assyrian Dictionary, No. 5)
- MEE 4 – G. Pettinato. *Testi lessicali bilingui della biblioteca L. 2769*. 1982. Naples: Istituto universitario orientale di Napoli (Materiali epigrafici di Ebla, vol. 4)
- RIÉ: Bernand/Drewes/Schneider 1991 ff.
- VE – Vocabulario di Ebla. Quoted after G. Pettinato. *Testi lessicali bilingui della biblioteca L. 2769*. 1982. Naples: Istituto universitario orientale di Napoli

Abbreviations of language names

- Akk. – Akkadian
- Amh. – Amharic
- Amn. – Ammonite
- Arb. – Arabic
- Arg. – Argobba
- Arm. – Aramaic
- Ass. – Assyrian dialect of Akkadian
- BA – Biblical Aramaic
- Cha. – Chaha
- CPA – Christian Palestinian Aramaic
- CS – Central Semitic
- End. – Endegeñ
- ES – Ethiopian Semitic
- ESA – Epigraphic South Arabian

Gaf. – Gafat
 Gez. – Geez
 Gur. – Gurage (unspecified)
 Har. – Harari
 Hbr. (pB.) – Hebrew (post-Biblical)
 Hdr. – Hadramitic
 Hrs. – Harsusi
 JBA – Jewish Babylonian Aramaic
 Jib. – Jibbali
 JNA – Jewish Neo-Aramaic
 JPA – Jewish Palestinian Aramaic
 MA – Middle Assyrian
 Mal. – Neo-Aramaic of Ma'lūla
 MArm. – Middle Aramaic
 Mhr. – Mehri
 Min. – Minaean
 Mnd. – Mandaic
 Mla. – Neo-Aramaic of Mlaḥsô
 MSA – Modern South Arabian
 Muh. – Muher
 NArm. – Neo-Aramaic
 NWS – North-West Semitic
 OA – Old Assyrian
 OArm. – Old Aramaic
 OB – Old Babylonian
 PCS – Proto-Central Semitic
 Pho. – Phoenician
 PS – Proto-Semitic
 PWS – Proto-West Semitic
 Qat. – Qatabanian
 Sab. – Sabaic
 Sel. – Selti
 Sod. – Soddo
 Soq. – Soqotri
 Sum. – Sumerian
 Syr. – Syriac
 Tgr. – Tigre
 Tna. – Tigrinya
 Tur. – Turoyo
 Ugr. – Ugaritic
 Wol. – Wolane
 WS – West Semitic
 Zwy. – Zway

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7. Reconstructive Morphology

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Abstract

This chapter discusses Proto-Semitic morphology and methodological questions pertinent to its reconstruction, presenting certain features of PS morphology that may be regarded as safe to reconstruct.

1. Introduction

1.1. Significance

The reconstruction of Proto-Semitic (PS) morphology, together with comparative phonology (see ch. 6) and lexical cognates (see ch. 8), forms the backbone of Semitics

as a historic-comparative linguistic discipline. It is therefore hardly surprising that all compendia on comparative Semitics, for example Brockelmann (1908, 285–642), Bergsträsser (1928/1983), Moscati (1964, 71–170), Lipiński (1997, 201–480), Bennett (1998), Stempel (1999, 69–136) and Kienast (2001, 39–401) have a strong focus on morphology.

Although it is a truism in historical-comparative linguistics that similarities between languages can have other sources besides a common heritage, such as borrowing, parallel development (cf. as an excellent example Blau 1980) and sheer coincidence, this truism is often neglected. It is therefore perhaps worthwhile to state clearly that this chapter is not concerned with what is ‘common’ or ‘wide-spread’ in Semitic but only with those phenomena that can be reconstructed for the morphology of Proto-Semitic.

1.2. How to use the sources

It is understood that in principle the oldest attested varieties of the presumptive daughter-languages provide the best source material for the reconstruction of a proto-language. Although it is theoretically possible that PS archaisms not attested in the older varieties of Aramaic could be preserved in a modern language like Turoyo (see ch. 39), this scenario is less likely. The oldest available varieties and documents are therefore the first port of call. However, linguistic attestation in very old varieties is often scarce and complicated by philological problems, the most serious of which are the vowels lacking in many Semitic language scripts. For example, the Ancient North Arabian (ANA) inscriptions (see ch. 44) yield data much older than Classical Arabic (CIArab, see ch. 45), but due to the lack of vowels and their textual characteristics the data are rather incomplete. In reconstructions, CIArab data are indispensable supplements to those of the ANA.

Under what circumstances is a reconstructed morpheme to be regarded as a part of PS morphology? If it is present only in West Semitic (WS) languages, as, for example, the suffix conjugation (SC) for antecedent situations, it is probably a WS innovation. Although Akk also has some innovative features (e.g. the *tan*-stems [Kouwenberg 2010, 431–437] or the perfect of the *iptaras*-type) and has been subject to intense contact with Sumerian (see ch. 15) its pivotal role for the reconstruction of PS morphology is due to two factors: it is by far the oldest attested Semitic language, and the Akk–WS-split is the most ancient and basic bifurcation in the classification of Semitic (see ch. 9). This has been accepted knowledge in Semitic comparative-historic linguistics for many decades, contrary to Kienast’s critique on mainstream Semitics (2001, 13), that the role of CIArab is still over-stressed as a kind of ‘normative grammar of the Semitic languages’.

2. Root and pattern morphology

2.1. Definition and basics

Morphology in the attested old Semitic languages is basically nonconcatenative, i.e. morphemes are usually discontinuous (Lat. *catena* ‘chain’). In Semitic terminology, a root is – in the majority of cases – an abstract sequence of three consonants (‘radicals’)

that are attached to a semantic notion, e.g. Arab *k-t-b* ‘to write’. The term ‘root’ is derived from the native grammatical tradition of Hebrew (Hebr *šōrēš*). To build actual words and forms, the root must be inserted in a nominal or verbal ‘pattern’ comprising the slots into which the root-elements can be inserted, e.g. the CIArab morpheme *maC₁C₂ūC₃* for the Passive Participle, yielding the form *maktūb* ‘written’ when filled with the root cited above. Many patterns or elements of patterns and hosts of roots can be reconstructed for PS, so there can be no doubt that PS morphology also followed the root-and-pattern principle.

There has been some debate as to whether the age-old root-and-pattern approach really functions ‘in the mental processing of Semitic languages by native speakers and even as to whether roots are theoretically appropriate entities for the description of Semitic languages’ (Hoberman 2007, 139). This debate (cf., *inter alia* the articles in Shimron 2003), interesting as it may be for general or psycho-linguistics, is of no relevance as regards the comparative-reconstructive approach followed here. The root-and-pattern system itself as reconstructed for PS is largely identical with that attested in individual Classical Semitic languages like Akk, Hebr, Aram and Gz. The question of the theoretical appropriateness remains the same, and so need not be touched upon here.

The notation of the roots in this chapter is conventional in that *prs* is used for Akk, *qtl* for Hebr and Aram, *fʿl* for Arabic and *kʾl* for ES. The author sees no necessity for normalization. *C₁C₂C₃* is used for abstract morphemes.

2.2. Types of roots

Roots in Semitic consist mainly, but not exclusively, of consonantal elements. The combination of the consonants is restricted by ‘incompatibility rules’. Some rules are language-specific. A famous rule in Akk is Geers’ law postulating that two different emphatic consonants cannot occur in one word (Geers 1945). An example of a cross-Semitic rule is that the first two radicals must not be identical, i.e. while a root like *r-d-d* is permissible (in CIArab ‘to refute’), a root **r-r-d* cannot exist (cf. further Greenberg 1950; Zaborski 1994; Zaborski 1996b; Bachra 2001).

As for roots with the weak radicals (from Arabic *ḥarf muʿtall* ‘weak [lit. ill] letter’) **w/ū* and *y/ī*, there has been a long and controversial debate (see del Olmo Lete 2003, 91–137; 2008, 53–86) whether in a historical and/or deep-structural perspective they are better conceptualized as roots containing (semi-)consonants that in some environments appear as vowels (e.g. Voigt 1988), or rather as original bi-radical roots that have a secondary root-augment to regularize the morphology (cf. e.g. Kienast 2001, 64).

The following root-types can be identified as PS:

- (a) Tri-consonantal sound roots behave regularly in all positions.
- (b) Verbs *C₂ = C₃* show different behavior in the individual languages. In Akk and Gz their inflection is nearly identical with the strong verb (Gz *sādādū* JUSS *yasdad* ‘banish’), while in CIArab contraction depends on the phonological context (PRF.3M.SG *radda*, 1SG *radadtu* ‘return’). In NWS we find integration with the regular pattern, with the patterns of *C₁ = n*, *C₂ = w/y* and bi-radical forms. As Akk and the peripheral Gz show largely regular behavior,

one is hesitant to agree that ‘the probable biconsonantal origin is particularly evident’ here, as Moscati (1964, 166) put it.

- (c) Roots $C_1 = y$ are rare.
- (d) Roots $C_1 = w$ have many forms without a consonantal representation of the first radical or no representation at all, especially in the relatively older PC forms and in nominal derivatives, e.g. Akk PRS.3.M.SG *ubbal*, PRT *ūbil* (rt. *wbl*), Hebr INF *réšæṭ* ‘inherit’ (rt. *yrš* < **wrt*), ClArab IMPF.3.M.SG *yariṭu* ‘inherit’ (rt. *wrt*), Gz JUSS 3.M.SG *yəlād* ‘give birth; beget’, *lādāt* birth’ (rt. *wld*).
- (e)–(g) The root types $C_2 = y/\bar{i}$, $C_2 = w/\bar{u}$, and $C_2 = \bar{a}$ represent the weak radical largely vocalic in the Akk verb; even in the D-stem it is sometimes not the ‘weak radical’ that is geminated (where applicable at all), but the third radical: Babylonian PRT.3.PL *ukinnū* ‘acknowledge’ (rt. *kūn*, D-stem). But see on the other hand Assyrian PRS.3.SG *ikūan* (<**ikawwan*). The situation in Hebr (and probably Canaanite) is similar: Hebr forms the PC.3PL of a rt. *rwš* in the D-stem with the suppletive *Pōlel*-stem as *y^orōš^ošū* Mi 2, 5 ‘drive (around)’. Other WS languages show ‘strong’ formation more often, but even in Gz, where these roots are integrated into the tri-consonantal system to a high degree, we find ‘weak’ formations in the base stem: PRF.3.SG.M. *konā*, IMPF *yākāwwān*, JUSS *yākun*.
- (h)–(i) The root types $C_3 = y/\bar{i}$, $C_3 = w/\bar{u}$ also show largely vocalic representations in Akk verbs: PRS.3SG *ibanni* ‘he builds’ (rt. *bny*), PRS *imannu* ‘he counts’ (rt. *mnw*). Vocalic affixes result in contractions: PRS.3F.PL *ibannā* ‘they build’, but see Assyrian PRS.3.M.PL *ibanniū*. In Ug, weak and strong representations occur, mainly conditioned by the affixes and the tense (Troppe 2000a, 653–671): Affixes beginning with a consonant produce a diphthong in the preceding syllable that is monophthongized (*bnt* [**banōtu*] ‘I built’ < **banawtu*). Vocalic affixes yield triphthongs that are in some cases contracted (PC^L *tzg* [**tazgū*] ‘she lows’ < **tazguwu* KTU 1.15:I:5), but less so in the SC (*ātwt* [**atawat*] ‘she came’ KTU 1.4:IV:32). Hebr also shows here largely vocalic representations, as does Syr with a few exceptions (*rmayton* ‘you (PL) threw’); nominal derivatives also show strong radicals: Hebr *binyān*, Syr *benyānā* ‘building’. ClArab has both representations, mainly conditioned by the following syllable (PRF.3SG.M *banā*, 1SG *banaytu*). Gz shows strong systematization with many strong forms: PRF.3M.SG *rāmāyā* ‘he threw’, 1SG *rāmāyku* 3PL.M *rāmāyu*, IMPF.3.M.SG *yərāmmi*, 3M.PL *yərāmmayu*. It is possible that the situation in PS was similar to that in early NWS, and from this (through contraction and monophthongization) the situations in both Akk and Gz developed via analogy and paradigmatic levelling (see also Moscati 1964, 166; Diem 1977; Lipiński 1997, 430–434; Kienast 2001, 361–366).

Several groups of Semitic languages show quadri-radical roots (e.g. Akk, Arabic, MSArab, Gz). They behave in a similar way in that they emulate the morphology of the tri-radical D and tD-stems to a certain degree, cf.: Akk PRS.3.SG *ušqammam*, PRT *ušqammim* ‘be silent as dead’ vs. *uparras*, *uparris* (D-stem), ClArab PRF.3M.SG *zalzala*, IMPF *yuzalzilu* ‘to shake (tr.)’ (G-stem of the quadri-radical) vs. *fa^oala*, *yufa^oilu* (IInd form/D-stem); Gz PRF.3SG.M *’adängäšä*, IMPF *yadänäggaš*, JUSS *yadänggaš* ‘terrify’ (Causative) vs. *’akättälä*, *yaḳettäl*, *yaḳättäl* (D-stem Causative/A₂). But not one

quadri-radical root can be reconstructed for PS (see Boekels 1990), so quadric-radical roots are most probably the result of parallel developments and not a feature of PS (*pace* Gensler 1997). See also Kienast (2001, 65–65).

2.3. Other morphological strategies

Semitic root-and-pattern morphology is supplemented by suffixes, like, for example *-t/-at- for F nouns.

Notable exceptions from the root-and-pattern system are the pronouns (cf. 5.1.–5.2.) and a number of primary substantives like **s₂anat*- ‘year’, **amat*- ‘maidservant’, etc. (Brockelmann 1908, 331–334, Kienast 2001, 60), that can at best be analysed as bi-radical (Nöldeke 1910, 109–178), but are in fact not analysable. Voigt (2001) reconstructs terms of relationship like **ab*-, CST.NOM **’abū* as tri-radical, but nevertheless, these words are outside the root-and-pattern system in the strictest sense.

There are several strategies common in morphologies of the world’s languages which occur only in individual, mostly younger Semitic languages and it is safe to say that these strategies were absent in PS:

- (1) Agglutination: Only some modern varieties from the periphery of the Semitic-speaking area, like SES or NENA, have agglutinative structures developed, cf. the following example from the dialect of the Jews of ‘Amādiya: *bzo:nítwale* ‘you would buy it’ (*b-zo:n-ít-wa-le* PRS-buy-2PL-PRT-it(OBJ)), where each morpheme has its fixed slot and semantic function, cf. Hoberman (1989, 148).
- (2) Composition: Beginnings of composition are present, for example in ClArab (*lā-ḥayyun*, lit.: NEG-living ‘a thing that is not alive’ WKAS II 33b) and more developed in MStArab (*šarq-’awsaṭī* ‘middle-eastern’), or MHebr (בְּלִי-חֻקִּי *bilti-xuki* ‘illegal’), but the existence of composition in PS can definitely be excluded. Composition should not be confused with lexicalized genitival constructions like Gz *bet=ä krastiy=an=at* (house=CST Christian=PL.M=PL.F) ‘churches’ (Kienast 2001, 127–128).
- (3) Reduplication (Brockelmann 1908, 439–441) occurs occasionally as a means to express plurality (OAram *rbrbn* [**rabrabīn*] KAI 216/9 ‘great [kings]’) or distributivity (Gz *sisay=ä=nä zä-lä-lä* ‘*älätə=nä*’ ‘our daily bread’ Mt 6, 11, lit. bread=ACC=our REL-for-for day=our), the latter esp. in Ethio-Semitic. The attestation of the phenomenon in older Semitic languages is scarce and cannot be reconstructed for PS.

3. Verbal morphology

3.1. Stem formation and derivation

3.1.1. Base stem

The base stem (‘G’-stem from German ‘Grundstamm’) is the most frequent. In contrast to the derived stems, it is characterised by the absence of any additional morphological features. It is reflected in Akk G-stem, Hebr *qal*, Syr *p’el*, ClArab Ist form and Gz 0₁.

In tri-radical roots the weight of lexical semantics lies in the consonants; but at least in the basic verbal stem (G-stem) the verbal roots are also connected with vocalic patterns that re-appear in several languages and to a certain extent these can therefore be attributed to PS, cf. the following sets:

(a) Intransitive verbs with *i*-vowel:

Akk PRT *ikbit*, PRS *ikabbit*, IMPT *kibit*, STAT *kabit* ‘be heavy’

Hebr PRF *kābēd* (< **kabid*) ‘be heavy’ (but PC *yikbod*)

(b) Intransitive verbs with *u*-vowel:

Akk PRT *iqrib* (mBab *iqrub*), PRS *iqerrib* (mBab) *iqerrub*, STAT *qarub* ‘be near, draw close’

CIArab PRF *qaruba/qariba*, IMPF *yaqrubu/yaqrabu*

(c) Transitive verbs with *a – u* pattern (‘Ablautklasse’):

Akk PRT *iḥnuq*, PRS *iḥannaq*, STAT *ḥaniq* ‘to strangle’

CIArab PRF *ḥanaqa*, IMPF *yaḥnuqu*

See further Frolova (2003).

3.1.2. D-stems

A stem with lengthened (or ‘doubled’, hence ‘D’-stem) middle radical in virtually all forms can safely be reconstructed on the basis of all ancient Semitic languages. As a further feature of this stem, the vowel **u* in the prefixes of the prefix-conjugations can be safely reconstructed (Brockelmann 1908, 508–510; Lipiński 1997, 382–384; Kienast 2001, 227–233). The stem is reflected, for example, in the Akk D-stem (PRT *uparris*), Hebr *pi’el*, Syr *pa’el*, Arab IInd form (*fa’ala*, *yufa’ilu*) and Gz 0₂ (*kättälä*, JUSS *yəkättäl*). For MSArab the situation is not as clear. The D/L-stem in Mhr shares morphological and semantic features of both D- and L-stems (Rubin 2010b, 93–97), and may therefore be the product of a morphological merger. Wide-spread semantic functions of the D-stem are plurality (or intensity) in respect to verbs of action in the G-stem, factitive for stative verbs in the G-stem and to derive verbs from nouns, especially where a pertinent G-stem is missing (Jenni 1968; Ryder 1974; Kouwenberg 1997, 114–300; Ali 2001, 66ff.). It is not too far-fetched to propose a similar semantic range for the proto-language.

3.1.3. Causatives

A further stem that can be reconstructed for PS is that of the causative. Its morphological features are the prefix **ša-* and the vowel **u* in the prefixes of the prefix-conjugations (Retsö 1989, 49–164; Kienast 2001, 209–215; Kouwenberg 2010, 324–354). The sibilant *š* in the prefix developed to *h* > *ʾ* in younger, mainly WS languages (Voigt 1994), as the Hebr *hip’el*, OArām *hqtl* (Degen 1969, 66), ANA *hf’l* and *ʾf’l*, CIArab IVth form (*ʾaf’ la*, *yuf’ilu*), or Syr. *aḫ’el*, but the *š*-causative is still productive in Ug (Tropper 1991). Besides its core function ‘causative for verbs of action’ Semitic causatives also function as factitive for stative verbs (Ali 2001, 90–109). The Phoen causative **yaqtīl* represents a rare development. Causatives with **š*- and **s*-elements are also present in many non-Semitic Afro-Asiatic languages (Sasse 1981, 141; Lipiński 1997, 387).

3.1.4. L-stems

Stems with lengthened (hence ‘L-stem’) first vowel and conative semantics can be found in several WS languages: Hebr *pōlel* (but restricted to roots $C_2 = C_3$ and $C_2 = w/y$), ClArab IIIrd form (*fā‘ala*, *yufā‘ilu*), Gz 0₃ (*katälä*, JUSS *yəkatal*, with *a* < **ā*), cf. Brockelmann 1908, 511–514; Fleisch 1944; Lipiński 1997, 385–387. As they are not present in Akk (and also left no trace in Aram), they are most probably not PS (so also Kienast 2001, 231; *pace* Zaborski 2005, 37 [more literature there]).

3.1.5. T-stems

A derivative morpheme that can safely be reconstructed for PS is the reflexive *(-)*tV*- (cf. Brockelmann 1908, 528–537; Diem 1982; Testen 1999). In combination with the G-stem it occurs either as a prefix or as an infix after the first radical, cf. Syr Et^pel (*etqtel*, *netqtel*), Gz T₁ (PRF *täkätlä*, JUSS *yətkätäl*) for stems with prefixed **t(V)*- and Akk Gt (PRS *imtaḥḥaš* ‘fight’, PRT *imtaḥaš*), Ug Gt (e.g. PC^S *yrtḥš* KTU 1.14:III:52 ‘he washed himself’, cf. Tropper 2000a, 518–532), Phoen (e.g. *thtpk* ‘she should be turned over’; attestation scarce, cf. Friedrich/Röllig 1999, 94), and ClArab VIIIth form (*ifta‘ala*, *yafta‘ilu*) for stems with infixed -*tV*-.

However, the situation is not always straightforward. The position of the t-morpheme can vary under several circumstances. Even two closely related varieties as Hebr and Moab can differ in this respect. While Hebr has only a tD (*hitpa‘el*), Moab has Gt (e.g. *w’lthm* ‘I fought’ Meša‘ 11, cf. Jackson 1989, 123). A peculiar situation is noted by Multhoff (2010) for Sab: There is one *t*-stem with prefixed t-morpheme in the SC and infixed t-morpheme in PC and INF (T₁) and another t-stem with prefixed t-morpheme throughout (T₂). It is possible that the situation in the Sab T₁-stem is that of PS, thus explaining the positional variation in the individual languages. In view of the principle of archaic heterogeneity (Hetzron 1976, 92–95) this is not unlikely, but needs further investigation.

In some languages, esp. those that do not have internal passives (see 3.1.8.), e.g. Syr and Gz, the T-stem (and its combinations, see 3.1.7.) are used as passives.

Reflexive -*t*- belongs to the few Semitic morphemes that can be safely reconstructed for Afro-Asiatic (Sasse 1981, 141).

3.1.6. N-stem

Akk, the Canaanite languages, Ug, and Arab share a stem with a prefixed morpheme **n(i/a)*- indicating reflexives. This stem is absent in Aramaic and ESA. ES stems with (**a*)*n*-prefixes as in Gz ‘*angwärgwära* ‘murmur, mutter’ or *ən-* as in Mhr *ənḥēbūb* ‘shriek (of camels)’ (Rubin 2010b, 118ff.) are restricted to quadri-radical verbs and have no specific semantic function, so they cannot be connected with the PS N-stem. The overall evidence is still strong enough to postulate a PS N-stem (Testen 1998a; Lipiński 1997, 393–395; Kienast 2001, 216–223), with a semantic function to form reflexives.

3.1.7. Combining derivational morphemes

The derivative morphemes mentioned under 3.1.1.–3.1.6. also occur in combination, cf. the following example from ClArab: *kāḏaba* ‘to lie to’ (L-stem, conative) vs. *ta-kāḏaba* ‘to contend in lying’ (tL-stem, reciprocal). The extent to which stem-derivative morphemes can be combined varies from language to language. While in Akk and Gz the freedom of combination is high, in Syr only combinations with the *t*-morpheme are productive (tG = *etp^cel*, tD = *etpa^cal*, and t-Causative = *ettap^cal*). The great freedom of combination and re-combination of derivative morphemes suggests that it is difficult to reconstruct PS combinations safely, because even combinations occurring in several languages could have emerged independently (cf., in general, Brockelmann 1908, 528–537; Kienast 2001, 224–226). Notwithstanding this note of caution, the following combinations attested both in Akk and WS can be postulated for PS:

- (a) Causative and T-Reflexive, represented in: Akk Št, Ug Št, BAram *hištap^cel*, Syr *ettap^cal* (according Brockelmann 1908, 158 and 532 an assimilation *tt* < *t^c*, but perhaps better *tt* < *št*), Arab *istaf^cala* (Xth form), Gz AST₁.
- (b) ‘Intensive’ (D-stem) and T-Reflexive, represented in: Akk tD, Ug (?), BAram *hiṭpa^cal*, Syr *etpa^cal*, Arab *tafa^cala* (Vth form), Gz T₂.

It should be noted, however, that the combination is in the first place a morphological one and that the semantic values of the relevant stems cannot simply be added. In particular, the combination of a Š- (or H-, or A-) causative and a T-reflexive hardly ever results in a ‘causative-reflexive’. The situation that has to be assumed for this (to cause s.o. to do s.th. with himself or to cause s.o. to do s.th. with oneself) is far too rare in everyday life to yield a lexically productive device. Instead the combination is used for a variety of semantic transformations in the individual languages, such as factitive, declarative, desiderative etc. (cf. Waltisberg 2001; Holes 2005).

3.1.8. Internal passive

Several of the classical Semitic languages have an internal passive, i.e. the morpheme of the passive voice is a vowel pattern different from the one of the active voice. For example, ClArab *ḏaraba* ‘he beat’/ḏuriba ‘he was beaten’ (‘apophonic’ passive, Retsö 1989, 20ff.): While Amurr shows no internal passive (Golinets 2010), the first traces of it are visible already in TAAkk (Rainey 1996, II 75–80, 179). Ug probably has it (see Tropper 2000a, 509–518 and Pardee 2003/2004, 254 with some reservations), as well as Sab (Stein 2003, 164–165). Hebr has an internal passive in the D-stem and H-stem. In the G-stem the internal passive is only partly productive (being mostly replaced by the N-stem) and detectable only with difficulty (Bauer/Leander 1922, 286; Retsö 1989, 30–48). Due to the defective writing system the situation in ANA is not certain, but there are indications that an internal passive did exist (Macdonald 2004, 515). In ClArab, the internal passive is very productive and is preserved to a certain degree also in the modern vernaculars (Dien 1987). Aramaic had an internal passive (cf. for OAram Degen 1969, 69ff.) although it was lost in later varieties and replaced by the T-stems, as e.g. in Syr. MSArab also shows clear traces of a productive internal passive:

Mhr has it in the G-stem (Rubin 2010b, 138–139). There are two branches of Semitic where the internal passive is totally absent: Akk and ES.

The vowel pattern of the passive in the PC is **-u-a-(a-)*, cf. the following examples:

TAkk *tù-da-ku[-n]a *tudākūna* ‘they will be killed’ (Rainey 1996, II 77), Ug *tùḥd* [**tu^(u)ḥadu*] ‘she will be conquered’ (Tropper 2000a, 510ff.), Hebr H-stem passive *yūqṭal/yoqṭal*, ClArab Ist form passive *yūqṭalu* ‘he gets killed’ or IInd form passive *yunaffaru* ‘he gets chased away’.

The vowel pattern of the SC differs. ClArab has the pattern **(-u)-u-i-*, cf. Ist form passive *qutla* ‘he was killed’ and Vth form *tu‘ullima* ‘it was learned’. Other languages follow the pattern **-u-a-* in the SC: Hebr *qutṭal* (D-stem passive) and *hu/oqṭal* (H-stem passive). The ESA orthography is not conclusive, but the Arabic onomastic tradition provides hints that at least Sab followed the *-u-a-* type: the Šuraḥbīl-case (i.e. Sab *s₂rḥb’l* ‘guarded by El’, cf. Müller 2010, 217). The situation in Ug SC is not clear. While the first vowel (*u*) seems fairly safe (Tropper 2000a, 519–518) it is not clear whether the Ug SC has *i* or *a* in the second syllable. The G-stem passive of Baram *kṭīb* (3M.SG), *kṭībāt* (3F.SG), *kṭībā* (2M.SG) is probably not a reflex of a ClArab-type *-u-i-* base (pace Lipiński 1997, 409), but a secondary formation from the passive participle. Brockelmann’s interpretation that the *ī* in the Baram passive is ‘lengthened under the influence of the participle’ (1908, 539) also seems difficult. The vowels of the passive in MSArab are difficult to assess and are not easily matched with either pattern.

All in all, the evidence points to the following result (notwithstanding quite a few factual errors basically in accordance with Kienast 2001, 258–260): The internal passive is not a PS phenomenon, but a CS one, perhaps stretching even to MSArab, although the present state of knowledge cannot exclude the possibility that the MSArab internal passive is an independent development. Despite the (partly) different vowel patterns CS passives probably have the same origin. The relative age of the attested forms points to a SC *-u-a-* / PC *-u-a-* vocalism (pace Brockelmann 1908, 537, who supposed an Arabic-type passive for Semitic).

3.2. Inflection

3.2.1. The prefix-conjugations

Based on the situation in Akk, MSArab and ES, two PCs are assumed that have the same set of affixes, PRT and PRS. The PS PRT is more or less directly reflected in Akk PRT (*iprus*), Ug. PC^S, Hebr PC^S (e.g. in *way-yiqṭal*), in the ClArab apocopatus (*yaf’al*), Gz JUSS (*yəktəl*) and probably in MSArab SUB (*yəktōb*). PS PRS is reflected in Akk PRS (*iparras*), Gz IMPF (*yəkättəl*) and probably in MSArab IMPF (*yəküṭəb*), cf. Kienast (2001, 196–202).

The consonants of the prefixes have proved extremely stable over the millennia. Concerning the vowels, two types may be seen: ClArab has an *a*-vowel in the prefixes of the G-stem, while most other languages have *i* or reflexes thereof. Akk has a mixed paradigm, so based on age and the principle of archaic heterogeneity (Hetzron 1976, 94–95) one can assume that the Akk vowels are the original ones and the situations in ClArab, Hebr etc. resulted from paradigmatic levelling (see for details Table 7.1).

Tab. 7.1: Affixes of the PCs in SG and PL with the most relevant paradigms for the reconstruction.

	PS PC	Akk		Gz		Mhr ²		Hebr PC ^s	ClArab Apocopat
		PRS	PRT	IMPF	JUSS	IMPF	SUB		
3M.SG	*yi- —	iparras	iprus	yəḳättal	yəḳtal	yəḳūtəb	yəḳtēb	yiqtol	yaf'al
3F.SG	*ta- —	taparras ¹	taprus ¹	təḳättal	təḳtal	təḳūtəb	təḳtēb	tiqtol	taf'al
2M.SG	*ta- —	taparras	taprus	təḳättal	təḳtal	təḳūtəb	təḳtēb	tiqtol	taf'al
2F.SG	*ta- — -ī	taparrasī	taprusī	təḳättali	təḳtali	təḳētəb	təḳtēbi	tiqf'li	taf'alī
1C.SG	*a- —	aparras	aprus	'əḳättal	'əḳtal	əḳūtəb	l-əḳtēb	'əqtol	'af'al
3M.PL	*yi- — -ū	iparrasū	iprusū	yəḳättalu	yəḳtalu	yəḳátəb	yəḳtēbəm	yiqf'lū	yaf'alū
3F.PL	*yi- — -ā	iparrasā	iprusā	yəḳättala	yəḳtala	yəḳátəb	yəḳtēbəm	tiqtolnā	yaf'alna
2M.PL	*ta- — -ū	taparrasū	taprusā	təḳättalu	təḳtalu	təḳátəb	təḳtēbəm	tiqf'lū	taf'alū
2F.PL	*ta- — -ā	taparrasā	taprusā	təḳättala	təḳtala	təḳátəb	təḳtēbəm	tiqtolnā	taf'alna
1C.PL	*ni- —	niparras	niprus	nəḳättal	nəḳtal	nəḳūtəb	nəḳtēb	niqtol	naf'al

¹ The 3F.SG disappears in the early Babylonian period (Kouwenberg 2010, 51).² The Mhr example is the Ga-stem in Omani Mehri (Rubin 2010b, 90).

Tab. 7.2: Key examples for the formation of the imperative

Language	Form	IMPT	PC ^S , 3SG	rem.
Akk	G, M.SG	<i>purus</i>	<i>iprus</i>	
	G, F.SG	<i>pursī</i>	<i>iprus</i>	
	G, M.SG	<i>piqid</i>	<i>ipqid</i>	
	G, PL	<i>piqdā</i>	<i>ipqidā</i>	
	D, M.SG	<i>purris</i>	<i>uparris</i>	
Hebr	G (<i>qal</i>), M.SG	<i>kʔbad</i>	<i>yikbad</i>	
	G (<i>qal</i>), M.PL	<i>kibdū</i>	<i>yikbʔdū</i>	
		<i>haqtel</i>	<i>yaqtel</i>	
Syr	G (<i>pʿal</i>)	<i>qtol</i>	<i>neqtol</i>	
	Caus (<i>apʿel</i>), M.SG	<i>aqtel</i>	<i>naqtel</i>	see PRF <i>aqtel</i>
ClArab	G (I st form), M.SG	<i>ifʿal</i>	<i>yafʿal</i>	prosthetic vowel
	Caus (IV th form), M.SG	<i>ʾafʿil</i>	<i>yufʿil</i>	see PRF <i>ʾafʿala</i>
	Gt (VIII th form), M.SG	<i>iftaʿil</i>	<i>yaftaʿil</i>	prosthetic vowel
Gz	G (Ø ₁) trans., M.SG	<i>kətəl</i>	<i>yəktəl</i>	
	Caus (A ₁), M.SG	<i>ʾaḳtəl</i>	<i>yakṯəl</i>	see PRF <i>ʾaḳtälä</i>

In the D-stems and the causatives the prefix has a *u*-vowel except where the prefix-vowels are levelled out (D-stem in Gz, D-stem in Syr, H-stem in Mhr; probably also Ug D and Š, cf. Tropper 2001a, 454 and 487) or where the causative has an *a/ā* < *-ā- < -*vha in the prefix (Hebr, Syr, Gz); but cf. the *u*-prefixes in Akk (D-PRS *ušapras* etc.), TAAkk (Rainey 1996, II 181 ff.) and ClArab (IInd form IMPF *yuqattilu*; IVth form *yuqtilu*). A *u*-vowel can probably be supposed for the proto-language in these cases.

The PC can safely be said to belong to the Afro-Asiatic inheritance of Semitic (Sasse 1980).

3.2.2. Imperative

Several features of the IMPT are strikingly identical throughout the Semitic languages. The IMPT exists only in the 2nd person. The IMPT cannot be negated (the exception in NENA is not relevant for PS); instead, the negated PC^S is supplanted. The basis of the IMPT-formation is the PC^S, but without a personal prefix; the suffixes are also identical. At the beginning of the word, an anaptyctic vowel must be inserted to avoid a word-initial CC-cluster in several stems. The vowel is either identical with the thematic vowel of the base (mostly in Akk), or identical with the vowel of the deleted prefix (also in Akk), or a reduced or neutral vowel (as in Hebr *shwa mobile* and Gz *a*); ClArab resorts to prosthetic vowels (as also in other cases of word-initial CC), see the examples in Table 7.2 (Brockelmann 1908, 544–554; Moscati 1964, 136–137, 156–157; Lipiński 1997, 366–367; Kienast 2001, 200–202).

As a development from the Akk strategies (thematic vowel/vowel of the stem-prefix) to those of WS (neutral anaptyctic vowel/prosthetic vowel) is easier to conceive, the PS IMPT was probably closer to the Akk system.

Tab. 7.3: Akk stative and West Semitic SC

	Akk STAT	Hebr PRF	CIArab PRF	Gz PRF
3M.SG	<i>zīkar</i>	<i>qāṭal</i>	<i>fa'ala</i>	<i>ḳātālā</i>
3F.SG	<i>zīkarat</i>	<i>qāṭ'lā</i>	<i>fa'alat</i>	<i>ḳātālāt</i>
2M.SG	<i>zīkarāta</i>	<i>qāṭaltā</i>	<i>fa'alta</i>	<i>ḳātālkā</i>
2F.SG	<i>zīkarāti</i>	<i>qāṭalt</i>	<i>fa'alti</i>	<i>ḳātālki</i>
1C.SG	<i>zīkarāku</i>	<i>qāṭaltī</i>	<i>fa'altu</i>	<i>ḳātālku</i>
3M.PL	<i>zīkarū</i>	<i>qāṭ'lū</i>	<i>fa'alū</i>	<i>ḳātālu</i>
3F.PL	<i>zīkarā</i>		<i>fa'alna</i>	<i>ḳātāla</i>
2M.PL	<i>zīkarātunu</i>	<i>q'ṭaltæm</i>	<i>fa'altum</i>	<i>ḳātālkæmu</i>
2F.PL	<i>zīkarātina</i>	<i>q'ṭaltæñ</i>	<i>fa'altunna</i>	<i>ḳātālkæn</i>
1C.PL	<i>zīkarānu</i>	<i>qāṭalnū</i>	<i>fa'alnā</i>	<i>ḳātālnā</i>

3.2.3. Secondary conjugations

3.2.3.1. Akk stative and WS SC

The ‘perfect’ (SC) denoting antecedent situations is, according to consensus among scholars, one of the most fundamental innovations of WS (Brockelmann 1908, 570–576; Moscati 1964, 132–134; Diem 1997; Stempel 1999, 101–102; Kienast 2001, 202–204). It probably evolved from a form similar to the Akk stative (see Table 7.3). The paradigms in the individual languages can largely be explained by paradigmatic leveling; e.g. ESA, MSArab and ES extended the *k* of the 1SG to the forms of the second person, while Arabic and NWS took the opposite path. But not all problems are so easily solved. For example, the Akk stative has no ending in the 3SG.M, while WS has an *-a* (wherever visible). Tropper (1999a) regarded the ending of the 3SG.M *-a* as PS and identical with the ending of the alleged nominal absolutive case. As the existence of the absolutive case itself is problematic (see 4.2.1.), this reconstruction is doubtful, although there is no plausible alternative suggestion.

3.2.3.2. WS IMPF terminating in *-u*

A ‘long’ PC with IMPF value, terminating in *-u* and with prolonged forms is a CS innovation. It is represented in Ug PC^L (e.g. *tqrū* ‘she shouts’ Tropper 2000a, 458), Hebr long PC^L (see H-stem 3M.SG *yaqtāl* vs. PC^S *way-yaqtel*) or CIArab IMPF (3M.SG *yaf'alu*, PL *yaf'alūna*). The genesis of Sab PC^L *yf'ln* is not clear (see 3.2.3.4.).

3.2.3.3. WS SUB terminating on *-a*

A volitive mood, formed by the PC^S with an *-a* ending in those positions where no other inflectional suffix is present, is attested in several CS languages. It is first attested

in TAAkk ('Volitive', as termed by Rainey 1996, II 254–263) as a nucleus of wishes and in dependent clauses expressing wishes, requests, commands and purposes. It is attested as a cohortative (1SG and 1PL) in Ug (Tropper 2000a, 725–726; *iqrā ilm* 'I will invoke the gods' KTU 1.23.1). But it is not clear whether the usage is actually restricted to the cohortative, or if other usages are simply not attested for orthographical reasons. In Hebrew the mood marked with *-ā* is restricted to the cohortative function (*n³natt³qā* 'let us burst ... asunder' Ps 2:3). In ClArab the subjunctive (*yaf³ala*) can only be used in specific syntactic environments; in subordinate clauses with certain conjunctions (with *'an* 'that': *lā ya'ba kātibun 'an yaktuba* 'nor should the scribe refuse to write' (lit. NEG refuse.3.SG writer.NOM that write.SUB) Q 2:282; see Wright 1896–1898, II 24–35) and with the negation *lan*, indicating a somewhat stronger commitment by the speaker than other negations (Bergsträsser 1914, 16; e.g. *wa-lan 'ağida min dūni=hī multahadan* 'I can't find any refuge besides him.', lit. and-NEG find.1.SG.SUB PREP PREP=PRON refuge.ACC, Q 72:22).

Both Lipiński (1997, 353) and Kienast (2001, 289) suggest that both the energetic mood and the subjunctive are connected with the ventive of Akkadian (*-a(m)*). Although this is not impossible, in view of the functional differences between these moods and the ventive which is ultimately a deictic category, this is far from safe. This view is corroborated by D. O. Edzard (1977, 49) and Pedersén (1989, 433ff.), who highlight the impact of Sumerian language contact for the function of the ventive, making it difficult to assume its existence for Proto-WS (which would have been a prerequisite for the ventive-*yaf³ala*-equation).

3.2.3.4. Energetic mood

The energetic mood is a grammaticalisation of strong commitment on behalf of the speaker (ClArab *la-yaqūlunna llāhu* 'verily, they will say: "God!"' Q 29, 61) or as a volitive mood (*šmm šmn tmṛn* 'the heavens shall rain oil!' KTU 1.6:III:6f.). It is marked with a suffixed *-(a)n(na)*.

The energetic mood is attested first in Early NWS (Tropper/Vita 2005, but see the critique of Rainey 2008). It is amply attested in Ug, where it is used not only on PC, but also on IMT and SC (Tropper 2000a, 730–734), and traceable in Hebr as the '*nūn* energicum' (Gesenius/Kautzsch 1909, 165, e.g. *kī-tizk³raennū* 'that you take thought of him?' Ps 8:5). In ClArab it is very productive in two variants, energicus I (*yaf³alanna*) and energicus II (*yaf³alan*), but the '*nūn mu'akkida*' can also be used with the IMPT (*bi-llāhi qribanna* 'strike by God!' Wright 1896–1898, II 44). In Sab, the PC^L also has an *-n*-suffix (*yqṭln*) that superficially resembles the energetic mood. Nebes (1994, 193) is very sceptical of a possible connection between the Sab *n*-PC and the energetic mood both for semantic as well as morphological reasons (see also Stein 2003, 167). Gz has no trace of the energetic mood. It remains an open question as to whether the *-ən* of the conditional in Mhr has anything to do with the energetic mood.

As Akk has no energetic mood and the Akk ventive only counts as a parallel 'formally' (Tropper 2001a, 730), it seems that the energetic mood is a CS innovation (*pace* Zaborski 1996a, 72); see further Zewi (1999).

4. Nominal morphology

4.1. Derivation

The vast majority of Semitic nouns can be attributed to a rather limited set of noun patterns (Barth 1894; Brockelmann 1908, 335–404; Eilers 1964–1966; Moscati 1964, 76–83; Lipiński 1997, 209–228; Kienast 2001, 69–126). Fox (2003) reconstructed the following patterns as PS: **qal*, **qil*, **qul*, **qatal*, **qatil*, **qatul*, **qatāl*, **qatīl*, **qatūl*, **qutul*, **qutūl*, **qital*, **qital*, **qitāl*, **qutāl*, **qātil*, **qattāl*, **qattīl*, **qattūl*, **quttāl*. Fox excludes augmented patterns from the notion ‘pattern’ in most cases: ‘Afformatives and affixes are not considered part of the pattern if they are an isolable morpheme, one that can be added to forms that have a meaning without it’ (2003, 39). The most relevant afformatives in nominal derivation in Semitic are: **ma-*, **mi-*, **mu-*, **ta-*, **ti-*, **a-*, **i-*, **u-*, **-ān*. But apart from these wide-spread elements, patterns like **maqal* ‘*nomen loci*’ can also be reconstructed. In this example the following evidence is relevant: Akk pattern *mapras* (e.g. *maškanum* ‘place’); Hebr pattern *maqāl* (< **maqāl*; e.g. *ma^arāb* ‘West’); ClArab pattern *maf^a / il* (e.g. *maskan* ‘place of living’, *mašgid* ‘place of prostration’). On the other hand, Gz *nomina loci* have the pattern *māktal* (< **muliktāl*; e.g. *mašrak* ‘East’). The topic requires further investigation.

A field where nominal derivation is also relevant is the ‘derivational plural’ in several Semitic languages, where the plural of a noun is formed from the same root as the singular but by a different pattern, e.g. ClArab *ḥimār* ‘veil (SG)’ vs. *ḥumur* (PL), in contrast to the ‘inflectional plural’, that works with suffixes (see 4.2.3.). Other technical terms are ‘internal plural’ (vs. ‘external plural’) or ‘broken plural’ (translated directly from the *ḡam^c mukassar* of the Arabic tradition; vs. ‘sound plural’, translated from *ḡam^c šaḥīḥ* or *ḡam^c sālim*). The derivational plural (with but few exceptions) is only used for masculine nouns. In every language that has the derivational plural, there are also noun types that require the inflectional plural, e.g. the participles of the derived stems in ClArab. For useful overviews on the patterns see Barth (1894, 417–483) and Murtonen (1964).

There are patterns that are exclusively used as PL patterns (e.g. *ʾafʿāl* in ClArab). Others are not specific: e.g. *fuʿl*, that is used as a basic noun pattern (e.g. *ḥusn* ‘beauty’), but can also form plurals to *ʾafʿalu*-forms (SG *ʾaḥmar* ‘red’, PL *ḥumr*). The derivational plural is only partly predictable. In ClArab, e.g. *fuʿʿāl* and *fīʿāl* are preferred PL patterns for *fāʿil* nouns (e.g. *kāfir* ‘unbeliever’, PL *kuffār* and *šāhib* ‘companion, PL *šihāb*), but these are lexicalized for specific nouns. It is a common phenomenon for a specific noun to have more than one PL pattern, e.g. Gz *sayf* ‘sword’, PL *ʾasyāf* and PL *ʾasyaft*. In poetry PL patterns can occur that are unattested for the specific word in prose (for ClArab see Ullmann 1966, 115).

The derivational plural is productive in Arabic, including ANA (Macdonald 2004, 504), in ESA, MSArab and NES. Although many PL patterns are attested in several or all languages that have the internal plural, quite frequently they use different PL patterns for specific cognate lexemes, e.g. the words for ‘head’ (PS **raʿs₁*): ClArab *raʿs*, PL *ruʿūs*, Sab *rʿs₁*, PL *ʿrʿs₁*, Gz *rəʿas*, PL *arʿast*. The result is that the PL pattern of a specific lexeme is not necessarily an inherited feature.

It has been discussed whether Hebr plurals of segolate nouns like *m^olākīm* ‘kings’ (SG *mélæk*), *qodāšīm* ‘holies’ (SG *qodāš*) and *n^odārīm* ‘vows’ (SG *nédær*), all showing an *a*

after the second consonant, that can hardly be explained with prosodic arguments, are in fact internal plurals with a pleonastic external plural ending (Brockelmann 1908, 430). Greenberg (1955) went as far as to equate this *-a*-morpheme with certain plural morphemes in Berber and Chadic languages, which would mean that it is part of Proto-Afro-Asiatic.

The attestation of the derivational plural is relevant for several questions. For the older classification of the Semitic languages the internal plural was one of the diagnostic isoglosses for South Semitic. The problem that SES has no internal plurals was, rather unsatisfying, explained as that they were lost in the SES subgroup. The modern, post-Hetzronian classifications, based more on the verbal system, largely ignore the internal plural (see ch. 9). The fact that internal plurals do not occur in Akk make it hard to believe that they are a PS phenomenon (*pace* Ratcliffe 1998, 221, 230–241). A possible solution for these conflicting isoglosses is to assume that the internal plural is a secondary feature that spread by areal diffusion. The question of the Afro-Asiatic *a*-plurals must therefore remain open for the present.

4.2. Inflection

4.2.1. Case

On the basis of Akk, Amurr, Ug, ClArab and Gz data the paradigm of the SG can be reconstructed quite safely: NOM **-u*, GEN **-i*, ACC **-a* (Brockelmann 1908, 459–460; Lipiński 1997, 259–261).

The so-called diptote inflection (NOM *-u*, GEN/ACC *-a*) for certain classes of nouns, is present in ClArab and traceable in Ug (Troppe 2000a, 304–305) and might be a feature of Proto-Central-Semitic, but certainly not of PS. Lipiński's arguments for labelling the diptote inflection the 'ergative' declension (1997, 254–258) are not convincing. The PL has only two case endings (PL.M.NOM *-ū*, GEN/ACC *-ī*; PL.F.NOM *-ātu*, GEN/ACC *-āti*).

Aside from this simple paradigm, further markers of case-roles have been discussed.

- (1) A locative **-u* (or better **-ū*, see Waltisberg 2002, 21) is productive in Akk and traceable in other languages (Aartun 1993 as 'adverbial case'; Lipiński 1997, 261; Kienast 2001, 172–173).
- (2) The terminative 'case' of Akk *-iš* is certainly to be connected with the Ug terminative *-h* (e.g. *ārṣh* 'towards the earth') and the '*hē* locale' in Hebr (*'arṣā miṣrāyim* 'to the land of Egypt' Ex 4, 20).

These postpositional elements were dubbed by Kienast (2001, 129 and 168–180) the 'old nominal inflection of Semitic' in opposition to the 'normal inflection' (i.e. the *u-i-a*-system). His reconstruction can, however, be followed only partly, as he conflates these case-role marking adpositions together with elements of word-formation like the suffix **-ūt* (abstract nouns) or the termination of the relational adjective ('*nisba*') **-īy*. The conclusion he draws from this reconstruction that Early Semitic originally had ergative syntax, is therefore based on invalid assumptions.

On the basis of evidence from ClArab (1999b), Gz (2000b) and TAAkk (2002, 164–165) Troppe reconstructed an 'absolute case' for PS. This view was challenged with

good reason by Waltisberg (2002, 22–34), on the basis of typological arguments (cf. also Waltisberg 2011).

After the case endings, various *-m* or *-n* endings are attached under certain conditions in the individual languages (although not in the construct state!), cf. Akk *šarrum* ‘the/a king’; Hebr *d^hbārīm* ‘words’ (indet.) / *had-d^hbārīm* ‘the words’; ClArab *baytun* ‘a house’ / *baytu r-raġūli* ‘the house of the man’; Sab *ġlmm* ‘a boy’, *ṭny ṣlmm* ‘two statues’, *hwt ymn* ‘this day’ (Stein 2003, 82–86). For the intricate diachronic interplay of number, state and definiteness, see Diem (1975).

4.2.2. Gender

Semitic languages have two grammatical genera, M and F. The marker of the M is Ø, and the marker of the F is **-at-*, with the reduced allomorph *-t* (Akk and Gz) or the allomorph *-ah/-ā* (esp. in NWS and Arabic). See Kienast (2001, 131–134).

No trace exists of a neuter, although it has repeatedly been claimed that Semitic had a fossilized marker of the noun class ‘wild animal’ **-b*, reflected in words such as Arabic *ġurāb* ‘raven’ or Hebr *šū‘āl* / ClArab *ta‘lab* ‘fox’ (cf. inter alia Vycichl 1935, 87; Lipiński 1997, 234, and Haelewyck 2006, 146). This claim has been discredited by the statistical analysis of Militarev/Kogan (2005, LXXXII–LXXIV) which shows (among other aspects) that only 7% of all PS animal names have a **b* at the end. As **b* is much more frequent in the whole phonological system than, for example, **ṣ* or **ġ*, the statistic is significant. Furthermore, the ‘grammatical gender comprising names of the parts of the body’ with the ‘postpositive determinant *-n*’ as claimed by Lipiński (1997, 235) seems unfounded on similar grounds. It is therefore safe to say that Semitic was never a classifier language of the Bantu-type: even more so, as no evidence of concord for either of the alleged noun-class-markers has been adduced.

4.2.3. Number

Three inflections of number can safely be reconstructed for PS: SG, PL and DU. The DU was originally restricted to nouns. Hebr represents the original situation in this respect (*pace* Lipiński 1997, 289). Languages like Aram and Gz that do not have a productive DU still preserve morphological traces of it (cf. the numeral *trēn* (< **ṭrayn*) in Syr; or the noun *ḥaq^{we}* ‘loin’ (< **ḥaqway*) in Gz, Heide 2006). The transfer of the DU morphemes to verbs and pronouns in ClArab is secondary, as is the situation in Ug and Mhr, where even 1st person DU forms exist (already noted by Wagner 1952).

For the inflection of the PL, see 4.2.1. On the ‘derivational plural’, see above 4.1. See further Tropper (2004) and Hasselbach (2007).

4.3. Numerals

PS numerals can be reconstructed with relative ease. Examples where a numeral is replaced by a new lexeme, like Ug *št* ‘one’ or Gz *kəṭe* ‘two’ (< **kil^p=ay* ‘both=DU’), are rare. Some assimilations exist, as in the case of Arab *talāt* ‘three’ (< **s₂alāt*), while

in other cases analogy is operative, as in Syr *hammeš* (M)/*hammšā* ‘five’ (< **hams*₁, **hams*₁=*at*) that was adapted to the syllable structure of *arba*’/*arb*’*ā* ‘four’ (Diem 1989, 68–72; Spitaler 1998, 105), but the picture is, on the whole, clear (Brockelmann 1908, 484–492; Lipiński 1997, 280–296; Kienast 2001, 181–186). For examples, see the cardinal numbers in Table 7.4.

Tab. 7.4: Semitic masculine cardinal numbers of the first decade with the most relevant source languages for reconstruction

PS	Akk	Ug	Arab	Sab	additional evidence
1	* <i>aḥad</i> -	(<i>ištēnum</i>)	<i>āḥd</i>	<i>wāḥidun</i>	<i>’ḥd</i>
2	* <i>tinān</i>	<i>šena/šina</i>	<i>tn</i>	<i>ignāni</i>	<i>tny</i>
3	* <i>s₂alāt</i> -	<i>šalāšum</i>	<i>lṭ</i>	<i>talātun</i>	<i>s₂lṭ</i>
4	* <i>arba</i> ’-	<i>erbūm</i>	<i>ārb</i> ’	<i>’arba’_{un}</i>	<i>’rb</i> ’
5	* <i>hams</i> ₁ -	<i>ḥamšum</i>	<i>ḥmš</i>	<i>ḥamsun</i>	<i>ḥms₁</i>
6	* <i>s₁idṭ</i> -	<i>š¹/₆ššum</i>	<i>lṭ</i>	<i>sittun</i>	<i>s₁dt/s₁ṭ</i>
7	* <i>s₁ab</i> ’-	<i>sebūm</i>	<i>šb</i> ’	<i>sab’_{un}</i>	<i>s₁b</i> ’
8	* <i>ṭamāniy</i> -	[<i>sam-ānūm</i>]	<i>ṭmn</i>	<i>ṭamānin</i>	<i>ṭmny/ṭmn</i>
9	* <i>tis</i> ₁ ’-	<i>tīšūm</i>	<i>tš</i> ’	<i>tis’_{un}</i>	<i>ts₁</i> ’
10	* <i>as₂r</i> -	<i>ešrum</i>	<i>’šr</i>	<i>’ašrun</i>	<i>’s₂r</i>

The peculiar syntax of the cardinal numbers (‘gender polarity’) is difficult to explain (Brugnatelli 1982). For the cardinal numbers of the first decade in an Afro-Asiatic framework, cf. Blažek (2001).

5. Pronominal and deictic elements

5.1. Independent personal pronouns

Brockelmann’s (1908, 297–306) classical reconstruction of PS independent personal pronouns is as follows: **anā* (1SG), **niḥnū* (1PL), **antā* (2M.SG), **antū* (2FSG), **antumū* (2M.PL), **antinnā* (2F.PL), **hū’a* (3M.SG), **šī’a* (3F.SG), **humū* (3M.PL), **šinnā* (3F.PL). This reconstruction allows for derivation of the forms of the individual languages by several processes of levelling. For example, the distribution of 3rd person pronouns with **š/s₁* in some languages like Akk (SG *šū*, *šī*, PL *šunu*, *šina*), Qat (*s₁* 3M.SG etc.) vs. *h* (> *’*) in other languages (e.g. ClArab *huwa*, *hiya*, PL *hum(u)*, *hunna*) can be explained by simple analogy. The **’* in the 3rd sg. forms explains the orthography of the Hebr forms אָנִי and אַתָּה as well as the glottal stop in Gz forms *wə’atu* (3SG.M) and *yə’ati* (3F.SG). The loss of the intervocalic glottal stop in favour of *w* and *y* in forms like ClArab *huwa* (3M.SG) and *hiya* (3F.SG) is also a simple process. The reconstruction is allegedly corroborated by MSArab forms like *hē* ‘he’ and *sē* ‘she’ (Rubin 2010b, 31). Bergsträsser (1928, 7) largely followed this reconstruction with the most noticeable exception being that he reconstructed Brockelmann’s final anceps vowels as long. Preservation and quantity of final vowels in the attested languages seems to be governed more by the need to preserve gender distinction than by sound laws; so both recon-

structions do make sense. As forms of the 1st sg. with *-k-* occur in Akk (*anāku*), Ug (*ʾānk*) and Canaanite (e.g. TAAkk *a-nu-ki*, Hebr *ʾanōkī*), these forms are perhaps better classified as archaisms and not as secondary pleonastic forms (cf. already Barth 1913, 4). In summary, Brockelmann's reconstruction maintained its canonical status for a long time.

D. O. Edzard (1984) raised doubts based on the observation that F forms should have **š* instead of the observable *s*. Voigt (1987) challenged the assumption of a PS **š/*h* opposition in the pronouns with the observation that an identical distribution can be found in the causative stems (the older languages having *š*-causative, with the younger having *h-* or *ʿ*-causatives) and other morphemes. We must therefore assume that PS 3rd person pronouns probably had **š*.

Lipiński (1997, 289) reconstructs a series of PS dual pronouns on the basis of Arab, Mhr and inferred oBab forms. This is hardly convincing (see 4.2.3.).

5.2. Oblique independent personal pronouns

PS must also have had a series of independent personal pronouns in oblique case (Lipiński 1997, 300; Kienast 2001, 48), although not yet recognized by Brockelmann (1908), cf. the forms of the 3rd pers. masc.: *šūātī/u* (Akk), *hwt* (Ug), *hwt* (Sab) *s₂w₂t* (Qat). All oblique forms share a *t*-element (with the exception of the Akk dative pronouns that are probably not PS). The pronouns *wəʾātu* (3SG.M) and *yəʾati* (3SG.F) in Gz are obviously derived from the oblique series, and the plural pronouns *ʾəmntu* (3PL.M) and *ʾəmantu* (3PL.F) also have a *t*. The series of Gz personal pronouns therefore probably originates from a syncretism of the nominative and oblique series. Tropper (2001b) interprets the gender-indifferent usage of the 3M.SG pronoun *hū(?)* as a remnant of the oblique independent personal pronoun.

5.3. Clitic personal pronouns

The clitic personal pronouns can be found in all Semitic languages. In most languages they replaced the oblique independent personal pronouns. At the verb, they serve as direct or indirect objects, at nouns, they have a genitival function. Hence they are also applied to prepositions.

Bergsträsser reconstructs the clitic pronouns as **-ya/*-ī* (1SG, at nouns), **-nī* (1SG, at verbs), **-kā* (2SG.M), **-kī* (2SG.F), **-hū* (3MSG), **-šā* (3FSG), **-nā* (1PL), **-kumū* (2M.PL), **-kinnā* (2F.PL), **-humū* (3M.PL), **-šinā* (3F.PL). The forms of the 3rd person of the independent pronouns and those of the clitics are related and clearly have the same source. The forms of the 1st and 2nd persons differ. For the **š/*h*-opposition in the 3rd person, the same objections apply as with the independent pronouns (see 5.1.). The clitic pronouns require connecting vowels especially when affixed to forms ending in consonants (Hetzron 1969).

5.4. Demonstrative elements

It is difficult to reconstruct PS demonstratives safely, but several elements can be identified that occur time and again in different combinations as Semitic demonstratives,

esp. the following: **hā*, **dā*, **la*, **li*, **k*, **lī*, **n* (Barth 1913, 72–89; Brockelmann 1908, 316–323; Lipiński 1997, 472–474; Kienast 2001, 49–51).

In WS relative particles like Syr *d-/da-*, ClArab *allaḏī* etc., or Gz *zä-* are derived from deictic elements. The reconstruction of a PS relative particle is not possible.

5.5. Article

Several attempts have been made to reconstruct a PS article (recently Voigt 1998 and Zaborski 2000), but it is probable that the Central Semitic article arose only in the late 10th ct. B.C. and is thus to be regarded as a West-Semitic innovation (Gzella 2006). The same holds for the various types of articles in modern Ethio-Semitic languages (Weninger 2001, 1766–1767; Rubin 2010a). The MSArab article is tentatively interpreted by Sima (2002) ultimately as borrowed from the North-Arabic article **al-*.

6. Particles

6.1. Prepositions

Due to their straightforward syntax (PREP + GEN), prepositions in Semitic form a class rather open for innovations. New prepositions can be formed easily by putting nouns in the construct state of the accusative (Lipiński 1997, 465–470), like e.g. ClArab *bayna* ‘between’ < *baynun* ‘separation; interval’. While several prepositions can be reconstructed for PWS (**bi-* ‘in’, **la-* ‘to’, **alay* ‘on’, **min* ‘from’ etc., Brockelmann 1908, 494–499; Voigt 1999), hardly any prepositions left traces both in Akk and WS and can therefore be safely stated for PS (Kienast 2001, 391–394). The only exception seems to be **ad* ‘until, to’ (local and temporal) that Sima (1999/2000) reconstructed on the basis of Akk *’adi*, Ḥaḍramawtic *’d* ‘to, until’, Ḡibbālī *’éd* ‘to (local)’, *’ed* ‘until’, Soqotri *’id* ‘to’, Ḥarsūsi *wedé* ‘to, after (local)’, (Old-)Amh *wādā* ‘to, towards’.

6.2. Conjunctions

Only three conjunctions can be regarded as PS, as their reflexes occur both in Akk and in one or more WS languages:

- (1) **wa* ‘and’ (Akk *u*, Hebr *wa-/w-/ū-*, ANA *w-*, ClArab *wa-*, Sab *w-*, Gz *wä-*, etc.; Eksell 1999)
- (2) **’aw* ‘or’ (Akk *ū*, Hebr *’ō*, Aram *’aw* > *’ō*, ClArab *’aw*)
- (3) **šimmā* ‘if’ (Akk *šumma*, Hebr *’im*, Sab. *hmy*, ANA *’n* ClArab *’in*, Gz *’ammä*; Voigt 1995)

While **pa-* ‘and, then’ was dubbed by Garbini (1957) a ‘Semitic’ conjunction, Nebes (1995, 255–270) has shown that it is purely CS.

6.3. Adverbs

Most Semitic languages have productive strategies to form adverbs from adjectives and nouns, for example the adverbial ending *-iš* in Akk (*šapliš* ‘down’), *-(‘)īl* in Syr (*šappīr-āīl* ‘beautifully’) or the (indefinite) accusative in Akk (*ūmam* ‘by day’) or ClArab (*‘abadan* ‘always’), cf. Moscati (1964, 120) and Lipiński (1997, 453ff.). Aside from this, no adverbs can be reconstructed as PS, with the exception of interrogative ‘adverbs’ (Brockelmann 1908, 328), see 6.4.

6.4. Interrogative particles, negation and miscellanea

Several interrogative elements can be reconstructed to a certain degree:

- (a) Interrogative particles frequently involve **‘ay-*, cf.: Ug *īy*, Hebr *‘ayyē*, Syr *‘aykā*, ClArab *‘ayna*, Gz *‘ayte* ‘where’ and Akk *ayyum* (etc., von Soden 1995, 213), ClArab *‘ayyu* ‘which’.
- (b) **man* ‘who’, cf. Akk *mannum* ‘who’, Syr *man* ‘who’, ClArab *man* ‘who’ Sab/Qat *mn* (rel. pron.), Mhr *mōn*, Gz *mānnu* ‘who’ (ACC *mānnā*).
- (c) **matī/ay* ‘when’, cf. Akk *mati* ‘when’, TAAkk *ma-ti-mi* (Rainey 1996, II 115), Hebr *māṭay*, Syr *emmaṭ* <‘mty>, ClArab *matā* (مَتَى), Mhr *mayt*.

The diachronic relationship between interrogatives and negations has been studied by Faber (1991). Three primary particles of negation are attested:

- (a) **‘al/ul*: Akk *ul*, TAAkk *ul* (Rainey 1996, II 207), Ug *āl*, Phoen *‘l*, Hebr *‘al(-)*; OArām *‘l* (Degen 1969, 64), Sab/Qat *‘l*, Mhr *əl ... lā* (Rubin 2010b 264), Gz *‘al-* (in *‘al-bo* ‘there is not’).
- (b) **‘iyV*: Phoen *‘y*, Gz *‘i-*.
- (c) **lā*: Akk *lā*, Ug *l* (syll.: *la-a*), TAAkk **lā* (Rainey 1996, II 206), Hebr *lō* (לוֹ), OArām *l* (Degen 1969, 64), Syr *lā*; ClArab *lā*.

The alternation of **‘al* and **lā* is probably conditioned syntactically. That **‘iyV* is a phonetic variant of **‘al* cannot be excluded.

Furthermore, the following particles are noteworthy:

- (a) A ‘nota accusativi’ **‘iyā-/‘kīyā-* used with clitic pronouns can be reconstructed for WS on the basis of data from Hebr, Moab, Arām, Arab, Gz, etc. (Correll 1994). Its precise form is hard to determine (Testen 1997–1998), but lack of Akk attestation suggests that it is a purely WS particle (see further Khan 1984).
- (b) Assertive *la-/li-* has been dealt with extensively by Testen (1998b).

Abbreviations:

ACC = accusative, Akk = Akkadian, Amh = Amharic; Amurr = Amurrite, ANA = Ancient North Arabian, Arab = Arabic, Arām = Aramaic, BArām = Biblical Aramaic, C = any consonant, ClArab = Classical Arabic, CS = Central Semitic, CST = construct state, DU = dual, ESA = Epigraphic South Arabian, ES = Ethio-Semitic, F = feminine, GEN = genitive, Gz = Gə‘əz (Classical Ethiopic), Hebr = (Biblical) Hebrew, IMPF = imperfect, IMPT = imperative, INF = infinitive, JUSS = jussive, KTU = Dietrich/Loretz/Sanmartín (1995), M = masculine, mBab = Middle Babylonian, MHebr = Modern Hebrew, Mhr = Mehri, Moab = Moabite, MSArab = Modern South

Arabian, MStArab = Modern Standard Arabic, NEG = negation, NENA = North East Neo-Aramaic, NES = North Ethio-Semitic, NOM = nominative, NWS = North West Semitic, OAram = Old Aramaic, oBab = Old Babylonian, OBJ = object, PC = prefix conjugation, PC^L = prefix conjugation (long), PC^S = prefix conjugation (short), Phoen = Phoenician, PL = plural, PREP = preposition, PRF = perfect, PRS = present, PRT = preterite, PS = Proto-Semitic, PWS = Proto-West-Semitic, Q = Qurʾān, Qat = Qatabanian, REL = relative particle, rt. = root, Sab = Sabaeen, SC = suffix conjugation, SES = South Ethio-Semitic, SG = singular, STAT = stative, SUB = subjunctive, Syr = (Classical) Syriac, TAAkk = Tell ʿAmārna Akkadian, Ug = Ugaritic, V = any vowel, WKAS = *Wörterbuch der klassischen arabischen Sprache*, WS = West Semitic.

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8. Proto-Semitic Lexicon

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Abstract

This chapter provides an introduction to the Proto-Semitic lexicon, including the basic principles for the reconstruction of Proto-Semitic vocabulary as well as history of its investigation, and a detailed presentation of eight semantic groups belonging to the basic lexicon of Proto-Semitic. Altogether, some 450 proto-forms belonging to different strata of reconstruction (proto-Semitic, proto-West Semitic, proto-Central Semitic) are presented, along with lexicographic references and, when necessary, textual and philological notes. Special attention is paid to the evolution of the proto-language vocabulary in the individual daughter tongues, as well as to the impact of lexical borrowing. The chapter closes with a discussion of the lexicon as a tool of genealogical classification.

1. Introduction

1.1. Purpose and scope

The present outline aims to provide an up-to-date introduction to the lexical reconstruction of Proto-Semitic (PS). Reconstructions are arranged by semantic groups, such as body parts, animals, plants, colors, etc. This method of organization was chosen for convenience in spite of the fact that inclusion of certain terms in one particular semantic field is often conventional. Space and time constraints do not allow presentation of the PS vocabulary in its entirety, but the semantic groups selected for detailed description (altogether some 450 concrete lexical reconstructions) provide a sufficiently deep insight into the nature of the reconstructed vocabulary. Throughout this chapter, the description is not limited to the reconstructed PS vocabulary in its static form. Rather, we will also deal with its evolution in the principal daughter languages. Which PS terms are preserved – both formally and semantically – more or less throughout Semitic? Which ones – and where – are marginalized or lost altogether? Where do ‘new words’ for this or that basic concept come from? A systematic approach to these difficult

questions is of prime importance for our understanding of the PS lexicon as a dynamic structure remarkably persistent during several millennia of the linguistic history of Semitic.

1.2. History of research

Lexical reconstruction of Proto-Semitic has never been the focus of Semitological scholarship. This lack of attention, perhaps due to a widespread perception of Semitic languages as closely related dialects of one language (which, consequently, needs no lexical reconstruction at all), easily explains the deplorable lack of comprehensive and reliable tools of comparative Semitic lexicography – especially in comparison to what has been long available in sister branches of comparative linguistics such as Indo-European, Uralic, Kartvelian and Altaic. Students wanting to gain some idea of the PS lexicon must content themselves with three categories of palliatives, briefly outlined below.

1.2.1. Studies specifically dealing with PS lexical reconstruction

An ideal representative of this category would be a complete etymological dictionary of Semitic, which, at present, does not exist. The closest approximation is found in a series of articles by Pelio Fronzaroli (1964–1971) under the general title ‘*Studi sul lessico comune semitico*’. This collection, rarely used by Semitists in spite of its truly outstanding merits, is in many respects equivalent to a real etymological dictionary for the semantic groups under scrutiny (anatomy; religion; natural phenomena; alimentation; natural environment; agriculture and animal husbandry). It is on Fronzaroli’s work, with its sound methodology and dozens of formal and semantic insights, that the present overview is largely based. The ‘Semitic Etymological Dictionary’ (SED) by Alexander Militarev and Leonid Kogan provides a detailed reconstruction for two fields of basic vocabulary, anatomy (2000) and fauna (2005). Its further volumes (notably, one dealing with plant names) are currently in preparation. The ‘*Dictionnaire des racines sémitiques*’ (DRS) by David Cohen and his team is not primarily oriented towards PS reconstruction, being rather an exhaustive collection of etymologically related nominal and verbal lexemes attested in individual Semitic languages. This valuable tool, appearing since 1970, now covers about one third of the alphabet. A few other studies, notably T. Nöldeke’s classic investigation of PS biconsonantal nouns (1910) and G. Bergsträsser’s list of PS lexical reconstructions (1928) should also be mentioned.

1.2.2. Comparative-historical dictionaries of individual Semitic languages

At present, very few Semitic languages can boast real etymological dictionaries. Neither Arabic, Akkadian, nor Syriac, or even Biblical Hebrew has a special etymological dictionary comparable to what is available for nearly every Indo-European language, let alone pillars of comparative IE studies such as Latin, Greek, Sanskrit and Gothic.

The few lucky exceptions are associated with the name of one scholar, the recently deceased Wolf Leslau, who in 1938 published his ‘Lexique Soqotri’ clearly oriented towards etymological analysis. This outstanding contribution was followed by no less important etymological dictionaries of Ethiopian Semitic languages: Harari (1963), Gurage (1979) and Geez (1987). Lack of special etymological dictionaries is only partly mitigated by the old Semitological tradition of including comparative evidence in descriptive dictionaries of particular languages. The amount of such information can vary from brief indications in W. von Soden’s ‘Akkadisches Handwörterbuch’ to lengthy digressions in ‘Hebrew and Aramaic Lexicon of the Old Testament’ by L. Koehler and W. Baumgartner, but one should always keep in mind that etymology is not the primary purpose of such dictionaries but rather a piece of auxiliary information at best.

1.2.3. Comparative-philological lexical studies in particular Semitic languages

Philological investigations of various semantic groups of the lexicon of individual Semitic languages have often been accompanied by extensive and sometimes deeply original etymological discussion. Early studies representing this trend include F. Hommel’s book on animal names in Arabic and Geez (1879), H. Holma’s overview of Akkadian names of body parts (1911) and B. Landsberger’s treatise on Akkadian animal names (1934). It is worth noting that in spite of their venerable age, none of these classic studies has been completely superceded. A major achievement of more recent decades (when this type of study has in fact become a rarity) is a first-rate investigation of Epigraphic South Arabian *realia* by A. Sima (2000).

1.3. Structure of protoforms

In agreement with Fronzaroli 1963 and 1964, 11–12, reconstructed nominal lexemes of PS will be presented in their vocalized form, thus **kalb-* (and not **klb*) ‘dog’. Advantages and limitations of this practice are extensively discussed in Kogan 2005a. At the same time (and at variance with Fronzaroli’s studies), no attempt is made to reconstruct the thematic vowel of PS verbal roots, although in principle such a reconstruction seems possible for a considerable number of verbs (Frolova 2003).

1.4. Stratification of reconstructions

Each reconstruction below is marked as PS (Proto-Semitic), PWS (Proto-West Semitic) or PCS (Proto-Central Semitic). This chronological evaluation, indispensable from both linguistic and cultural-historical points of view, is based on the widely (if not universally) acknowledged pattern of genealogical classification of Semitic once proposed by Otto Rössler (1950, 511) and further developed by Robert Hetzron (1974). In practice, a reconstruction is considered Central Semitic if it is sufficiently well attested in Ugaritic, Hebrew, Aramaic, Arabic and ESA, but not elsewhere. A Proto-West Semitic term is one reliably attested in Central as well as in Ethiopian Semitic

and/or Modern South Arabian, but not in Akkadian. A Proto-Semitic reconstruction is one based on the evidence of Akkadian and some West Semitic language(s). In each case, bilateral comparisons of data from languages in contact (Akkadian-Aramaic, Arabic-Geez, Arabic-MSA etc.) are avoided in view of the high probability of lexical borrowing.

1.5. Presentation of the lexical evidence

For every reconstruction in this chapter, detailed lexicographic references are provided. This practice serves to introduce the reader to the basic tools of Semitic lexicography (both descriptive and comparative) as well as to eliminate doubtful lexical items or ghost-words. An exception has been made for anatomic and faunal terms whose presentation usually relies on the respective volumes of SED, where all pertinent textual and lexicographic references can be easily located.

Lexical evidence from some branches of Semitic is often restricted to one representative language even if a particular PS term is in fact attested in other languages of the branch. Thus, Syriac and Geez typically represent Aramaic and Ethiopian Semitic respectively. Due attention is given to the lexical evidence from Ebla (in agreement with Krebernik 1996, this evidence will be presented together with the Akkadian one, with possible WS peculiarities emphasized when necessary).

No attempt will be made to coordinate the results of PS lexical reconstruction with the evidence from non-Semitic Afroasiatic languages: feeling unable to pronounce a competent independent judgment, we prefer not to rely on the existing tools of comparative Afroasiatic lexicography. Similarly, internal reconstruction (i.e., derivation of basic nominal concepts – *nomina primitiva* of traditional Semitic grammar – from supposedly more basic verbal roots) is avoided in view of the fact that such derivations, not impossible by themselves, quickly become hazardous or fanciful if not accompanied by a more detailed linguistic justification.

1.6. Lexical borrowing in the Semitic languages

1.6.1. General aspects of lexical borrowing in Semitic

All Semitic languages make more or less extensive use of loanwords, either inter-Semitic or borrowed from non-Semitic languages. The impact of foreign vocabulary in its various aspects – number of borrowed lexemes, penetration into the basic lexical strata, degree of integration – varies considerably from one Semitic language to another.

As a language comparatively resistant to lexical borrowing one can mention Biblical Hebrew, where ca. 285 borrowed lexemes (ca. 150 reliable Aramaisms – proper names and ultimate Akkadisms and Iranisms excluded – in Wagner 1966, ca. 80 Akkadisms in Mankowski 2000, ca. 35 Egyptisms in Muchiki 1999, 236–258, ca. 20 Iranisms in Wagner 1966, 152–153) do not exceed 3,5 % of the vocabulary (8252 lexemes in Andersen/Forbes 1989, from which proper names and Aramaic lexemes are to be de-

ducted). Most of these loanwords are rare terms from superficial layers of cultural vocabulary.

On the opposite extreme, the number of borrowed lexemes may amount to half of the vocabulary (or more) in Neo-Aramaic, even in such otherwise conservative languages as Maalula (ca. 55 per cent of Arabisms in the glossary of Arnold 1989) or Turoyo (ca. 45 per cent of Arabic, Kurdish and Turkish loanwords in the glossary of Jastrow 1992). Here borrowed lexemes strongly affect even the most fundamental segments of the basic lexicon.

The main directions of inter-Semitic and extra-Semitic lexical influences can be summarized as follows: Akkadian > Hebrew (Mankowski 2000), Akkadian > Aramaic (Kaufman 1974, 30–115); early NWS > OB Akkadian (Streck 2000, 82–130); Aramaic > Akkadian (von Soden 1966, 1968, 1977), Aramaic > Hebrew (Wagner 1966), Aramaic > Arabic (Fraenkel 1886); Arabic > Neo-Aramaic, Arabic > Ethiopian Semitic (Leslau 1990), Arabic > MSA; Sumerian > Akkadian (Lieberman 1977); Egyptian > NWS (Muchiki 1999); Cushitic > ES (Leslau 1988; Weninger 2005, 467–468); Greek and Latin > Rabbinic Hebrew/Jewish Aramaic (Krauss 1898) and Syriac (Schall 1960); Iranian > Hebrew (Wagner 1966, 152–153), Aramaic (Ciancaglini 2008, with a special emphasis on Syriac) and Arabic (Eilers 1971). Weninger (2009) discussed the possibility of a rather large scale lexical influence of ESA on Arabic and ES.

1.6.2. How to detect inter-Semitic loanwords

A non-Semitic loanword in a Semitic language is usually easy to detect, as such words usually do not comply with a few characteristically Semitic features like triconsonantal roots, poor vocalic inventory, rigid rules of syllable structure, etc. While problematic cases in this domain are not unknown (see, e.g., Sommerfeld 2006, 64–65 for PS **tūm-*/Sumerian *sum* ‘garlic’), the picture is still radically different in what concerns inter-Semitic loanwords. Material and structural proximity between Semitic languages is high, whereas all types of linguistic contact have been intense in the Semitic-speaking domain. Inter-Semitic borrowings can, therefore, be not only high in number, but also deeply integrated. Consequently, identification of such loanwords by strictly linguistic methods is a major challenge of comparative Semitic lexicography.

The necessity of elaborating a system of criteria for detecting inter-Semitic loanwords may look self-evident, but has in fact been rarely realized even in special studies dealing with this problem. What follows is an attempt at a critical synthesis of Kaufman 1974, 19–22, Leslau 1990, XI–XIV and SED I L–LVII where this very important question has been dealt with in some depth.

1.6.2.1. Consonantism

Irregular consonantal correspondences suggest a borrowing (Kaufman 1974, 19–21, Leslau 1990, XI), whereas regularity of phonological correspondences speak for a cognate relationship. As a parade example, Aramaic borrowings in Hebrew may be adduced: the reflexes of several PS phonemes are different in the two languages (**t* > Hbr. *š* / Arm. *t*, **d* > Hbr. *z* / Arm. *d*, **t* > Hbr. *š* / Arm. *t*, **š* > Hbr. *š* / Arm. *ʿ*, Wagner

1969, 11–12), which helps to detect such Aramaisms as *bərōt* ‘juniper’ (HALOT 155), *nṭr* ‘to watch’ (HALOT 695) or *rb* ‘to lie, recline’ (HALOT 1180).

The relevance of this criterion in the Semitic domain is, however, restricted: the number of ‘diagnostic’ phonemes is small (mostly sibilants and gutturals), whereas the rules of Semitic diachronic phonology remain largely understudied.

A few possible Arabisms in MSA involving the PS sibilant *š will suffice as an illustration. PS *š yields *s* in Arabic, whereas in MSA it is reflected as š/š or *h* in the most basic strata of the vocabulary, but as *s* elsewhere. A š-word in MSA has thus better chances to be genuine than a *s*-word, potentially an Arabism. On this ground, Mhr. *farhāyn* ‘horse’ (ML 98) may be traced directly to PWS **paraš*- (SED II No. 182) rather than treated as an Arabism – in spite of possible extra-linguistic arguments for the contrary. Conversely, *s*-reflexation of PS *š makes tempting to ascribe to the Arabic influence such lexemes as Mhr. *səbəlēt*, Soq. *seboléh* ‘ear of grain’ (ML 340, LS 280) < PS *šu(*n*)*bul-at*- or Mhr. *libəs*, Jib. *līs* ‘to put on (clothes)’ (ML 251, JL 159) < PS *lbš, notwithstanding their very basic status. But what about MSA words with *s* < *š and no Arabic cognates at all, such as Jib. *se* ‘she’ (JL 220) < PS *ši, Mhr. *kənsīd* ‘top of shoulder’ (ML 212) < PS *kišād- or Soq. ‘*énes* ‘to be small’ (LS 68) < PS *ns? An Arabic borrowing (or even influence) is hard to imagine in such cases.

Possible Aramaisms in Arabic with *ḥ* instead of *h* also deserve consideration. Since PS **h* and **ḥ* merge into *ḥ* in Aramaic, Arabic words like *ḥilāf* ‘willow’ or *ḥass* ‘lettuce’ (Lane 797 and 736) should not, *a priori*, be considered borrowings from Syr. *ḥellāpā* and *ḥasṣā* (LSyr. 245 and 235), but rather genuine cognates of Akk. *ḥilēpu* and *ḥassū* (AHw. 345, 331). It is now certain, however, that the loss of uvulars in Aramaic is a comparatively late phenomenon (Steiner 2005) and probably no obstacle for postulating Aramaisms with *ḥ* in Arabic (cf. already Fronzaroli 1969, 32 and contrast Kaufman 1974, 90, 106).

For Fronzaroli (1969, 13) the regular correspondence between Akk. *š* and Arm. *t* in Akk. *kunāšu* ‘spelt’ (AHw. 506) and Syr. *kūnātā* id. (LSyr. 336) excludes a borrowing and suggests a PS reconstruction **kunāt*-. However, the reflex of PS **ṭ* was still an independent phoneme in early Akkadian (Krebern timer 1985, 58), and it is hard to exclude that an early Akkadian **kunātu* actually penetrated into what later became Aramaic (for two potentially comparable cases – Aramaic *pātūrā* ‘table’ and ‘*ātūrā* ‘Assyria’ vs. Akk. *paššūru* and *Aššur* – cf. Kaufman 1974, 81–82).

All in all, postulating a borrowing remains an easy way to explain out phonological irregularities when alternative solutions are available. Thus, Syr. *šgedtā* ‘almond’ (LSyr. 755) may look a borrowing in view of the irregular *š* < **ṭ* (Fronzaroli 1968, 279, Fox 2003, 84, cf. Ugr. *ṭkd* in DUL 927). However, the regular shift **ṭ* > *t* might have rather been blocked because of the unwelcome accumulation of dentals in hypothetical form **taḳid-t*- (cf. Kaufman 1974, 20).

1.6.2.2. Vocalism

Irregular vocalic correspondences may help to detect loanwords. Thus, numerous substantives with the pattern $C_1\bar{a}C_2\bar{a}C_3$ in Biblical Hebrew – such as *səpār* ‘calculation’ (HALOT 767) or *yəḳār* ‘honor’ (HALOT 432) – must be borrowed from Aramaic because the regular Hebrew reflexes of the underlying patterns * $C_1aC_2\bar{a}C_3$ -,

*C₁iC₂āC₃- and *C₁uC₂āC₃- would display -ō- rather than -ā- (in the first pattern, moreover, *a in the first syllable would not be reduced, cf. Wagner 1966, 122). The relevance of this criterion is undermined by the low number of diagnostic positions and many uncertain points in the history of Semitic vocalism.

1.6.2.3. Morphological shape (primary nouns)

A morphological shape atypical for the recipient language may suggest a borrowing. This criterion is to be applied with much caution, as the PS inventory of vocalic shapes was not restricted to just a few widespread structures such as *C₁VC₂C₃-, *C₁aC₂aC₃- and *C₁aC₂iC₃-. Some of less common proto-shapes may also be preserved by daughter languages. A good example is Hbr. *ḥāzīr* ‘pig’, thought to be borrowed from Akk. *ḥuzīru* via Aramaic *ḥāzīrā* in Mankowski 2000, 56–57 and Fox 2003, 87. The Hebrew form can be regularly traced back to PS *C₁uC₂īC₃- (Blau 1976, 37), also attested in *kəpīr* ‘young lion’ (HALOT 493), *mərī(ʿ)* ‘cattle’ (HALOT 635) and *bəʿīr* id. (HALOT 142). There is no need to attribute -ə- to the Aramaic influence. Incidentally, the *C₁uC₂īC₃- pattern is hardly particularly common in Akkadian, nor (despite von Soden 1991) does it seem to possess any special (diminutive) function in that language.

Difference in morphological shape speaks against the loan hypothesis. Thus (*contra* Leslau 1990, 150), Tgr. *nib* ‘(canine) tooth’ (WTS 337) can hardly be borrowed from Arb. *nāb*- (Lane 2870): -i- in Tigre would be difficult to explain in such a case, especially in view of parallel forms with *-ī- in Aramaic: JPA, JBA, Syr. *nībā* (DJPA 349, DJBA 746, LSyr. 427).

Gez. *falfal* ‘elephant’, *hapax legomenon* in Liber Mysteriorum (*rakaba ʾarwe ʾabiya za-səmu falfal za-wəʾətu ba-ḥabaši ḥarmāz bəhil* ‘he found a large animal whose name is *falfal* and which is called *ḥarmāz* in Ethiopian’, LLA 84, 1347, Hommel 1879, 376) could be attributed to the well-known chain of borrowed terms ranging from Akk. *pīrulpīlu* to Arb. *fīl*- (SED II No. 173). Such a hypothesis (Leslau 1990, 71) is flawed by its inability to explain the reduplication and especially the *a*-vocalism of the Geez term.

Diagnostic structural features are not restricted to root vocalism. Thus, consonantal gemination is lost in the inherited vocabulary of Turoyo, but is preserved in loanwords (Jastrow 1993, 17). Accordingly, ‘*ammo* ‘uncle from father’s side’ (ibid. 168) must be a borrowing from Arb. ‘*amm*- (Lane 2149) in spite of the archaic ending -o (the genuine Turoyo reflex of PS *ʿamm- is ‘*amo* ‘people’, Jastrow 1993, 176).

1.6.2.4. Morphological pattern (derived nouns)

The inventories of morphological patterns are not identical throughout Semitic. A word with a pattern typical of the source language but uncommon in the recipient language is thus likely a borrowing (Leslau 1990, XIII). As an example, one may quote the abstract suffix -ūt, often helpful to detect Aramaisms in Biblical Hebrew (Wagner 1966, 130–131), such as *malḳūt* ‘kingdom’ (HALOT 592) or *siklūt* ‘folly’ (HALOT 755).

Rarity of morphological patterns does not automatically imply their foreign origin, however. Let us consider, for example, the Hebrew adjectives ʾakzāb and ʾēṭān denot-

ing different types of rivers ('dried up in summer' and 'always filled with running water', HALOT 44–45). The pattern is $'aC_1C_2aC_3-$, otherwise unknown in Hebrew, but highly productive in Arabic. Are we dealing with an early Arabian lexical infiltration? Probably yes, especially since the root *ym* is otherwise unattested in Hebrew, whereas Arabic *wtn* 'to flow constantly' is well known (LA 13 546). But caution is in order: (presumably residual) adjectival formations in $'a-$ are attested in NWS already in the second millennium BC: $'al'iy(n)$ 'mighty', $'anhr$ 'whale' in Ugaritic (Tropper 2000, 265), *aḫdamātum* 'eastern bank' and *āḫarātum* 'western bank' as West Semitisms in OB Akkadian of Mari (Streck 2000, 84).

The innovative nature of the pattern in question may be crucial. Thus, $C_1aC_2\bar{C}_3$ -adjectives are not just atypical for Akkadian, but likely represent a characteristic PWS innovation (Huehnergard 2006, 10). Accordingly, Akk. *asīru* 'prisoner', well documented already in OB (Stol 2004, 790–791), is not to be treated as an internally Akkadian derivation from *esēru* 'to enclose' (CAD E 334, note the lack of *e*-coloring!), but rather as a loanword from an early WS term continued by Hbr. $'āsīr-$ and Arb. $'asīr-$ (HALOT 73, Lane 58; so already CAD A₂ 332).

1.6.2.5. Dialectal distribution (internal)

If the term in question has no cognates in other languages of the minor taxonomic subdivision to which the recipient language belongs, it may be a loanword (Leslau 1990, XIII–XIV). This very important criterion can, regrettably, be also very misleading (Kaufman 1974, 21–22).

Thus, nearly every Tigre word with an Arabic parallel but no cognate in the rest of ES has been considered an Arabism by Leslau: 'if a lexeme exists only in Tigre, it is safe to assume that it is an Arabic loanword' (1990, 159). However, Tigre is not only a language heavily influenced by Arabic, but also a highly conservative ES language with many archaic features in grammar and lexicon. An exclusive Tigre-Arabic isogloss may easily turn out a shared archaism (Bulakh/Kogan 2011, 3–7. This is demonstrated by a few PS roots not preserved anywhere in ES except Tigre, yet absent from Arabic: Tgr. *dabās* 'being hump-backed' (WTS 528) < PS $*dbš$ (SED I No. 8_v; Hbr. *dabbāšūt*), Tgr. *tā'alažžä* 'to stammer' (WTS 454) < PS $*'lg$ (SED I No. 2_v; Hbr. *'illēg*), Tgr. *nälät* 'she-antelope' (WTS 232) < PS $*nayał-$ (SED II No. 169; Akk. *nayalu*).

1.6.2.6. Dialectal distribution (external)

If a given word occurs exclusively in two geographically contiguous languages, it is probably a loanword rather than an inherited term accidentally lost in the rest of Semitic (Kaufman 1974, 21). For example, while dealing with an exclusive Akkadian-Aramaic isogloss it is hard to avoid suspecting an Akkadism in Aramaic even if we are faced with such a basic concept as 'fish' (Akk. *nūnu*, Common Aramaic *nūn-*; contrast Fronzaroli 1968, 286 who traces them back to PS $*nūn-$). The same applies to other contact areas, notably Aramaic-Arabic and Arabic-MSA.

The exclusive nature of a given isogloss may however not withstand a deeper etymological scrutiny. Common Aramaic $*kays-$, $*kīs-$ 'timber' (JPA *kīs* in DJPA 491, Syr.

ḵaysā in LSyr. 665) is derived from Akk. *ḵištū* ‘forest’ (AHw. 923) in Kaufman 1974, 86, probably because of the exclusively Akkadian-Aramaic nature of this isogloss. This is, however, not the case in view of Mhr. *ḵəšnūt* and Soq. *ḵāšen* ‘forest’ (ML 242, LS 388), aptly compared to the Akkadian term in Huehnergard 1991a, 696. The MSA parallels provide an excellent justification for *s* (regularly < *š) in the Aramaic forms, whereas the semantic shift ‘wood’ > ‘timber’ is more natural within a cognate relationship than in the framework of a loan hypothesis.

1.6.2.7. Semantic groups

Terms belonging to certain semantic fields of the vocabulary are more likely to be borrowed (Kaufman 1974, 21), and *vice versa*. Kaufman’s warning against the uncritical application of this criterion is justified, as the PS vocabulary was by no means limited to a small circle of ‘primitive’ objects and concepts.

Openness vs. closeness to loanwords for particular semantic groups may vary greatly from one Semitic language to another, although such lexical fields as administration, religion, trade and industry tend to absorb loanwords throughout Semitic (Kaufman 1974, 165–167, Mankowski 2000, 175–176). For more basic lexical strata our decisions are often guided by empirical observations. Thus, only a handful of loanwords can be detected in the faunal vocabulary of Biblical Hebrew: *ḵōp* ‘monkey’ (HALOT 1089, from Egyptian or Indo-Arian, Powels 1992, 195–196), *tukkī* ‘kind of exotic bird’ (HALOT 1731, possibly from Dravidian, Powels 1992, 196), *šāpīr* ‘billy goat’ (HALOT 1048, from Aramaic, Wagner 1966, 99), perhaps *pātān* ‘snake’ (HALOT 1990, from Aramaic, Wagner 1966, 97) and *sūs* ‘horse’ (HALOT 746, from Indo-European, cf. SED II No. 199). Accordingly, we do not expect to find borrowings in the most basic layers of this semantic group, *contra* Wagner 1966, 157 and Mankowski 2000, 56–57 for whom *’aryē* ‘lion’ (HALOT 87) and *ḥāzīr* ‘pig’ have been borrowed from Aramaic and Akkadian respectively. Wagner’s doubts about the Aramaic origin of Hbr. *kippōd* ‘hedgehog’ (1966, 102) may therefore be justified notwithstanding the phonological irregularity (PS **ḵunpuḍ-* should have yielded Hbr. **ḵippōz*, cf. Blau 1977, 64–65).

1.6.2.8. Geographic areas, chronological periods and textual genres

In ancient Semitic languages, loanwords are usually not scattered at random in the corpus, being rather concentrated in certain types of texts. Thus, the greatest percentage of Aramaic, Akkadian and Iranian loanwords is observed in those Biblical books which are traditionally attributed to late periods, such as Job, Canticles, Qohelet, Esther, Ezra, Nehemiah (Wagner 1966, 144–145, cf. Kaufman 1974, 155). WS loanwords are abundant in OB Akkadian texts from Mari and other ‘Western’ corpora (Streck 2000, 82–130), but rare in OB texts from core Mesopotamia. Akkadian loanwords are not infrequent in Ugaritic documents, but hard to find in myths and epics.

New textual discoveries may, accordingly, bring unexpected arguments both *pro* and *contra* some well-established loan hypotheses.

Thus, one may be tempted to consider Akk. *parru* ‘lamb, ram’ and *kabsu* id. to be West Semitisms (Aramaisms?) in view of their predominantly late attestation (AHw.

834, 418; as far as *kabsu* is concerned, cf. explicitly Fronzaroli 1969, 35 and Steiner 1977, 49). However, both are now known to be attested already in OB: UDU *ka-ab-si kallūtīm* ‘small male lambs’ (AbB 9 162:12), 5 UDU *pa-ar-ri šāmamma šūbilam* ‘buy and send here five p.’ (ibid. 161:18). This early date scarcely allows one to speak of ‘Aramaisms’ (even if does not *a priori* exclude another WS source).

Similarly, the WS background of Akk. *arwû* ‘gazelle’ has been suspected because its early attestations were restricted to Amorite personal names (CAD A₂ 294: ‘the WS loan *armû*’). Further textual discoveries did contribute new documentation from Western areas (Mari: *šētētum* <ša> *ar-wi-i* ‘nets <for> gazelles’ in ARM 14 38:6; Ebla: *a-wi-um* = Sum. [DÀ]RA².DÀ in VE 1251¹; *ar-wi-um* = Sum. MAŠ.DÀ in CBS 8538:17, a list of WS animal names with Sumerian equivalents), but also some core Mesopotamian examples (*lišbassu-mi ša išbatu šabūtam likassīšu-mi ša ukassû arwi[am]* ‘may one who caught the gazelle catch him, may one who tied the deer tie him!’, OECT XI 19:22, OB incantation). The latter are not easily compatible with the loan hypothesis.

1.6.2.9. Semantic difference

Semantic difference between the hypothetic loanword and its source-word speaks against borrowing. Two terms related as cognates are separated by many hundreds or thousands of years of independent existence, which can naturally trigger serious (sometimes, even exotic) semantic shifts. The time-span separating a borrowing and its source-word is inevitably much shorter, so that substantial semantic changes are, in principle, less expected.

Thus, why Tgr. *‘aqab* ‘foot, leg’ (WTS 468), supposedly borrowed from Arb. *‘aqib* ‘heel’ (Lane 2100), should have acquired such a general meaning? Or why the basic terms for ‘head’ in Gafat (*dām^uä*) and East Gurage (Sel. *dum*, Wol. *dumi*) should have been borrowed from Arb. *dimāy-* (Lane 914), which displays a much narrower meaning ‘brain’? Nevertheless, Leslau does not hesitate to treat both terms as Arabisms (1990, 166 and EDG 207). Akk. *gapnu*, *gupnu* ‘tree, tree trunk’ is qualified as ‘late and most likely a WS loanword’ in CAD G 45, but WS **gapn-* (Hbr. *gäpän*, HALOT 200, etc.) is strictly applied to grapevine and never denotes a tree trunk. Rather than a WS loanword, the Akkadian term may be a rare but genuine word (perhaps an Assyrianism) whose first attestation as an Akkadism in Middle Hittite (*gapanu* ‘trunk, root of a tree’, Kassian/Korolev/Sidel’tsev 2002, 523–524) predates by many centuries its first appearance in the NA royal inscriptions.

1.6.2.10. Geographic proximity

Evidently enough, lexical borrowing requires some sort of contact between the speakers of the source and recipient languages. If such contacts are not in evidence, one has to assume that other languages served as intermediaries, in which case the word in question should have left some traces also there. In the absence of such traces, the loan hypothesis becomes problematic.

Arabic words ultimately going back to an Akkadian source are not rare, but in most cases we are faced with indirect borrowings via Aramaic. Lack of Aramaic parallel is,

therefore, a serious argument against a loan hypothesis, even if the latter looks attractive for extra-linguistic reasons.

Thus, it has been long ago suspected (Holma 1912, 442) that Arb. *ʾizb*- ‘man with small members, dwarf; misfortune’ (LA 1 253–254) is related to Akk. *izbu* ‘malformed newborn’ (CAD E 371). To attempt to trace these two terms to a PS reconstruction would be of course adventurous, but to explain the path of the borrowing is probably no easier in view of a total lack of comparable forms in Aramaic. A similar case is that of Arb. *ʾarfā*- and Akk. *ʾarpaʿu*, both designating the tamarisk tree (AHw. 1382, Lane 1844): a full coincidence in (highly peculiar) form and meaning makes one willingly suppose a borrowing, but how to account for the absence of any Aramaic intermediary?

2. The physical world

2.1. The earth

2.1.1. Earth, land, soil

The general term for ‘earth, land’ (as opposed to ‘heaven’ and ‘water’) is PS **ʾarṣ-*: Akk. *erṣetu*, Ugr. *ʾarṣ*, Hbr. *ʾārāṣ*, Syr. *ʾarṣā*, Arb. *ʾarḍ-*, Sab. *ʾrṣ*, Jib. *ʾerṣ* (Fronzaroli 1965a, 136, 144, AHw. 245, DUL 106, HALOT 90, LSyr. 51, Lane 48, SD 7, JL 4), missing from ES (replaced by **mVdr-*, **maray-t-* and **ʾapar-*, Kogan 2005b, 378) and most of MSA (for the origin of Mhr. *kā* and Soq. *ḥóhi* cf. Kogan 2006a, 468). A designation of earth as a solid surface (ground) is PS **karkar-*: Akk. *kakkaru*, Arb. *qarqar-*, Soq. *kárkahar*, perhaps pB. Hbr. *qarkārā* ‘bottom of a vessel’ (Fronzaroli 1968, 271, 287, 298, AHw. 900, Jastrow 1427, LA 5 100, LS 387). Hbr. *qarkāʿ* ‘floor; bottom of the sea’ (HALOT 1148), JPA *qrkʿ* and JBA *qarkāʿā* ‘land’ (DJPA 507, DJBA 1046) may be related with dissimilation (Růžička 1909, 17). The soft surface of the earth used for cultivation and as a building material (soil, dust) was designated by PS **ʾapar-*: Akk. *eperu*, Ugr. *ʾpr*, Amarna Canaanite *ḥa-pa-ru*, *a-pa-ru* (EA 143:11, 141:4), Hbr. *ʾāpār*, Syr. *ʾaprā*, Arb. *ʾafar-*, Gez. *ʾafar* (likely an Amharism, cf. LLA 808), Tgr. *ʾafār*, Amh. *afār* (Fronzaroli 1968, 270, 287, AHw. 222, DUL 174, HALOT 861, LSyr. 539, Lane 2090, CDG 10). Common MSA **ʾpr* ‘to be red’ may be further related to this root (Bulakh 2004, 274–276), as well Mhr. *ʾátfār* ‘to paw the soil’ (ML 14), Jib. *ʾǧfār* ‘to dig’ (JL 8). A less widely attested synonym is PWS **mVdr-*: pB. Hbr. *mādār* ‘ordure (material for vessels)’, JBA *midrā* ‘clay’, Syr. *medrā* ‘clod of earth, soil, mud, dust’, Arb. *madar-* ‘clod of earth’, Sab. *mdr* ‘territory, ground’, Gez. *madr* ‘earth, soil, ground, land’ (Fronzaroli 1969, 5, 24, Jastrow 735, DJBA 643, LSyr. 375, Lane 2698, SD 83, CDG 330; attestation of this root in Akkadian is uncertain, cf. AHw. 650–51 and CAD M₂ 48, 144). PS **ṭin-* denoted wet, glutinous earth (mud, clay): Akk. *ṭītu*, *ṭīṭtu*, Hbr. *ṭī*, Syr. *ṭinā*, Arb. *ṭīn-*, Mhr. *ṭayn*, Jib. *ṭun*, Tgr. (ṭ)ṭāyyānā ‘to be filled with sand’ (Fronzaroli 1968, 271, 287, 298, AHw. 1391, HALOT 374, LSyr. 274, Lane 1906, ML 414, JL 282, WTS 620; some of these terms have been treated as borrowings: Hbr. *ṭī* < Akk. *ṭītu* in Mankowski 2000, 57–8, Arb. *ṭīn-* < Syr. *ṭinā* in Jeffery 1938, 208).

2.1.2. Stone, pebble

The PS designation of ‘stone’ is **ʾabn-*: Akk. *abnu*, Ugr. *ʾabn*, Hbr. *ʾābān*, Syr. *ʾabnā*, Gez. *ʾābn*, Soq. *ʾōben* (Fronzaroli 1968, 271, 287, 298, AHW. 6, DUL 9, HALOT 7, LSyr. 3, CDG 4, LS 49). Its partial loss in Aramaic, Arabic, ES and continental MSA is discussed in Kogan 2005c, 560, 2006a, 481, together with the etymology of such replacements as Syr. *kēpā*, Arb. *ḥaḡar*- and Mhr. *ṣāwər*. PWS **ḥVṣ-* designated ‘pebble, gravel’: Hbr. *ḥāṣāṣ*, Syr. *ḥṣāṣā*, Arb. *ḥiṣḥiṣ-*, *ḥaṣaʿ*”, Gez. *ḥoṣā*, Tgr. *ḥoṣa*, *ḥaṣḥaṣ*, Mhr. *ḥaṣṣāyt*, Soq. *ḥāṣahāṣihin* (Fronzaroli 1968, 271, 287, 298, HALOT 344, LSyr. 250, Lane 587, LA 7 18, CDG 266, ML 189, LS 185; Akk. *ḥiṣṣu* ‘gravel’ is likely an Aramaism). PS **ṭVrr-* for ‘flint’ is attested in Akk. *ṣurru*, Hbr. *ṣōr*, Syr. *ṭarrānā*, Arb. *ḍirr-* (Fronzaroli 1968, 271, 287, 298, AHW. 1114, HALOT 1052, LSyr. 286, Lane 1909).

2.1.3. Mountain

There is no common designation of ‘mountain’ (Fronzaroli 1968, 271–272). Some of the pertinent terms are etymologically obscure, like Hbr. *har*, Arb. *ḡabal-* or Soq. *fidehon* (HALOT 254, Lane 376, LS 333), whereas a few others go back to prototypes with other meanings, notably ‘wild, uncultivated place’ (Akk. *ṣadū* or Gez. *dabr*, cf. 2.1.4.). One such transformation took place in PCS where **ṭūr-* ‘mountain’, represented by Ugr. *γr*, Hbr. *ṣūr*, Syr. *ṭūrā* and Sab. *ṭwr* (DUL 324, HALOT 1016, LSyr. 272, SD 173) was derived from PS **ṭVrr-* ‘flint’ (Fronzaroli 1968, 271). At the same time, a few common terms for landscape elevations can be detected. Thus, Akk. *karmu* ‘mound, heap’ (AHw. 449) and Mhr. *kərmáyim* ‘mountain’ (ML 214) may yield PS **kVrm-* with the meaning ‘hill, mound’, to which PCS **karm-* ‘vineyard’ (Ugr. *krm*, Hbr. *kārām*, Syr. *karmā*, Arb. *karm-*; DUL 455, HALOT 498, LSyr. 347, WKAS K 140) is likely related (Müller 1985, 272, cf. Fronzaroli 1969, 7–8). PS **tVII-* with the same meaning derives from Akk. *tīlu* (*tillu*), Ugr. *tl*, Hbr. *tēl*, Syr. *tellā*, Arb. *tall-*, Jib. *tellét* (Fronzaroli 1968, 272, 287, 298, AHW. 1359, DUL 869, HALOT 1735, Lane 311, JL 270), although borrowings from Akkadian to WS cannot be excluded (cf. LSyr. 824 where Akk. *tīlu* is thought to be cognate with Arb. *taʿ-* ‘elevation’). Har. *tullu* ‘hill’ is considered a Cushitism in EDH 149.

2.1.4. Open country

A general meaning ‘open country’ for PS **ṣadaw-* derives from Akk. *ṣadū* ‘mountain’, Ugr. *šd*, Hbr. *ṣādā* ‘open land, (cultivated) field’, Mnd. *sadia* ‘field, open space, plain, desert’ (AHw. 1124, DUL 807, HALOT 1307, MD 310; for Sab. *s₂dw*, interpreted as ‘mountain’ or ‘cultivated land’ in SD 131, cf. Sima 2000, 309). A similar meaning can be assigned to PWS **dVbr-*: Ugr. *mdbr*, Hbr. *midbār* ‘desert’, Syr. *dabrā* ‘field, land, country’, Arb. *dabrat-* ‘a patch of sown ground’, Gez. *dabr* ‘mountain’ (Fronzaroli 1965b, 266, DUL 525, HALOT 546, LSyr. 140, Lane 845, CDG 121).

2.2. The water

2.2.1. Water

The general PS term for ‘water’ is **māy-*: Akk. *mû* (well attested in VE, e.g. *ma-wul ma-u₉ i-da* = Sum. A.ŠU.LU₉ in VE 626a, cf. Krebernik 1983, 24), Ugr. *my*, *mh*, *mym*, *mmh* (Troppe 2000, 164), Amarna Canaanite *me-(e)-ma* (EA 148:31, EA 155.10, also *mu-mi* in Rainey 1976, 137), Hbr. *mayim*, Syr. *mayyā*, Arb. *māʿ*-, *māh*-, Sab. *mw*, Min. *mwy*, *mhy*, Hdr. *mhyhn*, Gez. *māy*, Mhr. *ḥə-mōh*, Jib. *mih* (Fronzaroli 1965a, 140, 146, 150, AHw. 664, DUL 535, HALOT 576, LSyr. 383, Lane 3025, SD 88, LM 63, CDG 376, ML 274, JL 176). It is only in Amh. *wəha* and Soq. *riho* that reflexes of **māy-* are replaced by borrowings or new formations (Kogan 2006a, 474).

2.2.2. River, wadi

The main PS term for ‘river’ is **nah(a)r-*, represented by Akk. *nāru*, Ugr. *nhr*, Hbr. *nāhār*, Syr. *nahrā*, Arb. *nahr*-, *nahar*-, Sab. *nhr* (Fronzaroli 1968, 273, 288, 299, AHw. 748, DUL 626, HALOT 676, LSyr. 417, Lane 2858, SD 94) and missing from ES and MSA. The best known replacement is Gez. *falag* (CDG 159) which, together with Mhr. *fālēg* and Jib. *fēlēg* (ML 93, JL 57), goes back to PS **pal(a)g-* with a more general meaning ‘stream’, otherwise represented by Akk. *palgu*, Ugr. *plg*, Hbr. *pālāg*, Arb. *falḡ*-, *falaḡ*- (Fronzaroli 1968, 273, 288, 299, AHw. 815, DUL 671, HALOT 929, Lane 2437). A special term for ‘river valley, wadi’ is reconstructed as **naḥl-* in Fronzaroli 1968, 272, 288, 298 on the basis of Akk. *naḥallu*, *naḥlu*, Ugr. *nḥl*, Hbr. *naḥal*, Syr. *naḥlā* (AHw. 712, DUL 629, HALOT 686, LSyr. 423). It is doubtful whether Arabian designations of ‘palm(grove)’ such as Arb. *naḥl*-, Sab. Min. Qat. *nḥl*, Mhr. *naḥlūt*, Jib. *naḥlēt* (Sima 2000, 217–239) are related.

2.2.3. Sea

As suggested by Fronzaroli (1965a, 136–137, 144, 149), **tiḥām(-at)-* was the main PS term for ‘sea’, although it is only Akk. *tiāmtum* that preserves the original basic function (AHw. 1353, for *ti-ʾā-ma-tum* = Sum. AB.A in VE 1343 cf. Krebernik 1983, 43). Ugr. *thm*, *thmt* (*ta-a-ma-tu₄*, Huehnergard 1987, 864), Hbr. *təhōm* and Syr. *thōmā* (a Hebraism) are literary terms for ‘primordial ocean, abyss’ (DUL 864, HALOT 1690, LSyr. 816), whereas Arb. *tiḥāmat*- is a geographic designation of the Red Sea coastal plain (Lane 320, where the appellative *taham*- ‘land descending to the sea’ is also quoted). The typical NWS replacements go back to **yamm-* (Fronzaroli 1968, 273, 288, 299), first attested in Ebla (*pi-mu*, *pi-mu-um* = Sum. PAP.A in VE 623, LÚ ŠÀ *pi-mu-mu* ‘one who is in the sea’ in ARET 5 4 v 6, Fronzaroli 1998), later represented by Ugr. *ym*, Hbr. *yām*, Syr. *yammā* (DUL 965, HALOT 413, LSyr. 303), but having no cognates outside the NWS area (Arb. *yamm-* is borrowed from NWS, Jeffery 1938, 293). The most widespread replacements in the South Semitic area go back to **baḥr-* (Fronzaroli 1968, 273, 288, 299): Arb. *baḥr*, Sab. Min. *bḥr*, Gez. *bāḥr* (LM 20, SD 27, Lane 156,

CDG 91). It is uncertain whether Akk. *bi-ra-a-ti*, denoting a kind of reservoir in a few literary and lexical passages (CAD B 206), is related to **baḥr-*. The same is true of *bù-la-tum* = Sum. *AB.A* in VE 1343', although the meaning 'sea' would agree with the Sumerogram and the alternative translation *tì-'à-ma-tum* (Fronzaroli 1984b, 158, but cf. Conti 1990, 146 and Sjöberg 2003, 559). Throughout MSA, 'sea' is designated by (partly) reduplicated combination of sonorants: Mhr. *rāwrēm* (ML 333), Jib. *rémnēm*, *rémrēm* (JL 214), Soq. *rínhem* (LS 402).

2.2.4. Spring, well

The natural 'spring' is usually opposed to the artificially constructed 'well'. For the former, reflexes of PS **'ayn-* 'eye' (cf. 6.2.3.) are applied throughout Semitic (Kogan/Militarev 2003, 291–293). For the latter, a double reconstruction **bi'r- / *bu'r(-at)-* has been proposed in Fronzaroli 1971, 611, 632, 640. The *i*-form with the meaning 'well' is known from Hbr. *bə'ēr*, Syr. *bērā*, Arb. *bi'r-*, Mhr. *bayr* (HALOT 106, LSyr. 56, Lane 145, ML 40), but not from Akkadian (*bēru* 'well' mentioned in AHw. 122 has been differently interpreted in CAD B 266 and AHw. 1548). The *u*-forms with the meaning 'well' are best represented by Akk. *būru*, *būrtu* (AHw. 141), perhaps with an early precedent in VE 520 (*bu-rúm* = Sum. *šU.A*, Conti 1990, 146). Akk. *būru*, *būrtu* also denote 'hole, pit' in general (CAD B 335, 342), and the same is true of Muh. *b^wər*, Gog. *bur*, Zwy. *bur* (EDG 150). Hbr. *bōr* (several times spelled with ') denotes 'cistern, pit, grave' but probably not 'well' (Rendsburg 2002, 205), whereas Arb. *bu'rat-* is applied specifically to a '(cooking) pit' (Lane 145). The vocalic shape of Sab. Min. Qat. *b'r* 'well' (SD 25, LM 19, LIQ 22) is unknown. The general picture is complicated by a few forms with unexpected loss of ' : Sab. *brt* 'grave' (SD 33), Gez. *barbir* 'cistern, well, pit' (CDG 102, LLA 503), Soq. *'ébehor* 'wells' (LS 295).

2.3. The heavens

2.3.1. Heaven

The only PS designation of 'heaven' is **šamāy-* (often in the plural): Akk. *šamû*, Ugr. *šmm*, Hbr. *šamayim*, Syr. *šmayyā*, Arb. *samā'*, Sab. *s₁myn*, Min. *s₁mhm*, Gez. *samāy* (Fronzaroli 1965a, 136, 144, 149, AHw. 1160, DUL 826, HALOT 1559, LSyr. 785, Lane 1434, SD 127, LM 82, CDG 504). Mhr. *sāmē'* and Jib. *siēh* (ML 350, JL 230) are Arabisms, whereas the etymological background of the genuine MSA terms such as Mhr. *háyṭəm*, Jib. *šútum*, Soq. *'ūtīn* (ML 161, JL 264, LS 78) is enigmatic. There is a complete replacement of **šamāy-* by the divine name *'astār* in Tigre (WTS 465), already observable in epigraphic Geez (Littmann 1913, 51, 90), but with no continuation in the classical language.

2.3.2. Sun

The PS term for 'sun' can be conventionally reconstructed as **šamš-* on the basis of Arb. *šams-* and Sab. Qat. *s₂ms₁* (Lane 1597, SD 133, LIQ 168), whereas Hbr. *šāmš*

and Syr. *šemsā* (HALOT 1589, LSyr. 788) point to **šamš-* (Fronzaroli 1965a, 137, 144, 149), although alternative reconstruction **šamš-*, implying dissimilation in Arabic and ESA, is also possible. Akk. *šamšu* (AHw. 1158) and Ugr. *špš* (DUL 836, with unexpected *p*) are not diagnostic for the sibilant reconstruction. PS **šamš-* left no trace in ES where it is replaced by reflexes of **šahāy-* (Kogan 2005b, 378). It is preserved in MSA as Jib. *šum* ‘heat of the sun’ (JL 267) and Soq. *šam* ‘sun’ (LS 418 and 210), but is seriously threatened by reflexes of PS **yawm-* ‘day’, such as Mhr. *ḥə-yāwm* (ML 462) and Jib. *yum* (JL 314).

2.3.3. Moon

The basic PS term for ‘moon’ is **war(i)ḥ-* (Fronzaroli 1965a, 137, 144, 149), fully preserved in Akk. *warḥu*, Ugr. *yrḥ*, Hbr. *yārēah* and Gez. *warḥ* (AHw. 1466, DUL 979, HALOT 438, CDG 617). In a few languages, **warḥ-* is relegated to the meaning ‘month’. Thus, Syr. *yarḥā* ‘month’ is opposed to *sahrā* ‘moon’ (LSyr. 309, 462), the latter going back to PWS **šahr-* ‘crescent’: Hbr. *šahārōnīm* ‘crescent-shaped amulets’, Arb. *šahr-* ‘crescent’, Sab. *s₂hr* ‘beginning of month’, Gez. *šāhr* ‘moon, first day of the month’, Mhr. *šēhər* ‘first crescent of the moon’ (Fronzaroli 1965a, 138, HALOT 1311, Lane 1612, SD 132, CDG 528, ML 376). It is only in Arabic and Soqotri that **war(i)ḥ-* is lost completely: the origin of Arb. *qamar-* ‘moon’ (Lane 2562) is unclear, for the MSA designations of ‘moon’ cf. 2.6.1.

2.3.4. Star

PS **kabkab-* for ‘star’ (Fronzaroli 1965a, 138, 144) persists throughout Semitic: Akk. *kakkabu* (for *kak-kab* = Sum. ^dMUL in VE 791 see Krebernik 1983, 30), Ugr. *kbkb*, Hbr. *kōkāb*, Syr. *kawkbā*, Arb. *kawkab-*, Gez. *kokab*, Mhr. *kəbkīb*, Soq. *kībšīb* (AHw. 421, DUL 427, HALOT 463, LSyr. 320, Lane 2623, CDG 280, ML 201, LS 214).

2.3.5. Wind

There is no PS term for ‘wind’. Derivates of the root **rwḥ* are common in CS (Ugr. *rḥ*, Hbr. *rūah*, Syr. *rūhā*, Arb. *rīḥ-*) and MSA (Mhr. *rīḥ*, Jib. *irāḥ*, Soq. *rāḥ*), which probably reflects the PWS picture (Fronzaroli 1965a, 139, 145, DUL 736, HALOT 1197, LSyr. 718, Lane 1180, ML 333, JL 218, LS 395). PWS **rwḥ* is preserved in ES (Gez. *roḥa* ‘to fan’ and *rəḥe* ‘flavor, odor’, Bulakh 2005, 415–420), but the main term for ‘wind’ is **nVpāš-* (< PS **npš* ‘to blow’): Gez. *nafās*, Amh. *nafas* etc. (Kogan 2005b, 384). Akk. *šāru* ‘wind’ (AHw. 1192) may be related to Hbr. *šə‘ārā*, *sə‘ārā* ‘storm’ (BDB 704, 973) and, perhaps, Arb. *šī‘ār-* ‘thunder’ (Lane 1561).

2.3.6. Rain

PS **dVnVm-* (or **dVnVn-*, cf. DRS 336) was probably the main term for ‘rain’ as suggested by Akk. *zanānu*, *zunnu* (AHw. 1509, 1537), Sab. *ḏnm* (SD 39) and Gez.

zanma, *zanām* (CDG 641), to which Hbr. *zārām* (HALOT 281) may be related with dissimilation (for dissimilated forms in ES, such as Tgr. *zəlam* or Har. *zanāb*, see CDG 641). PCS **maṭar-* (Fronzaroli 1965a, 139–140, 146, DUL 603, HALOT 574, LSyr. 382, Lane 2722, SD 88, LM 63) yields basic terms for ‘rain’ in Ugr. *mṭr*, Syr. *meṭrā*, Arb. *maṭar-* and one of the principal synonyms with this meaning in Hbr. *māṭār*. While Sab. and Min. *mṭr* ‘rain-watered field’ are clearly related to this root, Akk. *miṭirtu* appears more problematic (cf. AHW. 662, CAD M₂ 144). The origin of Hbr. *gāšām* (HALOT 205) and Ugr. *gšm* (DUL 310) is unclear. There is no etymology for common MSA **lsy*: Mhr. *əwsū(t)*, *məwsē* (ML 256), Jib. *lsét*, *mósé* (JL 165), Soq. *lī(y)soh*, *mése* (LS 234). In Mhr. and Jib. **lsy* is partly replaced by derivatives of **rhm* ‘to be generous, compassionate’ (for the semantic evolution see CDG 292): Mhr. *rəhmēt* (ML 321), Jib. *raḥmēt* (JL 210).

2.3.7. Lightning, thunder

PS **bar(a)ḳ-* for ‘lightning’ is ubiquitous: Akk. *birḳu*, Ugr. *brḳ*, Hbr. *bārāḳ*, Syr. *barḳā*, Arb. *barq-*, Sab. Min. *brḳ*, Gez. *mabraḳ*, Mhr. *bōrəḳ*, Jib. *berḳ* (Fronzaroli 1965a, 140, 146, 150, AHW. 122, DUL 238, HALOT 162, LSyr. 98, Lane 190, SD 31, LM 23, CDG 106, ML 53, JL 28). Thunder was probably designated by PS **hadad-* (cf. Fronzaroli 1965a, 140; DRS 373). It is preserved as the name of the storm god in Akk. *adad*, *addu* (Schwemer 2001, 34–58; for ^dā-da in Ebla see ibid. 46 and 93–122) and a few WS languages (for Ugr. *hd*, *hdd* see DUL 334), and functions as the main term for thunder in Tgr. *hadud*, *ḥadud* (WTS 26) and Mhr. *ḥad* (ML 152), Jib. *hid* (JL 94), Soq. *šed* (LS 412, with a hypercorrect š-). More marginally, it is attested also in Arb. *hāddat-* ‘thunder’ (Lane 2883) and Tna. *hadādä* ‘to thunder’ (TED 50). As a synonym, PS **ra’d-* can be considered, based on Akk. *rādu* ‘rainstorm’, CPA *r’d*, Arb. *ra’d-*, Har. *ra’di* ‘thunder’, Arg. *ra’ad* ‘lightning’ (Fronzaroli 1964, 40, 52, 1965, 140, AHW. 941, LSP 196, Lane 1105, EDH 132, Leslau 1997, 218).

2.3.8. Snow, hail

‘Snow’ is denoted by reflexes of PS **talg-* in Akk. *šalgu*, Hbr. *šäläg* (for *sa=ra=ḳu*₂ in early Canaanite see Hoch 1994, 264), Syr. *talgā*, Arb. *talḡ*, Jib. *talḡ*, perhaps Ugr. *gl̥t* with metathesis (Fronzaroli 1965a, 140, 146, 149, AHW. 1147, DUL 299, HALOT 1503, LSyr. 825, Lane 350, JL 284). The PWS term for ‘hail’ is **barad-*: Hbr. *bārād*, Arb. *barad-*, Sab. *brd*, Gez. *barad*, Mhr. *bərēd* (HALOT 154, LSyr. 95, Lane 184, SD 30, CDG 103, ML 51).

2.4. The fire

2.4.1. Fire

PS **iš(-āt)-* is the main term for ‘fire’: Akk. *išātu* (for *i-sa-tù* = Sum. ^dGIBIL in VE 783 see Krebernik 1983, 30), Ugr. *išt*, Hbr. *’ēš*, JPA *’yšth*, Gez. *’əsāt* (Fronzaroli 1965a, 138,

145, 149, AHw. 392, DUL 119, HALOT 92, DJPA 54, CDG 44). Its replacement by derivatives of **nwr* ‘to shine’ (Syr. *nūrā* and Arb. *nār-*) and **šwt* ‘to burn’ (Mhr. *šīwōt*, Jib. *šwt*, *šīāt*) is discussed in Kogan 2005c, 558 and 2006a, 477. In Fronzaroli 1971, 625, 636, 641–642 two additional PS synonyms are reconstructed: **lahb-* and **nabal-*. The former is attested throughout WS (Hbr. *lahab*, *lāhābā*, JPA *lhb*, Arb. *lahab-*, Gez. *lāhb*, Jib *lēheb*; HALOT 520, DJPA 277, Lane 2675, CDG 308, JL 161) and, possibly, in the Akkadian disease name *la’bu* (but cf. AHw. 526, 521). The latter is more marginally attested: Akk. *nablu*, Ugr. *nbl’at* (with unclear ’), Gez. *nabal* (AHw. 698, DUL 618, CDG 383, Conti 1980, 50–51).

2.4.2. Charcoal

PS **pVḥm-* for ‘charcoal’ derives from Akk. *pēmtu*, Ugr. *pḥm*, Hbr. *pāhām*, JPA *pḥm*, Syr. *paḥmā* (the Aramaic words are rare and may be borrowed), Arb. *faḥm-*, *faḥam-*, Min. *mḥm*, Gez. *fəḥm*, Soq. *fḥam* (Fronzaroli 1971, 625, 636, 642, AHw. 854, DUL 668, HALOT 924, DJPA 428, LSyr. 563, Lane 2347, LM 32, CDG 157, LS 335).

2.5. The temperature

According to Fronzaroli (1965a, 142, 147, 150), the opposition ‘cold’ vs. ‘hot’ was expressed by **krr* vs. **ḥmm*. PWS **krr* ‘to be cold’ (HALOT 1127, 1149, LSyr. 689, CDG 443) is best attested in NWS (Hbr. *kar*, Syr. *karriṛā*) and ES (Gez. *kʷarir*), whereas Arb. *qrr* (Lane 2499) is threatened by *brd* (< PS **barad-* ‘hail’, cf. 2.3.8.). The root is missing from Akkadian and doubtfully attested in MSA (see Kogan 2006a, 476 for such replacements as Akk. *kašû*, Common MSA **ḥbr*, **kšm*, **škk* and **šbl*). The basic status of **ḥmm* ‘to be hot’ is preserved in Akk. *emmu* (AHw. 214; on *a-pi-mu* ‘à-mu-tum = Sum. UD.GÁNA ‘hot days’ and *ma-wu* ‘à-mu-tum = Sum. A.UD ‘hot water’ in VE 637 and 777 see Krebern timer 1983, 25, 30), Hbr. *ḥām* (HALOT 325, 328) and such Aramaic forms as JPA *ḥmym* (DJPA 206). Throughout ES, **ḥmm* is relegated to the meaning ‘to be ill’, whereas ‘to be hot’ is expressed by **mwk* of unclear origin (Kogan 2005b, 380, 383). Arb. *ḥmm* is well attested (Lane 635), but the main term for ‘warm, hot’ is *suḥn-* (Lane 1326), going back to a rather widespread PS **šḥn-*: Akk. *šaḥānu*, Ugr. *šḥn*, Syr. *šḥen*, Gez. *saḥna*, Jib. *šḥan*, Hbr. *šḥin* ‘inflammation’ (AHw. 1128, DUL 813, HALOT 1460, LSyr. 769, CDG 495, JL 264).

2.6. The light

2.6.1. To shine, light

The most prominent PS root connected with ‘light’ is **nwr* ‘to shine’, based primarily on Akk. *nawāru* and Arb. *nwr* (Fronzaroli 1965a, 138, 144, Edzard 1994, AHw. 768, Lane 2864). Substantives with the meaning ‘light’ have been produced from this root in Akk. *nūru*, Ugr. *nr*, Hbr. *nēr*, Arb. *nūr-*, Tgr. *nor*, Mhr. *nawr* (AHw. 805, DUL 642,

HALOT 723, WTS 334, ML 307). Alternatively, ‘light’ can be designated by terms based on the PS biconsonantal element **r* (Fronzaroli 1965a, 138, 144): Akk. *urru* ‘daytime’ (AHw. 1433), Ugr. *’ar*, *’ir* ‘light’, *’ur* ‘warmth, heat’ (DUL 94–95), Hbr. *’ōr* ‘light’ (HALOT 24), Arb. *’irrat-*, *’uwār-* ‘heat, flame’ (LA 4 18, 39), Tgr. *’arwä* ‘to flame, to blaze’, *’arwa* ‘flame’ (WTS 359), Soq. *’érir* ‘to light, kindle’ (LS 75). MSA terms for ‘moon’ (Mhr. *ḥā-rūt*, Jib. *’erāt*, Soq. *’ére*; ML 7, JL 4, LS 72) may be further related, as well as Gez. *’er* ‘sun, light’ (cf. CDG 36, EDG 118). Another common root connected with ‘light’ by Fronzaroli (1965a, 138, 145) is PWS **ngh* ‘to shine, to dawn’: Hbr. *ngh*, Syr. *ngah*, Gez. *nagha*, Jib. *əngḥót*, Soq. *nigóhoh* (HALOT 667, LSyr. 414, CDG 391, JL 183, LS 256).

2.6.2. Shadow

The PS term for ‘shadow’ is **till-*: Akk. *šillu*, Ugr. *tl*, Hbr. *šēl*, JPA *ṭwlh*, Arb. *ḡill-*, Gez. *šālālot* (Fronzaroli 1965a, 138, 145, 149, AHw. 1101, DUL 1002, HALOT 1024, DJPA 224, Lane 1915, CDG 555). It is missing from MSA (Jib. *ḡélél* is an Arabism, JL 49), whose basic terms for ‘shadow’ go back to **šl’* (Mhr. *hōla’*, Soq. *miló’oh*; ML 156, LS 143) or **gfy* (Jib. *gófē’*, JL 72). Fronzaroli (1965a, 138–139, 145, 149) reconstructs two PS verbal roots connected with darkness: **dhm* and **tīm*. PS **dhm* is based on Akk. *da’āmu*, *da’mu* (AHw. 146, 158) and Arb. *’adham-* (Lane 925), to which Mhr. *dāhōm*, Jib. *dóhúm* ‘heat-haze, shimmer’ (ML 66, JL 36) and Hbr. *nidhām* ‘astounded, confused’ (HALOT 214) may be further related (DRS 227). For PS **tīm* cf. 3.2.

2.7. The time

2.7.1. Day, night, evening, dawn

The PS term for ‘day’ (both ‘daylight’ and ‘24 hours’) is **yawm-*, preserved in Akk. *ūmu* (for *a-pi-mu* *’à-mu-tum* ‘hot days’ in VE 77 see Krebernik 1983, 29) and thought-out CS: Ugr. *ym*, Hbr. *yōm*, Syr. *yawmā*, Arb. *yawm*, Sab. Min. Qat. *ywm* (Fronzaroli 1965a, 139, 141, AHw. 1418, DUL 964, HALOT 399, LSyr. 299, Lane 3064, SD 169, LM 108, LIQ 81). It is ousted by derivatives of *w’l* in ES (Gez. *’alat*, *mo’alt*), being either completely lost or relegated to the meaning ‘today’ (Gez. *yom*), see Kogan 2005b, 385 (*yom* ‘day’ is marginally preserved only in Tigre, WTS 508). For the complex interplay of **yawm-* ‘day’ and **šamš-* ‘sun’ in MSA see Kogan 2006a, 472. PS was likely opposing ‘night’ and ‘evening’. The former was designated by **layliy(-at)-*: Akk. *līlu*, *līlātu*, Ugr. *ll*, Hbr. *layil*, *laylā*, Syr. *lēlyā*, Arb. *layl-*, *laylat-*, Sab. *lly*, Qat. *lyl*, Gez. *lelit*, Tna. *läyti*, Amh. *let*, Mhr. *līlāt*, Soq. *līlhe* (Fronzaroli 1965a, 141, 147, 150, AHw. 552, DUL 497, HALOT 528, LSyr. 366, Lane 3015, SD 83, LIQ 92, CDG 314, ML 259, LS 471). For the latter, **mušy(-at)-* was used: Akk. *mūšu*, *mušītu* (for *mi-šum*, *me-su* = Sum. *ml.an* in VE 816a see Krebernik 1983, 31), Arb. *musy-*, *masā’-*, Gez. *māset*, *māsyat* (Fronzaroli 1965a, 141, 147, 150, AHw. 683, 687, LA 15 325, CDG 368). In Akkadian the opposition was reversed: *līlātu* is ‘evening’ and *mūšu*, *mušītu* is ‘night’. A special term for ‘dawn, morning’ is PS **šaḥ(a)r-*: Akk. *šēru*, *šērtu* ‘morning’ (for *si-en-lum* =

Sum. UD.DAG in VE 776 see Krebern timer 1983, 29), Ugr. *šhr*, Hbr. *šahar*, JPA *šahrā*, Arb. *saḥar*- ‘dawn’, Jib. *šhor*, Soq. *her* ‘today’ (Fronzaroli 1965a, 141, 147, 150, AHW. 1218–1219, DUL 812, HALOT 1466, DJPA 545, Lane 1317, JL 261, LS 188).

2.7.2. Year

While ‘month’ is designated by terms for ‘moon’ throughout Semitic, a special PS term for ‘year’ is **šan-at-*: Akk. *šattu*, Ugr. *šnt*, Hbr. *šānā*, Syr. *šattā*, Arb. *sanat-* (Fronzaroli 1965a, 143, 148, 150, AHW. 1201, DUL 834, HALOT 1600, LSyr. 789, Lane 1449). It is poorly preserved in ESA (*s₁nyn* interpreted as ‘one-year-old’ in Ryckmans/Müller/Abdallah 1994, 66), whose normal term for ‘year’ is *ḥrf* (SD 62, LM 44, LIQ 75), paralleled by Gez. *ḥarīf* ‘current year’ (LLA 590) and going back to PS **ḥVrp-* ‘autumn’: Akk. *ḥarpu*, Hbr. *ḥōrāp*, Arb. *ḥarīf-* (also ‘year’), Mhr. *ḥarf*, Jib. *ḥorḥ*, Soq. *horḥ*, perhaps Ugr. *hrpnt* (AHW. 326, DUL 450, HALOT 356, Lane 726, ML 446, JL 304, LS 191). PS **šan-at-* is lost in ES and MSA (Tgr. *sānāt* and Mhr. *sənēt* are Arabisms), where designations of ‘year’ go back to **ām-* (Gez. *ām*, *āmat*, also in Arb. *ām-* and, perhaps, Sab. *ʿwm*, Qat. *ʿmm*; Lane 2202, CDG 62, SD 23, LIQ 117) or **ān-* (Jib. *ʿónút*, Soq. *énoh*; JL 20, LS 303).

2.8. The space

2.8.1. Right, left

The right ‘hand (side)’ was designated by PS **yamīn-*, **yamān-*: Akk. *imnu* (for *a-mīnūm*, *a-mī-tum* = Sum. *Á.zi* in VE 534 see Krebern timer 1983, 20), Ugr. *ymn*, Hbr. *yāmīn*, Syr. *yammīnā*, Arb. *yamīn-*, *yaman-*, Sab. *ymn*, Gez. *yamān* (SED I No. 292). Throughout MSA, the original root was transformed under the influence of the terms for the left side (Mhr. *ḥāymāl*, Jib. *émli*, Soq. *ʾimhel*), although in early Jibbali ‘right’ was designated by *īn* (Bittner 1917, 9), which, in its turn, was able to transform the original term for ‘left’ into *šin* (ibid. 69; none in JL). PS **šamʾāl-* for the ‘left hand (side)’ is attested everywhere except ES: Akk. *šumēlu*, Ugr. *šmʾal*, Hbr. *šəmoʾ(ʿ)l*, Syr. *semmālā*, Arb. *šimāl-*, *šamāl-*, Mhr. *šaymāl*, Jib. *šīyēl*, Soq. *šimhīl* (SED I No. 264, where related forms with no *-l* such as Arb. *šaʾmat-* ‘left side’, Sab. Min. *s₂ʾm* ‘north’ are also discussed). For the typical replacements in ES, such as Gez. *šagām* and Amh. *gəra*, see CDG 149, EDG 288–289.

3. Color

Color designations of various Semitic languages have been diachronically investigated in a series of articles by M. Bulakh (2003, 2004, 2006a, 2006b). For Proto-Semitic, Bulakh reconstructs a four-member system of basic color designations: ‘white’, ‘black’, ‘red’ and ‘yellow-green’.

3.1. Yellow-green

The best preserved PS color term is **wrk* for ‘yellow-green’: Akk. *warku*, Ugr. *yrk*, Hbr. *yarakrak*, Syr. *yūrākā*, Har. *warīk* (Bulakh 2003, 8–10, 2006, 204–211, AHw. 1471, DUL 982, HALOT 441, LSyr. 309, EDH 161). It is preserved in Arb. *ʾawraq* ‘ash-colored’ and *waraq* ‘leaf’ (LA 10 450–456), but the main Arabic designation of ‘green’ is *ʾaḥḍar* (Lane 756), perhaps related to Hbr. *ḥāšīr* ‘grass; leek’ (Bulakh 2004, 276–277, HALOT 343). In Geez and other ES, **wrk* is attested as *wark* ‘gold’ (CDG 618), perhaps comparable to Arb. *warq*-, *wariq*- ‘silver coins’ (LA 10 451). The origin of Gez. *ḥamalmil* ‘green’ is discussed in Bulakh 2006a, 741–743. The meaning of *wrk* in ESA is difficult to ascertain (Kogan/Korotayev 2003, 112–113). There is no trace of **wrk* in MSA, the origin of Common MSA **ššr* ‘to be yellow-green’ (Mhr. *ḥāḏawr*, Jib. *šəḏrór*, Soq. *šəḏar*) is uncertain (Bulakh 2004, 276–277, ML 163, JL 265, LS 420).

3.2. Black

According to Bulakh, PS **ṭlm* can be reconstructed with the meaning ‘to be black’ on the cumulative evidence of Akk. *šalmu* and Gez. *šallim* (Bulakh 2003, 5–7, 2006, 738–740, AHw. 1078, CDG 556). In CS and MSA, this root is preserved with a more peripheral meaning ‘to be dark’: Ugr. *ṭlmt*, Hbr. *šalmāwāt*, Jib. *ḏəliūt* ‘darkness’, Arb. *ḏlm*, Mhr. *ḥəḏlāwm*, Soq. *ṭlm* ‘to go dark’ (DUL 1004, HALOT 1029, Lane 1921, ML 84, JL 49, LS 204). The etymology of Hbr. *šāḥōr* (HALOT 1466) is problematic: beside obvious Aramaic cognates like Syr. *šhar* ‘to become black’ (LSyr. 770), one may tentatively compare Arb. *saḥar*- ‘whiteness overspreading blackness’ (Lane 1317) and Akk. *šūru*, *šuhru* if the latter indeed denotes dark color as suggested in AHw. 1287 (Bulakh 2003, 13–15, 2006, 195–196). There is no reliable etymology for Common MSA **ḥwr*, represented by Mhr. *ḥōwar*, Jib. *ḥōr*, Soq. *ḥawr* (ML 492, JL 120, LS 168): it is conspicuously similar to both Hbr. *šāḥōr* ‘black’ and Common Aramaic **ḥwr* ‘to be white’, but each of the two comparisons is quite problematic (cf. Bulakh 2003, 4, 2004, 273–274 where Arb. *ḥawar*- ‘intense whiteness of the white of the eye and intense blackness of the black thereof’, Lane 666, is further compared). There is no etymology for Arb. *swd* and Common Aramaic **km* (Syr. *ʾukkāmā*, LSyr. 18).

3.3. White

Following Bulakh, one could reconstruct **lbn* as the PS designation of the color ‘white’. The original basic function would then be preserved in Ugr. Pho. *lbn*, Hbr. *lābān*, Mhr. *əwbōn*, Jib. *lūn*, Soq. *libehon* (Bulakh 2004, 270–273, 2006, 185–195, DUL 490, DNWSI 564, HALOT 517, ML 251, JL 159, LS 228). Outside Canaanite and MSA, this root is most clearly preserved in Arb. *laban*- ‘milk’ (LA 13 457). Akk. *pešû* may be related to PCS **pšh* ‘to be bright’, represented by Hbr. Syr. *pšh*, Arb. *fšh* (Bulakh 2003, 4–5, AHw. 857, HALOT 953, LSyr. 587, Lane 2403). Common Aramaic **ḥwr* is to be connected with Arb. *ʾaḥwariyy*- ‘white’, *ḥawwara* ‘to whiten’ (Lane 665–666) unless they are Aramaisms. There is no convincing etymology for Gez. *šāḏā* (Bulakh

2006, 738). Arb. *ʿabyaḍ*- may be internally derived from *bayḍ*- ‘egg’ (Lane 282–283), but it is also tempting to compare it to Gez. *beṣā*, Amh. *bəṣā* ‘yellow’ (cf. CDG 116, SED I No. 43).

3.4. Red

There is no deeply rooted common designation of the color ‘red’. The only relatively widespread root with this meaning is **ʾdm* (Bulakh 2006b, 196–203), attested as the basic term for ‘red’ in Hbr. *ʾādōm* and, presumably, Ugr. *ʾdm* (HALOT 15, DUL 17). Further reflexes of this root are Gez. *ʾaddāmāwi* ‘red’ (CDG 8, sparsely attested), Arb. *ʾādam*- ‘tawny, dark-complexioned’ and ‘having an intermixed color’ (Lane 37), perhaps Akk. *adamu* ‘a red garment’ (CAD A₁ 95). Common MSA **ʿpr* (Mhr. *ʾōfər*, Jib. *ʿṣfər*, Soq. *ʿāfer*; ML 14, JL 8, LS 320) is to be connected with PS **ʿapar*- ‘earth, dust’ (cf. 2.1.1. and Bulakh 2004, 274–276). Arb. *ʾaḥmar*- (Lane 641) is perhaps related to Hbr. *ḥmr* ‘to glow, to burn’ (HALOT 330). Common ES **kyḥ* (Gez. *kayyāḥ*, CDG 456) and Akk. *sāmu* (AHw. 1019) are etymologically obscure (cf. Bulakh 2003, 7–8, 2006, 740–741).

3.5. Other common color designations

A few other common color designations can be added to the aforementioned basic terms. Thus, PWS **šhb* probably designated a light-brown hue as suggested by Hbr. *šāhōb* ‘bright red’, Arb. *ʾaṣhab*- ‘red tinged with black’, Jib. *šahbōb* ‘fawn, light brown’ (Bulakh 2004, 278–279, 2006, 211–212, HALOT 1007, Lane 1736–1737, JL 237). PWS **šḥm* was likely applied to a dark-brown hue: Syr. *šḥāmā* ‘dusky, olive-colored’, Arb. *ʾaṣḥam*- ‘black’, Jib. *šḥamūm* ‘brown, dark’ (Bulakh 2004, 277–278, LSyr. 769, JL 261). PS **brm* with the meaning ‘to be multicolored’ is reconstructed on the evidence of Akk. *barāmu* ‘to be multicolored’, Hbr. *bərōmīm* ‘two-colored fabric’ and Arb. *barīm*- ‘a rope in which are two colors’ (AHw. 105, HALOT 161, Lane 195).

4. Vegetation

4.1. General botanical terminology

4.1.1. Tree, wood

PS **ʿṣ*- for ‘tree’ is preserved in Akk. *iṣu* (for *ì-šú* in VE 395, 411 see Krebern timer 1983, 15–16), Ugr. *ʿṣ*, Hbr. *ʿēṣ*, Gez. *ʿəṣ* (Fronzaroli 1968, 276, 290, 299, AHw. 390, DUL 186, HALOT 863, CDG 57). It is relegated to the meaning ‘wood’ in Aramaic (BA *ʾāʾā*, HALOT 1821) and some of ES (Kogan 2005c, 559–560, 2006a, 481). In ESA *ʿṣ* denotes a building material (Sima 2000, 290). The root persists as *ʿiḍḍ*-, *ʿuḍḍ*-, *ʿidāh*- ‘thorny trees’ in Arabic (Lane 2070, 2076), but left no trace in MSA (for the respective replace-

ments – Arb. *šažar*-, Common MSA **haram*- – see Kogan 2006a, 482). PS **kays̄-* is reconstructed with the meaning ‘wood, forest’ in Fronzaroli 1968, 277, 290 on the basis of Akk. *kīštu* (AHw. 923, for *ká-sa-tum* = Sum. GIŠ.TIR in VE 400 see Krebernik 1983, 15) and Mhr. *kāšnūt* (ML 242), Soq. *kāšen* (LS 388), to which JPA *kīs*, Syr. *kaysā* ‘wood, timber’ (DJPA 491, LSyr. 665) are clearly related.

4.1.2. Grass

PS **daṭ̄-* for ‘grass’ is based on Akk. *dīšu*, Hbr. *dāšā*’, BA *diṭā*, and, metathetically, Syr. *taḏā* (Fronzaroli 1965a, 142, 148, 150, 1968, 275, AHw. 173, HALOT 233, 1856, LSyr. 816). Its close connection with spring and spring rains is shown by Ass. *daš’u*, Arb. *daṭa’iyy-*, Sab. Min. *dī*’ (Pliny’s *dathiatum*), Jib. *dōṭe*’, Soq. *dōte* (AHw. 165, Dozy I 424, SD 36, LM 26, JL 42, LS 137). PCS **Všb-* ‘grass’, represented by Hbr. *ēšāb*, Syr. *‘esbā* and Arb. *‘ušb-* (Fronzaroli 1968, 274, 289, 299, HALOT 889, LSyr. 536, Lane 2050), is likely related to Akk. *ešēbu* ‘to grow luxuriantly’ and *išbaltu* ‘a grass’ (AHw. 253, 393). Sab. *‘s₃bt* ‘pastureland’ (SD 21) and Qat. *‘s₃b* ‘crops, produce’ (LIQ 126) are phonologically problematic, whereas Tgr. *‘ešbay* ‘a plant with tendrils’ (WTS 466) may be an Arabism.

4.2. Parts of plants

4.2.1. Root

Among common designations of parts of plants, PS **šVrš-* for ‘root’ is to be singled out: Akk. *šuršu*, Ugr. *šrš*, Hbr. *šōrāš*, JPA *šrš*, Gez. *šərw*, Jib. *šīrōh*, Soq. *šerah* (Fronzaroli 1968, 276, 290, 299, AHw. 1286, DUL 845, HALOT 1659, DJPA 568, CDG 535, JL 256, LS 433). ESA *s₂rs₁* is preserved with the meaning ‘base, foundation’ (SD 134, LM 88, LIQ 172), whereas Arb. *šaras-*, *širs-* exhibit a peculiar semantic shift to ‘small thorny tree’ (Lane 1532; the post-classical *šīrš* ‘root’ in Dozy I 745 is hardly genuine). The PS reconstruction **šVrš-*, based on the ESA and Arb. forms, is rather conventional (Faber 1984, 213–219, Kogan 2006a, 480). PS **šVrš-* tends to be replaced by **ikḳār-* in Aramaic and is ousted by *‘aṣl-* in Arabic (Kogan 2005c, 519–520, 2006, 480–481).

4.2.2. Seeds

The main PS term for ‘seed’ is probably to be reconstructed as **dar̄-* on the basis of Akk. *zēru* (for *ša-la-ù*, *šar-ù* in VE 684 see Krebernik 1983, 26), Ugr. *dr̄*, *dr̄*, Hbr. *zāra*’ (Fronzaroli 1969, 9–10, 26, 33, AHw. 1521, DUL 280, HALOT 282). Clearly related forms with phonological deviations are present in Syr. *zar’ā* (LSyr. 207), Gez. *zar’* (CDG 642), Soq. *deri* (LS 135), Sab. *mḏr’t* ‘sown field’ (SD 40). Arb. *zr̄* ‘to cultivate’ (Lane 1225) is well attested, but the main term for seed is *baḏr-* (Lane 173; for its etymology see Kogan 2006a, 471). Soq. *šāne* ‘seed’ (LS 145) has no apparent cognate outside MSA (Kogan 2006a, 472) unless one compares Akk. *ašnan* ‘(deified) grain’ (AHw. 82).

4.2.3. Shoots, flowers

PWS ***Vbb-** designated ‘shoot’ or ‘flower’: Ugr. *’ib* ‘fruit, bud, flower’, Hbr. *’ēb* ‘shoot’, *’ābīb* ‘ears of corn’, Syr. *’ebbā* ‘fruit’, Arb. *’abb-* ‘herbage’ (DUL 4, HALOT 2, 4, LSyr. 1, Lane 3; for the etymology of Amh. *abāba* ‘flower’ and similar Gurage forms see EDG 6, Appleyard 1977, 39). PCS ***parḥ-** with the same meaning derives from Hbr. *pārah* ‘bud, blossom’, Syr. *parḥā* ‘flower’, Arb. *farḥ-* ‘sprout’ (Fronzaroli 1968, 276, 290, HALOT 966, LSyr. 594, Lane 2362). A likely related PS ***piry-** is based on Akk. *per’u* ‘shoot’, Syr. *per’ā* ‘bud, shoot’, Tna. *färrē’e* ‘to flourish’, Mhr. *fātrəγ* ‘to bloom’, Jib. *fērəγ* ‘to open (flower)’ (Kogan 2006c, 272, AHw. 856, LSyr. 603, TED 2667, ML 98, JL 60). PWS ***piry-** for ‘fruit’ derives from Ugr. *pr*, Hbr. *pārī*, JPA *pyryyh*, Gez. *färe*, perhaps Jib. *frēt* ‘unripe fruit’ (Fronzaroli 1968, 276, 290, 300, DUL 678, HALOT 967, DJPA 446, CDG 167, JL 59).

4.2.4. Ear of corn

PS ***šu(n)bul-at-** designated ‘ear of corn’: Akk. *šubultu*, Ugr. *šblt*, Hbr. *šibbōlāt*, Syr. *šēblā*, Arb. *sabalat-*, *sunbulat-*, Sab. *s₁blt*, Gez. *sabl*, Mhr. *səbəlēt*, Soq. *seboléh* (Fronzaroli 1969, 12, 27, 34, AHw. 1258, DUL 805, HALOT 1394, LSyr. 752, Lane 1440, SD 123, CDG 484, ML 340, LS 280). PS ***tībn-** designated ‘straw’: Akk. *tībnu*, Hbr. *tābān*, Syr. *tebnā*, Arb. *tabn-*, *tībn-* (Fronzaroli 1969, 12, 27, 34, AHw. 1354, HALOT 1685, LSyr. 814, Lane 297).

4.3. Wild plants

4.3.1. Herbs, rushes

A few common terms for wild herbs can be reconstructed. ‘Thistle’ was designated by PS ***dardar-**: Akk. *daddaru*, Hbr. *dardar*, Syr. *dardrē*, Gez. *dandar*, *dader*, Tna. *dander*, *dandär*, Amh. *dändär* (Fronzaroli 1968, 276, 289, 299, AHw. 148, HALOT 230, LSyr. 166, CDG 123, 136); the root is preserved in dialectal Arabic (Yemen *durdurin*, Behnstedt 1992, 369) but probably not in the classical language (cf. Dozy I 432). PS ***ʾašal-** for ‘rush’ derives from Akk. *ašlu* (*a-sa-lu* = Sum. *Ú.NINNI*₅ in VE 300, Krebernik 1983, 13) and Arb. *ʾasal-* (Fronzaroli 1968, 276, 288, 299, AHw. 81, Lane 59). More widely attested is PS ***kanay-** for ‘cane, reed’: Akk. *kanû* (*ká-nu-wu* = Sum. *GIŠ.GI* in VE 416, Krebernik 1983, 16), Ugr. *kn*, Hbr. *kānā*, Syr. *kanyā*, Arb. *qanāt-* (Fronzaroli 1968, 276, 290, 299, AHw. 898, DUL 704, HALOT 1113, LSyr. 677, Freytag III 508). PS ***hVlp(-at)-** designated ‘alfa grass’: Akk. *elpetu*, Hbr. pB. *hēlāp*, Syr. *hulpā*, Arb. *ḥalaf-* (Fronzaroli 1968, 276, 289, 299, AHw. 205, Jastrow 156, LSyr. 237, Lane 627). PS ***pVḵV-** designated ‘colocynth’: Akk. *peḵû*, Hbr. *paḵḵū’ā*, Syr. *paḵḵū’ā*, Arb. *fuqqā’-* (AHw. 854, HALOT 960, LSyr. 590, Lane 2428).

4.3.2. Trees

There are a few relatively widespread designations of wild trees. PS ***Vtl-** with the meaning ‘tamarisk’ derives from Hbr. *’ēšāl*, Arb. *’atl-*, Sab. *’tl*, Mhr. *hōtəl* (Fronzaroli 1968, 279, 291, 300, Sima 2000, 181–184, HALOT 95, Lane 21, SD 9, ML 9), to which Soq. *’ešalēten* ‘kind of tree’ is compared in LS 76. The same meaning can be attributed to PS ***ṭarpa-** on the basis of Akk. *ṭarpa’u* and Arb. *ṭarfā-* (AHw. 1382, Lane 1844). PS ***bay(a)n-** came to denote ‘tamarisk’ in Akk. *bīnu* and Syr. *bīnā* (AHw. 127, LSyr. 69; for *ī-šū ba-ne*, *ba-nu* = Sum. GIŠ.ŠENIG in VE 395 see Krebernik 1983, 15), but ‘moringa tree’ in Arb. *bān-* and Sab. *bn* (Sima 2000, 198–199, Lane 278, SD 33; cf. DRS 62, Streck 2004, 251–252). PS ***buṭm(-at)-** denoted ‘terebinth’ (Stol 1979, 1–24) as suggested by Akk. *buṭnu*, *buṭumtu* (for *a-kà-lu bù-ṭa-ma-tim* = Sum. NINDA.LAM in VE 32b see Krebernik 1983, 2), Hbr. *boṭnīm*, JPA *bwṭnh*, *boṭmā*, Syr. *beṭmtā*, Arb. *buṭm-* (Fronzaroli 1968, 278, 290, 300, AHw. 144, HALOT 121, DJPA 87, 91, LSyr. 67, Lane 219; Gez. *bəṭm*, *buṭm* and related ES forms are Arabisms according to CDG 114). PS ***burāt-** for ‘juniper’ is based on Akk. *burāšu* (*ba-ra-su-um* = Sum. GIŠ.LI in VE 374 must be related, cf. Conti 1990, 124), Hbr. *bərōš*, Syr. *brātā* (Fronzaroli 1968, 278, 291, 300, AHw. 139, HALOT 155, LSyr. 98). Fronzaroli (1968, 277, 290, 300) reconstructs PS ***’ayl(-ān)-**, ***’all(-ān)-** with the meaning ‘big tree, oak’ on the basis of Akk. *allānu* ‘oak’ (for *’a₅-a-la-nu-um* = Sum. GIŠ.UD in VE 496 see Krebernik 1983, 18), Ugr. *’aln* ‘oak grove’, Hbr. *’ayil*, *’ēlā* ‘mighty tree’, *’allōn* ‘oak’ (AHw. 37, DUL 58, HALOT 40, 51–54). Common Aramaic **’ilān-*, clearly related, was generalized with the meaning ‘tree’ (Kogan 2005c, 559–560). Fronzaroli further compares Arb. *’allat-* ‘a spear with a big edge’ (LA 11 27), with a peculiar semantic evolution. PS ***’atad-** for ‘buckthorn’ derives from Hbr. *’āṭād*, Syr. *’atādā*, Arb. *’atad-* (Fronzaroli 1968, 278, 291, 300, PS 131, HALOT 37, LA 3 88). Likely related are Syr. *haṭṭā* (LSyr. 174, with unexpected *h-*) and Akk. *eṭṭettu* (AHw. 266; or *eddetu* as in CAD E 23, by contamination with *edēdu* ‘to be sharp’), but Tna. *’aṭ’at*, Amh. and Gur. *aṭat*, all denoting thorn trees (CDG 110), are more problematic. PS ***ḥilāp-** with the meaning ‘willow’ is based on Akk. *ḥilēpu*, JBA *ḥilāpā*, Syr. *ḥellāpā* and Arb. *ḥilāf-* (Fronzaroli 1968, 278, 291, 300, AHw. 345, DJBA 456, LSyr. 235, Lane 797). PWS ***ḡarab-** probably designated ‘Euphrates poplar’ as suggested by Hbr. *’ārābā* (HALOT 879), Syr. *’arbtā* (LSyr. 546) and Arb. *ḡarab-* (Lane 2242). Tgr. *’arəb* ‘a plant with tendrils’, *’arob* ‘a tree’ (WTS 460) and Soq. *’arhieḇ* ‘name of a tree’ (LS 325) may be further related. Conversely, Akk. *ṣarbatu* ‘Euphrates poplar’ (AHw. 1085; already in VE 397: *ṣār-ba-tum* = Sum. GIŠ.ASAL_x, Krebernik 1983, 15) is rather hard to reconcile with the above reconstruction (cf. Fronzaroli 1968, 278, 291, 300). PWS ***’arz-** for ‘cedar’ or ‘pine’ is attested in Ugr. *’arz*, Hbr. *’ūrāz*, Syr. *’arzā*, Arb. *’arz-*, Gez. *’arz*, Soq. *’arz* (DUL 113–114, HALOT 86, LSyr. 47, Lane 47, CDG 41, LS 73). At least some of these terms may be interborrowings (*ar-za-tum* = Sum. GIŠ.NUN.SAL in VE 471 may be due to a WS import, Lambert 1989, 30).

4.3.3. Mushrooms

PS ***kam’at-** designated a kind of mushroom (traditionally, ‘truffle’), represented by Akk. *kam’atu*, Arb. *kam’at-* and JPA *kmhh* (AHw. 432, DJPA 262, WKAS K 346–347).

4.4. Domestic plants

4.4.1. Cereals

PS ***bṽḳl-** was probably a general term for ‘cultivated plant, cereal’: Akk. *buklu* ‘malt’ (for *bù-kù-lu* = Sum. MÙNU in VE 856 see Krebernik 1983, 33), Ugr. *bkl* ‘malt’ (in *ḱmh bkl* ‘malt flour’ in a hippiatric text), Syr. *bukḳālā*, Arb. *baql-*, Sab. *bkl* ‘plants, plantation’ (cf. Sima 2000, 185), Min. *s₁bkl* and Qat. *bkl* ‘to plant’, Gez. *baḳʷl* ‘plant, herb, vegetation’, Tgr. *bəḳəl* ‘sprouting corn; beer made of corn’, Mhr. *bēḳəl*, Jib. *béḳəl* ‘vegetation growing after rain’ (Fronzaroli 1969, 5, 24, 32, AHw. 139, DUL 235, LSyr. 87, Lane 236, SD 30, LM 23, LIQ 31, CDG 101, WTS 284, ML 47, JL 25). PS ***ḥinṭ-at-** (Fronzaroli 1969, 12, 27, 34) denotes wheat throughout CS (Ugr. *ḥtt*, Hbr. *ḥittā*, Syr. *ḥettā*, Arb. *ḥinṭat-*, DUL 377, HALOT 307, LSyr. 227, Lane 657) and in Soqotri (*ḥinṭeh*, LS 182). Its reflexes in other MSA and in Geez are more general in meaning: Mhr. *ḥəṭāt* ‘grain’ (ML 192), Jib. *ḥūt* ‘food, beans, staple food, any cereal’, *ḥūtét* ‘an ear of rice’ (JL 119), Gez. *ḥəṭṭat*, *ḥəṭṭat* ‘grain, seed’ (CDG 268). Still uncertain is the exact significance of *uṭṭetu* in various strata of Akkadian: ‘wheat?’, ‘barley?’, ‘cereal in general?’ (AHw. 1446, CAD U/W 349, Kogan 2006b, 195). Another common term for wheat is PWS ***burr-**: Hbr. *bar*, Arb. *burr-*, Sab. *br*, Mhr. *barr*, Jib. *bohr*, Soq. *bor* (Fronzaroli 1969, 12, 27, 34, Sima 2000, 200–202, HALOT 153, Lane 176, SD 31, ML 51, JL 27, LS 98; for *burrum* ‘grain’ – perhaps a West Semitism – in Mari Akkadian see CAD B 330). PCS ***šṽVr-** for ‘barley’ is based on Ugr. *šʿr*, Hbr. *šəʿōrā*, Syr. *sʿartā*, Arb. *šaʿīr-*, Sab. *s₂ʿr* (Fronzaroli 1969, 13, 34, 36, Sima 2000, 247–248, DUL 798, HALOT 1346, LSyr. 489, Lane 561, SD 131). While Tgr. *šəʿir*, Mhr. *šəʿīr*, Jib. *šīʿīr*, Soq. *šāʿīr* as designations of ‘barley’ are obvious Arabisms (WTS 226, ML 391, JL 259, LS 420), phonologically comparable terms for ‘grass, straw’ in ES and MSA (Gez. *šāʿr*, Mhr. *šēr*, Jib. *šāʿar*; CDG 525, ML 370, JL 244) may be genuine cognates. It is uncertain whether Gez. *šarnāy* ‘wheat’ is related to this root (cf. CDG 534). PS ***duḥn-** for ‘millet’ derives from Akk. *duḥnu*, Hbr. *dōḥan*, Syr. *duḥnā*, Arb. *duḥn-* (Fronzaroli 1969, 13, 29, AHw. 174, HALOT 218, LSyr. 149, Lane 861).

4.4.2. Vegetables

There are several common terms for vegetables. PS ***tūm-** denoted ‘garlic’: Akk. *šūmū*, Hbr. *šūmīm*, Syr. *tūmā*, Arb. *tūm-*, Gez. *som*, *somat*, Mhr. *təmēt*, Jib. *tuhm* (Fronzaroli 1969, 6, 24, AHw. 1275, HALOT 1442, LSyr. 819, Lane 365, CDG 501, ML 417, JL 284). Less widespread is PWS ***baṣal-** for ‘onion’: Hbr. *bāṣāl*, Syr. *beṣlā*, Arb. *baṣal-*, Sab. *bṣl*, Gez. *baṣal*, Mhr. *baṣəlēt*, Jib. *bəṣāl*, Soq. *bīṣle* (Fronzaroli 1969, 6, 24, 32, Sima 2000, 202–203, HALOT 147, LSyr. 86, Lane 212, SD 33, CDG 111, ML 55, JL 29, LS 93). PS ***karaṭ-** is reconstructed with the meaning ‘leek’ in Fronzaroli 1969, 6, 24, 32 on the basis of Akk. *karašu*, pB. Hbr. *kārēšā*, Syr. *karrātā*, Arb. *karāt-*, *karrāt-*, *kurrāt-* (AHw. 448, Jastrow 667, LSyr. 349, Lane 2604). PS ***ḱVṭ(t)V²-** for ‘cucumber’ is widely attested: Akk. *ḱiššū*, Hbr. *ḱiššūʿīm*, Syr. *ḱaṭṭūtā*, Arb. *qittāʿ-*, *quṭṭāʿ-*, Gez. *ḱʷasyāt* (Fronzaroli 1969, 6, 25, 32, AHw. 923, HALOT 1151, LSyr. 657, Lane 2487, CDG 447). PS

***ḥass-** for ‘lettuce’ derives from Akk. *ḥassū*, Syr. *ḥasstā*, Arb. *ḥass-* (Fronzaroli 1969, 6, 25, 32, AHw. 331, LSyr. 245, Lane 736).

4.4.3. Fruit trees

There are a certain number of common designations for cultivated trees. PWS ***tam(a)r-** designated ‘date palm’ (and its fruit, as in most daughter languages except Arb. and continental MSA): Hbr. *tāmār*, JPA *twmrh*, Arb. *tamr-*, Sab. Min. *tmr*, Gez. *tamr*, *tāmārt*, Mhr. *tōmār*, Jib. *tāmṛét*, Soq. *timreh* (Fronzaroli 1968, 279, 291, 300, Sima 2000, 246, HALOT 1756, DJPA 577, Lane 317, CDG 576, ML 402, JL 271, LS 443). It is missing from Akkadian where the tree is designated by the Sumerian loanword *gišimmaru* (for an attempt to connect *sa-ma-lum* = Sum. GIŠ.GIŠIMMAR in VE 399 with PWS ***tam(a)r-** see Lambert 1989, 30). PS ***taḳid-**, ***tiḳd-** for ‘almond (tree and fruit)’ is reconstructed on the basis of Akk. *šikdu*, Ugr. *tkd* and Hbr. *šākēd* (Fronzaroli 1968, 279, 291, 300, AHw. 1247, DUL 927, HALOT 1638). Clearly related forms with -g- are common in Aramaic and ES: Syr. *šgettā* (LSyr. 755), Gez. *səgd* (CDG 491). PS ***ta’in(-at)-** for ‘fig’ derives from Akk. *tittu* (for *ti-ī-tum* = Sum. GIŠ.PÈŠ in VE 368a see Krebernik 1983, 14), Hbr. *tə’ēnā*, Syr. *tettā* (Fronzaroli 1969, 7, 25, 32, AHw. 1363, HALOT 1675, LSyr. 813; Arb. *tīn-* is thought to be an Aramaism, Jeffery 1938, 96–97). A less widespread synonym for ‘fig, sycamore’ is PWS ***balas-**, based on Hbr. *bōlēš šikmūm* ‘picker of sycamore figs’ in Amos 7.14 (HALOT 134, Steiner 2003), Arb. *balas-* (LA 6 36), Gez. *balas* (CDG 97). Fronzaroli (1969, 7, 25, 33) reconstructs PS ***ḥāḥ-** with the meaning ‘plum-tree’ on the basis of Akk. *ḥahḫu*, Syr. *ḥahḫā*, *ḥōḫā*, Arb. *ḥawḫ-*, Gez. *ḥoḥ* (AHw. 308, LSyr. 226, Lane 820, CDG 260), possibly related to such terms for ‘(thorn-)bush’ as Hbr. *ḥōaḥ*, Syr. *ḥōḫā*, Tgr. *ḥaḥot*, Tna. *ḥeḥot* (HALOT 296, LSyr. 226, WTS 58, TED 168).

4.4.4. Viniculture

Common botanical terms connected with viniculture usually do not go beyond CS. Thus, PCS ***gapn-** for ‘vine’ (Fronzaroli 1969, 8, 25, 33) is represented by Ugr. *gpn*, Hbr. *gāpān*, Syr. *gpettā*, *gupnā*, Arb. *ḡafn-* (DUL 304, HALOT 200, LSyr. 128, Lane 434). Akk. *gapnu*, *gupnu* ‘(fruit) tree, vine’ are late words probably borrowed from WS in spite of the semantic difference (with CAD G 44). Comparable forms in VE 1431’, EV 0432 and 0392 (*ga-pá-na-na-um_x*, *gáp-na-ne-um_x* = Sum. Ú.TIR, *ga-pá-na-na-ù* = Sum. ŠE.NINNI₅) may also have a WS background. PCS ***inab-** (or ***ḡinab-**) for ‘grape’ derives from Ugr. *ḡnb*, Hbr. *‘ēnāb*, Syr. *‘enbtā*, Arb. *‘inab-*, Sab. *‘nb* (Fronzaroli 1969, 8, 25, 33, Sima 2000, 195–196, DUL 323, HALOT 851, LSyr. 534, Lane 2167; Tgr. *‘ināb* in WTS 473 is an Arabism). Akk. *inbu* ‘fruit, flower’ (AHw. 381) may be related to this root (unless compared to PWS ***ibb-** ‘shoot, flower’, 4.2.3.). PWS ***ṽikāl-** probably designated cluster of grapes or other fruits: Ugr. *’uṭkl*, Hbr. *’āškōl*, JBA *’ikālā*, Arb. *’iḡkāl-*, Gez. *’askāl* (DUL 125, HALOT 95, DJBA 178, Lane 21, CDG 42). While *āš-kà-lum*, *iš₁₁-kà-um* in VE 660 (= Sum. ŠE.GEŠTIN, Krebernik 1983, 26) clearly represent the same root, this is less certain for Akk. *išhunnatu* (AHw. 387) in view of the phonological difference.

5. The animals

5.1. Domestic mammals

5.1.1. Large cattle

PS ***tawr-** for ‘bull, ox’ is represented by Akk. *šūru* (for *šu-lum* = Sum. GU₄.TUR in VE 1386 see Krebern timer 1983, 24), Ugr. *tr*, Hbr. *šōr*, Syr. *tawrā*, Arb. *tawr-*, Sab. Qat. Min. *twr*, Gez. *sor*, Mhr. *tawr* (SED II No. 241). A less widespread synonym is PS ***alp-**: Akk. *alpu*, Ugr. *’alp*, Pho. *’lp*, Hbr. *’ālāp* ‘bull’, Soq. *’alf* ‘heifer’ (SED II No. 4). The meaning ‘bull’ may also be attributed to PS ***bV’Vr-** on the evidence of Akk. *bīru* ‘bull, young cattle’, *būru* ‘young calf’ and Geez *bā’ar* ‘ox, bull’ (SED II No. 53), but a more general meaning ‘livestock, cattle’, typical of Hbr. *bā’ir* and ESA *b’r* is also possible (the semantic shift to ‘camel’ in Arb. *ba’ir-*, Mhr. *hā-bēr* and, probably, ESA *b’r* is an Arabian innovation). PS ***la’ay-at-**, ***lay²-at-** preserves the original meaning ‘cow’ in Akk. *lītu* (for *lī-a-nūm* = Sum. ALIM and *lī-a-tum* = Sum. ALIM.SAL in VE 731, 732 see Civil 1984, 90) and Mhr. *lāhātān*, Jib. *lē’*, Soq. *’ēltheh*, but came to denote a wild hoofed animal in Arb. *la’a*’, *la’āt-* (SED II No. 142). PS ***arḥ-** for ‘cow, heifer’ is represented by Akk. *arḥu*, Ugr. *’arḥ*, Amn. *’rh*, Demotic Arm. *’rh*, Arb. *’irḥ-*, Tna. *’arḥi*, Soq. *’arḥ* (SED II No. 12). PCS ***igl-** for ‘calf’, attested in Ugr. *’gl*, Hbr. *’ēgāl*, Syr. *’eglā*, Arb. *’iḡl-* (SED II No. 28), may go back to PWS or even to PS if *ù-gi-l[um]* = Sum. AL[IM’] in VE 1192 and Gez. *’agʷəl* (*’agʷal*, *’agʷl*) ‘the young of any animal or fowl’ are related. PCS ***baḡar-** is a collective term for ‘large cattle’: Hbr. *bāḡār*, Syr. *baḡrā*, Arb. *baḡar-*, Sab. Min. Hdr. *bḡr* (SED II No. 59). The root seems to be absent from Akkadian: *buḡāru* and *baḡru* in Mari and Emar are likely West Semitisms (Streck 2000, 87), and the same may be true of *ba-ḡa-lum* = AB.LU in VE 1101. The exact meaning of PS ***parr(-at)-** (SED II No. 181) is uncertain: Hbr. *par*, *pārā* and Ugr. *pr*, *prr* are applied to ‘(young of) large cattle’ (so also Common MSA **pa’r-* ‘young bull’), but Akk. *parru*, *parratu* (already in OB and MA, see CAD P 189, 192), Syr. *parrā*, *partā* and Arb. *furār-* denote ‘young of small cattle’.

5.1.2. Small cattle

5.1.2.1. Sheep

PS ***ša’n-** as a collective term for ‘small cattle’ derives from Akk. *šēnu*, Ugr. *š’in*, Hbr. *šō(’)n*, Syr. *’ānā*, Arb. *da’n-*, Sab. Min. *š’n* (SED II No. 219). PCS ***šawly-** designated a single head of small cattle: Hbr. *šā*, Ugr. *š*, Pho. *š*, Arb. *šā’-*, perhaps Sab. *s₂h* (SED II No. 217). The most widespread terms for an individual ewe are PS ***ta(w)-at-** (Akk. *šu’u*, Ugr. *’at*, Old Arm. *š’t*, *s’wn*, Mnd. *tata*, Arb. *ta’wat-*, Mhr. *tiwūt*, Jib. *tēt*, Soq. *tē’e*; SED II No. 236) and ***raḡil-** (Akk. *laḡru*, Hbr. *rāḡēl*, JPA *rāḡlā*, Arb. *raḡil-*, Soq. *rēḡloh*; SED II No. 188). PWS ***kabš-** denoted a ‘ram’: Hbr. *kābāš*, Arb. *kabš-*, Mhr. *kabš*, Jib. *kōbš*, Soq. *kobš*, perhaps Akk. *kabsu* (SED II No. 114; Syr. *kebšā* is an Arabism). The same meaning can be postulated for PS ***immar-** on the basis of Akk. *immeru*, Ugr. *’imr*, Hbr. *’immēr*, Pho. *’mr*, Syr. *’emrā*, Arb. *’alimmar-* (SED II No. 5),

but at least some of these terms may be borrowings. PWS **ṭalay-* for ‘lamb’ is represented by Hbr. *ṭālā*, JBA *ṭalyā* (DJBA 504; with the derived meaning ‘boy’ throughout Aramaic), Arb. *ṭala*ⁿ, Sab. Qat. Min. *ṭly*, Gez. *ṭali* (SED II No. 232). A similar meaning is possible for PS **ḥVrVp-*: Akk. *ḥurāpu*, Ugr. *ḥprt*, Syr. *ḥurpā*, Arb. *ḥarūf-*, perhaps Qat. *ḥrwf*, Min. *ḥrf* (SED II No. 113).

5.1.2.2. Goat

The most prominent PS term for ‘goat’ is **ʿanz-* or **ʿinz-*: Akk. *enzu*, Ugr. *ʿz*, Hbr. *ʿēz*, Syr. *ʿezzā*, Arb. *ʿanz-*, Sab. *ʿnz*, Mhr. *wōz*, Jib. *ʿoz*, Soq. *ʿoz* (SED II No. 35). PS **tayš-* denoted a billy goat: Hbr. *tayiš*, Syr. *tayšā*, Arb. *tays-*, Min. *tys*₁, Tgr. *tes*, Mhr. *táyh*, Jib. *tuš*, Soq. *teš*, perhaps Akk. *daššu*, *taššu* (SED II No. 231). PS **ʾat(t)ūd-* is reflected with the meaning ‘billy goat’ in Arb. *ʾatūd-* and Hbr. *ʾattūd*, whereas Akk. *atūdu*, *etūdu* denoted a kind of sheep. The two PS designations of ‘kid’ (male and female respectively) are **ʾurīṭ-* (Akk. *urīšu*, *urāšu*, Mhr. *ʾārīṭ*; SED II No. 39) and **ʾVnVḵ-* (Akk. *unīku*, Arb. *ʿanāq-*; SED II No. 34). PS **IV(?)IV(?)*- (SED II No. 143) is applied to a kid in Akk. *lalū* and Ugr. *lʾu*, but to a lamb in Soq. *lúloh*. PCS **gady-* ‘kid’ is restricted to Hbr. *gādī*, Ugr. *gd(y)*, Syr. *gadyā*, Arb. *ḡady-* (SED II No. 76).

5.1.3. Equids

5.1.3.1. Donkey

PS **ḥimār-* for ‘donkey’ (SED II No. 98) is well preserved in Akkadian (*imēru*) and CS (Ugr. *ḥmr*, Hbr. *ḥāmōr*, Syr. *ḥmārā*, Arb. *ḥimār-*, Sab. Min. *ḥmr*), but probably absent from ES and MSA. A synonymous PWS reconstruction is **ʾayr-*: Ugr. *ʿr*, Hbr. *ʾayir*, Arb. *ʾayr-*, Mhr. *ḡayr*, Jib. *aḡyér*, perhaps Tgr. *ʾayro* ‘a camel three years old’ (SED II No. 50; for its earliest attestation as a West Semitism in Akkadian texts from Mari see Streck 2000, 94). PS **ʾatān-* for ‘donkey mare’ derives from Akk. *atānu*, Ugr. *ʾatn*, Hbr. *ʾātōn*, Syr. *ʾattānā*, Arb. *ʾitān-* (SED II No. 19).

5.1.3.2. Horse

There is no deeply rooted common term for ‘horse’. Akk. *sīsû*, Ugr. *ssw*, *ššw*, Hbr. *sūs* and Syr. *sūsyā* are related to each other, but the common source is usually thought to be foreign rather than Semitic (SED II No. 199). PWS **paraš-*, represented by Hbr. *pārāš*, Syr. *parrāšā*, Arb. *faras-*, Sab. *frs*₁, Gez. *faras*, Mhr. *fārḡhāyn*, looks more genuine (SED II No. 182). PS **muhr-* for a ‘foal’ is preserved in Akk. *mūru*, Syr. *muhrā*, Arb. *muhr-*, Sab. *mhr̄t*, Tna. *māhir* (SED II No. 149).

5.1.3.3. Mule

There are three common designations of ‘mule’: **pVrd-* (Akk. *perdu*, Ugr. *prd*, Hbr. *pārād*; SED II No. 177), **bakl-*, **bāyl-* (Arb. *bayl-*, Sab. *byl*, Gez. *bakl*, Tgr. *bākāl*,

Amh. *bāklo*, Hrs. *beyelēt*; SED II No. 55) and **kawdan-* (Akk. *kūdanu*, Ugr. *kdnt*, Syr. *kūdanyā*, Arb. *kawdan-*; SED II No. 124). In each case we are likely faced with areal reconstructions of no relevance for PS.

5.1.4. Camel

There is no PS term for ‘camel’. The obvious similarity between camel designations in individual languages must be due to diffusion from an Arabian source. The most widespread common terms are **gamal-* (Akk. *gammalu*, Hbr. *gāmāl*, Syr. *gamlā*, Arb. *žamal-*, Sab. *gml*, Gez. *gamal*, Jib. *gūl*, Soq. *gimāl*; SED II No. 79), **ibil-* (Akk. *ibilu*, Syr. *’ebbāltā*, Arb. *’ibil-*, Sab. Qat. *’bl*, *’blt*, Mhr. *ḥə-ybīl*, Jib. *yət*; SED II No. 2), **nāḳ-at-* (Akk. *na-ka-ti*, *a-na-ḳa-a-te*, pB. Hbr. *nāḳā*, *’ānāḳā*, JBA *nā(’)ḳatā*, *nāḳā*, Arb. *nāḳat-*, Sab. *nḳt*, Gez. *nāḳat*, *nāḳāt*; SED II No. 161), **bVkr-* (Akk. *bakru*, Hbr. *bēkār*, *bikrā*, Syr. *bkūrē*, Arb. *bakr-*, Sab. *bkr*, Tgr. *bākrūt*, Mhr. *bōkər*, Hrs. *bōker*, Jib. *bəkrūt*, Soq. *mibkéroh*; SED II No. 56).

5.1.5. Pig

The only PS designation of ‘pig’ is **ḥV(n)zīr-*, continued by Akk. (mostly OA) *ḥuzīru*, Ugr. *ḥu-zi-rū*, Hbr. *ḥāzīr*, Syr. *ḥzīrā*, Arb. *ḥinzīr-*, Gez. *ḥanzīr*, Mhr. *ḥanzīr*, Jib. *ḥanzīr* (SED II No. 110). While Arabisms in ES and MSA are likely, loan hypotheses for other contact areas (Akkadian-Hebrew, Aramaic-Arabic) remain to be proved. An interesting isogloss between Ugr. *ḥe-en-ni-šu*, Deir Alla *ḥnyš*, Syr. *ḥannūšā* and Arb. *ḥinnawš-* suggest a common CS term for ‘piglet’ (SED II No. 111).

5.1.6. Dog

PS **kalb-* for ‘dog’ is virtually ubiquitous: Akk. *kalbu*, Ugr. *klb*, Hbr. *kālāb*, Syr. *kalbā*, Arb. *kalb-*, Sab. *klb*, Gez. *kalb*, Mhr. *kawb*, Jib. *kəb*, Soq. *kalb* (SED II No. 115). A characteristic feature of the MSA forms is that they denote not only ‘dog’, but also ‘wolf’.

5.2. Wild mammals

5.2.1. Carnivores

5.2.1.1. Lion, leopard

The most widespread designation of ‘lion’ is PS **labVʔ-*: Akk. *labbu* ‘lion’, *labbatu* ‘lioness’, Hbr. *lābī(ʔ)* ‘lioness’, Ugr. *lb’u* ‘lion’, Arb. *luba’at-*, *labu’at-* ‘lioness’, Sab. *lb’* ‘lion, lioness’ (SED II No. 144). Akk. *nēšū*, the basic equivalent of the poetic term *labbu*, may be related to Hbr. *nāḥāš*, Ugr. *nḥš* ‘snake’ (HALOT 690, DUL 628; for the semantic shift see SED II No. 159). The basic designations of ‘lion’ in NWS (Hbr.

ʾaryē, *ʾārī*, Syr. *ʾaryā*) are related to Gez. *ʾarwe* ‘wild animal’ (SED II No. 17), whereas Arb. *ʾasad*- (Lane 57) and Gez. *ʾanbasā* (CDG 64) are etymologically obscure. Almost ubiquitous is PS **namir*- for ‘leopard’: Akk. *nimru*, Hbr. *nāmēr*, Syr. *nemrā*, Arb. *nimr*-, *namir*-, Sab. Hdr. *nmr*, Gez. *namr*, Amh. *nābər* (SED II No. 164).

5.2.1.2. Wolf, fox

There are two PS terms for wild canines: **dīʿb*- for ‘wolf’, based on Hbr. *zəʿēb*, Syr. *dēbā*, Arb. *dīʿb*-, Soq. *dīb* ‘wolf’, Akk. *zību* ‘jackal’, Gez. *zəʿb*, Amh. *ḡəb* ‘hyena’ (SED II No. 72) and **tVʿl*-, **taʿlab*- for ‘fox’, represented by Akk. *šēlebu*, Hbr. *šūʿāl*, Syr. *taʿlā*, Arb. *tuʿāl*-, *taʿlab*-, Mhr. *yəṭāyl*, Jib. *itʿél* (SED II No. 237).

5.2.1.3. Hyena, bear, weasel

PS **ṣVbVʿ*- for ‘hyena’ is attested in Hbr. *šābūaʿ*, Deir Alla *kbʿ*, Arb. *ḡabuʿ*, Gez. *ṣəbʿ*, Soq. *ḡābʿah* and, with metathesis, Akk. *būšu* (SED II No. 220). PS **dubb*- denoted ‘bear’: Akk. *dabū* (for *da-bū-um* = Sum. *AZ* in VE 870a see Krebern timer 1983, 33), Hbr. *dōb*, Syr. *debbā*, Arb. *dubb*-, Gez. *dəbb* (SED II No. 65). ‘Weasel’ was probably designated by PS **ʾanyaṣ*-, **anṣaw*- as suggested by Akk. *ayyaṣu* and Gez. *ʾanṣawā*, *ʾanṣewā* (SED II No. 26).

5.2.2. Ruminants

The most widespread designations of wild ruminants include PS **ṭaby(-at)*- for ‘gazelle’ (Akk. *ṣabītu*, *ṣa-ba-a-tum* = Sum. *DÀRA.MAŠ.DÀ* in VE 1191, Ugr. *ṭby*, Hbr. *ṣəbī*, Syr. *ṭabyā*, Arb. *ḡaby*-, Sab. Hdr. *ṣby*; SED II No. 242), PS **ʾayyal*- for ‘fallow deer’ (Akk. *ayalu*, Ugr. *ʾayl*, Hbr. *ʾayyāl*, Syr. *ʾaylā*, Arb. *ʾiyyal*-, *ʾayyal*-, Sab. *ʾyl*, Jib. *ayyól*, probably Gez. *hayyal*; SED II No. 25), PS **rīm*- for ‘wild bull (bos primigenius)’ (Akk. *rīmu*, Ugr. *rʾum*, Hbr. *rəʿēm*, Syr. *raymā*, Arb. *rīm*- ‘kind of antelope’; SED II No. 186), PWS **waʿil*- for ‘ibex’ (*wa-i-lum* = Sum. *IGI.DÀRA* in VE 1452), Ugr. *yʿl*, Hbr. *yāʿēl*, Syr. *yaʿlā*, Arb. *waʿl*-, *waʿil*-, Sab. Qat. Hdr. *wʿl*, Gez. *wəʿālā*, Mhr. *wēl*, Jib. *əbʿóž*; SED II No. 244). Further common terms for wild ruminants include PCS **yupr*- ‘young fallow deer’ (Hbr. *ʿōpār*, Official Arm. *pr*, Arb. *yafr*-, *yufr*-, SED II No. 88), PS **γVzāl*- ‘gazelle’ (Akk. *(ḥ)uzālū*, Syr. *ʿūzaylā*, Arb. *γazāl*-, SED II No. 92), **na(ya)l*- ‘a wild ruminant’ (Akk. *nayalu* ‘roe deer’, Tgr. *nālāt* ‘koodoo’, Amh. *niyala* ‘mountain antelope’; SED II No. 169), **bVb(b)*- id. (Akk. *bibbu* ‘wild sheep’, Tgr. *buba* ‘koodoo’; SED II No. 54), PS **arwiy*- id. (Akk. *arwū* ‘gazelle’, *a-wi-um* = Sum. *[DÀR]Aʾ.DÀ* in VE 1251, Arb. *urwiyyat*- ‘wild goat’, Mhr. *ʾarūt* ‘goat’; SED II No. 18).

5.2.3. Equids

The only PS designation of a wild equid is **par(a)ʿ*- for ‘wild ass’: Akk. *parū* (with a meaning shift to ‘mule’), Hbr. *pārū*(ʿ), Arb. *faraʿ*-, Sab. *fr* (SED II No. 176). Less widespread is PCS **ar(ā)d*- with the same meaning: Hbr. *ʿārōd*, Syr. *rādā*, Arb. *ʿard*- (SED II No. 37; Akk. *a-ra-du* in a lexical list is a West Semitism, CAD A₂ 212).

5.2.4. Rodents

There are two deeply rooted terms for ‘mouse’. PS ***paʾr-** is represented by Akk. *pērū-rūtu* (for a more archaic form *pá-ra-tum* = Sum. NIN.PÉŠ in VE 0927 see Sjöberg 1996, 14), Arb. *faʾr-*, Gaf. *ūfʷərä*, Har. *fūr*, End. *fuʾur* (SED II No. 170). PS ***akbar-** is attested in Akk. *akbaru*, Hbr. *ʿakbār*, JBA *ʿakbārā*, Arb. *ʿakābir-* (SED II No. 30), to which Tgr. *ʿekrib* ‘badger’, Akk. *arkabu* ‘bat’, Common MSA **arḳīb-* and Syr. *ʿuḳbrā* ‘mouse’ may be further related (SED II No. 30). PS ***yarbVʿ-** for ‘jerboa’ (SED II No. 251) derives from Akk. *arrabu*, *arrabū* (for *a-ra-bū-um*, *ar-ra-bū* = Sum. NI.PÉŠ in VE 873 see Krebern timer 1983, 33) and Arb. *yarbūʿ-*.

5.2.5. Varia

5.2.5.1. Hare

PS ***ʾarnab(-at)-** for ‘hare’ is virtually pan-Semitic: Akk. *arnabu*, Hbr. *ʾarnābāt*, Syr. *ʾarnbā*, Arb. *ʾarnab-*, Gez. *ʾarnab*, Har. *ḥarbāñño*, Mhr. *ḥarnáyb*, Jib. *ʾerní* (SED II No. 14).

5.2.5.2. Hedgehog, mole

PWS ***kūnpud-** for ‘hedgehog’ is based on Hbr. *ḳippōd*, Syr. *ḳupdā*, Arb. *qunfuḍ-*, Gez. *ḳʷənḑəz* (SED II No. 133; *ḳi-pá-šum/šúm* = Sum. PÉŠ in VE 872 may suggest its original presence also in East Semitic, Civil 1984, 91). PCS ***ḥuld-** for ‘mole’ derives from Hbr. *ḥōlād*, Syr. *ḥuldā*, Arb. *ḥuld-* (SED II No. 108).

5.2.5.3. Rock hyrax

A peculiar isogloss between Hbr. *šāpān* and Mhr. *tōḑən*, Jib. *tṣfun* suggests ***tapan-** as a PWS designation of ‘rock hyrax’ (SED II No. 240).

5.2.5.4. Elephant

In most Semitic languages, ‘elephant’ is denoted by reflexes of ***pīl-** or ***pīr-**: Akk. *pīru*, *pīlu*, pB. Hbr. *pīl*, Syr. *pīlā*, Arb. *fīl-* (SED II No. 173). These forms are usually considered interborrowings going back to a non-Semitic source, but this analysis is hard to apply to Gez. *falfal* ‘water buffalo; elephant’ with its markedly different morphological shape.

5.3. Birds

5.3.1. General designations of bird

PWS ***šVp(p)Vr-** (SED II No. 212) produced basic general designations of ‘bird’ in Hebrew (*šippōr*), most of Aramaic (Syr. *šepṛā*), and some of MSA (Jib. *šefirôt*, Soq. *šafirôte*). Arb. *šāfir-* is applied to birds other than birds of prey (Lane 1699), whereas Akk. *šibāru* denoted a ‘sparrow’ (CAD § 155). It is debatable whether Akk. *iššūru* and Ugr. *šr* belong to ***šVp(p)Vr-** (cf. SED II No. 43 for a separate proto-form ***Vššūr-**; Arb. *ušfūr-* ‘a small bird’ may be due to contamination of these two roots). PWS ***awp-** (SED II No. 48) yielded basic terms for ‘bird’ in Ugr. *p*, Hbr. *ōp*, Syr. *awpā* and throughout ES (Gez. *of*), whereas Arb. *awf-* is attested with a narrowed meaning ‘cock’ (Lane 2198). The etymology of Arb. *ṭayr-* ‘bird’ is discussed in SED II No. 235. PWS ***parḥ-** (SED II No. 179) denoted a ‘chick’: Hbr. *ʾāprōaḥ*, Arb. *farḥ-*, Gez. *farḥ* (Syr. *pāraḥtā* means ‘bird’ in general).

5.3.2. Concrete bird species

Common designations of concrete bird species are scarce. By far the most prominent one is PS ***γārib-**, ***γurāb-** for ‘crow, raven’: Akk. *āribu* (*ḥa-ri-bū*, [*ḥ*]*a-ri-bū-um*, g[*a-r*]*i-bū* = Sum. UGA.MUŠEN in VE 295, Krebern timer 1983, 13), Hbr. *ōrēb*, Syr. *urbā*, Arb. *γurāb-*, Mhr. *yəṭarāyb*, Jib. *ʾayarēb*, Soq. *ʾāreb* (SED II No. 89). PWS ***našr-** denoted an ‘eagle’: Ugr. *nšr*, Hbr. *nāšār*, Syr. *nešrā*, Arb. *našr-*, Hdr. *ns₁r*, Gez. *našr*, Mhr. *nōhər*, Jib. *nūšer*, Soq. *nóyhir* ‘bird (general term)’ (SED II No. 166; Akk. *našru* is borrowed from WS, for a possible etymology of the genuine term *erū* see SED II No. 40). PWS ***raḥam-** was applied to the ‘Egyptian vulture’: Hbr. *rāḥām*, Deir Alla *rḥm*, Arb. *raḥam-*, Mhr. *rəḥamūt*, Jib. *erḥōt* (SED II No. 189). PS ***laqlaq-** for ‘stork’ is based on Akk. *laqlakḫu* and Arb. *laqlaq-*, *laqlāq-* (SED II No. 146), although independent onomatopoetic formations cannot be ruled out. PWS ***yawn(-at)-**, ***wānay-** designated a ‘dove’ as suggested by Ugr. *ynt*, Hbr. *yōnā*, Syr. *yawnā* and Amh. *wane*. PS ***sVnūn(Vw)-at-** for ‘swallow’ derives from Akk. *sinuntu*, *šinūnūtu*, Ugr. *snnt*, Hbr. pB. *sənūnūt*, Syr. *snūnūtā*, Arb. *sunūnuw-* (SED II No. 197).

5.4. Amphibians and reptiles

5.4.1. Frog

A PWS designation of ‘frog’ is ***šVpardV-** (SED II No. 222), represented by Hbr. *šəpardēaʿ* but reduced to quadriradical formations in Syr. *ʾurdʿā* (< ***šVrdʿ-** < ***šVrdVʿ-**) on the one hand and Arb. *ḍifḍīʿ-*, Mhr. *šəfdēt* on the other (Akk. *mušaʾirānu* is most probably unrelated).

5.4.2. Snake

There is no common general term for ‘snake’. Hbr. *nāḥāš* and Ugr. *nhš* are likely related to Akk. *nēšu* ‘lion’ (SED II No. 159), ‘snake’ being euphemistically designated as ‘lion of the earth’, as it is actually described in the Gilgamesh epic (*nēšu ša kaḫḫari* in XI 314, cf. *na-iš ḫār-ḫá-rí-im* in MEE 4 116r V 4). The same semantic evolution underlies Gez. *’arwe mēdr* ‘snake’ (literally ‘beast of the earth’) and, likely, Arb. *ḥayyat*- and Common Aramaic **ḥiwyā* (Kogan 2005c, 530–531). PWS **’ap’aylw-* denoted a ‘viper’: Ugr. *’ap*’, Hbr. *’āp’ā*, Arb. *’af’a*’, Gez. *’af’ot*, Har. *ḥiffiñ* (SED II No. 10; already in EV 034 as *i-pá-ù-um* = Sum. AMA.MUŠ, Civil 1984, 91). Ugr. *bīn*, Arb. *baṭan*- and *ba-ša-nu-um* in MEE 4 116r III 9 and ARET 5 4:3–4 suggest **baṭan-* as another common designation of ‘snake’, to which Hbr. *pātān*, Syr. *patnā* and Akk. *bašmu* (*ba-ša-mu-um* = Sum. MAḪ.MUŠ in Ebla, Fronzaroli 1984a, 138) may be related (SED II No. 63). A mythical snake (dragon) was probably designated by PWS **tVnVn-*: Ugr. *tnn* (*tu-un-na-nu*, Huehnergard 1987, 185–186), Hbr. *tannīn*, Syr. *tannīnā*, perhaps Gez. *taman* (SED II No. 227).

5.4.3. Chameleon, gecko and other lizards

PS **ḥVrb-* possibly designated ‘chameleon’ as suggested by Akk. *ḫurbabillu* (for *ḫur-ba-um* = Sum. NIN.ḪUR.BA.UM in EV 0293 see Sjöberg 1996, 16) and Arb. *ḫirbā’*- (SED II No. 101). PWS **šabb-* for ‘monitor lizard’ is represented by Hbr. *šāb*, Syr. *’abbā*, Arb. *ḏabb-*, Mhr. *žabbūt*, Jib. *žab* (SED II No. 221). There are two common terms for ‘gecko’: **Vṭāy-* (Akk. *iššū*, Arb. *’iḏāyat-*, *’aḏā’at-*; SED II No. 46) and **pVšy-* (Akk. *pišallurru*, Mhr. *fēšəy*, Jib. *fəšy*; SED II No. 184, Huehnergard 1991a, 695). Other common designations of lizards include PS **ḥVmt-* (Hbr. *ḥōmāt*, Arb. *ḥamaṭīt*-, perhaps Akk. *ḫulmiṭtu*; SED II No. 99), PWS **ḥVrdldān-* (Syr. *ḥardānā*, Arb. *ḫirdawn-*, *ḫirdawn-*, Amh. *arṣāno*; SED II No. 102); **waranll-* (Akk. *urnu*, Syr. *yarlā*, *yallā*, Arb. *waral-*, Mhr. *rəwōl*; SED II No. 246).

5.4.4. Turtle

There are two common designations of ‘turtle’. PS **rakḫ-* derives from Akk. *raḫḫu*, Syr. *raḫḫā* and Arb. *raqq-* (SED II No. 190), whereas PS **šalahpawly-*, **šalaphawly-* is based on Akk. *šeleppū* (identified with *ša-la-pū-um* = Sum. NÍG.BĀD.NA in Conti 1990, 67) and Arb. *sulahfā*, *sulḥafā* (SED II No. 200).

5.5. Fishes

No general term for ‘fish’ can be reconstructed for PS (Rundgren 1972). The respective terms of particular Semitic languages are either etymologically obscure like Arb. *samak-* (Lane 1430), Akk. *nūnu* (AHw. 803) and Common Aramaic **nūnā* (DJPA 344, LSyr. 421), Ugr. *dḡ* (DUL 267) and Hbr. *dāḡ* (HALOT 213), or borrowed from non-

Semitic languages like Gez. *‘āšā* and related ES terms (< Cushitic, CDG 73). No designations of concrete species of fish can be traced back to PS unless Akk. *laḫmu* ‘a mythical sea-monster’ is compared to Arb. *luḫm-*, Jib. *lḫum* and Soq. *lēḫem* ‘shark’ (Fronzaroli 1971, 615, SED II No. 145).

5.6. Insects

5.6.1. Bee

The main PS term for ‘bee’ is **nūb(-at)-*, preserved in Akk. *nūbtu*, Arb. *nūb-*, Gez. *nəhb*, Jib. *nibbōt* (SED II No. 156; with a meaning shift to ‘honey’ also in Ugr. *nbt*, Hbr. *nōpāt*). Less widespread is PWS **dVbr-* with the same meaning, represented by Hbr. *dəbōrā*, Syr. *debbortā*, Soq. *‘idbeher* ‘bee’, Arb. *dabr-*, *dibr-* ‘swarm of bees’ (SED II No. 66), to which a variety of forms with **d-* (Hrs. *debēr* ‘hornet, fly’) and **z-* (JBA *zibbūrā* ‘hornet’, Arb. *zanbūr-* ‘wasp’) may be further compared (Blau 1970, 46, Steiner 1982, 14).

5.6.2. Fly, gnat

PS **dVb(V)b-* for ‘fly’ is based on Akk. *zubbu*, Hbr. *zəbūb*, Syr. *dabbābā*, Arb. *ḍubāb-*, Gez. *zənb*, Amh. *zəmb*, Mhr. *ḍabbēt*, Jib. *ḍabbōt*, Soq. *‘edbīboh* (SED II No. 73). PS **baḳḳ-* for gnat derives from Akk. *baḳḳu*, Syr. *bāḳā*, Arb. *baqq-* (SED II No. 58).

5.6.3. Ant

PWS **namal-* for ‘ant’ (SED II No. 163) is well attested in CS and MSA (Hbr. *nəməlā*, Syr. *nmālā*, Arb. *naml-*, Mhr. *nōmīl*, Jib. *nīžīn*, Soq. *nīmīl*). While Akk. *namalu* in the Canaanite proverb from EA 252 (*kī namlu tumḫašu lā tiḳabbilu u tanšuku ḳāti amēli ša yimaḫḫašši* ‘when an ant is smitten, does not it fight and bite the hand of the man who smote it?’) is clearly a West Semitism, this is less likely for the metathetic *lamattu* (cf. CAD L 67, AHW. 533), paralleled by *la-ma-nūm* (= Sum. *šEG₉*) and *la-ma-an* in EV 0398 and MEE 4 116v II 7. The standard Akkadian term for ‘ant’ is *kulbābu* (etymologically obscure).

5.6.4. Flea, louse, nit

PS **pVrVt-* for ‘flea’ derives from Akk. *perša’u*, *per’āšu*, Hbr. *par’ōš*, Syr. *purta’nā*, most probably Arb. *buryūt-* (SED II No. 185). The PWS term for ‘louse’ (SED II No. 130) is represented by two metathetic variants, **ḳaml-* (Old Arm. *ḳml*, Arb. *qaml-*, Sab. *ḳmlt*, Gez. *ḳwāmāl*) and **ḳalm-* (Syr. *ḳalmā*, Sab. Qat. *ḳlm*), to which Akk. *kalmatu* (with non-emphatic *k*) may be related. The same meaning can be proposed for PWS **kVnVm-* on the basis of Hbr. *kinnām* ‘noxious insects’ and Mhr. *kənəmūt*, Jib. *šīnīt*,

Soq. *kónem* ‘louse’ (SED II No. 116; cf. *kâ-na-tù-um* = Sum. *uḥ* in VE 1022). Akk. *uplu* ‘louse’ may be compared to the verbal root **ply* ‘to delouse’ widely attested in WS (cf. SED II No. 175). PS **nāb-*, **nīb(b)-* denoted ‘nit’: Akk. *nābu*, Syr. *nābā*, Soq. *nīb(b)* (SED II No. 157).

5.6.5. Moth

PS **sālūs-* for ‘moth’ is attested in Akk. *sāsu*, Hbr. *sās*, Syr. *sūstā*, *sāsā*, Arb. *sūs-*, Amh. *šuš(š)*, Har. *sūs* (SED II No. 198). The same meaning can be attributed to PS **Vl(V)l-*: Akk. *ašāšu*, Hbr. *ās*, Syr. *aššā*, Arb. *‘uttat-* (SED II No. 45).

5.6.6. Locust, cricket

PS **arbay-* for ‘locust’ (Akk. *erbu*, pl. *erbû*, Ugr. *’irby*, Hbr. *’arbā*, Old Arm. *’rbh*, Sab. *’rby*, Mhr. *harbyēt*, Jib. *’irbôt*, Soq. *’erbhíyoh*) is thought to be missing from Arabic and later Aramaic, but note Syr. *’arbūtā* ‘shrimp’ (LSyr. 45) and Arb. *’irbiyān-* ‘a crustacean’ (Nöldeke 1952, 17), with a common semantic shift (SED II No. 11). PS **hargal-* as another locust designation derives from Akk. *ergilu* (perhaps already in VE 1095: *ir-gi-lum* = Sum. NAM.KUR.MUŠEN), Hbr. *hargōl*, Syr. *hargālā*, Arb. *haržalat-* ‘swarm of locust’, *haržal-*, *haržūl-* ‘kind of locust’ (SED II No. 103; for Sab. *’rgl* ‘crop scourge’ see Sima 2000, 32). PS **šaršar-*, **šaršūr-* for ‘cricket’ is based on Akk. *šaršaru* (Lion/Michel 1997), Syr. *šaršūrā*, Arb. *šaršar-* (SED II No. 213). PS **hVsVn-* denoted a kind of harmful insect: Ugr. *hšn* ‘grasshoppers’, Gez. *hasen* ‘butterfly’, Tna. *hasen* ‘winged ant-lion’, Amh. *ašan*, *ašen* ‘winged termites; small locusts’ (SED II No. 105; Hbr. *hāsīl* ‘kind of locust’ is likely related, Huehnergard 1999, 90). A similar meaning can be attributed to PWS **kVšVm-*, **kVmVš-*: Ugr. *kšm* ‘grasshoppers’, Arb. *qašam-* ‘eggs of locust’, *qašām-* ‘locust’, Amh. *kəšām* ‘nit, louse’; Syr. *kamšā* ‘locust’, Arb. *qamaš-* ‘small insects on the surface of stagnant water; small locusts’, Jib. *kitēs* ‘camel bug’, perhaps Gez. *kʷənš* ‘flea’ (SED II Nos. 131 and 139).

5.7. Spiders

PWS **ankab-* for ‘spider’ derives from Hbr. *akkābīš*, Arb. *‘ankab-*, *‘ankabūt*, Mhr. *‘ānšēt*, Jib. *‘ənšyēt* (SED II No. 33; Akk. *ettūtu* is hardly related *contra* Landsberger 1934, 137). PWS **akrāb-* for ‘scorpion’ is represented by Hbr. *‘akrāb*, Ugr. *‘krb*, Syr. *‘ekḫarbā*, Arb. *‘aqrab-*, Gez. *‘akrab*, Tna. *‘ənḫarbit* (SED II No. 31). Akk. *akrabu*, equated to the standard Akkadian *zuḫakīpu* in a late lexical list, is a West Semitism, whereas Common MSA **kibin-* (Mhr. *kəbāyn*, Jib. *išin*) is only remotely similar.

5.8. Worms

PS **tawli‘-at-* is a general term for ‘worm’: Akk. *tūltu*, Hbr. *tōlē‘ā*, Syr. *tawl‘ā*, Amh. *təl*, Har. *tulu’*, Mhr. *təwālōt*, Jib. *təb‘īlōt*, Soq *ta‘āleh* (SED II No. 230). PS **‘alak‘-at-* for

‘leech’ is also widely attested: Akk. *ilku*, Hbr. ‘*ālūkā*, Syr. ‘*elaqtā*, Arb. ‘*alaqat-*, Gez. ‘*alaqt*, Mhr. ‘*āwḳáyṭ*, Jib. ‘*oḳót* (SED II No. 32). Less certain is the meaning of PWS **rimm-at-*, represented by Hbr. *rimmā*, Syr. *remtā* ‘maggots, worms’, Arb. *rimmat-* ‘winged ant’ and ‘old and decayed bones, a used rope’ (SED II No. 191; for different approaches to Akk. *rimmatu* see Durand 1990, 106–107, Stol 2000b, 626).

6. Anatomy and physiology of man and animals

6.1. The trunk

6.1.1. Body, trunk

For the general meaning ‘body, trunk’ only areal reconstructions can be adduced (Fronzaroli 1964, 26–27): **badan-* (Arb. *badan-*, Gez. *badn*, Mhr. *bādēn*; SED I No. 31), **gVrVb-* (Sab. *grb*, Tgr. *gärob*; SED I No. 90), **gišm-* (Syr. *gušmā*, Arb. *žism-*, perhaps Soq. *múgšem* ‘boy’ and *gešómoh* ‘woman’; SED I No. 96), **pagr-* (Akk. *pagru*, Hbr. *pägär*, Syr. *pagrā*; SED I No. 209).

6.1.2. Blood, pus

PS **dam-* for ‘blood’ (SED I No. 50) is ubiquitous (Akk. *damu*, Ugr. *dm*, Hbr. *dām*, Syr. *dmā*, Arb. *dam-*, Sab. *dm*, Gez. *dam*, Mhr. *dām*, Jib. *dihm*, Soq. *dīm*), although the MSA terms denote ‘pus’ rather than ‘blood’ (the latter is designated by reflexes of **dVr-*: Mhr. *dōrə*, Jib. *dohr*, Soq. *dur*; ML 81, JL 47, LS 134). PWS **mugl-* for ‘pus’ (SED I No. 186) is represented by JBA *muglā*, Syr. *muglā*, Gez. *māgl* (Classical Arabic *mažl-* means ‘blister’, but the meaning ‘pus’ is attested in Yemen and Daḡīna).

6.1.3. Flesh

PWS **bašar-* with the meaning ‘flesh, meat’ (SED I No. 41) is based on Hbr. *bāšār*, Syr. *besrā*, Sabaic *bs₂r* (Sima 2000, 34), Har. *bäsär*, Gaf. *bäsärä*, Gur. *bäsär*. In Arabic *bašar-* means ‘epidermis’ and ‘mankind’ (for the latter meaning see also *bs₂r* in Min. and Sab.). Akk. *bišru*, equated to *šerru* ‘baby’ in a late lexical list, has been often compared to this root (cf. also *mē bišrim* ‘amniotic fluid’, interpreted as ‘water of the baby’ in Michel 1997, 63–64). Attestation of Punic *bšr* ‘child, boy’ is highly problematic (DNWSI 204). PS **šir-* ‘flesh’ (SED I No. 238) is restricted to Akk. *šīru* and Ugr. *š’ir*, Pho. *š’r*, Hbr. *šā’ēr* (Arb. *ta’r-* ‘blood revenge’ can hardly be related).

6.1.4. Bone

PS **aṭm-* for ‘bone’ preserves its original meaning in most of Semitic: Akk. *eṣemtu* (for *a-ša-mu-um* = Sum. *GIŠ.GI.NA* in VE 417 cf. Krebern timer 1983, 16), Ugr. ‘*ṭm*, Hbr.

‘*äšäm*, Arb. ‘*aḍm-*, Gez. ‘*ašm* (SED I No. 25). It came to denote ‘thigh, flank, side’ in Aramaic (Syr. ‘*aṯmā*), where the meaning ‘bone’ is expressed by reflexes of PCS **garm-* (SED I No. 94), also attested in Hbr. *gärām* and, with the meaning ‘body’, in Arb. *žirm-*, Sab. *grm*. In MSA **aṯm-* is preserved as Mhr. ‘*āḍāmēt* ‘back’, Jib. ‘*óḍúm* ‘to turn into scar (skin over badly set bone)’, but left no trace in Soqotri. The origin of the MSA terms for ‘bone’ (Mhr. ‘*āžáyž* and Jib. ‘*ížéž*, Soq. *šéhloh*) is unclear (cf. SED I No. 24 and No. 272).

6.1.5. Tendon, sinew

Several designations of ‘tendon, sinew’ can be reconstructed. PS **gīd-* (SED I No. 72) is attested in Akkadian (*gīdu*), NWS (Ugr. *gd*, Hbr. *gīd*, Syr. *gyādā*) and MSA (Jib. *žéd*, Soq. *žid*), to which Arb. *žīd-* ‘neck’ is related with a meaning shift. PS **matn-* combines two sets of meanings: ‘sinew, tendon’ and ‘hip, loins, small of the back’ (Held 1965, 405, SED I No. 191, 192). In most languages, only one of these meanings is attested (Akk. *matnu*, *ma-tá-nu* = Sum. *sa.šū* in VE 312, Gez. *matn*, Tna. *mātni* ‘sinew, tendon’ vs. Ugr. *mtnm*, Hbr. *motnayim*, Syr. *matnātā*, Mhr. *mōtən*, Jib. *mūtun*, Soq. *mōten* ‘small of the back, loins’), but Arb. *matn-* exhibits both (= *ḍahr-* ‘spine’ and *watar-* ‘tendon, sinew’ in LA 13 490). PWS **wat(a)r-* (SED I No. 290) is based on Hbr. *yātār*, Syr. *yatrā*, Arb. *watar-*, Gez. *watr*, Amh. *wätär* (some of them with non-anatomic meanings like ‘rope’, ‘cord’, ‘bowstring’). A highly specialized PWS term for ‘sciatic tendon’ is **našay-* (SED I No. 201): Ugr. ‘*anš* (‘*anš dt ṭrh* ‘the muscles of her back’ in KTU 1.3 II 35), Hbr. *nāšā* (in *gīd ha-nnāšā*), Syr. *gennešyā* (< **gīd nešyā*), Arb. ‘*an-nasā*, Amh. *anisa*.

6.1.6. Articulation

A special term for ‘articulation, joint’ can probably be reconstructed as PS **kVrm-* (SED I No. 149) on the basis of Akk. *kirimmu* ‘crooked arms’, Arb. *karmat-* ‘upper part of the thigh where the socket turns’ (LA 12 608), Amh. *kurma* ‘elbow’, *tāk^wäräm-mätü* ‘to be flexed, folded up (limbs, fingers)’, perhaps Mhr. ‘*ākərmōt* and Jib. ‘*akərūt* ‘pelvis’. A similar meaning can be proposed for PS **kVm-* (SED I No. 143): Akk. *kimkimmu* ‘wrist’, Tgr. *kəm* ‘joint, articulation’, Sod. *kumma* ‘heel, elbow’ and, possibly, Arb. *kumm-* ‘sleeve’.

6.1.7. Fat

There is no widespread Semitic term for ‘fat’ as an anatomic category. PS **šahm-* ‘fat’ (SED I No. 263) derives from Akk. *šēmu*, Arb. *šahm-* and, with a meaning shift, Jib. *šhmēt* ‘temple’ (‘it is cut in a slaughtered animal to see how much fat is on the carcass’ according to JL 250). Further common terms with this meaning are PCS **hīlb-* (Hbr. *hēlāb*, Pho. *hīlb* ‘fat’, Syr. *hēlbā* ‘fat; membrane, diaphragm’, Arb. *hīlb-* ‘diaphragm,

midgriff'; SED I No. 131), PS ***IVp²-** (Akk. *lipû* 'fat, tallow', Arb. *lafīʾat-* 'piece of flesh peeled off from the bone'; SED I No. 208), PCS ***pidr-** (Hbr. *pādār* 'suet from the kidney', Arb. *fīdrat-* 'piece of meat', *fudurr-* 'a fat, plump boy').

6.1.8. Skin

The only widespread term for 'skin' is PS ***mašk-** (SED I No. 190), based on Akk. *mašku*, Syr. *meškā* and Arb. *mask-* (cf. also Hbr. *māšāk* 'leather pouch'). PWS ***gild-** (SED I No. 78) is attested in Syr. *geldā*, Arb. *žild-* and MSA (Mhr. *gēd*, Jib. *gód*, Soq. *gad*), whereas Akk. *gildu* and Hbr. *gēlād* are Aramaisms (for this root in ES see CDG 188–189). Akk. *pāru*, *parru* 'skin', Syr. *partā* (pl. *parrē*) 'bran, scurf' and Arb. *farw-* 'fur, skin' suggest ***parr-**, ***parw-** as another PS term for 'skin' (SED I No. 217) unless the Akk. term is a Sumerism (Lieberman 1977, 172). The Ugaritic-Canaanite ***γār-** (Ugr. *γr*, Pho. 'r, Hbr. 'ōr) has no etymology (cf. SED I No. 106).

6.1.9. Neck

The basic PS term for 'neck' is ***kišād-**, based on Akk. *kišādu* and Gez. *kəsād* (SED I No. 147), to which the MSA terms for 'shoulder' (Mhr. *kənsīd*, Jib. *kənséd*) are related. Hbr. *šawwā(ʿ)r* and Syr. *šawrā* may belong to a rather ancient PS ***šawar-** 'neck' (SED I No. 258) as suggested by *ša-wa-ar-šu u ša-wa-ar-ki* 'his neck and your neck' in Old Akkadian (MAD 5 8:35–36), the verbal root *šwr* 'to carry (on shoulders)' in ES and Soqotri and, finally, Arb. *šawr-* 'side of the neck; bank of a river' (Lane 1744). Direct evidence for PS ***Vnḳ-** 'neck' (SED I No. 15) is limited to JBA *ʾunḳā* and Arb. *ʾunq-*, but note the verbal root *ʾnḳ* 'to carry around the neck' in ES (Gez. *ʾanaḳa*) and a few terms for 'neck-chain' such as Hbr. *ʾnāḳ*, Syr. *ʿeḳḳā*, possibly Ugr. *ḳḳ* (cf. DUL 170). Akk. *unḳu* 'neck' is an Aramaism, but the ancient and genuine *unḳu* 'ring' may be related with a meaning shift from 'necklace'. PWS ***tVkm-** (SED I No. 281), possibly denoting the lowest part of the neck, is preserved in Ugr. *tkm* 'shoulder', Hbr. *šəkām* 'shoulder, nape of the neck, back', Demotic Arm. *tkm* 'back' (DNWSI 1266) and, possibly, the verbal root **skm* 'to carry on shoulders' in ES (CDG 496).

6.1.10. Throat

PS ***ḥVlḳ-** for 'throat' (SED I No. 117) is reliably attested in Arabic (*ḥalq-*, *ḥalqūm-*) and ES (Gez. *ḥəlḳ*, Amh. *əlləḳt*). In Akkadian it is preserved in the combination *liḳ* (*aliḳ*, *elaḳ*) *pī* 'palate', whereas Ugr. *ḥlḳ-m* possibly denotes 'throat' in KTU 1.3 II 28 (*tyll bdm ḏmr ḥlḳm* 'she plunged the throat into the blood of the warriors'). PWS ***gVrgVr-at-** (SED I No. 102) is based on Hbr. *gargərōt* 'pharynx, neck', Syr. *gaggartā* 'throat' and such ES forms as Tna. *gʷərgʷərīt* 'goiter' and Amh. *gʷərorro* 'throat, trachea'. PCS ***gVrān-** (SED I No. 95) is attested in Hbr. *gārōn*, JBA *gərōnā* and Arb. *žirān-*, with metathesis also in Syr. *gnārā*.

6.1.11. Armpit

The PS term for ‘armpit’ is ***šah(a)y(-at)-**: Akk. *šaḫātu* and *suḫātu* (for *iš-ḫa-tum*, *sa-ḫa-tum* = Sum. *DA* in VE 569 see Krebernik 1983, 21), pB. Hbr. *šāḫī*, *šēḫī*, Syr. *šḫātā*, Mhr. *ḫōt*, Jib. *šḫot*, Soq. *šḫoh* (SED I No. 240).

6.1.12. Rib

PS ***šila-** for ‘rib’ (SED I No. 272) is widely attested: Akk. *šēlu*, Ugr. *šl*, Hbr. *šēlā*, JBA *‘ilā*, Syr. *‘ilā*, Arb. *ḍila-*, Mhr. *žāla*, Jib. *žal*, Soq. *žalh*.

6.1.13. Female breast

There is a wide variety of terms for ‘female breast’ (often indistinguishable from ‘udder’ and ‘nipple’). PS ***tVIV-** is represented by Akk. *tulû*, Gez. *tallā*, Mhr. *təlōt* (SED I No. 276). PS ***šVr-** (SED I No. 274) is attested in Akk. *šertu*, Syr. *šerā*, Arb. *ḍar-* (Tgr. *šārē* ‘udder’ is considered an Arabism in CDG 563, whereas Gez. *šarā* ‘loins, thigh, groin’ is semantically problematic). PWS ***tad(y)-** (SED I No. 280) is attested everywhere except ES (Ugr. *td*, Hbr. *šād*, Syr. *tdā*, Arb. *tady-*, Mhr. *tódi*, Jib. *tóde*, Soq. *tódi*). PWS ***nV-** is based on an Aramaic-MSA isogloss: JPA *ny*, Syr. *nāā* ‘breast of an animal’ and Mhr. *nāūt*, Jib. *nāét*, Soq. *nāḥ* ‘udder’ (SED I No. 193; Arb. *nuḥ* ‘at-craw of a bird’ in LA 8 426 may also be related). A few common designations of ‘breast’ may be originally descriptive: PCS ***bizz-** (Ugr. *bz*, Syr. *bezzā*, Arb. *bizz-*; SED I No. 44), PCS ***dVd-** (Hbr. *dad*, JPA *dd*, Ḥaḍrami Arabic *dayd*; SED I No. 47), PS ***zīd-** (Akk. *zīzu*, Ugr. *zd*, *ḏd*, Hbr. *zīz*, Algerian Arabic *zīza*; SED I No. 295).

6.1.14. Belly, navel

No well-defined term for ‘belly, abdomen’ can be traced back to PS. PCS ***baṭn-** ‘belly’ (SED I No. 42) is restricted to Hbr. *bāṭān* (*ba-aṭ-nu-ma* ‘on the belly’ already in Amarna Canaanite) and Arb. *baṭn-* (more marginally also in Syr. *bṭen* ‘to conceive’). A widely attested designation of ‘lower belly’ is ***ḥamt-** (Akk. *emšu*, Ugr. *ḥmt*, Hbr. *ḥō-māš*, Gez. *ḥamš*, Mhr. *ḥamt*; SED I No. 122). A common term for ‘navel’ is ***šurr-**, best attested in CS: Ugr. *šr*, Hbr. *šōr*, Syr. *šerrā*, Arb. *surr-* (SED I No. 254).

6.1.15. Back

PS ***ṭahr-** for ‘back’ (SED I No. 284) is based on Akk. *šēru* (for *ša-lum* = Sum. MURGU in EV 0357 see Krebernik 1983, 47), Ugr. *ṭr* and Arb. *ḍahr-*. Hbr. *šōhar* is only preserved as a designation of Noah’s Ark in Genesis 6.16, but the adverb *šū-uḫ-ru-ma* ‘on the back’ is well attested in Amarna Canaanite. In MSA ***ṭahr-** is preserved as a preposition ‘on, over’: Mhr. *ḍār*, Jib. *ḍēr*, Soq. *ṭhar*.

6.1.16. Middle part of the trunk

Designations of the the middle part of the trunk are PWS ***ḥVṣn-** ‘lap, bosom’ (Hbr. *ḥōṣān*, Arb. *ḥiḍn-*, Gez. *ḥəṣn*, Amh. *ḥən*, with metathesis Soq. *ḥānah*; SED I No. 129) and PWS ***ḥVḵ(w)-** ‘small of the back, loin, hips’ (Ugr. *ḥé-ku*, Hbr. *ḥēk*, Arb. *ḥaqw-* Sab. *ḥkw*, Gez. *ḥakwe*, Tgr. *ḥəḵāk*, Har. *ḥači*, Mhr. *ḥāḵəw*, Jib. *ḥakḥēk*; SED I No. 113). A special term for ‘lower torso’ may be reconstructed on the basis of Akk. *bamtu* ‘chest’, Ugr. *bmt* ‘back, rump, loin’, Hbr. *bomōtē* ‘back, breast, torso’, with an early precedent in Ebla (*bù-ma-tum* = Sum. SA.SAL in VE 308, Kogan/Tishchenko 2002). PS ***kVsl-** (SED I No. 153) was applied to the lower part of the trunk and the genitals: Akk. *kislu*, *kaslu* ‘transverse process of the vertebra’, Ugr. *ksl* ‘back’, Hbr. *kāsāl* ‘loins; genitals’, JPA *kslyn* ‘loins’, perhaps Arb. *kawsalat-* ‘glans penis’ (Ugr. *ksl* also means ‘bowstring’, paralleled by Arb. *kisl-*, Held 1965, 401–406).

6.1.17. Crotch, groin

PS ***rVby-** for ‘crotch, groin’ (SED I No. 227) is based on Akk. *ribītu* ‘groin’ (no connection with *rebītu* ‘square, avenue’, Kogan 2003, 131–132), Syr. *rbubyātā*, ‘*arbuby-ātā*’ ‘testicles’, Arb. ‘*urbiyyat-*’ ‘crotch’, Amh. *reb* ‘anus, buttocks’, Muh. *āribā* ‘abdomen below the navel’, Mhr. *rəbbūt*, Jib. *rēt* ‘groin’, Soq. ‘*erbéboh*’ ‘groin, lap, hip’. A similar meaning can be reconstructed for PS ***kapl-** (Akk. *kappaltu* ‘area between the thighs, groin’, JBA *kaplā* ‘loin’, Mnd. *kapla* ‘loins, buttocks’, Arb. *kafal-* ‘buttocks, podex’, Kogan/Militarev 2002, 316–317) and ***tVn(n)-** (Akk. *sūnu* ‘lap, crotch’, Arb. *tunnat-* ‘lower part of the belly, the pubes’, Har. *šān* ‘groin’, Kogan/Militarev 2002, 317–318).

6.1.18. Coccyx, buttocks

PWS ***aṣay-** as a designation of ‘coccyx’ (SED I No. 23) is preserved in Hbr. ‘*āṣē*, JPA ‘*yṣy*, Arb. ‘*aṣa*’, ‘*aṣaṣ-*’, ‘*uṣuṣ-*’, ‘*uṣūṣ-*’ and Tgr. ‘*eṣat*’, ‘*aṣet*. PWS ***šit-** for ‘buttocks’ (SED I No. 255) is well attested in CS (Hbr. *šēt*, Syr. ‘*eštā*’, Arb. ‘*ist-*’, *sath-*) and MSA (Mhr. *šūt*, Jib. *šét*, *šṣ*, Soq. *šéh*, *šīho*). It is debatable whether Ugr. ‘*išd*’ ‘leg’ and Akk. *išdu* ‘base, foundation’ are related to this root. The meaning ‘buttocks, anus’ can also be attributed to PS ***kinn-** (Kogan/Militarev 2002, 316) on the basis of Akk. *kinnatu* and Gunnän-Gurage forms like Muh. *k’ənn* (cf. also Arb. *qaynat-* ‘back, loins, space between the hips’, Tgr. *kən* ‘vulva; lower or back part’ and Har. *kānāwa* ‘tail’). One more synonym is PWS ***ag(a)b-**, represented by pB. Hbr. ‘*ägābā*’ ‘rump, buttocks’, Arb. ‘*ažb-*’ ‘sacrum’, ‘*ažab-*’ ‘having prominent buttocks’, Soq. *ma’gāboh* ‘buttocks’ (SED I No. 13).

6.1.19. Heart, liver, kidney, stomach

A few designations of internal organs are nearly pan-Semitic: ***libb-** for ‘heart’ (Akk. *libbu*, Ugr. *lb*, Hbr. *lēb*, Syr. *lebbā*, Arb. *lubb-*, Sab. *lb*, Gez. *labb*, Mhr. *ḥə-wbēb*, Jib. *ubbātā*, Soq. ‘*libib*’; SED I No. 174), ***kabid-** for ‘liver’ (Akk. *kabattu*, Ugr. *kbd*, Hbr.

kābēd, Syr. *kabdā*, Arb. *kabid-*, Gez. *kabd*, Har. *kūd*, Mhr. *šəbdūt*, Soq. *šībdeh*; SED I No. 141), ***kVly-at-** for ‘kidney’ (Akk. *kalītu*, Ugr. *klyt*, Hbr. *kilyā*, Syr. *kōlītā*, Arb. *kulyat-*, Gez. *kʷəlīt*, Mhr. *kəlyūt*, Jib. *kužét*, Soq. *kəḷḷyət*; SED I No. 156) and ***kariš-** for ‘stomach’ (Akk. *karšu*, *kār-su-um* = Sum. ŠA.GAL in VE 576, Hbr. *kārēš*, Syr. *karsā*, Arb. *kariš-*, Gez. *karš*, Mhr. *kīrāš*, Jib. *šīrš*, Soq. *šēreš*; SED I No. 151). A few deviations from the common semantic pattern are to be mentioned: Arb. *lubb-* is not the basic term for ‘heart’, which is *qalb-* (cf. Akk. *qablu* ‘middle’, SED I No. 161), whereas Akk. *kabattu* usually denotes ‘emotion’, ‘thought’, ‘spirit’ rather than ‘liver’ itself.

6.1.20. Intestines, lung, gall, spleen

PS ***mVVy-** probably denoted ‘intestines, entrails’ in general: Hbr. *mēʿayim*, Syr. *mʿayyā*, Arb. *maʿy-*, *maʿa*, Gez. *ʾamāʿut*, Tgr. *məʿo*, Mhr. *məʾəwəyēn* and Soq. *miʿho* (SED I No. 185). Akkadian *amūtu*, structurally close to Gez. *ʾamāʿut*, acquired a more concrete meaning ‘liver’ at the expense of PS **kabid-*. PWS ***riʾ-at-** meant ‘lung’: pB. Hbr. *rēʾā*, Syr. *rātā*, Arb. *riʾat-*, Mhr. *rəyēʾ*, Jib. *rōt* (SED I No. 224). Akk. *irtu*, Ugr. *ʾirt* ‘chest, breast’ can be related to this root with metathesis (Fronzaroli 1964, 46). PS ***mVr(V)r-at-** was used for ‘gall’ and ‘gall bladder’ (Akk. *martu*, Hbr. *mərōrā*, *mərērā*, Syr. *mertā*, Arb. *mirrat-*, Har. *mārār*, Mhr. *mərrāt*, Jib. *merrōt*; SED I No. 188). The PS term for ‘spleen’ (SED I No. 278) has two variants: ***ṭihāl-**, attested in CS and modern ES (Ugr. *ṭhl*, pB. Hbr. *ṭḥōl*, Syr. *ṭḥālā*, Arb. *ṭihāl-*, Har. *ṭāḥa*, Sod. *ṭala*) and ***ṭlhīm-**, known from Akk. *ṭulīmu* (perhaps already in VE 582: *ṭi-ʾā-mu* = Sum. ŠA.GI₆ ‘black intestine’) and Mhr. *ṭelḥāym*, Jib. *ṭelḥīm*, Soq. *ṭālḥən*, *ṭālḥem*.

6.1.21. Genital organs

There is a variety of common terms for genital organs. PS ***Všk-** denoted ‘testicle’ (Akk. *išku*, Ugr. *ʾušk*, Hbr. *ʾäšäk*, Syr. *ʾäškīā*, Gez. *ʾaskit*; SED I No. 11), but underwent a semantic shift to female genitals in Arb. *ʾiskat-* and Soq. *ḥošk* (cf. also Amh. *ašūkt* ‘pubic hair’). PS ***bVntur-** as a special term for female genitals is based on Akk. *biššūru* ‘vulva’ and Arb. *bunḍur-* ‘clitoris’ (SED I No. 37). PS ***ṭapr-** for ‘vulva’ (SED I No. 282) is deduced from Akk. *šapru* ‘thigh’ (contextually often applied to female genitals, Kogan/Militarev 2002, 312–313) and Arb. *tafr-* ‘vulva, vagina’ (Lane 340). PS ***γurl-at-** for ‘foreskin’ (SED I No. 108) is attested in Akk. *urullu*, Hbr. *ʾorlā* (for the Early Canaanite *ku₄-r=na=ta* in Egyptian syllabic writing see Hoch 1994, 302), JBA *ʾurlātā* and Arb. *γurlat-*. PS ***paḥl-** (SED I No. 210) probably designated ‘penis’ as suggested by Mhr. *fēḥəl*, Jib. *fāḥəl*, Soq. *fāḥal* and Mnd. *pīhla*. The meaning shift to ‘testicles’ in Syr. *pāḥlātā* is unproblematic, whereas Akk. *paḥallu* ‘thigh’ is often attested with sexual connotations (Durand 2002, 136–137). In Akkadian and Arabic this root is further attested with a derived meaning ‘stallion, male animal used for fecundation’ (Akk. *puḥālu*, Arb. *fāḥl-*), whereas Ugr. *pḥl* became one the main designations of ‘donkey’.

6.1.22. Womb

The PS term for ‘womb’ is ***raḥim-** (SED I No. 231): Akk. *rēmu* (for *ri-ʾe_x-mu*, *ri-mu-um* = Sum. É×ŠA in VE 324 see Krebern timer 1983, 14), Hbr. *rāḥām*, Syr. *raḥmā*, Arb.

raḥim-, Mhr. *raḥm*, perhaps Tna. *rəḥm-u* ‘prone, face down’. ‘Afterbirth’ was designated by PS **šily-at-* (Akk. *silītu*, *šelītu*, *šalītu*, Hbr. *šilyā*, Syr. *šlītā*, Arb. *sala*ⁿ, Tna. *šālār*; SED I No. 246). A few related terms are used for ‘embryo, foetus’: Hbr. pB. *šālīl*, Arb. *salīl-*, Gez. *sayl*, Amh. *šəl*.

6.2. The head

6.2.1. Head, skull

PS **raʕ-* as the main term for ‘head’ is attested throughout Semitic (Akk. *rēšu*, Ugr. *rīʕ*, Hbr. *rō(ʔ)š*, Syr. *rēšā*, Arb. *raʕs-*, Sab. *rʕs*₁, Gez. *rəʕs*, Amh. *ras*, Mhr. *ḥə-rōh*, Jib. *rēš*, Soq. *réy*; SED I No. 225) with the exception of Gurage where it is ousted by reflexes of **dimāy-* ‘brain’ (SED I No. 52) and **gunnān* of uncertain origin (Hetzron 1977, 3). Akk. *rēšu* is mostly attested in transferred meanings, the basic term being *kaḫḫadu*, related to Ugr. *ḫdḫd* and Hbr. *ḫodḫōd* ‘skull’ (SED I No. 159; for *ḫaḫ-ḫuḫ-dum* = Sum. SAG×IGI in EV 0343 see Krebernik 1983, 12). A more widely used PS term for ‘skull’ is **gVlgVl-at-*: Akk. *gulgullatu*, Hbr. *gulḡōlāt*, JBA *gulḡoltā*, Arb. *ḡalaḡat-* (SED I No. 79, LA 2 255).

6.2.1.2. Temple, front, occiput

PS **nakap-at-* as a designation of ‘temple’ (SED I No. 199) derives from Akk. *nak-kaptu* ‘temple’ (but cf. Streck 2002, 240) and Arb. *nakfat-*, *nakafat-* ‘area between the jaw and the neck’ (LA 9 406). As a term for ‘front’, PS **pVʕ-at-* can be reconstructed on the basis of Akk. *pūtu* (pl. *pātu* < **puʕ-āt-u*) ‘front’, Syr. *patā* ‘face, forehead’, Amh. *fit* ‘face, front’, Soq. *fīo* ‘front’ (SED I No. 204). For a PS term for ‘occiput’, one may compare Akk. *arūpu* (*arūbu*) ‘part of neck’, *ḫuruppu* ‘hump’, Hbr. *ʕrāp* ‘top of the head, neck’, Arb. *ḡārib-* ‘part between the hump and the neck’ and *ʕrf-* ‘mane, feathers on the neck’, Mhr. *ḡarb* ‘camel’s back and neck in front of the hump’, Soq. *ʕrib* ‘neck’ (SED I No. 107).

6.2.1.3. Brain

The PS term for ‘brain, marrow’ is **muḥḫ-* (SED I No. 187): Ugr. *mḥ*, Hbr. *mōaḥ*, Syr. *muḥḫā*, Arb. *muḥḫ-*. Akk. *muḥḫu* is usually applied to top of the head, but may have occasionally denoted both ‘marrow’ and ‘brain’, see Stol 2000b, 628 (*mu-ḫa-am ša kur^{ur}-sī-na-tim* ‘the marrow of the feet’) and Westenholz/Sigrist 2006. PWS **maʕmaʕ-* ‘brain’ is based on Ugr. *mmʕ*, Mhr. *mēma*, Jib. *maʕ*, Soq. *mīmāʕ* (SED I No. 184, Kogan 2005d).

6.2.2. Face

PS **pan(ay)-* for ‘face’ (SED I No. 215) derives from Akk. *panu*, Ugr. *pnm*, Hbr. *pānīm*, Jib. *fēne* and Soq. *fāne*, to which Arb. *fināʕ-* ‘exterior court’, Sab. *fḡw* ‘space

outside; front of building’ and Gez. *fannawa* ‘to send away’ are related. The root is practically lost in Aramaic where ‘face’ is denoted by reflexes of PS **ʾanp-* ‘nose’ (Kogan 2005c, 518).

6.2.2.1. Eye, pupil

PS **ʾayn-* for ‘eye’ is pan-Semitic: Akk. *īnu* (for several attestations of *a-na-a* in VE see Krebernik 1983, 27–28), Ugr. *ʿn*, Hbr. *ʾayin*, Syr. *ʾaynā*, Arb. *ʾayn*, Sab. *ʾyn*, Gez. *ʾayn*, Mhr. *ʾāyn*, Jib. *ʾihn*, Soq. *ʾain* (SED I No. 28). PCS **bV(ʔ)b(Vʔ)-* for ‘pupil of the eye’ is based on Hbr. *bābat hā-ʾayin*, Syr. *bābtā*, Arb. *buʾbuʾ* (SED I No. 29).

6.2.2.2. Ear

The PS term for ‘ear’ is **ʾudn-*: Akk. *uznu*, Ugr. *ʾudn*, Hbr. *ʾōzān*, Syr. *ʾednā*, Arb. *ʾudn-*, Sab. *ʾdn*, Gez. *ʾəzn*, Mhr. *ḥə-yḏēn*, Jib. *ʾidén*, Soq. *ʾidihen* (SED I No. 4). The similarity between Akk. *ḥasīsu* ‘ear’ and Arb. *ʾal-ḥasīs-āni* ‘the two veins behind the ear’ (Freitag I 377), perhaps also pB. Hbr. *ḥishūs* ‘cartilages forming the ear’ (Jastrow 486), suggests **ḥasīs-* ‘ear’ as a PS synonym (SED I No. 127, cf. already Holma 1911, 30).

6.2.2.3. Nose

PS **ʾanp-* for ‘nose’ (SED I No. 8) is widely attested: Akk. *appu* (for *ša-ḫi-lum a-pi* ‘one with raised nose’ = Sum. KIRI₄.DÙ see Krebernik 1983, 9–10), Ugr. *ʾap*, Hbr. *ʾap*, Arb. *ʾanf*, Gez. *ʾanf*, Har. *ūf*. It is lost in MSA (replaced by reflexes of PS **naḥīr-* ‘nostril’) and Amharic (no etymology for *aḥənča*). In later Aramaic **ʾanp-* is mostly preserved with the meaning ‘face’ (Syr. *ʾappayyā*), whereas reflexes of PS **naḥīr-* ‘nostril’ are used for ‘nose’ (in Old Aramaic **ʾanp-* was used with both meanings, Kogan 2005c, 518). A less widespread term for ‘nose’ (also ‘muzzle, beak, trunk’) is **ḥVṭm-* (SED I No. 139), represented by Akk. *ḥuṭimmu*, JBA *ḥuṭmā*, Arb. *ḥaṭm-*, possibly Ugr. *ḥṭm* (cf. DUL 416), as well as terms with inserted *-r-* such as Arb. *ḥurṭūm-* and Syr. *ḥarṭūmā* (SED I No. 137). PS **naḥīr-* (SED I No. 198) preserves the original meaning ‘nostril’ in Akk. *naḥīru*, Hbr. *naḥīrayim* and Arb. *nuḥrat-*, but became the general term for ‘nose’ in Aramaic (Syr. *nḥīrē*) and MSA (Mhr. *nəḥrūr*, Jib. *naḥrér*, Soq. *nāhrir*).

6.2.3. Mouth

PS **pay-* (or **paw-*) for ‘mouth’ (SED I No. 233) preserves its original form in Akkadian (*pû*), Ugaritic (*p*), Hebrew (*pā*) and Sabaic (*f*). In Aramaic an *m*-extension is normal (JPA *pām*, Syr. *pummā*), also known from Arabic (*fam-*, side by side with *fūh-*). The common ES form of this root is **ʾaf-*, with an unclear *ʾa-* (for possible Cushitic

influence see Dolgopolsky 1973, 230–231). In MSA this root was ousted by Mhr. *ḥā*, Jib. *ḥəh*, Soq. *ḥe* (ML 454, JL 310, LS 158), going back to a PS term for ‘opening, hole’ (CDG 260, under Gez. *ḥoḥət* ‘door, gate’).

6.2.3.1. Lip

PS **šap-at-* for ‘lip’ (SED I No. 265) is best preserved in Akkadian (*šaptu*) and CS (Ugr. *špt*, Hbr. *šāpā*, Syr. *septā*, Arb. *šafat-*). The verb *s₂ft* ‘to promise’ in Sab. and Qat. is probably derived from this root, whereas Tna. *šānfāt* ‘lips, muzzle, snout’, *šānfäf* ‘lip’ and Tgr. *šanəf* ‘mouth (of animals)’ are likely related to it. However, most ES terms for ‘lip’ go back to **kanpar-*, perhaps borrowed from Cushitic (cf. SED I No. 146). The MSA picture is complicated: Northern Mhr. *kafrīr* (ML 213), Jib. *kafrēr* (JL 142) are opposed to Southern Mhr. *karfīf* (ML 225), whose cognates in the northern dialect and in Jibbali mean ‘face’ (cf. Simeone-Senelle/Lonnet 1985–1986, 270, 278–279). Soq. *šébeh* has been usually identified with PS **šap-at-* (LS 424), but in fact can hardly be separated from Hrs. *šébeṭ* ‘lip’ (so HL 118).

6.2.3.2. Cheek, jaw, gum, palate

PS **lVhy-at-* for ‘cheek, jaw’ (SED I No. 178) is well preserved: Akk. *lētu* ‘cheek’ (also *lahû* ‘jaw’), Ugr. *lhm*, Hbr. *ləḥī*, JPA *lhy*, Arb. *laḥa* ‘cheek’, *lihyat-* ‘beard’, *lahy-* ‘jaw’, Gez. *malāḥt*, Tgr. *ləḥe*, Mhr. *məlhāw*, Jib. *məžḥét*, Soq. *malāḥi*. PS **laṭay-* denoting ‘gum’ is represented by Akk. *lašḫu* and Arb. *laṭayat-* (SED I No. 182, LA 8 532). The same meaning can be reconstructed for PS **dVrdVr-* (SED I No. 56) on the basis of JBA *dārārā* ‘gum’, Arb. *durdur-* ‘part of the gum where teeth grow’, *ʾadrad-*, *ʾadram-* ‘toothless’, Tgr. *dərdər gāʾa* ‘to grow toothless’, Amh. *dārāddārā* ‘to cut teeth’. Akk. *dūr šinni* ‘gums’ (> JBA *dūr šinnē*, Syr. *dūrā dā-šinnē*) may also go back to this root, being reinterpreted as *dūru* ‘wall’ by popular etymology (Kogan 2003, 128–129). PWS **ḥVnVk-* with the meaning ‘palate’ (SED I No. 124) is represented by Hbr. *ḥēk* (pB. *ḥānikayim*), Syr. *henkā*, Arb. *ḥanak-*, Mhr. *ḥənnūk*, Jib. *hónúk* as well as by the verbal root **ḥnk* ‘to munch, chew’ in ES (Gez. *ḥanaka*, Amh. *aññākä*).

6.2.3.3. Tongue

PS **lišān-* for ‘tongue’ (SED I No. 181) is attested throughout Semitic: Akk. *lišānu* (for *a-a-gú li-sa-nu* = Sum. EME.LÁ in VE 180 see Krebernik 1983, 7–8, Conti 1990, 94), Ugr. *lšn*, Hbr. *lāšōn*, Syr. *leššānā*, Arb. *lišān-*, Sab. *ls₁n*, Gez. *ləssān*, Mhr. *ewšēn*, Jib. *elšén*, Soq. *lēšin*. It is missing only from Tigrinya and Southern ES: Tna. *mālḥas*, Amh. *məlas* < PS **lḥs* ‘to lick’, Har. *arrāt* < Cushitic.

6.2.3.4. Tooth

PS **šinn-* as a general term for ‘tooth’ is widely attested: Akk. *šinnu* (for *si-nu-u[m]* = Sum. ZÚ.URUDU see Krebernik 1983, 6–7), Ugr. *šn*, Hbr. *šēn*, Syr. *šennā*, Arb. *sinn-*,

Gez. *sənn*, Jib. *šnin* (SED I No. 249). It is missing from Amharic, Mehri and Soqotri: Amh. *ṭərs* and Mhr. *məṣṣrāḥ* go back to PS **širš-* ‘molar’, the origin of Soq. *‘āle* and *šā‘al* (LS 309, 431) is uncertain. PWS **nāb-*, **nīb-* designated the ‘canine tooth’ (SED I No. 203) on the evidence of JBA *nībā*, Arb. *nāb-* and Tgr. *nib* (Akk. *nayyabtu*, compared since Holma 1911, 24, means ‘floating rib’, CAD N₁ 151). PWS **širš-* for ‘molar tooth’ (SED I No. 275) is based on Syr. *‘aršā*, Arb. *ḏirs-*, Sab. *šrs₁*, Gez. *ṣərs*, Mhr. *məṣṣrāḥ*, Jib. *məṣṣrēš*, Soq. *māṣṣrəḥ*. Akk. *širšu* means ‘protuberance’, but the original anatomic connotations seem to be preserved in VE 227 (*ša-la-šum* = Sum. ZÚ.GUL, Krebernik 1983, 10).

6.2.4. Hair, beard

The basic term for ‘hair’ is PS **ša‘r-* (SED I No. 260), represented by Akk. *šārtu* (*sa-ra-tum* in VE 972b, Krebernik 1983, 35), and such CS terms as Ugr. *š‘rt*, Hbr. *šē‘ār*, Syr. *sa‘rā*, Arb. *ša‘r-*. It is preserved in ES as Gez. *šə‘ərt*, but the Cushitism *ṣag^wr* (present already in Geez) ousted it completely in modern languages (CDG 550). PS **ša‘r-* is preserved in MSA (Hrs. *šōr*, Soq. *šā‘ihor*), where alternative designations such as Mhr. *šəft*, Jib. *šfēt* and Soq. *šfeh* are more prominent, however. These are related to Akk. *šipātu* ‘wool, fleece’, Tna. *šifašəfti* and Amh. *šəfašəft* ‘eyebrow’, yielding PS **šVp-at-* (SED I No. 259). Less widely attested are PS **par-* (Akk. *pērtu*, Hbr. *pāra‘*, Arb. *far-*; SED I No. 218) and PS **yapar-* (Akk. *apparrû*, *ḥapparrû* ‘stiff, wiry hair’ and Arb. *yafar-* ‘hair on the body’, perhaps Ugr. *γprt* ‘kind of garment’; SED I No. 105). PS **daḳan-* for ‘beard’ is attested everywhere except ES: Akk. *ziḳnu* (for *ša-ḳā-núm* = Sum. *su₆.DÙ* in VE 199 see Krebernik 1983, 8), Ugr. *dḳn*, Hbr. *zākān*, Syr. *daḳnā*, Arb. *daqan-*, Soq. *dīḳehon* (SED I No. 63).

6.3. The limbs

6.3.1. Hand

PS **yad-* for ‘hand’ is attested throughout Semitic: Akk. *idu* (for *i-da*, *i-dim* in VE see Krebernik 1983, 19–24), Ugr. *yd*, Hbr. *yād*, Syr. *‘idā*, Arb. *yad-*, Sab. *yd*, Gez. *‘əd*, Amh. *əṣṣ*, Mhr. *ḥayd*, Jib. *éd*, Soq. *‘ed* (SED I No. 291). Akk. *idu* is usually attested in transferred meanings only, the origin of the basic term *ḳātu* (AHw. 908) is obscure.

6.3.1.1. Palm, hollow of the hand

PS **kapp-* for ‘palm’ (Akk. *kappu*, Ugr. *kp*, Hbr. *kap*, Syr. *kappā*, Arb. *kaff-*, Mhr. *kaf*, Jib. *kəf*; SED I No. 148) is missing only from ES. PS **rāḥ-at-* with the same meaning (SED I No. 230) is also widespread: Akk. *rittu* (already in VE 516 and 517: *la-‘à-tum* = Sum. *šu.šā*, *ra-‘à-tum* = Sum. *šu.SAL*, Krebernik 1983, 19), Ugr. *rḥt*, Arb. *rāḥat-* (Lane 1181), Gez. *‘əṣṣ*, Mhr. *rəḥāt*, Jib. *iršḥót*, Soq. *rīḥoh* (Hbr. *rāḥat* ‘winnowing shovel’ is

related with a meaning shift). Well attested is PS **ḥupn-* ‘hollow of the hand’: Akk. *upnu*, Hbr. *ḥopnayim*, Syr. *ḥupnā*, Arb. *ḥufnat*-, Sab. *ḥfn-nhn*, Gez. *ḥəfn*, Amh. *əffəñ*, Mhr. *ḥāfən*, Jib. *ḥáfən* (SED I No. 125).

6.3.1.2. Finger, thumb, nail

PWS **ʾiṣbaʿ-* with the meaning ‘finger’ (SED I No. 256) is attested throughout WS: Ugr. *ʾuṣbʿ*, Hbr. *ʾāṣbaʿ*, JBA *ʾaṣbāʿā*, Syr. *ṣebʿā*, Arb. *ʾiṣbaʿ-*, Gez. *ʾaṣbāʿt*, Tgr. *ṣəbʿət*, Har. *aṭābiñña*, Mhr. *ṣəbāʿ*, Jib. *ʾiṣbāʿ*, Soq. *ʾéṣbah*. It is present in VE 500 (iṣ-ba-um, i-sa-ba-um = Sum. *ṣu.tur*, Krebernik 1983, 18, Conti 1990, 148–150), but the only possible attestation in standard Akkadian (*ni-iṣ-bit-tú* in a late lexical list) is problematic (Streck 2002, 249). The PS term for ‘thumb’ (SED I No. 34) can be reconstructed as **bVhVn-* on the evidence of Hbr. *bōhān* ‘thumb, big toe’ and *ba-ʾà-núm* in VE 499 (= Sum. *ṣu.dagal.gal*, Krebernik 1983, 18). Other parallels are less transparent: Arb. *ʾibhām-*, *bahīm-* ‘thumb, toe’, Akk. *ubānu* ‘finger’ (< **hubān-* or **ubhān-*?), Mhr. *hābēn* (< **hVbVn-*?) and Hrs. *hābēn* (**ḥa-hVbVn-*?) ‘thumb’. A PWS designation of little finger is **ḥiṣr-*: Syr. *ḥeṣrā*, Mnd. *hiṣra*, Arb. *ḥinṣir-*, Mhr. *ḥoṣṣərrəʿ*, Jib. *ḥəṣrér* (SED I No. 134). PS **ṭipr-* for ‘nail, claw’ (SED I No. 285) is virtually pan-Semitic: Akk. *ṣupru*, Hbr. *ṣippōrān*, Syr. *ṭeprā*, Arb. *ḍifr-*, Gez. *ṣəfr*, Mhr. *ḍfēr*, Jib. *ḍífēr*, Soq. *tífer*.

6.3.1.3. Elbow, shoulder

The most widespread term for ‘elbow, forearm’ is PS **amm-at-*: Akk. *ammatu* (for *ama-tum* = Sum. *á.kūš* in VE 541 see Krebernik 1983, 20), Ugr. *ʾamt*, Hbr. *ʾammā*, Syr. *ʾammtā*, Sab. *ʾmt*, Gez. *ʾamat*, Tgr. *ʾammāt* (SED I No. 6). This term is best attested with the non-anatomic meaning ‘cubit’, but the original anatomic connotations are clear in Ugr. *yrḥṣ ydh ʾamth* ‘she washed her arms up to the elbow’ (KTU 1.14 III 53) and Gez. *Wa-ʾamatā tāṣannəʿ la-fatil* ‘she strengthens her forearm for spinning’ (LLA 724). PWS **ḍirāʿ-* with the same meaning is based on Ugr. *ḍrʿ*, Amarna Canaanite *zu-ru-uḥ*, Hbr. *zərōāʿ*, Syr. *drāʿā*, Arb. *ḍirāʿ-*, Gez. *mazrāʿt*, Mhr. *darʿ*, Soq. *diréʿi* (SED I No. 65). PS **katip-* for ‘shoulder’ (SED I No. 154) is well preserved in CS (Ugr. *ktp*, Hbr. *kātēp*, Syr. *katpā*, Arb. *katif-*) and continental MSA (Mhr. *katf*, Jib. *ketf*), with morphological rebuilding also in Tgr. *māktāf* and Gez. *matkaf*. Akk. *katappātu*, possibly related, is a rare word interpreted as ‘sternum or part of the ribs’ in CAD K 303.

6.3.2. Foot

There is no single PS term for ‘foot’. A possible candidate is PS **paʿm-* (SED I No. 207), which produced basic terms for ‘foot’ in continental MSA (Mhr. *fēm*, Jib. *faʿm*) and Ugaritic-Canaanite (Pho. *pʿm*, Ugr. *pʿn*, marginally also in Hbr. *paʿam*: *mayyāpū pəʿamayik ba-nnəʿālayim* ‘how beautiful are your feet in the sandals’ in Canticle 7.2). Akk. *pēmu* denotes ‘hip’, to be compared to Arb. *fēm* ‘to have fat hips; to be fat (arms)’. Reflexes of **rigl-* ‘foot’ are attested throughout CS (Hbr. *rägāl*, Syr. *reglā*, Arb. *riḡl*-, Sab. *rgl*; SED I No. 228) except Ugaritic and Phoenician (for *ri-[i]g-lu* ‘foot’

in a lexical list from Ugarit see Huehnergard 1987, 176). There is no consensus about whether Gez. *ʾagr* and related ES terms (SED I No. 7) are connected with **rigl-* (similar forms in Arabic dialects, such as Daḥina *ʾiḡr*, Syria *ʾaḡar*, make the picture especially complicated, cf. Kaye 1991, Voigt 1998). Akk. *šēpu* ‘foot’ may be related to Common MSA **ša(p)-* ‘trace, foot’ represented by Mhr. *šaf*, Jib. *šef*, Soq. *šab*, du. *šaʿfi* (SED I No. 269).

6.3.2.1. Heel

PS **aḳib-* for ‘heel’ (Akk. *ekbu*, Ugr. *ḳb*, Hbr. *ʾāḳēb*, Syr. *ʾekbā*, Arb. *ʾaqib-*; SED I No. 14) is missing from ES and MSA. A special designation of ‘Achilles’ tendon’ is PWS **arḳVb-* (SED I No. 21), based on pB. Hbr. *ʾarḳūb*, Syr. *ʾarḳūbā*, Arb. *ʾurqūb-*, Tgr. *tārḳoba* and Mhr. *ʾārḳayb dā-fām* (Steiner 1982, 15–18, Kogan/Militarev 2003, 287–288).

6.3.2.2. Leg

PWS **šāḳ-* for ‘leg, shin’ (SED I No. 241) is best attested in CS (Ugr. *šḳ*, Hbr. *šōḳ*, Syr. *šāḳā*, Arb. *sāq-*), but cf. also Tgr. *sāḳuḳa* ‘forearm; lower part of the leg’ as well as Akk. *sīku* and *sāku* ‘lap, thigh’. PS **kursV-* ‘lower leg’ (SED I No. 150) is reliably attested in Akk. *kursinnu* ‘fetlock, lower leg’ and Arb. *kursū-* ‘wrist bone’. A special PS term for ‘ankle’ may be reconstructed as PS **ḳVṣVl-* on the basis of Akk. *kiṣallu*, Hbr. *ḳarṣullayim*, JPA *ḳrṣwl* and Syr. *ḳurṣlā* (SED I No. 169). PS **birk-* for ‘knee’ (Akk. *birku*, Ugr. *brk*, Hbr. *bārāk*, Syr. *burkā*, Gez. *bark*, Mhr. *bark*; SED I No. 39) is replaced by Cushitisms in Southern ES (Amh. *gulbāt*), whereas in Arabic the metathetic form *rukbat-* is common (SED I No. 232), also attested in Aramaic (JPA *ʾrkwbth*). PS **warik-* for ‘hip, thigh’ (SED I No. 288) is present throughout WS (Hbr. *yārēk*, JBA *yirkā*, Arb. *warik-*, Sab. *wrk*, Tna. *wārākāt*, Amh. *wārč*, Mhr. *warkūt*, Jib. *iršēt*). Akk. *warkatu* usually means ‘rear, rear side’, but *wa-rí-ku₁₇-um*, *wa-rí-gúm* in VE 864 (= Sum. *íB.ÁŠ*) may preserve the anatomic meaning (Krebern timer 1983, 33, Conti 1990, 204). Another synonym for ‘hip’ is PWS **pahid-*: Syr. *puḥdā*, Arb. *faḥid-*, Sab. *fḥd*, Mhr. *aḥḥād*, Jib. *faḥd* (SED I No. 211).

6.4. Terms specific to animal anatomy

Pan-Semitic are **ḳarn-* for ‘horn’ (Akk. *ḳarnu*, Ugr. *ḳrn*, Hbr. *ḳārān*, Syr. *ḳarnā*, Arb. *qarn-*, Gez. *ḳarn*, Tgr. *ḳār*, Amh. *ḳānd*, Mhr. *ḳōn*, Jib. *ḳun*, Soq. *ḳan*; SED I No. 168), **danab-* for ‘tail’ (Akk. *zibbatu*, *šē-na-bu* = Sum. *KUN* in VE 1371, Ugr. *ḏnb*, Hbr. *zānāb*, Syr. *dunbā*, Arb. *danab-*, Mhr. *ḏnūb*, Jib. *ḏúnūb*, Soq. *dinob*; SED I No. 64) and **kanap-* for ‘wing’ (Akk. *kappu*, Ugr. *knp*, Hbr. *kānāp*, Syr. *kenpā*, Arb. *kanaf-*, Gez. *kānf*; SED I No. 145). PS **ḳVb-at-* (SED I No. 158) denoted an animal’s stomach as suggested by Akk. *ḳuḳḳubātu*, Hbr. *ḳēbā*, JBA *ḳabtā*, Arb. *qibat-*, *qibbat-*, *qabqab-*, Tgr. *ḳābbāt* (SED I No. 167). PS **kurā-* (SED I No. 157) was likely applied to an animal’s shin or leg, as in Akk. *kurītu*, Ugr. *kr*, Hbr. *ḳarāʿayim*, Syr. *krāʿā*, Sab. *kr*. At

the same time, JPA *kr*^c and JBA *kərā*^c*ā* are used only for humans (DJPA 270, DJBA 604), whereas Arb. *kurā*^c- can be used for both humans and animals (the meaning ‘(human) elbow’ is typical of Gez. *k^wərnā*^c, Amh. *kərn*, Har. *kuru*^c). PWS ***pVrs-** for ‘hoof’ is best attested in Hbr. *parsā* and Syr. *parstā*, but Arb. *firsin-* ‘lowest part of the leg of a camel’ and Tgr. *fərsəm* ‘ankle; heel tendon’ are undoubtedly related (SED I No. 220). PCS ***alyat-** (SED I No. 5) denotes ‘sheep’s fat tail’ (Hbr. *’alyā*, JBA *’ālūtā*, Arb. *’alyat-*; Müller 1972, 303 further compares Amh. *lat*, Har. *lāt*, Sel. *lāt* with the same meaning). PS ***nāṣiy-at-** (SED I No. 202) denotes ‘plumage, feathers’ in Akk. *nāṣu*, Hbr. *nōṣā*, but Arb. *nāṣiat-* is applied to a man’s forelock.

6.5. Secretion and excrements

6.5.1. Tear

PS ***dVm^c-at-** for ‘tear’ (SED I No. 51) is attested almost everywhere: Akk. *dīmtu* (for *ī-dī-ma-a-tum* = Sum. *ÉR.ÉR* in VE 716 see Krebernik 1983, 27), Ugr. *dm^ct*, Hbr. *dim^cā*, Syr. *dem^ctā*, Arb. *dam^c-*, Mhr. *dāmāt*, Jib. *dām^cāt*, Soq. *’edmf^ca*. It is only in ES that it is replaced by derivatives of ***nb^c** ‘to gush forth’ such as Gez. *’anbā^c* (CDG 382).

6.5.2. Sweat

PS ***dV^c-at-** for ‘sweat’ (SED I No. 61) is preserved in Akk. *zu^cutu*, *zūtu* (already in VE 1041: *šu-tū-um* = Sum. *IR*, Krebernik 1983, 37), Ugr. *d^ct*, Hbr. *zē^cā*, Syr. *du^ctā*. Related forms in *wV-* are attested in Southern ES (Amh. *wāz*, Har. *wuzi^c*, Sod. *wəzat*).

6.5.3. Saliva

There is no single common term for ‘saliva’. Attestations of ***rīr-** do not go beyond CS (SED I No. 234): Hbr. *rīr*, Syr. *rīrā*, Arb. *rayr-*, *rīr-*. Reflexes of PS ***ḥim-at-** are semantically diverse: Akk. *imtu* ‘poisonous foam; spittle’, Ugr. *ḥmt*, Hbr. *ḥēmā*, Syr. *ḥemtā* ‘venom’, Arb. *ḥumat-* ‘scorpion’s venom’, Gez. *ḥamot* ‘bile, gall, venom’ (SED I No. 120). Similarly heterogeneous are the reflexes of PS ***ruḡw-at-**: Akk. *ru^ctu* ‘spittle, saliva, phlegm, mucus’, Syr. *ru^ctā* ‘foam’, Arb. *raywat-*, *ruḡwat-* ‘foam on milk’ (SED I No. 229). The PWS biconsonantal element ***rk^c** can be reconstructed with the meaning ‘to spit’: Hbr. *yrk^c*, *rk^ck*, Syr. *raḡk*, Arb. *ryq*, Gez. *wrk^c* (SED I No. 81_v).

6.5.4. Mucus, phlegm

Similarity between Arb. *nuḡmat-*, Gez. *naḡā*^c and Jib *nḡḡ* suggests ***nVḡ-** as a PWS designation of ‘mucus, phlegm’ (SED I No. 197), to which Akk. *naḡnaḡatu* ‘cartilage of the nose’ and Syr. *naḡnaḡtā* ‘tonsils’ may be related (Akk. < Arm. or vice versa?).

6.5.5. Urine

PS ***tyn** with the meaning ‘to urinate’ (SED I No. 77_v) is based on Akk. *šānu*, Syr. *tān* and such ES verbs as Gez. *šena*, Tna. *šänä*, Amh. *šännä*. Hbr. *maštin* ‘urinating’ exhibits a fossilized *t*-infix (cf. Akk. *šatānu*, Ugr. *ytn*). Derived nouns with the meaning ‘urine’ are widespread: Akk. *šinātu*, Ugr. *tnt*, Hbr. *šēnā*, Syr. *tūnā*, Gez. *šant*, Amh. *šant*. The only reflex of this root in Arabic is *maṭānat*- ‘bladder’.

6.5.6. Non-digested food in the stomach

PS ***part-** denoted ‘non-digested food in the stomach’: Akk. *paršu*, Hbr. *päräš*, Syr. *perā*, Arb. *fart-*, Tna. *färsi*, Amh. *färs*, Mhr. *fart*, Jib. *fört*, Soq. *fört* (SED I No. 221).

6.5.7. Excrement, dung

A variety of terms for ‘excrement, dung’ can be traced back to PS, PWS or PCS: PS ***kVbVw-** (Akk. *kabû*, JBA *kabūyē*, Arb. *kiba*‘, *kibat-*, *kubat-*, Gez. *kābo*, Amh. *kubät*, Mhr. *kōbən*, Jib. *kā*; SED I No. 142), PS ***zibl-** (Akk. *ziblu*, JBA *ziblā*, Arb. *zibl-*, Gez. *zəbl*; SED I No. 294), PWS ***ḥVr²-** (Ugr. *ḥr’u*, Hbr. *ḥārā’im*, Syr. *ḥeryā*, Arb. *ḥarr-*, *ḥur’-*, *ḥary-*, Tna. *ḥar’i*, Amh. *ar*, Soq. *ḥaryómoh*, perhaps Akk. *arāru*, *ḥarāru* ‘to rot, to defecate’; SED I No. 136), PWS ***šVp’-** (Hbr. *šāpīa’*, Arb. *ḍaf’-*, Gez. *šəf’*, Hrs. *žōfa’*; SED I No. 273), PWS ***gVIVl-** (Hbr. *gālāl*, JBA *gilālā*, Mnd. *gala*, Arb. *žallat-*, Tgr. *gāllō*; SED I No. 75), PWS ***ṭi’-at-** (Hbr. *šē’ā*, *šō’ā*, Gez. *šī’at*, Gaf. *čičütä* ‘excrement’, Arb. *ḍiyyat-* ‘corpse in putrefaction’, TA 38 529, Ugr. *ṭu* ‘secretion’, Mhr. *ḍāy*, Jib. *ḍé’*, Soq. *ṭay* ‘smell’, perhaps Akk. *zû* ‘excrement’, *ezû*, *tezû*, *nezû* ‘to void excrement’; SED I No. 286), PCS ***dVmn-** (Hbr. *dōmān*, Arb. *dimn-*; SED I No. 53).

7. Life and death

7.1. Life

Throughout WS, verbs with the meaning ‘to live’ go back to ***ḥyy**, ***ḥwy**: Ugr. *ḥwy*, *ḥyy*, Hbr. *ḥāyā*, Syr. *ḥwā*, Arb. *ḥayya*, Sab. *ḥyw*, Gez. *ḥaywa*, Soq. *ḥyy* (Fronzaroli 1964, 24, 38, DUL 379, HALOT 309, LSyr. 228, Lane 679, SD 74, CDG 252, LS 171). In Akkadian, this root may be preserved in the theonym Ea (‘*à-a* [*ḥayya*]), see Roberts 1972, 20, 80 (for ‘*à-u*’ = Sum. ^dEN.KI in VE 803 see Krebernik 1983, 31). Akk. *balātu* ‘to live’ (AHw. 99) is usually compared to Ugr. Hbr. Syr. *plṭ* ‘to escape’ (Fronzaroli 1965b, 250, 263, 267; instead of Arb. *flṭ* ‘to escape’, phonetically remote, cf. rather Arb. *bālata* ‘to flee’, *buluṭ-* ‘fugitives’, LA 7 300). PS ***napš-** for ‘soul’ as receptacle of vital energy (Fronzaroli 1964, 21–23) is ubiquitous: Akk. *napištu* (for *nu-pù-uš-tum* = Sum. *zi* in VE 1050, 1315 see Krebernik 1983, 37), Ugr. *npš*, Hbr. *nāpāš*, Syr. *napšā*, Arb. *nafs-*, Sab. Min. Qat. *nfs*₁, Gez. *nafs*, Soq. *nafh* (SED I No. 46_v).

7.2. Procreation and birth

7.2.1. Sexual intercourse

‘Sexual intercourse’ was designated by PS **nyk*, preserved in Akk. *nāku*, Arb. *nyk*, Mhr. *nəyūk*, Jib. *nēk* (SED I No. 53_v). PS **rkb* ‘to ride, to mount’ is widely attested with sexual connotations: Akk. *rakābu*, Syr. *rkeb*, Gez. *tarākaba*, Mhr. *rēkəb* (SED I No. 60_v).

7.2.2. Pregnancy

The most widespread PS root with the meaning ‘to be pregnant’ is **hry*: Akk. *erû* (for *’ā-rî-tum* = Sum. ŠA×MUNUS in VE 594, see Krebern timer 1983, 23), Ugr. *hry*, Hbr. *hārā*, Old Arm. *hry* (SED I No. 20_v). Outside Akkadian and NWS, it is preserved in Tna. *harāyāt* ‘she became pregnant’ (TED 17) and, probably, Sab. *hry hryt* ‘pregnancy with which she became pregnant’ in Ja 751:6 (SD addendum). For various replacements in later Aramaic (such as *bḥn*, ‘*br*’) see Kogan 2005c, 559, for Common MSA **dny* see SED I No. 10_v, for Arb. *ḥāmil*- ‘pregnant’ (literally ‘carrying’) see Lane 649.

7.2.3. Birth

PS **wld* with the general meaning ‘to give birth’ is attested everywhere except MSA: Akk. *walādu*, Ugr. Hbr. *ylđ*, Syr. *’iled*, Arb. Sab. Gez. *wld* (SED I No. 80_v). The Common MSA replacement is **brw* (Mhr. *bərō*, Jib. *bíri*, Soq. *bére*), unseparable from the designations of ‘children’ discussed in 8.3.2. (ML 54, JL 28, LS 95). A more specialized meaning ‘to be in childbed’ can be attributed to PS **ḥrs* on the basis of Akk. *ḥarāšu* ‘to deliver’, *ḥarištu* ‘woman in labor’ (Stol 2000a, 123), Gez. *ḥarasa* ‘to be in childbed’ Arb. *ḥarūs*- ‘woman in labor’ (SED I No. 31_v). PCS **kr*, represented by Hbr. Syr. *’kr*, Arb. *’qr*, designated male or female childlessness (SED I No. 1_v), whereas PCS **tkl* meant ‘to be bereft’ (Ugr. *tkl*, Hbr. *škl*, JPA *təkēl*, Arb. *tkl*; SED I No. 76_v).

7.2.3. Breast-feeding

PS **ynk* for ‘to suck’ (in the causative stem, ‘to suckle’) is best preserved in Akk. *enēku* and Ugr. Hbr. *ynk*, Syr. *’inek*, to which Mhr. *ḵənū*, Jib. *ḵéní*, Soq. *ḵéne* ‘to suckle’ as well as Mhr. *ḵənūk*, Jib. *ḵónúk* ‘to feed from a feeding-jug’ are likely related (SED I No. 83_v). Arb. *naqā* ‘to suck marrow from bones’ (LA 15 396) may be connected with **ynk*, but *nāqat*- ‘she-camel’ is hardly related to it. Arb. *mšš* ‘to suck’ (Lane 2717) goes back to PWS **mšš* (with variants): Ugr. *mšš*, Syr. *maš*, *mšā*, Amh. *mātmātä*, Mhr. *māš*, Jib. *mišš*, Soq. *meš* ‘to suck’, also Hbr. *mīš* ‘squeezing’, *māšā*, *māšaš* ‘to drain out’ (Fronzaroli 1971, 630, 639, DUL 589, HALOT 578, 621, 624, LSyr. 398, AED 520, ML 272, JL 175, LS 249). Common ES **ṭbw* ‘to suck’ (Gez. *ṭabawa*) is derived from **ṭVb*- ‘breast’, attested in Arb. *ṭiby*-, *waṭb*-, Gez. *ṭab*, Mhr. *wōṭab* (SED I No. 277, Kogan 2005b, 385).

7.3. Sleep

7.3.1. To lie down

The most widespread common root for ‘to lie down’ is PWS **škb* (Ugr. Hbr. Syr. *škb*, Gez. *sakaba*), to which Akk. *sakāpu* may be related (AHw. 1011, DUL 814, HALOT 1486, LSyr. 775, CDG 496; for *si-kà-pù-um* = Sum. ù.DI.DI in VE 1132 see Krebernik 1983, 40). The basic Akkadian verbs with this meaning are *šalālu* (AHw. 1075) and *niālu* (*itūlu* in the Gt stem, Huehnergard 2002a, 178–184; for *na-a-um* = Sum. ù.DI, *tá-tá-ì-lum* = Sum. ù.DI.DI in VE 1131, 1132 see Krebernik 1983, 40). The former may be related to Arb. *qll* ‘to spend one’s time’ (Lane 1914), whereas the latter can be traced back to PS **layliy-* ‘night’ (2.7.1.) with dissimilation of sonorants (Huehnergard 1991a, 692, also for a similar process in Ugr. *ln*, Hbr. *lān* ‘to spend the night’).

7.3.2. Sleep

PS **šin-at-* for ‘sleep’ (noun) is attested everywhere except ES: Akk. *šittu* (for *si-tum* = Sum. ù.DI in VE 1131 see Krebernik 1983, 40), Ugr. *šnt*, Hbr. *šēnā*, Syr. *šentā*, Arb. *sinat-*, Sab. *s₁nt*, Mhr. *šēnēt*, Jib. *šónút* (SED I No. 82). However, it is only in Ugaritic and Hebrew that *yšn* functions as the main verb with the meaning ‘to sleep’. Arb. *nāma* and Gez. *noma* go back to PWS **nwm*, preserved with the non-basic meaning ‘to slumber’ in Hbr. and Syr. *nām* (SED I No. 52_v) and doubtfully attested in Ugr. *nhmmt* ‘drowsiness’ (DUL 626) and Akk. *nu-ma-at* ‘it (the forest) was still’ (AHw. 729, cf. George 2003, 209; for Akk. *munattu* ‘waking time’, *Morgendämmer(traum)* see CAD M₂ 200, Zgoll 2006, 66–69). The etymology of Southern ES forms like Har. *ñē’a*, Amh. *tāññā* is discussed in CDG 394 and EDH 120. The origin of Common Aramaic **dmk* is uncertain: if related to Soq. *dēme* (LS 129), it can further be compared to Hbr. *dāmā* ‘to be silent, still’ (HALOT 225). In Akkadian, ‘to sleep’ is mostly undistinguishable from ‘to lie down’ (6.3.1.).

7.3.3. Dream

Akk. *šuttu* for ‘dream’ (AHw. 1292) derives from the same PS root **wšn* as *šittu* ‘sleep’. Throughout WS, dreaming is expressed by a special root **hlm*: Hbr. Syr. Arb. Gez. Mhr. Jib. Soq. *hlm* ‘to dream’, Ugr. Sab. *hlm* ‘dream’ (SED I No. 25_v).

7.4. Diseases

PS **mrš* as the basic root with the meaning ‘to be ill’ is represented by Akk. *marāšu*, Ugr. *mrš*, Syr. *mra’*, Arb. *mrđ*, Sab. *mrš*, Mhr. *mārēž*, Jib. *mírž* (SED I No. 42_v). It is missing from ES (replaced by reflexes of PS **hmm* ‘to be hot’, 2.5.) and scarcely attested in Hebrew (replaced by *hly* with no certain etymology, cf. SED I No. 27_v). Less widespread is PWS **dwy* (SED I No. 12_v), present in CS (Ugr. *dwy*, Hbr. *dāwā*, Syr. *dwī*, Arb. *dwy*) and ES (Gez. *dawaya*).

7.4.1. Skin diseases

Numerous designations of skin diseases can be traced back to PS: ***lam(a)ṭ-** (Akk. *lamṣatu*, Arb. *lamaḍ-*, Gez. *lamṣ*, Amh. *lämṭ*; SED I No. 179), ***bVṬV-** (Akk. *bubu'tu*, Hbr. *ʾābaʿbūʿōt*, JBA *būʾātā*, probably Gez. *ʾanpāʿānpē* as suggested in LLA 780; SED I No. 30), ***ʾabak-** (Akk. *epku*, Arb. *ʾabāqiyat-*, Gez. *ʾabak*; SED I No. 18), ***garab-** (Akk. *garabu*, Hbr. *gārāb*, Syr. *garbā*, Arb. *žarab-*, Tgr. *garbeḅ*, Mhr. *garb*, Soq. *gerb*; SED I No. 91), ***šVrmV-at-** (Akk. *šernettu*, Hbr. *šāraʿat*, Gez. *šarnāʿt*; SED I No. 257), ***ḥala-** (Akk. *ḥalū*, Arb. *ḥala-*; SED I No. 116), ***ḥumš-at-** (Akk. *umṣatu*, Arb. *ḥummaṣat-*; SED I No. 121), ***ḥVbVr-** (Akk. *ibāru*, Hbr. *ḥabbūrā*, Syr. *ḥbārtā*, Arb. *ḥibr-*, Gez. *ḥəbərḅəre*, Soq. *ḥábār*; SED I No. 111). Less widely attested are PWS ***ḥVšp-** (JBA *ḥwspnyṭ*, Arb. *ḥšf*, Gez. *ḥəṣaf*, Jib. *ḥšfēt*; SED I No. 138) and ***bVhVḳ-** (Hbr. *bōḥaḳ*, Syr. *behkūtā*, Arb. *bahaq-*, Jib. *bḥək*; SED I No. 33). PS ***ḥkk** was likely used with the meaning ‘to itch’ (Akk. *ekēku*, Syr. *ḥak*, Arb. *ḥkk*, Gez. *ḥakaka*, Mhr. *ḥək*, Jib. *ḥəttk*; SED I No. 23_v), whereas PS ***ḥbt** meant ‘to swell, inflate’ (Akk. *ebētu*, Arb. *ḥbt*, Gez. *ḥabaṭa*, Mhr. *ḥāybəṭ*, Jib. *ḥēt*; SED I No. 22).

7.4.2. Grey hair, baldness

A virtually pan-Semitic designation of ‘grey hair’ is ***šayb-at-**, ***šīb-at-** (Akk. *šibtu*, Ugr. *šbt*, Hbr. *šēbā*, Syr. *saybātā*, Arb. *šayb-*, Gez. *šibat*, Amh. *šəbāt*, Mhr. *šayb*, Jib. *šub*; SED I No. 66_v). Less widespread is PWS ***ḳurḥ-at-** for ‘baldness’: Hbr. *ḳorḥā*, Syr. *ḳurḥtā*, Arb. *qurḥat-*, Gez. *ḳʿərḥat* (SED I No. 38_v).

7.4.3. Hump, hunchback

A number of PWS terms connected with ‘hump, hunchback’ are known: ***gbb**, ***gbn** (Hbr. *gibbēn* ‘hunchbacked’, JPA *gbynth* ‘hump’, Syr. *gbab* ‘to be hunchbacked’, Arb. *žabab-* ‘erosion of the hump of a camel’, Amh. *gʷābābb alā* ‘to be hunchbacked’, Muh. *gʷəbən* ‘hunchbacked’; SED I No. 67), ***gbṭ** (Ugr. *gbṭt* ‘humps’ in *bhm ḳrnm km ṭrm w gbṭt km ʾibrm* ‘they have horns like oxen and humps like bulls’ in KTU 1.12 I 30–32, Tgr. *gübəs* ‘crook-backed’, Wol. *gumbus* ‘hunchbacked’; SED I No. 82_v), ***dbš** (Hbr. *dabbāšāt* ‘hump’, Tgr. *däbbisotat* ‘hunchbacks’; SED I No. 8_v).

7.4.4. Lameness

PWS ***ṭl-** for ‘to limp, to be lame’ derives from Hbr. *šlʿ*, JPA *ṭlʿ*, Arb. *ḍlʿ*, Mhr. *ḍāwla*, Jib. *ḍēlaʿ*, to which Gez. *šaʿa* ‘to be wounded’ may be related (SED I No. 78_v).

7.4.5. Blindness

The root ***wr** for ‘to be blind’ (SED I No. 5_v) is common in WS (Ugr. *ʿwr*, Hbr. *ʿiwwēr*, Syr. *ʿwārā*, Arb. *ʿwr*, Gez. *ʿora*, Mhr. *ʿáywer*, Soq. *ʿér*), but has no parallel in Akkadian.

7.4.6. Deafness

There are several common roots with the meaning ‘to be deaf and dumb’: PS **ṭmm*, **ṭm* (Akk. *ṭummumu* ‘deaf’, Hbr. *ṭm* ‘to stop one’s ears’, Syr. *ṭṭīmā* ‘deaf’, *ṭmīmā* ‘dumb’, probably Tna. *ṭāmāmā* ‘to close the eyes and the mouth of a dying person’; SED I No. 75_v), PWS **šmm* (pB. Hbr. *šummām* ‘one with shapeless auricles’, Syr. *šammā* ‘dumb and deaf’, Arb. *šmm* ‘to be deaf’, Gez. *šamma* ‘to be deaf, dumb’; SED I No. 64_v) and PCS **ḥrš* (Hbr. *ḥrš*, Syr. *ḥreš*, Arb. *ḥrs*, perhaps Akk. *ḥarāšu*; SED I No. 32_v, Streck 2000, 94). PWS **lg* ‘meant to stammer’: Ugr. *lg*, Tgr. *tā’alažžā*, Hbr. *‘illēg*, possibly Arb. *‘ilž* ‘foreigner, non-Muslim’ and *a-a-gú li-sa-nu* = Sum. EME.LÁ ‘one with stammering tongue’ (SED I No. 2_v, Conti 1990, 94).

7.4.7. Caught and sneezing

PS **šl* with the meaning ‘to cough’ (SED I No. 61_v) is attested in Akk. *sa’ālu* ‘to cough’, *su’ālu*, *sūlu* ‘cough’, CS (Syr. *šal*, Arb. *s’l*, Sab. *s₁’l*, also Hbr. *š’l* in late Rabbinic sources) and ES (Gez. *sa’ala*, Amh. *salā*). PWS **šš* for ‘to sneeze’ is represented by Hbr. *‘āššā*, Syr. *‘āšā*, Arb. *‘ts*, Gez. *‘aṭasa*, Amh. *anāṭṭāsā*, Mhr. *‘āwṭḥ*, Jib. *‘ššš*, Soq. *‘ētoš* (SED I No. 4_v).

7.4.8. Digestive disorders

The terminology of digestive disorders includes three roots with the meaning ‘to vomit, belch’: PS **ky* (Akk. *kā’u*, *gā’u*, Hbr. *ky*, Arb. *qy*, Gez. *ke’a*, Mhr. *kāwya*, Jib. *ké’*, Soq. *ké’*; SED I No. 39_v), PS **gš* (Akk. *gešū*, Gez. *g^waš’a*, Amh. *gässa*, with phonological irregularities also Hbr. *g’š*, Syr. *gsā*, Arb. *žš*, Mhr. *gəšō*, Soq. *gš*; SED I No. 17_v) and PWS **gṭ* (Syr. *g’at*, Arb. *žā’aq-*, Amh. *g^wagg^wäṭä*; SED I No. 16_v). Two PS roots for ‘to fart’ are known: **šrt* (Akk. *šarātu*, Syr. *‘arret*, Arb. *drṭ*, Mhr. *žərūt*, Jib. *žérót*; SED I No. 71_v) and **pšw* (Akk. *pašū*, Arb. *fsw*, Gez. *fasawa*, Amh. *fässa*, also Jib. *šeff* with metathesis; SED I No. 57_v). PS **ḥmr* ‘to have indigestion’ derives from Akk. *emēru* ‘to have intestinal trouble’, Hbr. *ḥmr* ‘to glow, burn (of intestines)’, Arb. *ḥmr* ‘to suffer from indigestion and bad breath’, Jib. *aḥmír* ‘bad breath and indigestion’ (SED I No. 28_v).

7.4.9. Mental illness

Mental illness was probably designated by PS **šg* or **šg* (Akk. *šegū* ‘to rage, to be rabid’, Hbr. *šg* ‘to behave like a madman’, Arb. *‘ašža* ‘mad’; SED I No. 67_v). Similar meanings can be attributed to PS **dḥb* (Akk. *zabābu* ‘to act crazily’, *zabbu* ‘an extatic’, Arb. *ḍubāb-* ‘madness’; SED I No. 13_v), **hdy* (Akk. *azū* ‘to produce unnatural sounds’, Hbr. *hāzā* ‘to pant in sleep’, Syr *hdā* ‘to wander in thought’, Arb. *hḏw* ‘to talk non-sense’, End. *ažāžūt* ‘one who acts mad’, Jib. *hédé* ‘to be delirious’; SED I No. 18_v).

7.5. Death

PS **mwt* for ‘to die’ preserves its basic function almost everywhere: Akk. *mātu*, Ugr. *mt*, Hbr. *mēt*, Syr. *mūt*, Arb. *māta*, Sab. *mwt*, Gez. *mota*, Mhr. *mōt* (SED I No. 43_v). Jib. *háróg* ‘to die’ (JL 22) is unseparable from Arb. *hrǝ* ‘to go out’ and may be borrowed from it, whereas Soq. *šáme* (LS 353) may be related to Arb. *šmy* ‘to die on the spot (object of hunt)’ (Lane 1729). In both languages **mwt* is preserved in nominal and verbal formations: Jib. *emyét* ‘to put to death’, *mūt* ‘death’ (JL 176), Soq. *mī* ‘death’ (LS 237). PS **kbr* for ‘to bury’ is ubiquitous: Akk. *kebēru*, Ugr. Hbr. Syr. *kbr*, Arb. *qbr*, Gez. *qabara*, Mhr. *kābūr*, Jib. *kār*, Soq. *kbr* (Fronzaroli 1965b, 252, 263, AHW. 912, DUL 692, HALOT 1064, LSyr. 644, Lane 2480, CDG 419, ML 222, JL 140, LS 366).

8. Man

8.1. The man

There is no pan-Semitic general term for ‘man’. The most widespread common designation is PWS **Vnāš-*, preserved (with semantic variation from singular to collective) in Hbr. *’ānōš* ‘men, mankind, man’, Common Aramaic **Vnāšā* ‘mankind; a human being’, Arb. *’unās-* ‘men’, Tgr. *’anas* ‘man’ (Fronzaroli 1964, 19, 37, 50, HALOT 70, 1818–1819, Lane 114, WTS 371). The vocalic patterns of Ugr. *’inš* and ESA *’ns₁* are largely unknown, but in view of the non-assimilated *-n-* both of them may be assigned to **Vnāš-*. The meaning of Ugr. *’inš* is clear from KTU 2.81:7 (*yšlm ... l-’inšk l-ḥwtk* ‘hail ... to your people, your country’, DUL 84). Sab. *’ns₁* is attested with the neutral meanings ‘man’, ‘people’ (German *Mensch, Menschen*) according to Stein 2003, 56, 66 (for *’ns₁* in Min. and Qat. see LM 6, LIQ 13).

An alternative (though likely related) PCS designation of ‘man’ is **’inš-*, represented by Hbr. *’iš*, Pho. Moab. *’š*, Old Arm. *’š*, Off. Arm. *’š*, *’yš* ‘man’, Arb. *’ins-* ‘mankind’, *’insān-* ‘man’, Sab. *’(y)s₁* ‘man, male, warrior’ (DNWSI 115–121, HALOT 43, Lane 114, SD 10). Loss of *-n-* in Hbr., Arm. and Sab. (presumably, **’inš-* > **’iš-* > *’iš*) remains problematic in spite of the obvious presence of *-n-* in the Hebrew plural form *’ānāšīm* (constr. *’anšē*). Also enigmatic is the plene spelling of Sab. *’ys₁* (according to Stein 2003, 56, not in Old Sabaic).

The etymology of Akk. *awīlu* ‘man’ (AHw. 90) is uncertain (cf. Kraus 1973, 117–118). Akk. *niš-ū* ‘men’ (AHw. 796) has an immediate parallel in Ugr. *nš-m* with the same meaning (DUL 650). The vocalic shape of the Ugr. term (*’na’-[š]u-’ma’*, Huehnergard 1987, 155) is identical to the Semitic-based logogram NA.SE₁₁ ‘men’ attested in VE 900 and elsewhere in the Ebla texts (Krebernik 1985, 54). It remains uncertain whether these forms are connected with **Vnāš-* and **’inš-* ‘man, men’ as well as **nVš-* ‘women’ (8.2.). According to Krebernik, the feminine agreement of Akk. *nišū* is an argument for its connection with **nVš-* ‘women’.

PWS **’adam-* ‘people, mankind’ is represented by Ugr. *’adm* ‘man; people’, Pho. *’dm* ‘man’, Hbr. *’ādām* ‘mankind, people; man’, Sab. Min. Qat. *’dm* ‘servants, subjects’ (DRS 9, DUL 17, DNWSI 13–14, HALOT 14, SD 2, LM 1, LIQ 5). This root may also be preserved in Tgr. *’addam* ‘men, people’, Tna. *’addam* ‘humanity, mankind, everybody’ (WTS 384, TED 1530), perhaps contaminated with the proper name Adam

(Gez. *ʾaddām*, CDG 7). Arb. *ʾadam*- ‘skin’ (Lane 36) probably belongs to this root with a shift of meaning (cf. 6.1.8.).

In Aramaic, PCS **ʾnš-* ‘man’ was gradually ousted by PCS **gabr-* (JPA *gabar*, Syr. *gubrā*), whose cognates in other CS (Hbr. *gābār*, Arb. *ǧabr-*) are rather marginally attested (Kogan 2005c, 521). This root may be ultimately related to PS **gbr* ‘to be strong’ (CDG 179).

In Hebrew and Aramaic, an individual man is often designated by nominal phrases which literally mean ‘son of mankind’: Hbr. *bān-ʾādām* (HALOT 14), Syr. *bar nāšā* (LSyr. 89). A similar analysis has often been proposed for Ugr. *bnš* (DUL 230), but this is hard to accept in view of the syllabic spelling *bu-nu-šu* (Huehnergard 1987, 47).

In most of ES, terms for man go back to **sabʾ-* (Tna. *sābʾay*, Amh. *sāb*, Har. *usu* ‘man’, Gez. *sabʾ*, Tgr. *sābʾ* ‘men, people’, CDG 482), etymologically uncertain (for some suggestions, including generalization of the ethnonym *s₁bʾ* ‘Saba’, see Kogan 2005b, 379–380). Similarly unclear is the origin of Gez. *bəʿasi* ‘man’ (cf. CDG 83).

The etymological background of Common MSA **ɣayg-* ‘man’ (Mhr. *ɣayg*, Jib. *ɣég*, Soq. *ʾaig*; ML 147, JL 91, LS 307) is enigmatic.

8.2. Gender

8.2.1. Woman

‘Woman’ was designated by PS **ʾant-at-*, preserving its original function in Ugr. *ʾatt*, Hbr. *ʾiššā*, Syr. *ʾattātā*, Sab. Min *ʾntt*, Tgr. *ʾassit*, Arg. *ənəšča* (DRS 27, DUL 129, HALOT 93, LSyr. 31, SD 7, LM 6, WTS 371, Leslau 1997, 19). Mhr. *tēt*, Jib. *teṭ* (ML 6, JL 4) probably belong to this root (cf. the pl. forms *ḥə-ynūt*, *ʾinēt*) in spite of the difference in structure (there is no trace of **ʾant-at-* in Soqotri, where woman is designated by *ʾažeh*, a feminine of *ʾaig* ‘man’, LS 307). Akk. *aššatu* means ‘wife’ (AHw. 83), the meaning ‘woman’ is expressed by the etymologically obscure *sinništu* (ibid. 1047). Arb. *ʾunṭā* denotes a female (Lane 112), the main term for woman being *marʾat-*, a feminine of *marʾ-* ‘man’ (8.2.2.). Gez. *ʾanəst* and Tna. *ʾanəsti* are attested as collective and plural (LLA 771, TED 1476), whereas a single woman is designated by *bəʿasit* and *sābäyiti*, derived from the respective terms for man (8.1.). In Southern ES **ʾant-at-* is usually preserved with the meaning ‘female’ and/or ‘women’ (e.g. Sod. *ənəst* and *ənšəttatā* respectively), with various replacements for the basic concept (Amh. *set*, Sod. *məšt*, Har. *idōč*, Kogan 2006a, 482–483).

For PCS, a special collective designation of ‘women’ can be reconstructed as **nVš-*: Hbr. *nāšīm*, Syr. *neššē*, Arb. *nisūna*, *niswat-*, *nisāʾ-* (Nöldeke 1910, 150–151, HALOT 729, LSyr. 450, LA 15 374).

8.2.2. Man

In some Semitic languages the distinction between ‘man as an adult male’ (*vir*, *Mann*) and ‘man as a human being’ (*homo*, *Mensch*) is well pronounced. Thus, Arb. *ʾinsān*- ‘human being’ is opposed to *marʾ-* ‘man’, which, together with Akk. *māru* ‘son’, Common Aramaic **māriʾ-* ‘lord’ and Sab. Qat. *mrʾ* ‘man; male child; lord’ may go back to PS **marʾ-* ‘man, male’ (Fronzaroli 1964, 28–29, 42, Kogan 2005c, 532, 2006a, 482, AHw. 615, Lane 2702, SD 25, LIQ 31). Another widely attested term for man in Arabic

is *raḡul-* (Lane 1045), originally perhaps ‘foot-soldier’ (< *riḡl-* ‘foot’, 6.3.2). In Syriac *bar nāšā* ‘person’ is opposed to *gabrā* ‘man’ (LSyr. 31, 102).

In other languages the distinction is less rigid. Thus, Hbr. *’iš* may denote both ‘man’ and ‘human being’ in general, although for the latter (*bān*) *’ādām* is more typical. Similarly, Akk. *awīlu* can be found in both types of contexts, but quite often *sinništu* ‘woman’ is specifically opposed to *zikaru* ‘man’, going back to PS **dakar-* which denoted a male: Ugr. *dkr* ‘male animal’, Hbr. *zākār* ‘man, male’, Syr. *dekrā* ‘male; ram; penis’, Arb. *dakar-*, Sab. *ḏkr* ‘male (child)’, Jib. *māḏkér* ‘small male kid’, Soq. *mīdkir* ‘male’ (Fronzaroli 1964, 19, 37, 50, DUL 269, HALOT 270, LSyr. 153, SD 38, JL 46, LS 128). Gez. *bə’əsi* has both meanings (LLA 519–520), whereas *sab*’ (LLA 359) and *’ad* (LLA 1010, etymologically obscure) may specifically denote ‘human being’ and ‘man, male’ respectively.

8.3. Direct kinship

8.3.1. Father, mother, brother

Three basic PS terms of kinship – **’ab-* for ‘father’, **’imm-* for ‘mother’ and **’ah-*, **’ah-āt-* for ‘brother’ and ‘sister’ – persist nearly throughout Semitic: Akk. *abu*, Ugr. *’ab*, Hbr. *’āb*, Syr. *’abbā*, Arb. *’ab-*, Sab. Min. Qat. *’b*, Gez. *’ab*, Mhr. *ḡáyb*, Jib. *’iy*, Soq. *’iif* (DRS 1, AHw. 7, DUL 2, HALOT 1, LSyr. 1, SD 1, Lane 10, LM 1, LIQ 3, CDG 2, ML 2, JL 1, LS 68); Akk. *ummu* (for *ù-mu-mu* = Sum. AMA.MU in VE 1044 see Krebernik 1983, 37), Ugr. *’um*, Hbr. *’ēm*, Syr. *’emmā*, Arb. *’umm-*, Sab. Min. *’m*, Mhr. *ḡām*, Jib. *’ém*, Soq. *’em* (DRS 22, AHw. 1416, DUL 69, HALOT 61, LSyr. 23, Lane 89, SD 5, LM 5, CDG 22, ML 5, JL 3, LS 62); Akk. *aḡu*, *aḡātu* (for *a-ḡu-um* = Sum. ŠEŠ.MU in VE 1043 and *a-ḡa-tum* = Sum. NIN.NI see Krebernik 1983, 37, 42), Ugr. *’ah*, *’aht*, Hbr. *’āh*, *’āḡōt*, Syr. *’ahḡā*, *ḡātā*, Arb. *’ah-*, *’uḡt-*, Sab. Min. Qat. *’ḡ*, Sab. *’ḡt*, Gez. *’ahḡ*, *’ahḡat* (DRS 15, AHw. 21, 18, DUL 34, HALOT 29, LSyr. 10, Lane 33, SD 4, LM 3, LIQ 8, CDG 13). The more noteworthy are a few deviations from the common pattern. Thus, Amharic replaced **’imm-* with *’annat* (probably a Cushitism, Appleyard 1977, 9) and **’ah-* with *wāndamm* (< **wald ’amm* ‘the son of the mother’, CDG 22), but both are preserved in the closely related Argobba as *’am* and *’ah* (Leslau 1997, 189–190). The MSA terms for ‘brother’ and ‘sister’ (Mhr. *ḡā*, *ḡayt*, Jib. *ayā*, *ḡit*, Soq. *’aḡa*, *’eḡet*; ML 145, JL 90, LS 56) are hard to reconcile with PS **’ah-* in spite of the common opinion. In Soqotri the PS terms are only used with pronominal enclitics, otherwise being replaced by new descriptive formations: *bēbe* ‘father’, *bīoh* ‘mother’, *kāka* ‘brother, sister’ (LS 80–81, 384).

8.3.2. Son, daughter

Less uniform are designations of ‘son’ and ‘daughter’. PS **bin-* and **bin-at-* are most clearly preserved in Ugr. *bn*, *bt* (pl. *bnt*), Hbr. *bēn* (pl. *bānīm*), *bat* (pl. *bānōt*), Arb. *’ibn-* (pl. *banūna*), *bint-* (pl. *banāt-*), Sab. Qat. *bn*, *bnt*, Min. *bn* (pl. *bhn*), *bnt* (pl. *bhnt*) (DUL 224, 244, HALOT 137, 165, Lane 262, SD 29, LM 21, LIQ 28–29). A peculiar feature of Aramaic and MSA is that in the singular forms of this root **n-* is replaced by *-r-* (Testen 1985): Syr. *brā*, pl. *bnayyā/bartā*, pl. *bnātā*, Mhr. *bər*, pl. *ḡā-būn/bərt*, pl.

ḥə-bántən, Jib. *ber*, pl. *mín/brit*, pl. *bóntə* (LSyr. 88, 93, ML 54, JL 27–28; for *brw* ‘son’ in Sab. and Min. see SD 32, LM 24). Comparable forms in Soqotri are marginally attested (cf. LS 95), the main terms for ‘son’ and ‘daughter’ being *múgšem* and *firehim* (LS 117, 341), etymologically rather obscure (cf. SED I No. 96 and SED II No. 182 respectively). Akkadian reflexes of **bin-* (*binu*, *bintu* and *bunu*, *buntu* in AHW. 127, 138) are so marginal that make one suspect a WS import. Instead, *māru* and *mārtu* are used (AHW. 614–615), going back to PS **mar-* ‘man, male’ (8.2.2.). In ES **bin-* is almost completely ousted by derivatives of PS **wld* ‘to bear’ such as Gez. *wald*, *walatt* (CDG 613). Its only remnant is the nominal phase *bənt-a* ‘ayn ‘pupil of the eye’ in Geez (CDG 99), exhibiting a widely attested semantic shift (Militarev/Kogan 2003, 293–295; for a peculiar parallel in Amh. *yä-ayn bərūt* see Kogan 2003, 127–128).

The ‘first-born son’ was designated by PS **bVkvVr-*: Akk. *bukru* (for *bū-ku₁₇-lu*, *bū-kā-lu* = Sum. DUMU.SAG see Krebernik 1983, 13), Ugr. *bkr*, Hbr. *bəḳōr*, Syr. *bukrā*, Arb. *bikr-*, Sab. Qat. *bkr*, Gez. *bak^wr*, Mhr. *bēkər*, Soq. *bēkir* (AHW. 137, DUL 210, HALOT 131, LSyr. 73, Lane 240, SD 28, LIQ 26, CDG 94, ML 46, LS 86).

8.3.3. Uncle, aunt

Paternal uncle was designated by PWS **dād-*, preserved in Hbr. *dōd* (exact meaning clear from 1 Samuel 14.50–51), Syr. *dādā*, Mhr. *ḥə-dīd*, Jib. *did*, Soq. *dēdo*, perhaps Qat. *dd* and Gez. *dud* (HALOT 215, LSyr. 144, ML 75, JL 42, LS 123, LIQ 41, CDG 123). PWS **ḥāl-* for ‘maternal uncle’ derives from Syr. *ḥālā*, Arb. *ḥāl-*, Tgr. *ḥāl*, Mhr. *ḥayl*, Jib. *ḥīz*, Soq. *ḥalēle* (LSyr. 221, Lane 825, WTS 52, ML 455, JL 310, LS 166). Designations of paternal and maternal aunt are usually derived from the respective terms for ‘uncle’ (Hbr. *dōdā*, Syr. *dādātā*; Syr. *ḥāltā*, Arb. *ḥālat-*, Tgr. *ḥal*), but in continental MSA the opposition was reversed: Mhr. *ḥā-dūt*, Jib. *dūt* denote ‘maternal aunt’, whereas Mhr. *ḥəlūt*, Jib. *ḥəlūt* are used for paternal aunt (in modern Soqotri, *ḥéloḥ* denotes ‘aunt’ from both sides, but *dédoh* has been earlier recorded for paternal aunt, cf. Naumkin/Porkhomovskiy 1981, 83–91). The opposition **dād-/ḥāl-* is not attested in Akkadian (where analytic designations like *aḥi abim/aḥi ummim* are normal, CAD A₁ 199–200), but has been detected in OB Mari texts (Durand 1992, 120–121), likely due to WS influence.

PS **dād-* left no trace in Arabic where ‘paternal uncle and aunt’ are designated by **amm-* and **ammat-* (Lane 2149). These terms are paralleled by Sab. **m* ‘uncle’, Syr. **amtā* and Tgr. **ammāt* ‘paternal aunt’ (SD 16, LSyr. 529, WTS 455), but the MSA cognates denote grandparents: Mhr. **ōm*, **āmēt*, Jib. **om*, **ūt* (ML 36, JL 19; for *ḥammu* ‘grand-father’ as a WS loanword in OB Akkadian see Durand 1992, 120). PWS **amm-* is also attested with more general meanings such as ‘relatives, clan, people’: Ugr. **m*, Hbr. **am*, Syr. **ammā*, Arb. **amm-* (DUL 163, HALOT 837, LSyr. 529, Lane 2149).

8.4. Kinship by marriage

8.4.1. Wife, husband

‘Wife’ is most often designated by reflexes of PS **ant-at-* (8.2.1.), which may or may not be opposed to general designations of woman (Akk. *aššatu* vs. *sinništu*, Gez. **anəst* vs. *bəʾəsīt*, but Hbr. **iššā* with both meanings).

The meaning ‘husband’ can be attributed to PS **mut-* on the joint evidence of Akk. *mutu*, Ugr. *mt*, Gez. *mət* (AHw. 690, DUL 598, CDG 371). However, Hbr. *məṭīm* is attested with the general meaning ‘men’ only (HALOT 653), which is not unknown from Akkadian and Ugaritic either.

8.4.2. Father-in-law and mother-in-law

PS **ḥam-* and **ḥamāt-* designated primarily ‘father-in-law’ and ‘mother-in-law’ respectively: Akk. *emu*, *emētu*, Hbr. *ḥām*, *ḥāmōt*, Syr. *ḥmā*, *ḥmātā*, Arb. *ḥam-*, *ḥamāt-*, Gez. *ḥam*, *ḥamot*, Mhr. *ḥaym*, *ḥəməyt*, Soq. *ḥam*, *ḥāmit* (AHw. 214–215, HALOT 324, 327, Lane 650, LLA 77, ML 180, LS 178–179). Most of these terms denote parents-in-law from both sides, but Hbr. *ḥām* and *ḥāmōt* are restricted to the parents of the husband (for the same tendency in Arabic see Lane 650). In Babylonian Akkadian, Arabic and Mehri reflexes of **ḥam-* also designate ‘brother-in-law’, whereas Assyrian *emu* (Kogan 2006b, 196–197) and Gez. *ḥam* combine the meanings ‘father-in-law’ and ‘son-in-law’.

8.4.3. Daughter-in-law, bride and son-in-law, groom

PS **kall-at-* denoted ‘daughter-in-law’ and ‘bride’: Akk. *kallatu* (Kraus 1973, 246–249; for *kāl-la-tum* = Sum. É.GI.A in VE 322 see Krebernik 1983, 14), Ugr. *klt*, Hbr. *kallā*, Syr. *kaltā* (AHw. 426, DUL 441, HALOT 478, LSyr. 326). In MSA, a form of this root extended with **-ān* denotes both bride and groom: Mhr. *kālōn*, Jib. *kólún*, Soq. *kelán* (ML 209, JL 130, LS 219). Arb. *kannat-* ‘daughter-in-law, sister-in-law’ (WKAS K 372) is traditionally identified with this root, but the phonological difference remains unexplained (cf. alternatively *kall-* ‘orphan; sponger’, LA 11 708).

PS **ḥatan-* for ‘son-in-law’ and ‘groom’ (occasionally also ‘father-in-law’ and ‘brother-in-law’) is preserved in Akk. *ḥatanu*, Ugr. *ḥtn* ‘to marry’, *ḥa-at-ni* ‘son-in-law’, Hbr. *ḥātān*, Syr. *ḥatnā*, Arb. *ḥatan-* (AHw. 335, DUL 413, Huehnergard 1987, 130, HALOT 364, LSyr. 264). In Hebrew this root gave origin to special terms for parents-in-law from the wife’s side – *ḥōtēn* and *ḥōtānūt* (HALOT 364–365) – as opposed to *ḥām* and *ḥāmōt*.

8.5. Social status

8.5.1. Orphan, widow

PWS **yatVm-* designated an ‘orphan’: Ugr. *ytm*, Hbr. *yātōm*, Syr. *yatmā*, Arb. *yatīm-*, Mhr. *ḥə-yīm*, Jib. *ótīm*, Soq. *é’tīm* (DUL 989, HALOT 451, LSyr. 312, LA 12 769, ML 462, JL 314, HL 147). This root is usually thought to be missing from Akkadian and ES, but cf. perhaps Akk. *watmu* ‘small young animal or man’ and Sod. *tam^wyā* ‘orphan’ (AHw. 1492, EDG 599, Kogan 2006c, 272–273). PS **alman-at-* for ‘widow’ is preserved in Akk. *almattu*, Ugr. *’almnt*, Hbr. *’almānā* (AHw. 38, DUL 58, HALOT 58), to which Syr. *’armaltā* and Arb. *’armalat-* (LSyr. 735, Lane 1160) must be related with a mutation of sonorants.

8.5.2. Owner, lord

PS **baʿl-* for ‘owner, lord’ is preserved throughout Semitic: Akk. *bēlu*, Ugr. *bʿl*, Hbr. *baʿal*, Syr. *baʿlā*, Arb. *baʿl-*, Sab. Min. Qat. *bʿl*, Gez. *bāʿl*, Mhr. *bāl*, Jib. *bāʿal*, Soq. *baʿl* (AHw. 118, DUL 206, HALOT 142, LSyr. 83, Lane 228, SD 25, LM 19, LIQ 31, ML 41, JL 22, LS 90).

8.5.3. Slave

PS **am-at-* for ‘maidservant’ is preserved everywhere except MSA: Akk. *amtu* (for **a₅-ma-tum* = Sum. MUNUS in VE 1160 see Krebernik 1983, 41), Ugr. *ʾamt*, Hbr. *ʾāmā*, Syr. *ʾamtā*, Arb. *ʾamat-*, Sab. Qat. *ʾmt*, Gez. *ʾamat* (AHw. 45, DUL 74, HALOT 61, LSyr. 24, Lane 103, SD 5, LIQ 11, CDG 26). Conversely, there is no deeply rooted term for ‘male slave’. The most widespread common designation is PCS **ʿabd-*, perhaps derived from the verbal root **ʿbd* ‘to work, to make’: Ugr. *ʿbd*, Hbr. *ʿābād*, Syr. *ʿabdā*, Arb. *ʿabd-*, Sab. Min. Qat. *ʿbd* (DUL 138, HALOT 774, LSyr. 504, Lane 1935, SD 11, LM 10, LIQ 113; *īb-dum* = Sum. SAG.KÉŠ in VE 253a, if interpreted as ‘slave’ with Krebernik 1983, 12, must be due to WS import). Gez. *gabr* (CDG 178) may also be considered an internal derivation from *gabra* ‘to do, work’, but an eventual connection with PCS **gabr-* ‘man’ (8.1.) is not excluded. In continental MSA, designations of male and female slave go back to PS **ʿgr* ‘to hire’: Mhr. *ḥā-gōr*, *ḥā-gārūt*, Jib. *ʿḡgór*, *ʿizīrēt* (ML 3–4, JL 2). The corresponding Soq. *mēbeḥel*, *mēbʿéloh* (LS 91) go back to PS **bʿl* ‘to own’. No etymology for Akk. *wardu* (AHw. 1464).

9. Alimentation

9.1. Hunger and thirst

9.1.1. Hunger

PWS **rȳb* with the meaning ‘to be hungry’ derives from Ugr. *rȳb*, Hbr. *rʿb* and Gez. *rəḥba* (SED I No. 59_v), to which Akk. *barû*, *berû* (AHw. 123) may be related with metathesis (Fronzaroli 1971, 606, 629, 639). Arb. *rȳb* means ‘to desire’, whereas ‘hunger’ is expressed by *ḡwʿ*, *ḡwy* or *ṭwy* (Lane 487, 827, 1898). In Aramaic **rȳb* is ousted by **kpn*, of uncertain origin (Kogan 2005c, 560). PS **šbʿ* for ‘to be satiated’ is better preserved: Akk. *šebû*, Ugr. *šbʿ*, Hbr. *šbʿ*, Syr. *sbaʿ*, Arb. *šbʿ*, Sab. *hs₂bʿ*, Mhr. *šiba*, Jib. *šē*, Soq. *šibah* (SED I No. 65_v; Common ES **šgb* is hardly related to this root, cf. CDG 549).

9.1.2. Thirst

PS **ṭmʿ* for ‘to be thirsty’ is almost ubiquitous: Akk. *šamû*, Ugr. *ṭmʿ*, *ḡmʿ*, Hbr. *šmʿ*, Arb. *ḡmʿ*, Sab. *ṭmʿ*, Gez. *šamʿa*, Mhr. *ḡáyma*, Jib. *ḡī*, Soq. *ṭéme* (SED I No. 79_v). It is threatened by *ṭš*, *ʿaṭaš-* in Arabic (perhaps an Iranism, cf. Eilers 1972, 587) and is replaced by **šhy* in Aramaic (Fronzaroli 1971, 606, LSyr. 622, DJPA 459).

9.2. Eating and drinking

9.2.1. Eating

The main PS root for ‘eating’ is **kl*, which preserves its basic function in Akk. *akālu* (*a-kā-lu-um* = Sum. *κú* in VE 156, Krebernik 1983, 6) and Hbr. Syr. Arb. *ʾkl* (Fronzaroli 1971, 609, 631, HALOT 46, LSyr. 17, Lane 71). Ugr. *ʾkl* is restricted to the meaning ‘to consume, devour’ (DUL 43), whereas the basic verb for ‘to eat’ is *lhm* (DUL 495), related to Akk. *lēmu* and Hbr. *lhm* ‘to eat, taste’ (AHw. 543, HALOT 526) as well as to PCS **laḥm-* ‘food’ (Fronzaroli 1971, 615–616, 632, 640), represented by Hbr. *lähäm*, Syr. *laḥmā* ‘bread’ and Arb. *laḥm-* ‘meat’ (HALOT 526, Syr. 364, WKAS L 348). Throughout ES, **kl* is preserved only in the derivate *ʾakl* ‘food, bread, corn’ (CDG 15), comparable to Akk. *akalu* ‘bread’ and Sab. Min. *ʾkl* ‘grain, food’ (AHw. 26, SD 4, LM 4). The meaning ‘to eat’ is expressed, instead, by the root *blʿ* (Kogan 2005b, 378), going back to PWS **blʿ* ‘with the meaning ‘to swallow’: Ugr. Hbr. Syr. Arb. *blʿ* (Fronzaroli 1971, 610, 631, DUL 222, HALOT 134, LSyr. 76, Lane 249). PS **kl* left no trace in MSA: the common verb for ‘to eat’ is *twy* (Mhr. *təwū*, Jib. *té*, Soq. *té*), comparable to Akk. *taʾū* ‘to eat’, *tūtum* ‘food’ (Fronzaroli 1971, 609, 630, 639, AHw. 1340, 1363, ML 404, JL 273, LS 440).

9.2.2. Drinking

PS **šty*, the basic verb for ‘drinking’, is preserved in Akk. *šātū*, Ugr. *šty*, Hbr. *šātā*, Syr. *ʾeštī*, Gez. *satya*, Sab. *ms₁ty* ‘libation’ (Fronzaroli 1971, 607, 630, 638, AHw. 1202, DUL 852, HALOT 1667, LSyr. 811, SD 129, CDG 518), but left no trace in Arabic and MSA. Arb. *šrb* (Lane 1525) goes back to PS **šrb* ‘to sip, to absorb’, continued by Akk. *sarāpu*, pB. Hbr. *šrp*, Syr. *srp*, Gez. *šrb* (Fronzaroli 1971, 607, 630, 638–639, AHw. 1028, Jastrow 1632, LSyr. 500, CDG 533). In continental MSA **šty* is replaced by reflexive formations of PS **šky* ‘to irrigate’ (9.4.): Mhr. *təḳ*, Jib. *šúṣī* (ML 155, JL 262). A similar replacement took place in Gunnän-Gurage (*säčä*, EDG 534). Soq. *re* (LS 395) goes back to PWS **rwy* ‘to be abundant (water)’, cf. 9.4.

9.3. Taste

A detailed etymological study of the semantic field of taste in Semitic is Bulakh 2005. PS **tʾm* preserves the original meaning ‘to taste’ (also ‘to be tasty’) throughout WS (Hbr. Syr. Arb. Gez. Jib. Soq. *tʾm*; Fronzaroli 1971, 607, 630, Bulakh 2005, 343–346, HALOT 377, LSyr. 283, Lane 1853, CDG 583, JL 273, LS 206). In Akkadian, only the derived substantive *tēmu* with a peculiar semantic shift to ‘thought, reason, plan’ is attested (AHw. 1385). The most widespread designation for a concrete taste is PS **mrr* for ‘bitterness’: Akk. *marāru* (for *l.ḡiṣ [m]ar-ru₁₂-um* = Sum. *l.šEŠ* ‘bitter oil’ in VE 884 and *mu-ru₁₂* = Sum. *šE.MUNU* ‘a bitter plant’ in VE 676 see Krebernik 1983, 34, Conti 1990, 178), Hbr. *mar*, Syr. *mar*, Arb. *marra*, Gez. *marara* ‘to be bitter’, Ugr. *mr*, Mhr. *mər* ‘bitter’ (Bulakh 2005, 336–340, AHw. 609, DUL 569, HALOT 638, LSyr. 400, LA

5 195, CDG 360, ML 268). More restricted is PS **mṭk*, **mṭk* for ‘sweetness’: Akk. *matāku* (*tá-ma-tù-kù* = Sum. NINDA.KI already in VE 42, see Krebern timer 1983, 2–3), Hbr. *mṭk*, Tgr. *māṭṭākū* ‘to be sweet’, Ugr. *mṭk*, JBA *māṭik*, Gez. *məṭuk*, Mhr. *maṭk*, Jib. *miṭáyk*, Soq. *mēṭok* ‘sweet’ (AHw. 632, DUL 601, HALOT 655, DJBA 721, CDG 340, WTS 143, ML 273, JL 176, LS 242). Bulakh (2005, 240–242) extensively discuss possibly related meanings in other languages: ‘to smack one’s lips’ in Arb. *tamaṭṭaqa* (Lane 3021), ‘to suck’ in Syr. *mtak* (LSyr. 410), ‘to bake unleavened bread’, ‘to squeeze’, ‘to be or make dry’ in ES. PS **ḥmš* (Fronzaroli 1971, 623, 635, 641) preserves the original meaning ‘to be sour’ in Akk. *emēšu*, JPA *ḥm*^c, Arb. *ḥmd*, Mhr. *ḥāmāz* (AHw. 214, DJPA 206, Lane 644, ML 183). Clearly related are *’ā-me-šu*, *’ā-mi-šu-um* ‘leavened bread’ (= Sum. NINDA.AD₆ in VE 128, Conti 1990, 83), Ugr. *ḥmš* ‘vinegar’ (DUL 364), Hbr. *ḥmš* ‘to be leavened’, *ḥōmās* ‘vinegar’ (HALOT 329), Syr. *ḥm*^c ‘to be leavened’ (LSyr. 240), Jib. *hīz* ‘(milk) to begin turning into butter’ (JL 112), Soq. *ḥēmaž* ‘sour milk’ (LS 181). South ES forms in **k-* (> *h*) like Amh. *kʷāmāṭṭāṭū*, *homāṭṭāṭū* ‘to be sour’ may be further related (cf. EDG 344). PWS **milḥ-* for ‘salt’ is best preserved in CS and MSA: Ugr. *mlḥ*, Hbr. *mālah*, Syr. *mālḥā*, Arb. *milḥ-*, Mhr. *mālḥāt*, Jib. *mīžḥst*, Soq. *mīlḥo* (Fronzaroli 1971, 621, 634, 641, DUL 549, HALOT 588, LSyr. 390, Lane 2732, ML 266, JL 171, LS 243). The verbal root *mlḥ* ‘to salt’ is well attested in Geez and Tigre (Bulakh 2005, 333–334), but the noun is replaced by **šew* throughout ES, usually thought to be a Cushitism (but cf. Kogan 2006c, 271 for a tentative comparison with Ugr. *ššm* ‘salt-works’, Hbr. *šīš* ‘salt’). Akk. *miṭu* ‘saltpetre’ (AHw. 653) and *mallaḥtu* ‘a plant’ (AHw. 596) are rare words which may be borrowed from WS if at all related to **milḥ-*. The basic term for ‘salt’ in Akkadian is *ṭābtu* (AHw. 1377), probably connected with the adjective *ṭābu* ‘good, pleasant’ (for the semantic relationship see Bulakh 2005, 335–336).

9.4. Provision of water

PS **šb* with a general meaning ‘to draw water’ derives from Ugr. Hbr. *šb*, Sab. *s₁-t-’b*, Jib. *šēb* and, perhaps, Akk. *sābu* (Fronzaroli 1971, 611, 631, 639, AHw 1000, DUL 794, HALOT 1367, SD 121, JL 265), to which Arb. *s’b* ‘to be satisfied with drinking’, *sa’b-* ‘receptacle for liquids’ (Lane 1281) and Gez. *sa’aba* ‘to drag, pull’ (CDG 480) are likely related. PS **dlw* was applied to ‘drawing water with a bucket’ (**dalw-*): Akk. *dalū* (*dālu*), Hbr. *dālā* (*dālī*), Syr. *dlā* (*dawlā*), Arb. *dlw* (*dalw-*), Mhr. *dālō* (*dōlōw*), Jib. *délé* (*dēle*) (Fronzaroli 1971, 611, 631, 640, AHw. 155, HALOT 222, LSyr. 145, 154, Lane 908, ML 71, JL 39). In ES the root is likely preserved as Tgr. *dāla* ‘to be watered, to grow green’ (WTS 512), whereas Common ES **dlw* ‘to weigh’ (CDG 132) and its cognates in ESA (Sab. *mdlt*, SD 36) and MSA (Soq. *dēle*, LS 128) are somewhat remote semantically. ‘Abundance of water’ was designated by PWS **rwy*: Hbr. *rāwā*, Syr. *rwā*, *rwī*, Gez. *rawaya*, Mhr. *rāywi*, Jib. *rē* ‘to drink one’s fill’, Arb. *rawā* ‘to provide with water’, *rawiya* ‘to be satisfied with drinking’, Sab. *rwy* ‘to provide water-supply’, Qat. *mrw* ‘irrigation system’, Soq. *re* ‘to drink’ (HALOT 1195, LSyr. 719, Lane 1194, SD 119, LIQ 153, CDG 478, LS 395, ML 334, JL 218). PS **šky* with the meaning ‘to provide enough water’ is widely attested: Akk. *šaḫū*, Ugr. *šky*, Hbr. *hiškā*, Syr. *’aškī*, Arb. *sqy*, Sab. Min. Qat. *s₁ky*, Gez. *saḫaya*, Mhr. *həḫū*, Jib. *šéké*, Soq. *héše* (Fronzaroli 1969, 4, 24, 32, AHw. 1181, DUL 840, HALOT 1639, LSyr. 798, Lane 1384, SD 128, LM 83, LQ 162, CDG 511, JM 155, JJ 262, LS 142).

9.5. Food-stuffs

9.5.1. Milk

There is no pan-Semitic term for ‘milk’. PWS **ḥalab-* (Fronzaroli 1971, 613, 1969, 19, 30, 35) is attested throughout CS (Ugr. *ḥlb*, Hbr. *ḥālāb*, Syr. *ḥalbā*, Arb. *ḥalab-*, *ḥalīb-*; DUL 360, HALOT 315, LSyr. 232, Lane 624) and in most of ES (Gez. Tgr. Tna. *ḥalib*, Har. *ḥay*, Cha. *eb*; CDG 229, WTS 54, TAD 145, EDH 89, EDG 5). Argobba preserves *hayu* ‘milk’ (Leslau 1997, 207), but Amh. *ayb* is relegated to the meaning ‘cheese’ (the origin of the basic term *wātāt* is unknown, Appleyard 1977, 30). PS **ḥalab-* is preserved in MSA, but not with the original basic meaning: Mhr. *ḥālūb*, Jib. *ḥālōb*, Soq. *ḥēlob* ‘to milk’ (ML 177, JL 109, LS 174), Jib. *ḥālōb* ‘buttermilk’, Soq. *ḥālōb* ‘yoghurt’ (JL 109). Mhr. *ṣəḥōf* and Soq. *ṣhof* ‘milk’ (ML 389, LS 427), together with Jib. *ṣhaf* ‘to drink milk’ (JL 258), have no certain etymology (for Syr. *ṣḥāpā* and, perhaps, Ugr. *ṣḥp* ‘colostrum’ see LSyr. 770, DUL 813; for Amh. *ṣəffəta* ‘clumps of butter’ and related Gurage forms see EDG 573; for Arb. *ṣaḥb-* ‘milk coming forth from the udder’ see Lane 1515). Akk. *ḥalāpu* ‘to milk’, *ḥilpu* ‘milk’ (AHw. 309, 345) are West Semitisms, the etymology of the genuine *ṣizbu* (AHw. 1253; already in VE 82, *sa-ša-bu* = Sum. NĪ.GA, Conti 1990, 75) is unknown.

9.5.2. Milk products

By far the most widespread common designation of a milk-product is PS **ḥimʾat-* for ‘clarified butter’: Akk. *ḥimētu*, Ugr. *ḥmʾat*, Hbr. *ḥāmʾā*, Sab. *ḥmʾt*, Hrs. *ḥāmi*, Soq. *ḥāmi* (Fronzaroli 1971, 622, 634, 641, Sima 2000, 240, AHw. 346, DUL 395, HALOT 325, SD 61, HL 60, LS 179; Syr. *ḥewtā* is borrowed from Akkadian, Kaufman 1974, 55–56). PS **laš(a)d-* denoted ‘butter’ or ‘cream’: Akk. *lišdu* ‘cream’, Gez. *lasd* ‘butter’, Tna. *lāsdi* ‘pure unboiled butter’ (Fronzaroli 1971, 622, CAD L 215, CDG 318, TED 86; the Hbr. expression *lašad ha-ššāmān* for a foodstuff to which the taste of manna is compared in Numbers 11.8 is certainly related). There is no deeply rooted common term for ‘cheese’, **gubn-at-* being restricted to CS: Hbr. *gəbīnā*, Syr. *gbettā*, Arb. *ḡubnat-* (Fronzaroli 1971, 622, HALOT 173, LSyr. 102, Lane 376). Late Akkadian *gubnatu* is an Aramaism (AHw. 295), whereas Gez. *gəbnat*, *gʷəbnat* is thought to be borrowed from Arabic (CDG 178). The same may be true of Mhr. Jib. *gəbn* (ML 113, JL 70).

9.5.3. Fat

The main PS term for ‘fat’ as a foodstuff seems to be **šamn-*, although exact semantics of its reflexes are rather diverse (SED I No. 248, Fronzaroli 1964, 28, 42). The meaning ‘(clarified) butter’ is typical of Arb. *samn-* (Lane 1432), whereas Akk. *šamnu* (for *sama-nu ʾa-bū* = ĩ.DU₁₀ in VE 883 see Krebern timer 1983, 34), Ugr. *šmn*, *šmt* and Hbr. *šāmān* mostly denote vegetable oil and are only rarely applied to animal fat or cream (CAD Š₁ 321–330, DUL 827–829, 831, BDB 1032). Common Aramaic **šumnā* mostly denotes ‘(animal) fat, fatness’ (LSyr. 786, DJPA 541, DJBA 1120). The exact meaning of Jib. *šēn*, translated as ‘fat, fatness’ in JL 262, remains to be ascertained.

9.5.4. Egg

There is no widespread common term for ‘egg’. PCS **bayš-at-* (Hbr. *bēšā*, Syr. *bēʿtā*, Arb. *baydat-*; SED I No. 43) was borrowed into Mhr. *bīdayt* (ML 60). In ES two types of forms are common, represented by Gez. *ʾanḳokəho* and Amh. *ənḳ^walal*. Both are etymologically obscure (cf. SED I No. 160 and No. 170), but the latter may be related to Jib. *ḳəhlət*, Soq. *ḳəhélhin*. No etymology for Akk. *pelû* (AHw. 853).

9.5.5. Honey

The PS designation of ‘honey’ is **dibš-*, best preserved in Akk. *dišpu* (with devoicing and metathesis), Hbr. *dabaš* and Syr. *debšā* (Fronzaroli 1968, 286, 297, 303, AHw. 173, HALOT 212, LSyr. 140). Arb. *dibs-* is mostly relegated to the meaning ‘date-syrup’ (Lane 847; the possible meaning ‘honey’ is critically discussed in TA 16 38–39), whereas ‘honey’ is denoted by *ʾasal-* (Lane 2046), borrowed into Soq. *ʾasel* (LS 318). Attestations of Sab. *dbs₁* are discussed by Sima (2000, 240–244) who opts for ‘honey’ as the most probable meaning. Genuine MSA reflexes of **dibš-* (Mhr. *dabh*, Jib. *dəbš*) denote honey, whereas the meaning ‘date syrup’ is typical of Arabisms such as Hrs. *debs*, Jib. *dəbs* (ML 63, JL 23, JL 34). PS **dibš-* is marginally preserved in ES (Epigraphic Geez *dbs*, Har. *dūs*; CDG 122, EDH 59). Its typical replacement is **maʿār*, related to Hbr. *yaʿar* ‘honeycomb’ (Kogan 2005b, 384, Bulakh 2005, 330–331).

9.5.6. Alcoholic drink

PS **šikar-* is a general term for an ‘alcoholic drink’: Akk. *šikaru*, Hbr. *šēkār*, Syr. *šakrā*, Arb. *sakar-* (Fronzaroli 1971, 613, 632, AHw. 1232, HALOT 501, LSyr. 777, Lane 1391). The verbal root **škr* ‘to become inebriated’ is also widely attested: Akk. *šakāru*, Ugr. Hbr. Syr. *škr*, Arb. *skr*, Gez. *sakra*, Mhr. *sīkər*, Jib. *sékər*, Soq. *sékir* (AHw. 1139, DUL 816, HALOT 1500, LSyr. 777, Lane 1390, CDG 497, ML 347, JL 227, LS 286). There is no widespread common term for ‘wine’. PWS **wayn-* (Fronzaroli 1971, 613, 632, 640) denotes wine in Ugr. *yn* (DUL 968), Hbr. *yayin* (HALOT 409; for *ye-nu* in Old Canaanite see Rainey 1976, 137) and Gez. *wayn* (CDG 623), Tna. *wäyni* (TED 1780). While the ES terms also denote vine and grapes, ‘grapes’ is the only meaning of Arb. *wayn-* (LA 13 563), whereas Sab. Qat. *wyn* denoted a ‘vineyard’ (Sima 2000, 255–257). PS **wayn-* left no trace in Aramaic where ‘wine’ is denoted by reflexes of PWS **ḥamr-* (Fronzaroli 1971, 624, 635, 641) already in Deir Alla (*štyw ḥmr* ‘they drank wine’ in I.10). This isogloss is shared by Arb. *ḥamr-* (Lane 808), but only marginally affects other NWS (for Ugr. *ḥmr*, Pho. *ḥmr* and Hbr. *ḥāmār* see Kogan 2005c, 552, for *ḥimru* in OB Mari see Streck 2000, 98). Akk. *karānu* ‘wine’ (AHw. 446) has no certain etymology (cf. Fronzaroli 1971, 614).

9.6. Preparation of food

9.6.1. Flour

PS **ṭhn* with the meaning ‘to grind’ is ubiquitous: Akk. *ṭēnu* (*ṭa-ʾā-nu-um* = Sum. *še.ār.ār* in VE 656, Krebern timer 1983, 25), Ugr. Hbr. Syr. Arb. Mhr. Jib. Soq. *ṭhn* ‘to grind’, Sab. *ṭhn*, Gez. *ṭəhn* ‘flour’ (Fronzaroli 1971, 618, 633, 640, Sima 2000, 200, AHw.

1387, DUL 888, HALOT 374, LSyr. 272, Lane 1831, LLA 1217, JM 408, JL 276, LS 202). There are two PS roots connected with sieving: **npy*, represented by Akk. *napû*, JPA *npy*, Gez. *nafaya*, Hbr. *nāpā* ‘sieve (n.)’, pB. *nippā* ‘to fan, winnow, sift’, perhaps Arb. *nafiyy-* ‘kind of sieve made of palm leaves’ (TA 40 119) and Syr. *nfātā* ‘refuse, rubbish’ (Fronzaroli 1971, 618, 633, 640, AHw. 742, HALOT 708, Jastrow 923, DJPA 355, LSyr. 435, CDG 390) and **nhl*, attested in Akk. *naḥālu*, Syr. *nhl*, Arb. Mhr. Jib. *nhl* (Fronzaroli 1969, 11, 27, 34, AHw. 712, LSyr. 423, Lane 3029, ML 308, JL 199). ‘Flour’ was designated by PS **kaḥḥ-*: Akk. *kēmu* (for *ḳá-ma-u*, *ḳá-ma-um* = Sum. *MA₈* in VE 169 see Krebernik 1983, 6), Ugr. *ḳmh*, Hbr. *ḳāmah*, Syr. *ḳamḥā*, Tgr. *ḳəḥəm*, with semantic shifts also Arb. *qamḥ-* ‘wheat’ and Gez. *ḳamḥ* ‘fruit, yield’ (Fronzaroli 1971, 618, 633, 640, AHw. 913, DUL 702, HALOT 1107, LSyr. 671, Lane 2561, CDG 431, WTS 236).

9.6.2. Baking

‘Kneading’ was designated by PS **lwš-*: Akk. *lāšu*, Hbr. *lwš*, Syr. *lāš*, Gez. *losa* (Fronzaroli 1971, 619, 633, 640–641, AHw. 540, HALOT 525, LSyr. 362, CDG 321). Arb. *lwṭ* ‘to roll a morsel of food in melted fat’ (Lane 2678), probably related, points to **t* in the protoform (similarly *li-la-šu* = Sum. *NÌ.ĠÚG* in VE 68, Conti 1990, 68). PS **py* with the meaning ‘to bake’ is represented by Akk. *epû* (for *a-pá-um* = Sum. *NÌ.DU₈.DU₈* in VE 44 and other references from Ebla see Sjöberg 2003, 530), Ugr. *‘apy*, Hbr. *‘āpā*, Syr. *‘efā*, Gez. *‘afuy* ‘baked’, Arb. *mīfa* ‘baking tray’, Soq. *mo’fe* ‘oven’ (Fronzaroli 1971, 619, 634, 641, AHw. 231, DUL 92, HALOT 78, LSyr. 39, LA 15 467, LLA 810, LS 496; for Sab. *‘fy*, translated as ‘sort of foodstuff’ in SD 3, cf. Sima 2000, 148).

9.6.3. Cooking

PS **šlk* meant ‘to boil, cook’: Akk. *salāku*, pB. Hbr. Syr. *šlk*, Arb. *slq*, probably Tna. *šä-läkä* ‘to be burned; to simmer’ (Fronzaroli 1971, 626, 636, AHw. 1014, Jastrow 1588, LSyr. 784, Lane 1410, TED 806). PS **bšl* in the basic stem usually means ‘to be cooked, ready, ripe’: Akk. *bašālu*, Hbr. *bāšal*, Syr. *bšēl*, Gez. *basala*, Mhr. *behēl*, Jib. *béšəl*, Soq. *béhel* (Fronzaroli 1971, 626, 636, 642, AHw. 111, HALOT 164, LSyr. 99, CDG 109, ML 45, JL 30, LS 83). The transitive meaning ‘to boil, cook’ is mostly reserved for causative formations: Akk. *šubšulu*, Hbr. *biššēl*, Syr. *baššēl*, Arb. *‘absala* ‘to boil unripe dates’ (TA 28 84), Gez. *‘absala*, Mhr. *həbhōl*, Jib. *ebšēl*, Soq. *‘ēbhel*, probably Ugr. *bšl* (DUL 242). Clearly related are Sab. *mbs₁l* ‘cooking-place’, Min *bs₁l* ‘to dedicate (an offering)’ (LM 24, SD 32). ‘Broth’ was designated by PWS **marak-*: Hbr. *māraḳ*, Arb. *maraq-*, Gez. *marak*, Mhr. *mərəḳ*, Jib. *míréḳ*, Soq. *marak* (HALOT 638, Lane 3019, CDG 359, ML 270, JL 173, LS 251; perhaps already in VE 602: *mar-ḳum*, *ma-la-ḳù-um* = Sum. *A.AKA*, see Conti 1990, 167).

10. Lexicon and genealogical classification of Semitic

10.1. The common opinion

Lexical evidence as a means of genealogical classification is met with extreme skepticism in today’s comparative Semitics (Pardee 1991, 100, Renfroe 1992, 6–7, Tropper

1993, 283, Appleyard 1996, 204, Huehnergard 1995, 275–276, 2005, 189–191, 2006, 6). A few dissenting voices (Greenfield 1969, 97–99, Hetzron 1972, 13, Kaufman 1988, 47–48) change little in the overall negative attitude.

10.2. Lexicostatistics in the Semitic domain

Criticism against the use of lexical data as a means of genealogical classification has often amounted to rejection of lexicostatistics as applied to the Semitic family.

The record of Semitic lexicostatistics is not extensive: early studies by D. Cohen (1961, reprinted 1970), Fleming (1968), Bender (1970) and Rabin (1975) have been followed by Rodgers (1991), Hayes (1991) and Militarev (2000, 2007, 2008).

Ever since the discussion closing Rabin's 1975 paper, criticism against Semitic lexicostatistics has been lapidary, apodictic and destructive (Faber 1980, 13, 1997, 5, Appleyard 1996, 204, Huehnergard 2002b, 124), mostly directed against the method in general or some technical infelicities of its application to Semitic languages (such as Rabin's unlucky selection of some basic lexemes). There was no attempt to correlate the results of the aforementioned studies with those obtained through other classification procedures or to provide a rationale for the discrepancies between the two approaches. Thus, no attention has been spent to the virtual lack of lexical proximity between Arabic and Ge'ez (Rabin 1975, 98–99), very much in agreement with the CS affiliation of Arabic advocated by Rössler (1950, 511) and Hetzron (e.g., 1974). Similarly, there is nothing to detract from Rabin's penetrating remarks about the highly specific nature of the core vocabulary of Classical Arabic (1975, 99), a perplexing phenomenon practically ignored by Semitists (but cf. now Corriente 2006, 142–143). High number of lexical coincidences between Harari and Wolane observed in D. Cohen 1970[1961], 21 perfectly correlates with the historical unity of Harari and East Gurage universally accepted since Hetzron 1972. Rodgers (1991, 1327) observes that there is no lexical evidence for a special relationship between ES and MSA – not unlike Huehnergard 2005, 161–162, although on quite different grounds. Militarev's CS comprising Arabic, Aramaic and Canaanite (2000, 303) is identical to the same subdivision in the Hetzronian pattern. Early separation of MSA in his scheme (2000, 303) is admittedly hard to correlate with morphological facts, but it draws deserved attention to the remarkable specificity of the basic vocabulary of MSA, where so many terms still defy Semitic etymology.

Sadly enough, criticism against Semitic lexicostatistics has deeply discredited the relevance of the basic lexicon for genealogical classification of Semitic in general. Given the crucial value of the core vocabulary for the identity of each and every language, such an overt disregard of its significance cannot be correct, the more so since widely accepted classification strategies based on shared morphological innovations are far from giving unambiguous results (v. Huehnergard 2002b, 128–133 and Kouwenberg 2010, 595–598 for a detailed survey of the debate).

10.3. Lexical innovations

Lexicostatistics is not the only method by which the role of the lexical factor can be assessed. A (rarely observed) drawback of lexicostatistics is the equal weight given to

all lexical coincidences independently of their diachronic nature. In fact, each shared lexical feature – not unlike morphological ones – can be either archaic or innovative. While lexical archaisms are of no relevance for classification, formal and semantic innovations shared by a few Semitic languages and opposing them to the rest of the family can be legitimately considered as valuable classificatory isoglosses.

The possibility of using lexical innovations in the classification procedure has been rather often considered (Cantineau 1932, 179, Greenfield 1969, 97–99, Ginsberg 1970, 103, 105, 119–120, Hetzron 1972, 1, 28, 29, 59, Appleyard 1977, 4–5, Hackett 1980, 122–123, Tropper 1993, 278–282, 1994, 351, Huehnergard 1995, 275–276, 2005, 189–191), but no extensive use of this method has been made, mostly because of two fundamental concerns, viz. openness of the vocabulary to foreign influence (e.g., Tropper 1993, 283) and lack of proper methodology of evaluating the archaic vs. innovative nature of individual lexical isoglosses (Huehnergard 1995, 276, 2005, 189–191, 2006, 6).

However, the negative impact of any of these queries should not be overestimated (Cohen 1970[1961], 9, Kaufman 1988, 47–48). On the one hand, foreign influence on fundamental lexical strata is usually low: as an empirical observation on individual Semitic languages clearly shows, proven non-Semitic and inter-Semitic borrowings are a rarity in this lexical segment. On the other hand, historical development of the basic lexicon is far from chaotic. For many basic concepts clear-cut lexical exponents can be reconstructed for PS (Kogan 2006a, 465–483), and it is upon this background that archaic vs. innovative nature of lexical isoglosses to be evaluated. While preservation of a PS term as the basic lexical exponent for a given concept has no bearing on classification, its loss and replacement by a shared innovation can be highly meaningful.

This method owes much to lexicostatistics, but is free from some of its problematic aspects (such as postulating fixed rate of lexical replacement or restricting the analysis to a closed set of concepts). It is now appropriate to test its practical validity.

10.3.1. Ethiopian Semitic

The historical unity of ES is so intuitively perceived by most Semitists that a few dissenting opinions postulating separate origin for NES and SES (M. Cohen 1931, 38–52, Fleming 1968, 356, 365) met little acceptance (Hetzron 1972, 17–19, Appleyard 1996, 207–208). However, as pointed out in Faber 1997, 12, Kogan 2005b, 368–369 and Bulakh/Kogan 2010, reliable morphological innovations shared by all major ES languages are nearly absent. What do we find in the lexical domain?

Comparison between Swadesh wordlists of major ES languages suggests that for 68 positions one can reconstruct common terms which functioned as the basic exponents of the corresponding concepts already in proto-ES (Kogan 2005b). Such a high number may look a definitive confirmation of the historical unity of ES (cf. D. Cohen 1970[1961], 19–25), but a real proof can only be obtained through a more detailed diachronic analysis.

In fact, more than a half of the pertinent terms (37) are irrelevant for classification being trivial retentions from PS: Gez. *‘ašm*, Tna. *‘ašmi*, Amh. *aṭənt*, Sod. *aṭəm*, Har. *āt* ‘bone’ (CDG 58) < PS **‘ašm-* or Gez. *kokab*, Tna. *kokob*, Amh. *kokäb*, Sod. *kokäb*, Zwy. *kokkäb* ‘star’ < PS **kabkab-* (CDG 280) etc. (Kogan 2005b, 372–374).

On the opposite extreme, there are 6 highly specific semantic innovations (Kogan 2005b, 377–378). Gez. *kəp'e*, Tna. *kəḷte*, Amh. *hulätt*, Sod. *kitt*, Har. *ko'ot* 'two' go back to PS **kil'-ā* 'both' (Akk. *kilallān*, Hbr. *kil'ayim*, Arb. *kilā*, Mhr. *kəḷō*, CDG 282), whereas the pan-Semitic **tīn-ā* 'two' is only preserved in Gez. *sānəy* 'the next day' (CDG 509). Gez. *baſ'a*, Tna. *bāl'e*, Amh. *bälla* 'to eat' derive from PWS **b'l'* 'to swallow' (CDG 95), with a concomitant extinction of PS **'kl* 'to eat' (preserved in Gez. *'əkl* 'corn, cereals', CDG 15). Other shared innovations include Gez. *ləḥš*, Tna. *ləḥši*, Amh. *lət*, Muh. *lətā*, Wol. *ləččačə* 'bark' < PS **lḥš*, **ḥlš* 'to draw off' (CDG 312); Gez. *kabd*, Tgr. *kābəd*, Tna. *kābdī*, Amh. *hod* 'belly' < PS **kabit-* 'liver' (CDG 273); Gez. *mādr*, Tna. *mādrī*, Amh. *mādar*, Sod. *mādar* 'earth' < PWS **mVd(V)r-* 'clod' (CDG 378); Gez. *šahāy*, Tna. *šāhay*, Amh. *ṭay*, Eža *čət* < PS **šḥw* 'to shine, to be bright' (CDG 149). Complete extinction of PS **'arš-* 'earth' and **šamš-* 'sun' throughout ES is highly remarkable.

These two extremes do not exhaust the complexity of the picture.

In some cases, no single PS lexeme can be safely reconstructed as the main exponent of a given basic concept, so that each minor subdivision of Semitic had to make a choice from a number of synonyms. 14 positions in the ES list can be attributed to this group (Kogan 2005b, 375–377), such as Gez. *rə'ya*, Tna. *rā'ayā*, Har. *ri'a*, Zwy. *ərī* 'to see' < PWS **r'y* (CDG 459), Gez. *wahaba*, Tna. *habā*, Arg. *hawa*, Sod. *abā*, Sel. *wābā* 'to give' < PWS **whb* (CDG 609) or Gez. *ḳatala*, Tna. *ḳātālā*, Wol. *ḳātālā*, Cha. *ḳātārā* 'to kill' < PWS **ḳtl*, **ḳtl* (CDG 451). Diachronic status of such terms – non-trivial retentions – is ambiguous: they are no real innovations, but still by far less ubiquitous than trivial retentions. Taken individually, they are rarely significant, especially if their cognates came to denote the same basic notions also outside ES, as **r'y* 'to see' (also in Hebrew and Arabic), **whb* 'to give' (also in Aramaic), **ḳtl* 'to kill' (also in Aramaic and Arabic). However, simultaneous presence of, say, **'awp-* 'bird' (CDG 78), **ṭlm* '(to be) black' (CDG 556), **mṭ'* 'to come' (CDG 370), **šVbh-* 'fat' (CDG 535) and **bhl* 'to say' (CDG 89) unmistakably suggests that we are faced with an ES language.

For 6 pan-Ethiopian terms no etymology within or outside Semitic has been found (Kogan 2005b, 378–380): PES **ḥamad* 'ashes' (Gez. *ḥamad*, Tgr. *ḥamād*, Amh. *amād*, Sod. *amād*, Har. *ḥamād*, CDG 231), PES **bzḥ* '(to be) many' (Gez. *bəzuḥ*, Tna. *bəzuḥ*, Amh. *bəzu*, Gog. *bəžā*, Har. *bəžīḥ*, CDG 117) or PES **kyḥ* '(to be) red' (Gez. *ḳayyāḥ*, Tna. *ḳayyāḥ*, Amh. *ḳayy*, Har. *kēḥ*, CDG 456).

There are, finally, 5 pan-ES Cushitisms, most probably borrowed already into proto-ES (Kogan 2005b, 380–381, cf. Ehreth 1988, 649): Gez. *dammanā*, Tna. *dāmmāna*, Amh. *dāmmāna*, Sod. *dāmmāna*, Har. *dān* 'cloud' (CDG 134–135); Gez. *'anḳoḳəḥo*, Tna. *'ənḳw'aḳwəḥo*, Sod. *anḳo*, Har. *aḳuḥ* 'egg' (CDG 31); Gez. *'āsā*, Tna. *'asa*, Amh. *asa* 'fish' (CDG 73); Tgr. *čəgār*, Tna. *šəg^wri*, Amh. *ṭagur*, Sod. *čəgār*, Har. *čigār* 'hair' (CDG 550); Gez. *šəgā*, Tna. *səga*, Amh. *səga* 'meat' (CDG 550).

The historical unity of ES is corroborated by lexical data from outside Swadesh wordlists (Kogan 2005b, 383–388): **ḥmm* 'to be sick, ill' (Gez. *ḥamama*, Tna. *ḥamāmā*, Amh. *ammāmā-w*, CDG 233) < PS **ḥmm* 'to be hot, feverish' (ousting PS **mrš*); **'amlāk-* 'god' (Gez. *'amlāk*, Tna. *'amlak*, Amh. *amlak*, CDG 344) < PS **mal(i)k-* 'king' (ousting PS **'il-*); **ngš* 'to rule, to be king' (Gez. *nagša*, Tna. *nägäsā*, Amh. *näggäsā*, Sod. *näggäsā*, Har. *nägäsa*, CDG 393) < PWS **ngš* 'to push, press, drive to work' (relegating PS **mlk*, **mal(i)k-* to **'amlāk-* 'god'); **wald-*, **lid-* 'son' (Gez. *wald*, Tgr. *wād*, Tna. *wāddi*, Amh. *ləḳ*, Sod. *wäld*, Har. *liži*, *waldi*, CDG 613) < PS **wld* 'to bear'

(relegating PS **bin-* to Gez. *bānta* ‘ayn ‘pupil of the eye’, CDG 99); **zīb* ‘hyena’ (Gez. *zəb*, Tna. *zəb’i*, Amh. *ḡəb*, Arg. *ḡəb*, CDG 630) < PS **dīb-* ‘wolf, jackal’ (ousting PS **šabu-*).

10.3.2. Aramaic

Three millennia of linguistic history of Aramaic witnessed serious grammatical changes. Many phonological and morphological features recognized as characteristically Aramaic are absent from (or cannot be detected in) the Old Aramaic inscriptions of 10th-8th centuries BC (Huehnergard 2005, 268–272). The same is even more evident for most varieties of Neo-Aramaic. Common vocabulary turns out to be one of the chief consolidating factors assuring the historical unity of the Aramaic language (Kogan 2005c).

A good example of a common lexical innovation in the Aramaic domain is the evolution of PS **anp-* ‘nose’ (Kogan 2005c, 518). It acquired the meaning ‘face’ in proto-Aramaic, first attested in OArm. (*py* in KAI 222A:28, *pyh* *ibid.* 42), continued by MArm. (Syr. *appayyā*, LSyr. 39) and preserved until now as *ffōya* in the NArm. of Ma’lūla (GNDM 24). In a kind of push-chain, the reflexes of **anp-* replaced those of PS **pan-* ‘face’ (practically unattested in Aramaic), ‘nose’ being either not distinguished from ‘face’ (as in OArm.: *rwh* *’pwh* ‘breath of his nose’ in KAI 224:2), or expressed by reflexes of PS **naḥūr-* ‘nostril’ (Syr. *nḥūrē*, LSyr. 424).

Other exclusive pan-Aramaic lexical features (Kogan 2005c, 518–526) include **zīl* ‘to go’ > OArm. *īzīl* (KAI 222B:39), Syr. *ezal* (LSyr. 10), Mal. *zalle* (GNDM 105), Tur. *əzzé* (LTS 161); **bd* ‘to make, do’ (Huehnergard 1995, 276) > OArm. *bd* (KAI 309:15), Syr. *bad* (LSyr. 504), JNA Arbel *’ol* (Khan 1999, 551); **ll* ‘to enter’ > OArm. *y’l* (KAI 222B:35), Syr. *al* (LSyr. 524), Mal. *ī’al* (GNDM 3), Modern Mnd. *’ll* (Macuch 1993, 362); **gabr-* ‘man’ > OArm. *gbr* (KAI 224:1–2), Syr. *gabrā* (LSyr. 102), Mal. *ḡabrōna* (GNDM 29), Mla. *gavro* (Jastrow 1994, 174); **gaww-* ‘interior’ > OArm. *b-gw-h* (KAI 202B:3), Syr. *gawwā* (LSyr. 107), Mal. *ḡawwa* (GNDM 29), Tur. *gawo* (LTS 162); **šrk* ‘to flee’ > OArm. *ykrk* (KAI 224:4), Syr. *rak* (LSyr. 550), Mla. *orek* (Jastrow 1994, 155); **mš’(-at)-* ‘midst, middle’ > OArm. *b-mš’t* (KAI 216:9–10), Syr. *meš’ā* (LSyr. 399), Mal. *misti* (GNDM 59), Modern Mnd. *mešša* (Macuch 1993, 415); **nht* ‘to descend’ > OArm. *mnhnt* (KAI 309:2), Syr. *nhet* (LSyr. 424), Mal. *inheč* (GNDM 63), Tur. *noḡat* (LTS 186); **npk* ‘to go out’ > OArm. *ypk* (KAI 222A:28), Syr. *npak* (LSyr. 438), Mal. *infek* (GNDM 61), Tur. *nofək* (LTS 186); **rhm* ‘to love’, **rāhim-* ‘friend’ > OArm. *rhm* (KAI 224:8), Syr. *rhem*, *rāhmā* (LSyr. 724), Mal. *irham* (GNDM 75), Tur. *roḡam* (LTS 177); **slk* ‘to go up’ > OArm. *ysk* (KAI 224:14), Syr. *slek* (LSyr. 477), Mal. *islek* (GNDM 81), Tur. *solək* (LTS 186); **šappīr-* ‘beautiful’ > OArm. *špr* (KAI 224:29), Syr. *šappīrā* (LSyr. 797), Tur. *šafiro* (LTS 179); **dhl* ‘to be afraid’ > OArm. *w-yzhl* (KAI 223C:6), Syr. *dhel* (LSyr. 148), Mla. *doḡel* (Jastrow 1994, 156).

Some widely attested Semitic terms acquired specific phonological or morphological features in Aramaic (Huehnergard 2005, 191, Kogan 2005c, 526–528). Such exclusive semi-lexical traits include the pattern $C_1uC_2C_3\text{-}ān\text{-}$ for the adjective **uḥr-ān-* ‘other’ (Beyer 1994, 306) > OArm. *l-ḥrn* (KAI 224:24), Syr. (‘)ḥrēnā (LSyr. 13), Mal. *ḥrēna* (GNDM 39), Tur. *ḥreno* (LTS 166); the pattern $C_1uC_2ayC_3\text{-}$ for the noun **ulaym-* ‘child’ (Beyer 1984, 659) > OArm. *lym* (KAI 222A:2), Syr. *laymā* (LSyr. 528); *r-*in-

tion in **kursi*- ‘chair’ (Beyer 1984, 610) > OArm. *krš*’ (KAI 216:5), Syr. *kursyā* (LSyr. 348), Mal. *korsa* (GNDM 50); the prefix *ma-* for the noun **ma-nay*- ‘vessel’ (Bauer/Leander 1927, 194, cf. Beyer 1984, 620) > OArm. *m’ny*’ (KAI 309:16), Syr. *mānā* (LSyr. 373), Modern Mnd. *māna* (Macuch 1993, 411); the reduplicated plural for the adjective **rabb*- ‘big’ (Beyer 1984, 690) > OArm. *rbrbn* (KAI 216:10), Syr. *rawrbē* (LSyr. 706).

Some peculiar lexical features, while not exclusively Aramaic, are still specific enough to be considered as hallmarks of this subgroup (Kogan 2005c, 528–536): **hiwy*- ‘snake’ > OArm. *hwh* (KAI 222A:31), Syr. *hewyā* (LSyr. 220), Mal. *hūya* (GNDM 34), Mla. *hevyo* (Jastrow 1994, 178), also in Arb. *hayyat*- (Lane 681); **māri*- ‘lord’ > OArm. *passim* (DNWSI 682), Syr. *mārā* (LSyr. 401), Mal. *mōra* (GNDM 58), Tur. *moro* (LTS 173), also in ESA *mr*’ (SD 87, LIQ 98, LM 62); **n > r* in PS **bin*- ‘son’ (Beyer 1984, 535, Huehnergard 1995, 266) > OArm. *passim* (DNWSI 188), Syr. *brā* (LSyr. 88–89), Mal. *ebra* (GNDM 13), Tur. *abro* (LTS 157), also in MSA (Testen 1985); loss of **a-* in PWS **aḥad*- ‘one’ (Beyer 1984, 572, Huehnergard 1995, 266) > OArm. *passim* (DNWSI 32), Syr. *ḥad* (LSyr. 215), Tur. *ḥdo* (LTS 165), also in modern ES (EDG 322); *m*-extension on PS **pay*- ‘mouth’ (Beyer 1994, 669) > OArm. *w-pm* (KAI 222A:31), Syr. *pummā* (LSyr. 577), Mal. *temma* (GNDM 102), Tur. *femo* (LTS 161), also in Arb. *fam*- (Lane 2446); **ṭawr-at*- ‘cow’ derived from PS **ṭawr*- ‘bull’ > OArm. *šwrh* (KAI 222A:23), Syr. *tōrtā* (LSyr. 819), Mal. *tawrča* (GNDM 103), Tur. *tarto* (LTS 181), also in Arb. *ṭawr-at*- (TA 10 338).

The origin of some of the specifically Aramaic lexical features is admittedly obscure, but in a few cases the path of innovation can be ascertained (Kogan 2005c, 539): **anp*- ‘face’ < ‘nose’, **bd* ‘to make, do’ < ‘to serve, to work’, **ll* ‘to enter’ < **yll* ‘to insert’, **rhm* ‘to love’, **rāhim*- ‘friend’ < ‘to be compassionate’ (< **raḥim*- ‘womb’), **hiwy*- ‘snake’ < ‘(wild) animal’, **māri*- ‘lord’ < ‘male, man’. A concomitant extinction (or marginalization) of such widely attested PS roots as **pan*- ‘face’, **wrd* ‘to descend’, **wṣ*’ ‘to go out’, **lw* ‘to go up’, **baʿl*- ‘lord’ is noteworthy.

10.3.2.1. Samʿalian

Genealogical position of the language of KAI 214–215 is hotly debated (Tropper 1993, 287–297). In the lexical domain there are several features speaking for the Aramaic affiliation (Kogan 2005c, 543–550): *mṣʿh*, *b-mṣʿh* ‘in the middle’ (214:28, 215:10), *mr*’- *h* ‘his lord’ (215:11 and *passim*), *br* ‘son’ (*passim*), *ḥd*, *ḥdh* ‘one’ (214:27, 28, 215:5), *pm* ‘mouth’ (214:29, 30), *šwrh* ‘cow’ (215:6, 9). Canaanite-like lexical traits – such as wider use of *hrg* ‘to kill’ and *ntn* ‘to give’ to the detriment of *ktl* and *yhb* – are few and not unambiguous (Kogan 2005c, 544–550).

10.3.2.2. Deir ʿAllā

There is no consensus about the genealogical affiliation of the language of the Deir ʿAllā inscription (Hackett 1984, 108–124, Kaufman 1988, Huehnergard 1991b, 1995, 278–282, McCarter 1991, Tropper 1993, 301–311). Isoglosses for the Aramaic affiliation are not lacking (Kogan 2005c, 550–553): *ʿll* ‘to enter’ in *w-yʿl* (I:4), *krk* ‘to flee’ in *hkrkt* (I:15), *npk* ‘to go out’ in *tpky* (I:6), *br* ‘son’ (I:2, 4), *ḥd* (II:10). However,

some characteristically Aramaic lexemes are missing and Canaanite-like ones are used instead (Kogan 2005c, 553–555): *hlk* rather than *ʾzl* or *hwk* ‘to go’ in *w-lkw* (I:5), *rʾy* rather than *hzy* ‘to see’ in *rʾw* (I:5), *pʾl* rather than *ʾbd* ‘to do, make’ in *ypʾl* (I:2, cf. also *pʾlt* ‘deed(s)’ in I:5), *dbr* ‘word’ or ‘he spoke’ rather than *mll*, *mlh* (II:17).

10.3.3. Ugaritic and Canaanite

Ugaritic is usually thought either to have a separate status in NWS (Huehnergard 1991b) or to belong to its Canaanite branch (Troppe 1994).

A comprehensive analysis of Ugaritic vocabulary from the Swadesh wordlist (Kogan 2006a, 436–464) has not produced unambiguous results. Ugaritic-Hebrew isoglosses are high in number (58, or 70 % of the list, cf. Troppe 1994, 351), but most of them (44, or 76 %) are trivial retentions from PS. They characterize both languages as lexically conservative, but do not point to any particularly close genetic ties between them. Exclusive Ugaritic-Hebrew isoglosses are only five – *dg/dāg* ‘fish’, *pʾ/wp* ‘to fly’, *yr/ʾor* ‘skin’, *yšn/yšn* ‘to sleep’, *my/mī* ‘who?’ (HALOT 213, 801, 803, 447, 575; DUL 267, 173, 325, 988, 607) – and none of them can be proved to be a shared innovation.

Nevertheless, further perusal of Ugaritic vocabulary (Kogan 2010a; 2010b) still leaves some chances for a Canaanite affiliation. Outside the Swadesh wordlist, there are no less than 70 exclusive (or nearly exclusive) lexical isoglosses uniting Ugaritic and Hebrew, and some of them can be safely considered shared semantic innovations: Ugr. *ʾany(t)* ‘ship’ – Hbr. *ʾōnī*, *ʾōniyyā* ‘ship’ (DUL 85, HALOT 71) < PS **Vn(V)w* ‘vessel, receptacle’ (CDG 410); Ugr. *hmt* – Hbr. *hōmā* ‘wall’ (DUL 364–365, HALOT 298) < PS **hmy* ‘to watch, to protect’ (Blau 1957, 98); Ugr. *hrš* – Hbr. *hārāš* ‘craftsman’ (DUL 370, HALOT 358) < PS **hrš* ‘to be skillful, intelligent’ (AHw. 246, CDG 243); Ugr. *ksm* – Hbr. *kussāmāt* ‘spelt’ (DUL 462, HALOT 490) < PS **ksm* ‘to cut, split’ (Fronzaroli 1969, 13); Ugr. *ln* – Hbr. *lān* ‘to spend the night’ (DUL 500, HALOT 529) < **layl(-liy)-* ‘night’ (Nöldeke 1904, 42); Ugr. *nbt* – Hbr. *nōpāt* ‘honey’ (DUL 618, HALOT 713) < PS **nūb-at-* ‘bee’ (SED II No. 156); Ugr. *nhš* – Hbr. *nāhāš* ‘snake’ (DUL 628, HALOT 690) < PS **naḥaš-* ‘wild animal, snake’ (Kogan 2006d, 294); Ugr. *šd* – Hbr. *šādā* ‘cultivated field’ (DUL 807, HALOT 1307) < PS **šadaw-* ‘open country, wild, uncultivated place’ (Fronzaroli 1968, 269–270).

10.3.4. Ways of further research

Lexical isoglosses for a few other hypothetical subdivisions of Semitic still await their comprehensive evaluation.

The historical unity of MSA is universally acknowledged, but shared morphological innovations in favor of this assumption are hard to find (Steiner 1977, 12). Conversely, even a cursory perusal of the basic vocabulary of MSA reveals striking common features which remain to be properly assessed.

Recent studies of ESA have often cast doubts on the traditional perception of this group as a genealogical unity (Avanzini 1991, 112–113, 116–118, Huehnergard 2002b, 129, Stein 2003, 1–5). Given the fact that morphological isoglosses (both positive and negative) are not easy to find in this domain due to the non-vocalized nature of the

script, closer attention to shared lexical features would seem quite appropriate, although the specific nature of the extant textual corpus will scarcely favor such an investigation.

The diachronic unity of CS consisting of Canaanite, Aramaic, Arabic and Sabaic being a plausible hypothesis, it is tempting to supplement possible grammatical isoglosses of this group discussed in Huehnergard 2005 with some shared lexical features. Huehnergard (2005, 189–191) opens promising paths for such an investigation, leaving ample room for further research in this domain.

One wonders, finally, whether there are some lexical isoglosses supporting the somewhat ephemeral diachronic unity of NWS (Ginsberg 1970, 102, Huehnergard 1991b, 284–286, 1995, 264–265, cf. 2005, 160, Faber 1997, 9–10).

11. References

Abbreviations of lexical tools, of language names and of texts quoted as in ch. 6.

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9. Phyla and Waves: Models of Classification of the Semitic Languages

1. Introduction
2. Traditional classification schemes
3. Hetzron's model and Central Semitic
4. Modifications to Hetzron's model
5. Problems with Hetzron's model
6. Trees and waves: Causes/sources of similarity among languages
7. Areal features and parallel developments in Central Semitic
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Abstract

This chapter gives a brief overview of the internal classification of the Semitic language family. The scheme promoted here is based on the earlier challenges made by R. Hetzron to the traditional subgrouping of the Semitic family. Problems addressed include the question of a South Semitic group, the features which distinguish the Central Semitic group, and the merits of the tree vs. wave model of classification.

1. Introduction

The internal subgrouping of the Semitic language family has been debated almost since the systematic linguistic study of the family began in the 19th century. In the bibliography of Semitic studies published by G. del Olmo Lete (2003), the list of works pertaining to classification, covering only the years 1940–2000, runs to forty pages. Indeed, in a recent article on the comparative method, W. R. Garr (2005, 17) refers to “our persistent interest in subgrouping”. There seems to be almost as many approaches to classification as there are scholars who work on the problem, some of them markedly different in methodology and conclusions (for some history of the issue, cf. Hetzron 1974; Voigt 1987; Faber 1997; and Rubio 2003). Schemes of classification have been challenged or updated not only because of disagreement among scholars as pertains to method or relevance of features, but also because advances in the scholarship of languages (both ancient and modern) repeatedly result in an improved understanding of the subgrouping of the family.

In this chapter we will briefly discuss the history of the classification of the Semitic languages, then outline the classification as it is best understood today. After some treatment of the usefulness of our models of classification, we will focus on some specific linguistic features that are relevant to the topic.

2. Traditional classification schemes

For much of the twentieth century, the prevailing view of the internal subgrouping of the Semitic language family was that of such great scholars as Th. Nöldeke (1899; 1911) and C. Brockelmann (1908–13). This scheme can be found in several other older handbooks, e.g., Zetterstéen (1914), Fleisch (1947), and Moscati et al. (1964). In this view, which was based as much on the ancient location of the languages as on shared linguistic features, there exist three main sub-families within Semitic (see Figure 9.1): Akkadian is the sole member of East or Northeast Semitic; Hebrew, the other Canaanite languages (Phoenician, Moabite, etc.), and Aramaic comprise Northwest Semitic; and Arabic, Ethiopian Semitic, the Ṣayhadic languages (also called the Old South Arabian languages; cf. Beeston 1984, 1), and the Modern South Arabian languages comprise South or Southwest Semitic. Some scholars (e.g., Nöldeke) saw these three sub-families as individual nodes of the Semitic family, though the majority have seen a primary split between East and West Semitic, the latter including Northwest and South (or Southwest) Semitic. Languages discovered subsequent to the works of Nöldeke and Brockelmann were easily fit into this scheme. So, Ugaritic was classified by most as Northwest Semitic; Eblaite was classified by most as East or Northeast Semitic. This is not to say that the exact position of Ugaritic or Eblaite has been agreed upon, only that they could be fit into the existing model. This point is highlighted by the fact that F. Israel (2006, 178) recently counted over thirty-five different theories on the exact classification of Ugaritic.

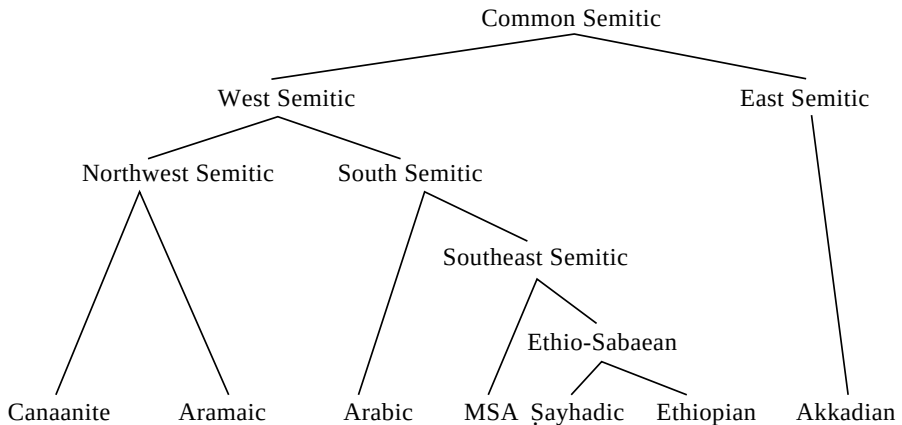


Figure 9.1: Traditional Subgrouping (after Faber 1997)

3. Hetzron's model and Central Semitic

R. Hetzron challenged the traditional view of Semitic classification in a series of works in the 1970's, emphasizing the importance of morphological innovations over phonological innovations and typological similarities in determining genetic relationships (cf.

Hetzron 1974; 1975; 1976). Specifically, Hetzron articulated two principles that he considered fundamental for genetic classification. One is the principle of Archaic Heterogeneity, which “implies that when cognate systems (i.e. paradigms) in related languages are compared, the system that exhibits the most inner heterogeneity is likely to be the closest to the ancestor-system”. The second is the principle of Shared Morpholexical Innovations, on which he wrote that “the phonetic shape of morphological items is the least likely to be borrowed (as against lexical items)” (Hetzron 1976, 89).

Hetzron proposed the branching that is illustrated in Figure 9.2. Proto-West Semitic is characterized by a new means of expressing the perfective aspect, the suffix-conjugation, as in Hebrew *nāṣartā* ‘you (have) guarded’, which in Proto-Semitic (probably also in Proto-Afroasiatic) and in Akkadian was simply a conjugated adjective, as in Akkadian *naṣrāta* ‘you are/were guarded’. The speech forms that did not participate in this innovation are labeled East Semitic, and comprise only Akkadian and Eblaite (for other innovations shared by Akkadian and Eblaite, see Huehnergard 2006; Rubio 2006b; ch. 14). On this primary division between East and West Semitic, Hetzron’s model does not differ from the traditional model (Figure 9.1). It is the subgrouping of languages within West Semitic on which Hetzron deviates from the earlier model.

Proto-West Semitic, in Hetzron’s scheme, splits into two branches: South Semitic and Central Semitic. On the basis of earlier scholarship (e.g., Haupt 1878; Greenberg 1952), Hetzron plausibly assumed that the Proto-Semitic imperfective form of the verb had the shape we find in Akkadian, Ethiopian, and the Modern South Arabian languages, namely, a form with a two-syllable base and a doubled middle radical, **yaqattal*, as in Akkadian *inaṣṣar* ‘he guards’. For Modern South Arabian, we are assuming that a form like the Mehri G-Stem imperfect *yākōtāb* reflects **yākattāb*, just as a Mehri D/L-Stem perfect like *hōrām* ‘swear (not to do s.t.)’ reflects an earlier D-Stem **harrama*. A few scholars have suggested that the Modern South Arabian imperfect reflects **yaqtulu* (e.g., Cohen 1974; 1984, 68–75; Lonnet 2005, 187–188); see Goldenberg (1977, 475–477; 1979) for arguments against this alternative scenario.

Following his assumption regarding the Proto-Semitic imperfective **yaqattal*, Hetzron then suggested that the languages in which this Proto-Semitic form has been abandoned and replaced with a very different form, **yaqtulu* – namely, Arabic, Aramaic, Ugaritic, and the Canaanite languages – must have shared a common ancestor, an ancestor that he labeled Central Semitic. Thus, Proto-Central Semitic, with its innovative imperfective verb, splits off from Proto-West Semitic. The remaining part of West Semitic, which Hetzron called South Semitic, consisted of Ethiopian Semitic, Ṣayhadic, and Modern South Arabian. In some of his ideas on Central Semitic, especially as related to the characteristic verbal form **yaqtulu*, Hetzron was preceded by Christian (1919–1920); for discussion, see Voigt (1987).

Some Semitists have rejected Hetzron’s model, especially his placement of Arabic in the same branch as Aramaic and Hebrew. In fact, of the most recent monograph-length treatments of comparative Semitic (excluding the works of the present authors), only Belova et al. (2009) presents a scheme deriving from that of Hetzron (according to the modifications discussed below in Section 4). For example, Stempel (1999) clings to the traditional model, while Lipiński (2000) and Haelewyck (2007) follow a more idiosyncratic scheme. Nevertheless, for many Semitists, Hetzron’s model remains foundational, and is the point of departure for additional investigation.

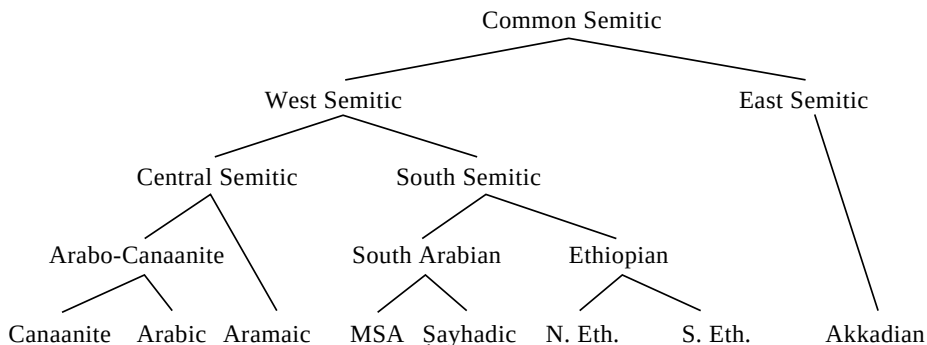


Figure 9.2: R. Hetzron's Model Classification Scheme (Hetzron 1976, etc.)

4. Modifications to Hetzron's model

A number of scholars, while generally accepting this new model, have proposed modifications to it, which have led to the classification scheme outlined in Figure 9.3. One change, which was proposed independently by both J. Huehnergard (1987a) and R. Voigt (1987), was to undo Hetzron's "Arabo-Canaanite" sub-branch, because the feature that, in Hetzron's view, tied Arabic and Canaanite together, was discovered in early Aramaic as well.

Perhaps the most significant modification was a result of an important study of weak verbs in the Şayhadic languages by N. Nebes (1994). Nebes demonstrated that none of the Şayhadic languages for which there is sufficient evidence exhibits the form *yaqattal*; the imperfective of the verb is, instead, formed on the pattern *yaqtulu* (cf. also Voigt 1987). This is important, because it means that these languages participated in the most significant innovation that characterizes the Central Semitic branch, and are therefore also part of Central Semitic. It also means that, contrary to long-standing assumption, none of those languages can be the ancestor of either the Modern South Arabian languages or the Ethiopian Semitic languages (so already Rabin 1963, 108 n. 1), both of which do continue to exhibit *yaqattal* rather than *yaqtulu* for the imperfective; Rubin (2008, 69–70), outlines additional reasons why the Modern South Arabian languages cannot derive from the Şayhadic languages. A recent article by Huehnergard (2005) examined a number of other innovative features common to Central Semitic, including, in most instances, the newly-added Şayhadic languages. These features, which run the gamut of phonological, morphological, and syntactic traits, further validate the existence of Central Semitic and the inclusion of the Şayhadic languages.

Still another modification to Hetzron's model was proposed by V. Porkhomovsky (1997), who pointed out that Hetzron's South Semitic branch may be an illusion, since it is based on a shared retention, namely, the imperfective *yaqattal* form, rather than on any compelling shared innovations. In other words, it is simply what is left of West Semitic once Central Semitic breaks away. They do share the use of *-k* for the first- and second-persons of the suffix-conjugation (*katabku*, *katabka*), but this is not a very significant feature (and one shared by the Şayhadic languages and some Arabic dia-

lects); see below, Section 9.4. Thus, Porkhomovsky suggested that, until a truly significant innovation shared by Ethiopian Semitic and the Modern South Arabian languages has been identified, they should not be considered a genetic subgroup, but rather separate descendant branches of West Semitic (as in Figure 9.3).

There have been a vast number of studies pertaining to subgrouping within the various subfamilies of Semitic, e.g., studies on the internal classification of Aramaic dialects, Neo-Aramaic languages, Ethiopian Semitic languages, Arabic dialects, and Akkadian dialects. There have been many studies on the position of individual languages, e.g., on the position of Ugaritic or Eblaite. Most of these do not affect the overall classification scheme of Semitic as a whole; see further in Rubin (2008) and the references therein.

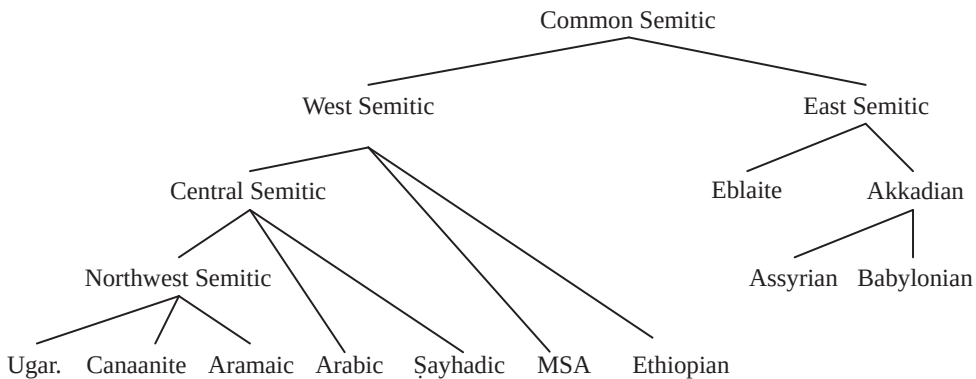


Figure 9.3: Modifications to Hetzron's Model

5. Problems with Hetzron's model

Hetzron's model of a proposed Central Semitic subgroup, with the abovementioned modifications, yields a neat family tree of the Semitic languages, as illustrated in Figure 9.3. But there are a number of significant challenges to this tree. First, within the Central Semitic sub-family, not all of the characteristic features are common to the entire group. Second, and more importantly, there are a number of isoglosses that seem to link Arabic and the Şayhadic languages to Ethiopian Semitic and the Modern South Arabian languages. These features have led a number of scholars to reject Hetzron's model and to prefer the more traditional subgrouping that unites Arabic, Şayhadic, Modern South Arabian, and Ethiopian in a unified genetic subfamily, i.e., South Semitic. Three features are mentioned most prominently in this regard are the shift of Semitic **p > f*, the extensive use of internal plurals, and the use of the L-Stem.

Arabic, Şayhadic, Modern South Arabian, and Ethiopian all exhibit the fricative labiodental *f* as a reflex of Proto-Semitic **p*. So, corresponding to Hebrew *pātaḥ* and Akkadian *petûm*, 'to open', we find Arabic *fataḥa* and Gə'əz (classical Ethiopic) *fathā*. The second feature, the use of broken plurals, is a bit more complex. Noun plurals in Akkadian are formed with the addition of endings to the noun base, or the alteration

of the ending on the noun base, as in *nārum* ‘river’, pl. *nārātum*; *kalbum* ‘dog’, pl. *kalbū*. In Hebrew, Aramaic, and Ugaritic, too, plurals exhibit endings, as in Hebrew *sūs* ‘horse’, pl. *sūsīm*; *qôl* ‘voice’, pl. *qôlôt* (see Hasselbach 2007 for discussion of suffixal plural marking in Semitic). Plurals made by suffixation alone also exist in Arabic, Şayhadic, Modern South Arabian, and Gəʿəz, but they are restricted in those languages mainly to a few semantic or morphological groups, such as certain adjectives and de-adjectival substantives, as in Gəʿəz *mašaggər* ‘fisherman’, pl. *mašaggərān*; *nəgəšt* ‘queen’, pl. *nəgəštāt*. It is much more common in those languages for plurals to be formed by what is termed either internal plurals, broken plurals, or pattern replacement: the vowel pattern of the singular is replaced by another pattern in the plural (with or without the addition of prefixes and suffixes as well), as in Gəʿəz *nəguš* ‘king’, pl. *nəgašt*; *kalb* ‘dog’, plural *ʾaklabt*; and Arabic *malik* ‘king’, pl. *mulūk*; *nahr* ‘river’, pl. *ʾanhur*. Not only is this means of forming plurals common to Arabic, Şayhadic, Modern South Arabian, and Gəʿəz, but the actual patterns that occur are, to a degree, common to all of these languages (cf. the comprehensive studies of Ratcliffe 1998a; 1998b).

The third oft-cited feature linking these languages is the L-Stem. Arabic exhibits a derived form of the verb with a long first vowel, as in *qātala* ‘he fought’; because of this characteristic long vowel, Semitists call this form the L-Stem. In Arabic such verbs often denote association with another person, as shown in the pairs *qatala* ‘he killed’ ~ *qātala* ‘he fought’; *kataba* ‘he wrote’ ~ *kātaba* ‘he corresponded’. Arabic also has a form with a long first vowel and a prefixed *t*-, which is often reflexive or reciprocal in meaning, as in *taqātālū* ‘they fought one another’. Ethiopian Semitic also exhibits verbs with long first vowels; these, however, do not have a particular derivational meaning, but are instead simply lexical, as in Gəʿəz *bāraka* ‘he blessed’ and *māsana* ‘it perished’. The form with a prefixed *t* also exists in Gəʿəz; for the lexical forms such as *bāraka* ‘he blessed’ it is simply the corresponding passive, e.g., *tabāraka* ‘he was blessed’. But the *t*-form can also be created from a basic (G-Stem) verb, to denote a reciprocal or associative meaning; cf. Gəʿəz *kʾatala* ‘he killed’ and *takʾātalū* ‘they fought or killed one another’. Thus the *t*-forms in Ethiopic and in Arabic share a common derivational meaning, namely, that of association or reciprocity. In the Modern South Arabian languages, the L-Stem, if it was once present, has fallen together with the D-Stem. In Şayhadic, the existence of such forms cannot be detected because of the vowelless orthography of those languages, and indirect evidence is very scant (Beeston 1984, 12–13). The L-Stem, thus, links Arabic and Ethiopian Semitic, but cannot reliably be used as evidence for involving Modern South Arabian or Şayhadic. Even so, the L-Stem, along with the other two features discussed above, favors the existence of a South Semitic sub-family.

6. Trees and waves: Causes/sources of similarity among languages

The features discussed in the previous section, especially the two morphological features, are clearly important isoglosses, and they also clearly wreak havoc with the neat family tree shown in Figure 9.3. In other words, the family tree cannot easily accommodate these additional features. Perhaps the problem is the tree model itself! The family tree model of linguistic relationships has been around almost as long as the field of comparative linguistics, having been popularized in the early 1860’s by A. Schleicher.

But a different model to account for similarities among languages, which invokes the metaphor of a wave, is almost as old, having been proposed already in 1872 by J. Schmidt. The wave model accounts for similarities due to the spreading of features across languages, including well-established language boundaries, and even across unrelated languages. Frequently these two models have been seen as mutually exclusive absolutes. But they are in fact complementary, and both are necessary to account for language relatedness.

The family tree model reflects genetic splits that occur when one group of speakers, whose speech includes innovative developments, becomes separated from the rest. For example, in the Semitic family we can point to the early split between Akkadian (or Proto-East Semitic), whose ancestral speakers infiltrated Mesopotamia probably in the mid- to late fourth millennium, and the rest of Semitic.

But only rarely, if ever, is there a complete break between two dialect groups; speakers of diverging forms of a language normally remain in some type of contact, at least at first. Emerging new features in one group may then spread, wave-like, to adjacent speech communities. Further, groups of speakers continue to move about, to migrate, after splits have occurred. Thus, for example, in the first millennium BCE, speakers of Aramaic dialects moved into Mesopotamia, and their speech then had significant effects on the Akkadian of that period, and vice versa. Any borrowed features between Akkadian and Aramaic are unconnected to the fact that the two languages share an ancestor. Of course, the fact that these two languages were already similar would have facilitated borrowing in both directions.

There are actually a number of factors that may give rise to similarities among languages, and these are worth reviewing before returning to the history of the Semitic family. The first and most obvious reason for similarity among languages – and in reality the least common – is coincidence or chance. A simple example is Hebrew *kāmô* ‘like’, which looks and sounds very similar to Spanish *como* ‘like’, but is totally unrelated. Another is Mehri *hō* ‘I’, which looks nearly identical to the first person singular pronoun *ho*’ in Zuni, a language isolate spoken in the American Southwest. A purely intra-Semitic example is Amharic *alä* ‘he said’ and Egyptian Arabic *’äl* ‘he said’, which are similar only by chance; the former comes historically from the root *bhl*, while the latter comes from the root *qwl*.

Second, a group of languages may exhibit a feature in common because it arose in a shared or common intermediate ancestor. Such shared innovations, as they are called, are the only features that are significant for genetic subgrouping. As the Semitist and phonologist A. Faber (1997, 4) succinctly put it, “the establishment of a linguistic subgroup requires the identification of innovations that are shared among all and only the members of that subgroup”. Several examples of proposed shared innovations have already been mentioned in connection with Hetzron’s diagnostic features for the main subdivisions of Semitic: the Proto-West Semitic development of a conjugated adjective, as in Akkadian *našir* ‘he is/was guarded’ into a perfective verb, as in Hebrew *nāšar* ‘he has guarded’; and the Proto-Central Semitic replacement of the earlier imperfective verb **yaqattal* by the innovative form **yaqtulu*.

Third, a shared feature may have been inherited from a still earlier ancestor, and have been lost in other members of the family. This is called shared retention, and it is generally not relevant for subgrouping, since it need not involve a common intermediate ancestor. For example, Akkadian, Hebrew, and Arabic all have a productive,

derived passive verbal form with prefixed *n* (the N-Stem), whereas Aramaic, Ethiopian Semitic, and the Modern South Arabian languages do not (a prefixed *n* is found in Ethiopian Semitic and Modern South Arabian, mainly with quadriliteral roots, but has no derivational value). But we would not therefore group together Akkadian, Hebrew, and Arabic, since the N-Stem is undoubtedly a Proto-Semitic feature that has been lost or marginalized independently in the other languages. Nor would we group together those languages that have lost this form; a shared loss is not usually diagnostic for subgrouping.

A fourth source of similarities is parallel development (cf. Hetzron 1976, 97), also called convergence or drift, in which languages that have long been separated may pass through similar developments as a result of an inherent or latent tendency or an “inner dynamic” (Aikhenvald/Dixon 2001, 3). Included here are analogical changes that are obvious and relatively minor, and that could easily take place in several speech communities independently; many English-speaking children, for example, say *brang* instead of *brought*, on the analogy of *sing/sang*; should there be whole speech communities in which *brang* has become normative, we would not suggest that they necessarily share a common immediate ancestor and constitute a genetic subgrouping. A probable Semitic instance of this is the final *-ā* that marks the third-feminine plural of prefix-conjugation verbs in Akkadian, Ethiopian Semitic, and Aramaic; in each of these the ending replaced an earlier ending through an obvious analogy with the corresponding suffix-conjugation paradigm, and thus need not indicate either a genetic relationship among these languages or an instance of borrowing.

Still another phenomenon that results in shared features, which we have already noted briefly, is the areal diffusion or wave-like spreading of features as a result of contact between speakers of different dialects or languages. Lexical items may be borrowed through language contact, of course (and abundant borrowing has occurred between many of the Semitic languages), but also phonological features and even whole morphological categories can spread across language boundaries. Examples are the perfective/separative *t*-form in Akkadian, which was perhaps prompted by the existence of a similar category in Sumerian, and the word order of Ethiopian Semitic, which has been heavily influenced by neighboring Cushitic languages. Indeed, a recent study by W. Labov (2007) suggests that there are very few linguistic features, if any, that may not be borrowed. When languages are close enough geographically to share features through such borrowing or diffusion, they sometimes form what are termed linguistic areas or areal groupings. Perhaps the most famous example is the group of languages in the Balkans, which, though only distantly related to each other, nevertheless share a common phonology, a common word order, and much else; a number of such linguistic areas are described by Heine/Kuteva (2005, 182–218). The Ethiopian Semitic languages are part of a linguistic area which includes a number of non-Semitic (Cushitic and Omotic) languages (cf. Ferguson 1976, and the response by Tosco 2000); this has no bearing on their inclusion in the Semitic family. The same applies to some Neo-Aramaic languages (cf. Khan 2007), which share a number of areal features with non-Semitic languages (especially Kurdish).

Thus, there are at least five sources of similarity among languages. In a recent collection of papers on areal diffusion and genetic inheritance, the editors state that, “the hardest task in comparative linguistics is to distinguish between these ... kinds of similarity, and then to assess them.” (Aikhenvald/Dixon 2001, 4). One of the authors in

that volume makes the following comments: “Making the argument for an innovation shared by virtue of a period of common development is never easy. I take it for granted that a statement of shared inheritance as explanation for a shared feature should only be made once all other possible explanations for the shared feature have been exhausted. ... How do we decide amongst the alternatives? One possibility is to begin by attempting to identify patterns which are most clearly the results of diffusion and attempting to distinguish these from patterns which are most clearly the result of a shared innovative inheritance.” (Dench 2001, 113).

Concerning trees and waves, the well known sociolinguist W. Labov (2007, 345) has recently suggested “that any general view of language descent must be prepared to integrate the two models of language change”. Only by integrating the two models of language change, the family tree model and the wave model, can we explain the relationships among the Semitic language. The family tree as expounded in Section 4, above, does seem to be a reliable model of the genetic relationship of the Semitic languages, but it does not accurately depict the history of contact among all of the languages. Contact between the languages, and the changes this has brought about, is better depicted in a wave model. In the remainder of this chapter, we will examine more closely some of the features that support the notion of Central Semitic, as well as some of the features that contradict it. It should be clear that there are innovations which support the idea that Central Semitic is a genetic family, areal phenomena that stem from the fact that the Central Semitic languages had prolonged contact subsequent to their split from each other, and areal phenomena that support a South Semitic linguistic area.

7. Areal features and parallel developments in Central Semitic

In this section, we will look at some of the features that are common to Central Semitic, but which cannot be attributed convincingly to shared innovation. Additional features can be found in Huehnergard (2005).

7.1. Loss of feminine *-t*

Semitic nouns have two genders, masculine and feminine; the feminine is usually marked by an ending **-t* or **-at*, as in Proto-Semitic **baʿl-* ‘lord’, **baʿl-at-* ‘lady’. The third feminine singular of the suffix-conjugation of the verb is also marked with the ending **-at*, as in classical Arabic *katabat* ‘she wrote’ versus *kataba* ‘he wrote’. In many of the languages of the Central Semitic group, and almost exclusively in the languages of that group, the *t* of this ending is lost when word-final, as in Hebrew *malkā* ‘queen’ from earlier **malkat-*. In Hebrew, this loss occurs on both nouns and verbs. In Phoenician, however, it occurs only on verbs, while in Aramaic it occurs only on nouns. In Arabic, too, the loss occurs mainly on nouns; moreover, it occurs within the recorded history of Arabic, after the loss of the case-endings that follow the feminine marker; thus, classical Arabic *malikatun* ‘queen’ appears in modern Arabic dialects as *malika*. In a few modern Arabic dialects, e.g., in some varieties of northern Yemeni, the loss

occurs with verbs as well (cf. Behnstedt 1987, 28–29; 153). Finally, in Ugaritic and Ṣayhadic, which are geographically the most remote or peripheral members of the group, no loss of the *t* is attested. These data show that the loss of the *t* cannot be ascribed to a common ancestor. It must be attributed either to parallel development or, more likely, to areal diffusion. The absence of the loss in the geographical periphery suggests an areal diffusion according to a wave model. As evidence that this could also be an example of parallel development, we can add that Soqotri, one of the Modern South Arabian languages, also shows this loss, as noted already by Blau (1980, 27).

In this case of the loss of feminine *-t*, the presence of vestiges of the earlier situation in the various languages indicates that the innovation did not occur in a common ancestor of these languages. Sound changes normally take place without exception. Thus, if these changes had occurred in a common ancestor, we should expect the descendant languages to exhibit no traces of the earlier forms. In other words, there should be no examples of the final *-t* in feminine forms. These developments should not, therefore, be considered genetic inheritances, but rather the results of parallel development or areal diffusion. We would propose, in fact, that such vestiges may serve as a heuristic criterion for determining whether a feature is due to some factor other than genetic inheritance: if one or more of the languages of a proposed subgroup exhibits vestiges of an earlier state of a given feature that has otherwise been replaced, that feature should be attributed to some cause other than genetic inheritance, and should not be considered to constitute evidence of genetic subgrouping. This is not profound, but we have not seen this criterion enunciated elsewhere. Perhaps it is too self-evident. It should be added that the absence of remnants of the earlier situation is not proof that languages sharing a similar feature are genetically related; but the presence of such remnants may be taken as evidence that the feature is due to some factor other than genetic inheritance.

7.2. Reduction of triphthongs

Another feature that is restricted (among the ancient languages) to the Central Semitic group is the reduction of final triphthongs of the shape *-awa* and *-aya* to a long *-ā*. Thus, while Gəʿaz for ‘he wept’ is *bakaya*, Arabic has *bakā*, Hebrew has *bākā*, and Aramaic has *bākā*. In the earliest Phoenician inscriptions, however, the final triphthong is still present; and in Ugaritic and Ṣayhadic we find forms both with and without the triphthong. Further, there are vestiges of these triphthongs in the other languages as well. Again, these data indicate that the reduction of the triphthongs must have occurred after the period of a putative common ancestor; the fact that it is attested in so many of the languages, yet missing at the “margins” of the speech area, shows that it too is in all likelihood due to areal spreading. As in Section 7.1, the change is also attested in some modern Semitic languages outside of the Central Semitic group, showing that a parallel development is conceivable. For example, we find Tigré *bāka* and Mehri *bākō* ‘he wept’ (both from **bakā*).

7.3. Pharyngealization of “emphatic consonants”

A. Faber has suggested that a major defining innovation of Central Semitic is the development of a series of pharyngealized consonants from the inherited series of

Proto-Semitic glottalic consonants (the so-called “emphatics”). Faber (1990, 629; 1997, 8) argues that certain assimilation rules present in the Hebrew *hithpael* conjugation, and in the various Aramaic *t*-stems, suggest the presence of pharyngealization, a feature still present in Arabic. This assimilation can be seen in forms like Aramaic (Syriac) *ʿeṣṭallaḥ* ‘it was ripped open’ (< **eṣṭallaḥ* < **eṣṭallaḥ*), and is explainable by the fact that pharyngealization has a tendency to spread. Ignoring the fact that this alone is weak evidence for reconstructing pharyngealization for the early Central Semitic emphatics, since there is no evidence as to how the emphatics were pronounced in Old South Arabian or Ugaritic, and ignoring the fact that there is also evidence for glottalics in Hebrew, Aramaic, and Phoenician (cf. Steiner 1982), the simple fact is that a phonetic feature like pharyngealization could easily have spread due to areal influence.

7.4. The definite article

One of the most interesting features that is shared by the languages of the Central Semitic group is the definite article. Neither Akkadian nor classical Ethiopic exhibits an article, and it seems clear on comparative grounds that no article is to be reconstructed for Proto-Semitic either. The modern Ethiopian Semitic languages do have definite articles, but the diversity of the morphology of the article in the modern languages indicates a late, inner-Ethiopic origin, unrelated to the development of the article elsewhere; on the origin of many of these, see Rubin (2010a). The origin of the article found in some of the Modern South Arabian languages is still not clear, but it is possibly a borrowing from Arabic, as suggested by Sima (2002); regardless, it differs in its syntax from that of the Central Semitic languages, for example, in appearing on nouns with possessive suffixes, as in Mehri *a-bayt-i* ‘my house’ (cf. Rubin 2010b).

The article in the Central Semitic languages has the following forms. In the Canaanite languages, including Hebrew, it is a prefixed *ha-* plus the doubling of the first consonant of the word to which it is attached, as in Hebrew *báyit* ‘house’, *hab-báyit* ‘the house’; the initial *h* is elided after proclitic prepositions, as in *bab-báyit* ‘in the house’. In Arabic, the article has the form *al-*, as in *al-baytu* ‘the house’; the *l* assimilates to coronal consonants, as in *ar-rajulu* ‘the man’; further, the initial *a* is usually elided, except when sentence-initial, thus, *li-r-rajuli* ‘for the man’. In the Sayhadic languages, the article is a suffixed *-n* (presumably *-ān*), as in *byt-n* (presumably *bayt-ān*) ‘the house’. In Aramaic the article is a suffixed *-ā*, as in *bayt-ā* ‘the house’. In the earliest Aramaic inscriptions, the article is relatively rare, and seems to occur only in certain conditions, especially before a demonstrative adjective. In the earliest Hebrew poetry, too, the article is less common. Further, the article is entirely absent from Ugaritic, and from the eighth-century Deir ‘Allā and Zincirli inscriptions. The various forms of the article where it is attested in these languages, and its absence in some of them, would seem to indicate that the article arose independently in the languages in which we find it. And yet, the syntax of the article is strikingly uniform across these languages. Consider this list of features: the article may appear only on the final member of genitive chain (for example, in a phrase like ‘the house of the son of the king’, the article may appear only on ‘king’); the article may not appear on nouns with possessive pronominal suffixes, or on proper nouns; attributive adjectives must agree in definiteness (in ‘the good king’ the article must appear on both ‘good’ and ‘king’); predicative

adjectives are indicated syntactically by the lack of an article in conjunction with a definite noun, as in Hebrew *ham-melek tōb* ‘the king is good’ versus *ham-melek ha-tōb* ‘the good king’; the article can be used to nominalize adjectives. When we consider that most of these features are not inevitable – cf. the Mehri form *a-bayt-i*, cited above, and Amharic *ləḡ-u* ‘the boy’, but *təllək-u ləḡ* ‘the big boy’, with the article *-u* attached only to the adjective in an attributive phrase – the fact that all of them characterize Canaanite, Aramaic, Arabic, and Šayhadic is quite remarkable. And despite the diversity of the shape of the article in these languages, it is likely that they originate in a small number of forms. Rubin (2005) has argued that all of these articles, both prefixed and suffixed, derive from the grammaticalization of two common Semitic demonstrative elements.

So what are we to make of these data? As we have already noted, the article in these languages cannot be reconstructed to a common ancestor. Even if we accept that all of the Central Semitic articles do come from a single morpheme (cf. Tropper 2001), the fact that the article is non-existent in Ugaritic and Amarna Canaanite, and rare in the earliest Hebrew and Aramaic, along with the fact that we find both prefixed and suffixed articles, all support this idea. However, the remarkable syntactic similarities and the use of a small, common set of forms to create an article, must be attributed either to some dynamic pressure for such a feature, that is, to parallel development, or to a striking instance of areal diffusion, or perhaps both (see also Pat-El 2009).

8. Shared innovations in Central Semitic

In this section, we will look at some of the features common to Central Semitic that are best interpreted as shared innovations and therefore support the existence of Central Semitic as a genetic group. Additional features are discussed in Huehnergard (2005).

8.1. *yaqtulu* and the TMA System

As noted above, Hetzron’s primary diagnostic Central Semitic feature is the innovative imperfective form of the verb, **yaqtulu* (pl. **yaqtulūna*). For Proto-Semitic, the imperfective verb must be reconstructed as **yaqattal*, with a two-syllable base and doubling of the middle root consonant, as in **yaθabbir* ‘he breaks’, which is reflected in Akkadian *išabber*, Gəʿəz *yəsabbər*, and Mehri *yəθōbər* (on the Mehri form, see Section 3, above). There is no evidence for the form *yaqtulu* in Ethiopian Semitic or in Modern South Arabian. It does occur in Akkadian; but there the final *-u* is an obligatory suffix on all verbs in subordinate clauses (e.g., *īmūr* ‘he saw’, but *bītum ša īmur-u* ‘the house that he saw’). The relationship of the Akkadian subordinate marker *-u* and the indicative *-u* of Central Semitic is discussed by Hamori (1973) and Rubin (2005, 146–148).

Thus, the adoption of *yaqtulu* as a new imperfective verb, with the complete loss of the earlier form *yaqattal*, constitutes a profound innovation. One looks in vain for any vestiges of the old *yaqattal* form in any of the Central Semitic languages. Although the lack of such vestiges does not guarantee that this feature must be a genetic inheritance,

in this case it seems a deep and significant enough development that it is unlikely to be the result of either parallel development or areal diffusion. Indeed, the indications that it reflects a shared inheritance are even stronger. For these languages share an entire tense-mood-aspect system, with only relatively minor differences (which can be attributed to later developments within the individual languages). In addition to the imperfective *yaqtulu*, there is a modal form *yaqtula*, attested as a subjunctive in Arabic, and as an injunctive in Ugaritic, in Amarna Canaanite, and in Hebrew, where it has become restricted to first-person forms and is known as the cohortative. There is no evidence of *yaqtula* in Aramaic, where it has presumably been lost, and the orthography of the Šayhadic languages does not allow us to detect the presence of such a form. The same form is also rarely attested in early Akkadian, but its use there seems to be quite different; again, no such form is attested in either Ethiopian Semitic or the Modern South Arabian languages. Further, one or more forms with a final *n*, *yaqtulan* or *yaqtulanna*, termed the “energetic” in Arabic grammars, are also found throughout the Central Semitic group, though in Hebrew and Aramaic there are only remnants; Haselbach (2006) examines the morphological relationship between those West Semitic “energetic” forms and the East Semitic ventive forms.

8.2. Prefixes of the active G stem (the “Barth-Ginsberg Law”)

It is well known that in the prefix-conjugation forms of certain types of Hebrew G (Qal) verbs (I-guttural, geminate, II–weak), the vowel of the prefix varies with the theme-vowel, viz., with theme-vowel *u* and *i* the prefix has *a*, while with theme-vowel *a* the prefix has *i*, i.e., we find **yaqtul*, **yaqtil*, but **yiqtal*. J. Barth (1894), who first analyzed this alternation, also suggested that such a distinction is vestigially found in Syriac. It is now also known in Ugaritic, in a few old Arabic forms, and in a few Amarna Canaanite forms, and it may have existed in Šayhadic as well (see Huehnergard 2005, 180–181, for details). All of these are Central Semitic languages, while there is no evidence of this phenomenon in Ethiopian Semitic, in the Modern South Arabian languages, or in Akkadian. Barth considered the distribution of prefix vowels to reflect the original Semitic situation. As Hetzron (1973–1974, 35–40) and more recently Haselbach (2004) have cogently argued, however, it is more likely the heterogeneous paradigm of the prefixes in Akkadian, where we find *ta-prus* with *-a-* but *ni-prus* with *-i-*, are the more archaic. We may, therefore, suggest that the Barth-Ginsberg “law” is a common Central Semitic innovation.

9. Areal features of “South Semitic”

In this section, we will address some of the features which link Arabic, Ethiopian Semitic, Šayhadic, and Modern South Arabian, and which, as discussed above, present a problem for the Hetzronian model and its offshoots. It will be seen that all of these links can be seen as shared retentions, areal phenomena, or parallel developments, suggesting rather a wave model for the South Semitic group.

9.1. Shift of **p* to *f*

The change of common Semitic **p* to *f* is simply not significant enough to indicate genetic subgrouping in the face of evidence to the contrary. It is a very common change in the world's languages, and is the type of change that may easily spread across adjacent languages. It is even found elsewhere in Semitic; in Hebrew and classical Aramaic, *f* was an allophonic development of *p* in post-vocalic position (e.g., Hebrew [nafši:] 'my soul' < **napš-ī*). Since the change can easily be explained as an areal phenomenon, it cannot be reliably used to indicate genetic relatedness.

9.2. Internal Plurals

Although the use of internal plurals is most productive and widespread in Arabic, Ethiopian Semitic, Ṣayḥadic, and Modern South Arabian, there are vestiges of internal plurals in all Semitic languages. In Northwest Semitic, an entire class of nouns, those with the underlying shape *CVCC*, form their plurals not only with external endings, but also with the insertion of a vowel *a* between the second and third consonants, as in Hebrew *melek* 'king', pl. *mālākīm*, from earlier **malk*, pl. **malakīma*. It is likely that this represents a regularization of one of a set of earlier internal plural possibilities. Even Akkadian has one or two remnants of such an earlier system, e.g., *ṣuḥarû* 'lads' < **ṣuḥarā'u*; cf. Arabic *ṣuḡarā'u*, pl. of *ṣaḡīr* 'young, small' (Huehnergard 1987b). Thus, the formation of plurals by pattern replacement must be reconstructed for Proto-Semitic and, indeed, probably goes back to Afroasiatic (cf. Greenberg 1955). We propose the following set of developments. First, Akkadian, apart from the few remnants just referred to, lost this type of pluralization, probably when it came into contact with Sumerian, which also exhibits only endings for noun plurals. Common West Semitic retained the internal plurals, which would also have been a feature inherited by Proto-Central Semitic; it is even possible that Common West Semitic expanded the Proto-Semitic system of internal plurals. Later, the Northwest Semitic subset of Central Semitic, probably in a common ancestor of their own, drastically reduced the plurals of this type, keeping only the *a*-insertion in nouns of the *CVCC* type, and adding a secondary external plural marker to those as well (cf. Hebrew *melek* ~ *mālākīm*, cited above). It is possible that this change occurred because of contact with Akkadian, which was a *lingua franca* in the area in which the Northwest Semitic languages developed during the second millennium BCE. The other Central Semitic languages, Arabic and Ṣayḥadic, did not participate in this innovative reduction of the internal plural type. Except for the northern edge of their distribution, they were not in contact with such languages, but rather with the ancestor(s) of Modern South Arabian and Ethiopic, which likewise retained, and expanded, the internal plural types. In any case, if Proto-Central Semitic possessed the internal plural types—and there is no evidence to the contrary—their presence in Arabic and Ṣayḥadic is seen to be a shared retention rather than a shared innovation tying those languages together with Modern South Arabian and Ethiopian Semitic as a genetic subgroup. The pervasiveness of internal plurals in these languages can be seen as an areal development.

The shared retention of internal plurals was, perhaps, partly due to areal contact. The noted Indo-Europeanist C. Watkins (2004, 573) has suggested that the Anatolian

languages, such as Hittite, alone of all the Indo-European languages, may have retained the Proto-Indo-European “laryngeal” consonants because they were part of a linguistic area with other languages, Hurrian and Hattic, that likewise had such consonants. Analogously, we might suggest that Arabic and Şayhadic retained the various internal plural patterns because of contact with the ancestor of Modern South Arabian. Or, perhaps it would be more accurate to say that Arabic and Şayhadic retained internal plurals from the *lack* of any outside influence. Perhaps for Hittite, too, it was not that Hurrian and Hattic had such consonants, but that Hittite was *not* in contact with a language with *did not* have these consonants. However, any shared innovative patterns and the expansion of the use of internal plurals can be confidently chalked up to areal influence.

It should also be noted that while Ethiopian Semitic in its oldest attested form, Gəʿəz, is replete with internal plurals, modern Ethiopian Semitic languages have shifted away from this method of plural marking. In all modern Ethiopian Semitic languages external plurals are the norm, if plurals are even marked at all. Numerous internal plurals survive in some languages, like Tigrinya, but they have practically disappeared in some of the so-called Gurage languages. That the modern languages have shifted away from internal plural marking (and many other morphological and syntactic features of earlier Ethiopian Semitic) is possibly due to areal influence. This only lends support to the suggestion that the original expansion of the internal plural system in “South Semitic” could have indeed been an areal feature.

9.3. L-Stem

The verbal forms with the long first vowel (the L-Stem), such as Arabic *qātala*, are probably to be understood in much the same way as the internal plurals. Such forms seem to be vestigially present in Hebrew, although they do not have any recognizable derivational semantic value (cf. Brockelmann 1908–1913 I, § 257d). We may consider them to be relics of a more complete paradigm like those found in Arabic and Ethiopian Semitic. A. Zaborski (1991, 371) has noted the presence of similar forms in Beja, a Cushitic language, suggesting that this is a possible Afroasiatic feature. Thus, these forms probably reflect a Proto-Semitic feature that was lost in Akkadian and, with rare exception, in Proto-Northwest Semitic. Their presence in Arabic is a shared retention from an earlier ancestor, not an innovation shared exclusively by Arabic and Ethiopian Semitic. Even the derivational value of the L-Stem can be seen as a shared retention.

9.4. Suffix-Conjugation: First and second person forms

We can reconstruct for the Proto-Semitic suffix-conjugation a first person singular suffix *-ku* and second person singular suffixes *-ta* (masc.) and *-ti* (fem.). In West Semitic, we find leveling of these suffixes. In the Northwest Semitic languages and in Arabic, we find leveling of the *t* (cf. Arabic *-tu*, *-ta*, *-ti*), while in Şayhadic, Ethiopian Semitic, and Modern South Arabian, we find leveling of the *k* (cf. Gəʿəz *-ku*, *-ka*, *-ki*). Some

have suggested that this kind of leveling is evidence of genetic relationship, but these are clearly cases of areal phenomena or parallel development. As evidence of this, we can point to Yemeni Arabic dialects, which have the *k*-suffixes, having been influenced by neighboring, non-Arabic languages (presumably Şayhadic). We can also point to Neo-Assyrian Akkadian, which likewise leveled the *k*-suffixes, in what must be a parallel development (cf. Hämeen-Anttila 2000, 90).

10. Conclusions

In summary, we may conclude that these few features that Arabic and Şayhadic share with Modern South Arabian and Ethiopian Semitic do not constitute evidence for a genetic subgrouping of those languages. The only convincing evidence we have seen for the genetic relationship of Arabic and Şayhadic, instead, indicates that they are part of a Central Semitic subgroup. What those three features do suggest, however, is the existence of an areal grouping that included Arabic, Şayhadic, the ancestor of Modern South Arabian, and the ancestor of Ethiopian Semitic. This is particularly interesting because, as described in Section 8, Arabic and Şayhadic were also part of an areal grouping that included the other members of the Central Semitic subgroup. Thus, Arabic and Şayhadic would be located at the intersection of two overlapping linguistic areas, assuming the areas to be contemporaneous; it is also possible that Arabic and Şayhadic were part of the Central Semitic area for a time, and became part of the more southerly area later in their histories. The existence of multiple linguistic areas within a single language family has parallels elsewhere. For example, within the Slavic family, there are some innovations that are common to West and South Slavic (to the exclusion of East Slavic), and other innovations that are common to West Slavic and East Slavic.

We have tried to demonstrate in this chapter that by integrating the family tree and wave models of language classification, we can account for the seeming discrepancies in the modified Hetzronian scheme. This type of integration can also be successfully applied to younger nodes of the Semitic family tree, for example Northwest Semitic or Ethiopian Semitic, since the languages in these subgroups remained in contact with one another after splitting off from the parent node. The idea that both the family tree and wave models are necessary in order to provide a complete picture of the subgrouping of Semitic is certainly not new, but it is an idea that has not yet received sufficient attention.

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III. The Semitic Languages and Dialects I: Their Typology

10. Morphological Typology of Semitic

1. Introduction
2. Some remarkable features of Semitic morphology
3. Morphological techniques
4. Person-gender-number (pgn) marking: Paradigmatic structure
5. Morphological categories of the noun
6. Morphological categories of the verb
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Abstract

Focusing on the old Semitic languages, though also with some attention to (eastern) Neoaramaic, Arabic dialects, and modern Ethiosemitic, this article describes the morphological typology of Semitic, with some diachronic notes. It begins with a catalogue of the many remarkable morphological features found in Semitic, then proceeds to a discussion of the formal techniques used in Semitic morphology. The pronominal person-gender-number (pgn) paradigms are presented and analyzed next, followed by discussion of the morphological categories of nouns and of verbs, and concluding with issues of word complexity, degree of synthesis and fusion, and syntagmatic ordering of morphemes. Particular attention is devoted to several highly characteristic features of Semitic morphology: root-and-pattern morphology, the binyan system of derived verb stems, broken plurals, the manner of forming tense-aspect morphology, and the special Construct form which marks the head noun in genitive embeddings.

1. Introduction

The presentation in this chapter will focus strongly on the old Semitic languages, with some mention of modern Ethiosemitic, modern Arabic dialects and Neoaramaic. (Modern South Arabian will not be mentioned; modern Hebrew is almost identical morphologically to Biblical Hebrew, and hence will hardly be discussed). The overall morphological structure of all the old languages is strikingly similar in its broad architecture, which justifies treating them together despite differences of detail. For convenience I will draw my examples especially from Classical Arabic, which is notably conservative and typical of old Semitic in many respects. I assume a subgrouping of Semitic which unites Hebrew, Aramaic, Ugaritic, and Arabic into a 'Central Semitic' subfamily.

In this typological article I will barely mention morphophonology; different morphophonological rules apply in the various languages, notably assimilations, which have the effect of rendering the segmentation of morphemes less transparent than might otherwise be the case. Such morphophonological changes are generally fairly modest in scope. Note that they seldom compromise the integrity of the root; they generally leave the root consonants intact, instead modifying segments that belong to affixes. This is not surprising, given the foundational importance of the root in Semitic morphology. One pan-Semitic change which does affect (verbal) roots is the deletion of a root-initial *w* in the imperfect: in Arabic, from the root *w-l-d* 'bear (a child)' we have *walad-at* 'she bore' but *ta-lidu* 'she will bear' (not **ta-wlidu*).

Throughout I will use the abbreviation 'pgn' to indicate 'person-gender-number' marking; these three categories are rolled together into a single macrocategory in paradigms of personal pronouns and personal verbal affixes, and cannot always be separated.

In a chapter this size many topics could not be addressed, or only in passing. The morphology of relative and demonstrative pronouns has been neglected, for instance, as has the morphology of relative verb forms in modern Ethiosemitic. (Proper discussion of the complexities of modern Ethiosemitic and Neoaramaic would surely have doubled the length of the article.) On the topic of grammaticalization in Semitic, the reader is referred to Rubin (2005).

The chapter is organized as follows. Section 2 is a catalogue of unusual morphological features of Semitic. Section 3 discusses morphological techniques, notably root-and-pattern morphology. Section 4 is devoted to pgn paradigms and their internal organization. Section 5 treats morphological categories of the noun, and section 6 categories of the verb. Section 7 is a brief discussion of morphological syntagmatics and word complexity. Inevitably there is some repetition, as the same topic may be treated from several perspectives. Standard facts about language data which are readily available in reference grammar books are cited without any source.

2. Some remarkable features of Semitic morphology

The typological profile of a language (or language family) is concerned both with its general structural make-up and with those features that make the language (family) 'special'. What general linguists tend to know about the morphological specialness of Semitic is its nonconcatenative root-and-pattern morphology. But the Semitic family, and individual Semitic languages, display many other rare, curious, and distinctive morphological behaviors. I catalogue some of these briefly in this section. Not all of these are discussed elsewhere in the article; for those which are, cross-reference is made to the appropriate section.

- (1) Gender is coded not only in 3rd person but also in 2nd person (see 4.).
- (2) Numerals are coded for gender, but the encoding shows a characteristic 'gender reversal' vis-à-vis the counted noun: masculine nouns are modified by (formally) feminine numerals (ending in *-a(t)*), and feminine nouns by (formally) masculine numerals. This reversal is a purely formal phenomenon and does not affect the gender agreement of the counted noun with other sentence elements.

- (3) In Arabic, demonstrative pronouns can optionally show agreement with the *addressee*:

dālika ‘that’ (general; or addressing one person) (cf. enclitic *-ka* ‘you’, sg)
dālikum ‘that’ (addressing many people) (cf. enclitic *-kum* ‘you’, pl)

Note that, despite the agreement with the addressee, these demonstratives do not *refer* to the addressee but to some 3rd-person entity.

- (4) Arabic has both a definite and an indefinite article, but they occur in different slots: prenominal definite *al-* vs. postnominal indefinite *-n* (see 5.5.).
 (5) In Gəʿəz, alongside the normal accusative case ending *-a*, there is a special accusative case allomorph *-hā* which is used only for proper nouns. Thus:

bet-a ‘house-Acc’ vs. *Yohānnəs-hā* ‘Yohannes-Acc’.

- (6) Gəʿəz has a remarkable type of bipartite case system: accusative (*-a*) vs. everything else (*-Ø*) (see 5.4.).
 (7) In Amharic, 2pl and 3pl independent pronouns have developed an innovative form which is built by adding an ‘associative prefix’ *ənn-* to the corresponding singular pronoun. Thus:

antä ‘you (sg)’ vs. *ənn-antä* ‘you (pl)’.

Etymologically this prefixal element originally meant ‘those of’, so that the literal meaning of this plural pronoun is ‘you and those-of-you’, i.e. you and your associates. This mode of formation is noteworthy because, as is well known, 2nd-plural pronouns need not represent a plurality of listeners, but can indicate one listener and his (absent) associates (e.g. Jespersen 1924, 192); Amharic provides a rare case where this fact is encoded in the morphology with total explicitness. (See also 3.1.)

- (8) Arabic has a morphological diminutive pattern, CuCayC. Some denominal *prepositions* can also form diminutives in this way (3.3., end), a rare case of derivational morphology being applied to prepositions.
 (9) In modern Ethiosemitic languages (and even a bit in classical Gəʿəz), a definite article has been innovated that is clearly derived from a 3rd-person possessive marker. Thus the suffix *-u* is strictly a possessive ‘his’ elsewhere in Semitic, but in (e.g.) Amharic it can also mean ‘the’:

bet ‘house’ vs. *bet-u* ‘his house’ or ‘the house’.

This is not a frequent or well-known source for definite articles crosslinguistically (though cf. Fraurud 2001).

- (10) The basic mode of expressing tense-aspect distinctions in old Semitic is quite distinctive. There is no segmental ‘tense-aspect slot’ that distinguishes different tenses. Rather, tense differences are indicated by:
 (a) Totally different internal vowel patterns
 (b) Suffixal vs. prefixal positioning of the verbal person-gender-number (pgn) marker
 (c) (Almost) totally different pgn morphemes comprising the two paradigms.
 See also 3.2., 6.1.
 (11) Biblical Hebrew has a very common ‘narrative tense’ which at first seems to involve just the prefixing of the proclitic *w(a)-* ‘and’. This narrative tense, how-

ever, shows a strange semantic ‘tense inversion’. Normally the suffixing tense indicates past and the prefixing tense indicates present-future. With narrative *w(a)-* these temporal relations are reversed. Thus from the root š-m-r ‘keep, guard’:

<i>ti-šmor</i> ‘you will keep’	<i>wa-tti-šmor</i> ‘and you kept’
<i>šamar-ta</i> ‘you kept’	<i>wə-šamar-ta</i> ‘and you will keep’

(This presentation is much oversimplified, but it captures the essence of the phenomenon; see also 6.1.)

- (12) In eastern Neoaramaic, the verb is followed by two clitics indicating pronominal subject and object. However, in some tenses the clitics denote ‘Subject, then Object’ respectively, while in other tenses the identical clitics in the identical order denote ‘Object, then Subject’ (see 6.5.).
- (13) Modern Ethiosemitic languages can form a frequentative verb form by reduplicating the C_2 consonant. Remarkably, the language Tigre can iterate this internal reduplication: from *dāgmā* ‘he told, related’ one can form *dāgāgāmā*, *dāgāgāgāmā*, *dāgāgāgāgāmā* (see 3.5.).
- (14) Old Semitic has a globally unusual kind of head-marking (the Construct) in genitive embeddings: the marker on the head is *not* a possessive affix (as is common crosslinguistically), but simply signals the fact of the embedding per se (see 5.3.).
- (15) Although the ‘of’ morpheme in Amharic (as in other modern Ethiosemitic languages) is a proclitic particle *yä-* marked on the possessor (the old Construct is moribund), nonetheless the syntactic order of possessives in these OV languages is [yä-Dept] Head. This is typologically unusual: normally in OV languages we expect to find ‘of-clitics’ as enclitics, not proclitics, i.e. Dept-*of* Head.
- (16) Semitic lacks compounding as a distinctive structure almost entirely (see 3.4.).

3. Morphological techniques

In constructing words, Semitic morphology appeals much more to certain techniques than others. Affixation (prefixation and suffixation, occasionally infixation) is common. Internal vowel change, a hallmark of the whole Semitic language family, is universal, very often occurring together with affixation. By contrast, two other familiar morphological processes – compounding and reduplication – play a much more restricted role, and incorporation is (to my knowledge) non-existent. Suppletion is very unusual outside of pronoun paradigms. Below I will discuss these in order.

3.1. Affixation

Suffixes are somewhat more common than prefixes in Semitic; infixes are quite rare and occur only in verbs. Some grammatical categories, if expressed by affixation (often accompanied by internal vowel change), involve exclusively suffixes; others involve either prefixes or suffixes or both. I will discuss nominals first, then verbs.

With nouns and adjectives and pronouns, the most basic type of gender and number marking (feminine gender and so-called ‘sound plurals’ and duals) is purely suffixal. Thus in Arabic we have suffixes fsg *-a(t)*, mpl *-ū(na)*, fpl *-āt*, dual *-ā(ni)*:

<i>muslim-Ø</i>	‘Muslim (msg)’	<i>muslim-a(t)</i>	‘Muslim (fsg)’
<i>muslim-ūna</i>	‘Muslims (mpl)’	<i>muslim-āt</i>	‘Muslims (fpl)’
<i>muslim-āni</i>	‘Muslims (dual)’		

A rare exception to suffixality is found in Amharic in the paradigm of independent personal pronouns, where the 2nd and 3rd person plural pronouns are formed by adding an ‘associative’ prefix *ənn-*: *antä* ‘you (msg)’, *ənn-antä* ‘you (pl)’. On the other hand, pluralization by internal vowel change (‘broken plurals’) is often accompanied by affixal material, and this may be either prefixal or suffixal. Thus in Arabic, from *walad*, *walīd* ‘boy’, we have (respectively) the two broken plurals *ʾa-wlād* (with prefix) and *wild-ān* (with suffix).

Pronominal possession on nouns (*my*, *your*, etc.) is generally indicated in old Semitic by pgn enclitics; essentially a single series of enclitics is used as pronominal possessor, as pronominal object of prepositions, as complement to a small number of particles, and (with a change in 1st-sg) as the object of verbs (see 4.). In those languages where definiteness is found, the definite article assumes various forms in the different languages, sometimes prefixal (Hebrew, Arabic), sometimes suffixal (Aramaic, South Arabian). Only Arabic has an indefinite article (suffixal). Case is always suffixal in those language which have it. On the other hand, the adjectival ‘relative’ formation (see 5.7.) involves a prefix plus vowel change: *kabīr* ‘great’, *ʾa-kbar* ‘greatest’. Derivational morphology makes frequent use of both prefixes and suffixes.

With verbs, there are two very different series of affixes that indicate the person-gender-number (‘pgn’) of the subject: one series is purely suffixal, the other largely prefixal (but also involving suffixes). Which series is chosen depends on which tense-aspect category is involved; for example, in Central Semitic, the so-called perfect is marked suffixally, the imperfect prefixally. In the prefixal series, suffixes are co-present only in some of the pgn forms; when present, they indicate gender and/or number. – The complex ‘*binyan*’ system of derived verb stems is formed by prefixes together with vowel change; in Arabic and Akkadian, a handful of *binyanim* are formed with infixes *-ta-* (Arabic, Akkadian) and *-tan-* (Akkadian). Mood is expressed suffixally or prefixally or internally, depending on the language.

3.2. Root-and-pattern morphology: Verbs and *binyanim*

Semitic is the best-known example of a language family that, to a large extent, builds its morphology by applying internal vowel patterns to a skeleton of all-consonantal roots. In verbs this is totally systematic, in nouns less so. In general, all verbs (including borrowed verbs) are built formally upon a purely consonantal root — usually trilateral ($C_1-C_2-C_3$), sometimes quadrilateral ($C_1-C_2-C_3-C_4$), more rarely biliteral or having more than four consonants. (The linguistic ‘reality’ of such an abstract, vowelless root is an endless theme for debate; see e.g. the contributions in Shimron (2003), among many others.) The root typically has a rather general but fairly clear overall meaning, flexibly delimiting a certain semantic field. Through a restricted number of fixed pat-

terns of internal vowelizing (coupled with other formal devices), various verbal categories can be expressed in a semi-systematic manner: intensive, pluractional, transitivizing, causative, passive, mediopassive, reflexive, reciprocal, ‘trying to’, iterative, and still other nuances. These fixed vowel patterns (or ‘CV templates’) are commonly called *binyan-im* (Hebrew: ‘building-s’) or ‘Forms’. The *binyan* system varies from language to language — variability regarding what *binyanim* a particular language makes use of, the number of *binyanim* (Arabic has over 10 *binyanim*, Aramaic only 6), their individual form (Arabic C₁aC₂C₂aC₃a = Hebrew C₁iC₂C₂eC₃ ‘Intensive’), and the formal paradigmatic organization of the *binyan* system as a whole. The *binyan* system creates derived verb **stems**; these stems can then be inflected for person, number, and gender in the usual way, using the standard pgn prefixes and suffixes.

By way of illustration, I give here the basic 10-*binyan* system of Arabic for triliteral verbs, ignoring other, rarer *binyanim* that the language also has. (For quadriliteral verbs see below.) Following Semitic convention, the *binyanim* are represented here using a schematic root, here q-b-r ‘bury’; the real concrete root q-b-r does not actually occur in all these *binyanim*. The semantic functions given are only suggestive and approximate, and not at all exhaustive.

Table 10.1: *Binyanim* in Classical Arabic

	Form	Some approximate functions	Passive
I	<i>qabara</i> (sometimes <i>qabira</i> or <i>qabura</i>)	Basic/plain (no special nuance)	<i>qubira</i>
II	<i>qabbara</i>	Intensive, transitivizer, denominal	<i>qubbira</i>
III	<i>qābara</i>	Applicative (IndObject → DirObject)	<i>qūbira</i>
IV	<i>ʾa-qbara</i>	Causative, factitive	<i>ʾu-qbira</i>
V	<i>ta-qabbara</i>	Mediopassive	<i>tu-qubbira</i>
VI	<i>ta-qābara</i>	Reciprocal	<i>tu-qūbira</i>
VII	<i>in-qabara</i>	Passive (agentless)	<i>un-qubira</i>
VIII	<i>i-q-t-abara</i>	Various (often mediopassive)	<i>u-q-t-ubira</i> (infix -t-)
IX	<i>i-qbarra</i>	Colors/defects (‘be red/blind’, etc.)	—
X	<i>ista-qbara</i>	‘Seek to’ Verb, etc.	<i>ustu-qbira</i>

As Table 10.1 shows, the above characterization of *binyanim* as being formed by ‘fixed patterns of internal vowelizing’ only presents part of the picture. In fact, in Arabic (and similarly in all the old Semitic languages) each *binyan* can be characterized formally as some combination of the following factors:

- Selection of a particular vowel pattern
- Gemination of C₂ (or rarely C₃, cf. form IX in Table 10.1)
- Lengthening of the first vowel
- Various prefixes or infixes: in Arabic, prefixes **ʾa-**, **ta-**, **in-**, **ista-**; infix **-ta-**

Different Semitic languages combine these formal factors in different ways to create different language-specific *binyan* systems.

As can be seen, the categories expressed by *binyanim* have to do primarily with voice, with some contribution from aspect and other nuances. The *binyan* system is predominantly derivational, or straddles the border between derivational and inflectional. Formally it is extremely regular. But it is heavily lexicalized: one can seldom

predict *whether* a root can occur at all in a given *binyan*, or precisely *what meaning* it will have if it does occur in the given *binyan*. (Indeed, it is not unusual that a root does not occur in the Plain form at all.) Although it can be said that each *binyan* has a ‘meaning’, this is true only in the broadest and vaguest sense: thus many roots, when put into a ‘mediopassive’ *binyan*, have a clearly passive meaning; others mediopassive; others reflexive or reciprocal; while others have quite idiosyncratic semantics. Mutatis mutandis, the same holds for all the *binyanim*. On the other hand, as can be seen above, Arabic and also Hebrew have a system of passivization by internal vowel change (Arabic: active **a-a-a**, passive **u-i-a**) which can fairly be described as inflectional, inasmuch as both its occurrence and its meaning are fully predictable.

All the Semitic languages have a *binyan* system, though not all of them adhere strictly to the principle of ‘purely consonantal roots’. This is notably the case for bilateral roots: Akkadian is often described as having bilateral roots of the form CV:C (with a root-specific long vowel), as are the modern Ethiosemitic languages (CVC, without vowel length). But such vowel-containing roots also undergo regular *binyan*-related vowel changes, like purely consonantal roots.

Quadriliteral roots, in the Central Semitic languages, conform to the patterns of the geminate *binyanim* of trilateral roots (e.g. Arabic forms II, V in Table 10.1). This is well motivated and reasonable: the geminated slot C_2C_2 in the template is parceled out to two different consonants:

$$C_1VC_2C_2VC_3 = C_1VC_2C_3VC_4 = CVCCVC.$$

However, this isomorphism does not hold in Gəʿəz or Akkadian, and arguably represents a secondary leveling and not the original Semitic pattern of quadriliteral inflection (Gensler 1997).

The *binyan* system powerfully constrains the verbal morphology of the languages. When verbs are borrowed into Semitic they either change their original voweling to conform to the vowels of the *binyan* system, or are borrowed in an invariant nominal form which is combined with a general-purpose verb like ‘be’ or ‘do’. Denominal verbs, whether from Semitic or foreign sources, likewise alter their original voweling where necessary, in order to fit into the *binyan* system.

Above and beyond the basic vowel patterns imposed by the choice of *binyan*, many of the languages display further changes in the exact voweling of particular subclasses of verb (and noun) forms. These changes are morphophonological in nature, and are determined by factors like accent and the presence of various ‘weak’ consonants (notably w, y, ʾ) somewhere in the verb root. Logically, such changes stand apart from the *binyan* system, though they can complicate the surface realization of the *binyanim*.

Verbs also use internal vowel change to express the category of **tense/aspect**, now in tandem with a choice between a ‘prefixing tense’ (largely prefixal subject markers) and a ‘suffixing tense’ (purely suffixal subject markers). Thus we have, for the same Arabic verb given above, the opposition:

Suffixing tense (CaCaC-)	Prefixing tense (-CCVC-)
<i>qabar-a</i> ‘he buried’	<i>ya-qburu</i> ‘he buries/will bury’
<i>qabar-tu</i> ‘I buried’	<i>ʾa-qburu</i> ‘I bury/will bury’ etc.

In Gəʿəz and Akkadian (but not Central Semitic) there are two distinct prefixing tenses, each with its own vowel pattern; one shows gemination of the C_2 , the other does not. (This gemination is inflectional in nature, and stands clearly apart from the derivational gemination seen in the *binyan* system.) Thus:

	Akkadian (root p-r-s)	Gəʿaz (root s-b-r)
Prefixing I:	<i>i-prus</i> 'he cut'	<i>yə-sbər</i> 'let him break'
Prefixing II:	<i>i-parras</i> 'he cuts/will cut'	<i>yə-sabbər</i> 'he breaks/will break'

3.3. Root-and-pattern morphology: Nouns and broken plurals

Nouns (and adjectives) show much greater pattern flexibility than verbs. Whereas *verbs* in a Semitic language must fit into at most 10–15 *binyan* patterns, the native *nominal* vocabulary may show a much higher number of possible CV templates. Any verb can without difficulty be considered to be derived from a root; for nouns, and especially for short (biconsonantal) nouns like *ʾab* 'father' or *yad* 'hand', this is often artificial. On the other hand, like verbs, nouns can typically be derived from a given root by applying standard vowel patterns. Thus in modern Hebrew, from the root *s-b-l* 'suffer, bear', we can form the nominals *savl-anut* 'patience', *sovl-anut* 'tolerance', *sabal* 'a porter', *savil* 'passive', *sevel* 'suffering', etc. (Here *v* is the fricative allophone of *b*.)

As indicated in 3.1., the most basic way to express nominal plurality is with suffixes. However, in the southern Semitic languages (Arabic, South Arabian, Ethiosemitic), it is extremely common instead to express noun plurality by means of internal vowel change (sometimes together with affixation). These so-called 'broken plurals' must in general be learned by rote. They involve just as wide a range of possible vowel patterns as do the singulars, and only sometimes can a given singular pattern be correlated, either absolutely or tendentially, with a given plural pattern. Moreover, a given pattern can be singular with one root, plural with another: compare *kitāb* 'book' and *kilāb* 'dogs' (below), both of the pattern CiCāC. Some Arabic examples of broken plurals:

<i>walad</i> 'boy'	<i>ʾawlād</i> 'boys'
<i>kitāb</i> 'book'	<i>kutub</i> 'books'
<i>kalb</i> 'dog'	<i>kilāb</i> 'dogs'
<i>qalb</i> 'heart'	<i>qulūb</i> 'hearts'
<i>šahr</i> 'month'	<i>ʾašhur, šuhūr</i> 'months'
<i>miftāḥ</i> 'key'	<i>mafātīḥ</i> 'keys'

A given noun can sometimes have both a sound plural and a broken plural, or two competing broken plurals, sometimes (but not always) with a meaning difference. For instance, in Arabic the word *ʾayn* 'eye' covers a wide polysemous range of senses, each marked by its own different broken plural:

<i>ʾayn</i> 'eye'	<i>ʾaʿyun</i> 'eyes'
<i>ʾayn</i> 'spring'	<i>ʾuyūn</i> 'springs'
<i>ʾayn</i> 'notable (person)'	<i>ʾaʿyān</i> 'notables'

On the other hand, Arabic *kāfir* 'an unbeliever' has the broken plural forms *kuffār*, *kafara*, *kifār* as well as the sound plural *kāfirūna*, with no obvious meaning difference.

Broken plurals do not occur outside the above-mentioned groups (except for traces in Hebrew), and in Ethiosemitic they are found only in the northern languages (Gəʿaz, Tigre, Tigrinya). The existence in Arabic, South Arabian, and Ethiosemitic of broken plurals, agreeing in many points of detail across the three groups, was traditionally

Adjectives for the most part have the same morphological forms as do nouns, including the frequent possibility (in South Semitic) of sound vs. broken plurals. Additionally, in Arabic a special 'elative' vowel pattern exists for adjectives, expressing comparative, superlative, or a high degree of the adjective; thus

In South Semitic, certain adjective patterns show not only broken plurals but also ‘broken feminines’, where the feminine is formed by vowel change. Arabic has a few such broken-feminine patterns, notably the elative:

In Tigrinya we have (inherited from Gəʿəz) the pattern-opposition CäCCiC (masc) vs. CäCCaC (fem), e.g.

In Arabic there is also a productive noun-diminutive pattern, of the pattern C₁uC₂ayC₃, which may be applied to almost any basic noun. Thus:

Remarkably, this pattern can even be applied to certain prepositions, e.g.

This is a clear sign of the preposition's nominal origin (grammaticalization). Crosslinguistically it is not common for prepositions to be affected by derivational morphology in this way.

Finally, it should also be mentioned that Semitic languages can easily borrow foreign nouns 'as is', without rearranging their voweling to fit into an acceptable native pattern. With borrowed verbs this is normally impossible.

Compounding as such is almost unknown in Semitic. There are of course lexicalized or semi-lexicalized collocational combinations of two nouns, but structurally these are normally indistinguishable from the Head-Genitive syntagm of the Construct (see 5.3.), and the two collocated nouns may be interrupted by the definite article (just as with the Construct). Thus in Arabic we have *ibn al-sabīl* (lit.) ‘son of the road’, i.e. ‘traveler’, with the article *al-* separating the two combined elements. Only rarely do we find true compounds like Arabic *rās-māl-ī* (lit.) ‘head-capital-Adj’, i.e. ‘capitalist’. In modern (not Biblical) Hebrew, new compounds are not infrequently coined by blending two

roots: for example, from *midraḳa* ‘sidewalk’ + *reḥov* ‘street’ the language has created the compound blend *midreḥov* ‘pedestrian mall’ (lit. sidewalk-street). In the modern Ethiosemitic languages ‘compound verb tenses’ are formed, some of which involve the compounding of a verb form and an auxiliary verb, notably ‘to be’; thus in Amharic

tasäbr-alläčč = ‘she will break’ (lit. she.will.break + she.is)

3.5. Reduplication

Morphological reduplication in Semitic, though it occurs (with both nouns and verbs), is not very highly profiled and tends not to be productive. The reduplication is generally derivational, not inflectional; it usually involves two consonants (C_1C_2) that are repeated, with the resultant four-consonant skeleton ($C_1C_2C_1C_2$) plugged into one of the standard quadriliteral vowel templates, most typically as a verb. Thus, in Hebrew *gilgel* ‘roll’ (g-l-g-l) fits the quadriliteral pattern $C_1iC_2C_3eC_4$ seen e.g. in *tirgem* ‘translate’.

When reduplication applies to a triconsonantal noun, it is generally the last two consonants (and not the entire root) that are repeated:

$C_1C_2C_3 \rightarrow C_1C_2C_3C_2C_3$.

Again such cases are lexicalized, and again the vowels of the reduplicated pattern must conform to some standard 5-consonantal pattern. Sometimes this latter type of reduplication has diminutive value, sometimes not. Examples (Hebrew):

<i>kelev</i> ‘dog’	<i>klavlav</i> ‘puppy’
<i>’adom</i> ‘red’	<i>’adamdam</i> ‘reddish’
—	<i>šrafrāf</i> ‘bench’ [no simplex form]

A very different pattern involves internal reduplication of a CV syllable. This is seen in the frequentative verb form of the modern Ethiosemitic languages, where the C_2 consonant is reduplicated with the fixed vowel *a*. This is an inflectional pattern, not derivational. Thus Amharic has the contrast:

Simplex	<i>säbbärä</i>	‘he broke’
Frequentative	<i>säbabbärä</i>	‘he broke in pieces’

Remarkably, in Tigre this frequentative reduplication can be iterated (the Tigre frequentative has the semantic value of an attenuative or diminutive):

<i>dägmā</i>	‘he told, related’
<i>dägāgāmā</i>	‘he told stories occasionally’
<i>dägāgāgāmā</i>	‘he told stories very occasionally’
<i>dägāgāgāgāmā</i>	‘he told stories infrequently’ (Rose 2003, 112–114)

Finally, many triliteral Semitic roots have a lexical form where the second and third root consonants are identical: $C_1C_2C_2$. Though this might perhaps be considered a kind of reduplication, Semitists usually treat such roots as a type of weak root (‘geminate roots’).

3.6. Other techniques

Incorporation of nouns into verbs, as far as I know, does not exist in any Semitic language, ancient or modern.

Acronyms also can occasionally figure in morphology. For example, from the Arabic phrase *bi-smi allāhi al-rahmān al-rahīm* ‘in the name of Allah, the compassionate, the merciful’, the quadriliteral verb *basmala* ‘to utter this phrase’ (root b-s-m-l) is derived.

Suppletion of various kinds can be found in the pronoun paradigms (as in most languages). Thus, in the prefixing tense in Arabic, the 2nd persons all involve the prefix *ta-*, and most of the 3rd persons involve the prefix *ya-*; but the 3fsg prefix is *ta-* (not *ya-*). And the 1sg and 1pl prefixes are fully suppletive: 1sg *ʾa-*, 1pl *na-*. Suppletion of verb stems is almost non-existent, but it does occur with the verb ‘come’, which in several languages has a suppletive imperative:

	Past (3msg)	Imperative (2msg)
Arabic	<i>jāʾa</i> ‘he came’	<i>taʾāla</i> ‘come!’
Amharic	<i>mätta</i>	<i>na</i>

4. Person-gender-number (pgn) marking: Paradigmatic structure

This section examines the internal structure of pgn paradigms in old Semitic, as seen both in verbs and in pronouns. Consider the following paradigms from Arabic, whose structure (except for the dual) is typical of all the old Semitic languages:

Table 10.2: Affixes of the verb in Classical Arabic

	Verb: Prefix Conjugation		Verb: Suffix Conjugation	Enclitic Pronouns	Independent Pronouns (Nom)
Sg					
1	<i>ʾa-</i>		<i>-tu</i>	<i>-ī, -nī</i>	<i>ʾanā</i>
2m	<i>ta-</i>		<i>-ta</i>	<i>-ka</i>	<i>ʾanta</i>
2f	<i>ta-</i>	<i>-ī(na)</i>	<i>-ti</i>	<i>-ki</i>	<i>ʾanti</i>
3m	<i>ya-</i>		<i>-a</i>	<i>-hu</i>	<i>huwa</i>
3f	<i>ta-</i>		<i>-at</i>	<i>-hā</i>	<i>hiya</i>
Pl					
1	<i>na-</i>		<i>-nā</i>	<i>-nā</i>	<i>naḥnu</i>
2m	<i>ta-</i>	<i>-ū(na)</i>	<i>-tum</i>	<i>-kum</i>	<i>ʾantum</i>
2f	<i>ta-</i>	<i>-na</i>	<i>-tunna</i>	<i>-kunna</i>	<i>ʾantunna</i>
3m	<i>ya-</i>	<i>-ū(na)</i>	<i>-ū</i>	<i>-hum</i>	<i>hum</i>
3f	<i>ya-</i>	<i>-na</i>	<i>-na</i>	<i>-hunna</i>	<i>hunna</i>
Du					
2	<i>ta-</i>	<i>-ā(nī)</i>	<i>-tumā</i>	<i>-kumā</i>	<i>ʾantumā</i>
3m	<i>ya-</i>	<i>-ā(nī)</i>	<i>-ā</i>	<i>-humā</i>	<i>humā</i>
3f	<i>ta-</i>	<i>-ā(nī)</i>	<i>-atā</i>	“	“

Concrete examples of these patterns are (in 2mpl):

Prefix conjugation:	<i>ta-ktub-ū(na)</i>	‘you (mpl) write’
Suffix conjugation:	<i>katab-tum</i>	‘you (mpl) wrote’
Enclitic pronoun:	<i>baytu-kum</i>	‘house-your (mpl)’ (= ‘your house’)

Several notable points emerge from examination of these paradigms and from other considerations:

- (1) Gender is marked not only on the 3rd person but also on the 2nd. This is typologically quite unusual in the world, and Semitic (and Afroasiatic) is probably the best-known example. The 2sg marks gender in both old and modern Semitic languages; the 2dual never does; all the old languages have a gender distinction in the 2pl. Several (not all) of the modern Ethiosemitic languages, e.g. Amharic, have given up gender completely (all persons) in the plural; similarly in many Arabic dialects and in non-normative modern spoken Hebrew. There is no gender distinction in the 1st person.
- (2) There is no distinction between inclusive and exclusive 1pl, nor between alienable and inalienable possessive forms.
- (3) None of the old Semitic languages shows any morphological distinction of politeness (such as *tu* vs. *vous*). In modern Ethiosemitic such a distinction has developed secondarily in some of the languages, e.g. Amharic and Tigrinya (Hetzron 1972, 88–89).
- (4) The dual (in those languages which have it: Arabic, Akkadian, Ugaritic) exists only in the 2nd and 3rd persons. Only in Ugaritic is there a 1st-person dual, and only in the enclitic pronouns and the verbal suffix conjugation: 1pl *-n*, 1dual *-ny*.
- (5) The functional paradigmatic opposition of verbal tense-aspect is expressed by a choice of two completely different paradigms, a prefixing tense (really mixed prefixing-suffixing) and a suffixing tense; for the functions of these forms see 6.1. Not only the positioning but also the form of the personal affixes is very different in the two paradigms (see above).
- (6) In the prefix conjugation, there is a syncretism between 2msg and 3fsg; both are expressed identically with the prefix *ta-* and zero suffix. This pattern is unmotivated and functionally strange, but it is absolutely regular throughout old Semitic and is a hallmark of the family.
- (7) In the prefix conjugation, the forms of the 2nd and 3rd person (except 3fsg) are built up in a regular way from a combination of prefix and suffix: the prefix determines the person (*ta-* ‘2nd person’, *ya-* ‘3rd person’), while the suffix indicates gender and number. By contrast, the 1st person forms are built in a completely different way: the prefixes for 1sg (*’a-*) and 1pl (*na-*) are suppletive, and the 1pl takes no plural suffix. Thus:

’a-ktub- ‘I write’ *na-ktub*- ‘we write’.

This paradigmatic asymmetry (2nd/3rd persons regular, 1st person suppletive) is again a hallmark of old Semitic and of almost all modern Semitic languages as well. Only in the Arabic dialects of Northwest Africa (Maghrebi) has the 1st person undergone paradigm leveling to conform to the general regular pattern:

na-ktub ‘I write’ *na-ktub-ū* ‘we write’

on the model of

ya-ktub ‘he writes’ *ya-ktub-ū* ‘they write’

(schematic data; the actual phonetic forms vary from dialect to dialect). It is interesting that the old 1pl and not the 1sg provides the base for these new forms.

- (8) In the suffix conjugation, the consonant of the 1st and 2nd person endings varies across the languages. Arabic (representing Central Semitic) has *tulta/ti* (see above); Gəʿəz has *kul/kalki*; Akkadian has *kul/talti*. Plausibly the original pattern is the heterogeneous one seen in Akkadian (1sg *k*, 2sg *t*). In Central Semitic *t* spread analogically to both persons, in Geʿez *k* – a prototypical illustration of reconstructing ‘archaic heterogeneity’ (Hetzron 1976).
- (9) The series of enclitic pronouns can be appended to nouns (as possessor), to prepositions (as object of the preposition), to verbs (as object of the verb), and language-specifically to a small number of particles. Essentially the same single paradigm is used for all these functions, except in the 1sg: verbs take *-nī*, nouns and prepositions take *-ī*. Thus in Arabic:

	Verb	Noun	Preposition
1sg	<i>samīʿa-nī</i> ‘he heard me’	<i>bayt-ī</i> ‘my house’	<i>ʿind-ī</i> ‘with me’
2msg	<i>samīʿa-ka</i> ‘he heard you’	<i>baytu-ka</i> ‘your house’	<i>ʿinda-ka</i> ‘with you’

Akkadian has two distinct series of verbal object enclitics, for direct and indirect objects: in 2msg, accusative *-ka* vs. dative *-ku(m)*.

- (10) As regards the independent pronouns, most of the languages have not only nominative but also (verbal) object forms. These independent object forms are structurally quite unlike the nominative forms; rather, they are generally built on a language-specific ‘oblique pronoun base’ to which the enclitic pronouns are added. Thus for the object independent pronoun in the 2msg (enclitic *-ka*), we have Hebrew *ʾot-ka*, Arabic *ʾiyyā-ka*, and Gəʿəz *kiyā-ka*. Akkadian diverges here, and moreover has (as with the object enclitics) two distinct object pronoun series, accusative and dative: the 2msg forms are respectively *kātīla* and *kāšim*. Some of the languages also have independent possessive pronouns.

5. Morphological categories of the noun

Nouns and adjectives in Semitic have almost identical morphological properties. It is very difficult to distinguish them on purely formal grounds, the more so as an adjective by itself can always function as a noun (cf. English ‘the poor’). Thus what is said below for nouns applies also to adjectives, with one exception to be noted.

The basic morphological categories of nouns in Semitic are gender and number; Construct; case, in those languages which preserve Proto-Semitic case (Arabic, Akkadian, Ugaritic, Gəʿəz) or which have created a new case system (e.g. Amharic); and definiteness, in those languages which have innovated this category (Hebrew, Aramaic, Arabic, South Arabian, some modern Ethiosemitic). I will examine these in turn below.

5.1. Gender

Gender is defined in terms of agreement patterns, and this does not present any difficulty in Semitic. There are two genders, masculine and feminine. Generally a noun’s gender is reflected formally on modifiers and on the verb: a masculine noun will take masculine modifiers, will be referred to with a masculine pronoun, and will trigger

masculine gender on the verb of which it is the subject, and thus also for feminine. The form of the noun itself is not a reliable guide to its gender. Often but not always feminine nouns are marked with a distinctive feminine ending, most commonly *-a(t)*; but some feminine nouns do not take such an ending, and a few masculine nouns take a feminine ending.

5.2. Number

Number in Proto-Semitic had three values: singular, dual, plural. The dual has disappeared partly or entirely in many of the languages, even the old languages; it is most fully functional in Arabic, where not only nouns but also verbs (in 2nd and 3rd person only) have a dual inflection. The dual is always expressed suffixally, e.g. Arabic *-āni*. The plural can be expressed either externally, by plural suffixes (Arabic *-ūna* ‘mpl’, *-āt* ‘fpl’), or in some languages by internal vowel change (‘broken plural’); see 3.1., 3.3.

There is an interaction between gender and number in some Semitic languages which, though syntactic in nature, has morphological ramifications. In Arabic, and to a minor degree in some of the other languages, an inanimate plural noun regularly takes feminine singular concord:

<i>al-rijāl</i>	<i>al-kibār</i>	<i>rajaʿ-ū</i>	‘the big men returned’
the-men	the-big.Pl	returned-3mpl	

vs.

<i>al-kutub</i>	<i>al-kabīr-a</i>	<i>saqaṭ-at</i>	‘the big books fell’
the-books	the-big-fem.sg.	fell-3fsg	

If gender is to be defined strictly in terms of agreement patterns, then it would seem that we have here a covert gender distinction involving animacy, crosscutting the standard division into masculine and feminine: inanimate plurals take fsg concord, animate plurals do not. I will not follow through on the implications of this, however.

5.3. Construct

In all the old Semitic languages, a noun which functions as Head Noun in a possessive construction appears in a special form called the Construct. The Construct is one of the most characteristic hallmarks of the Semitic family. It is a head marking pattern, but it differs from the crosslinguistically common type of possessive head marking, where the head marker consists in the presence of a possessive pronoun suffix on the Head (the type ‘his-book John’). Rather, the Construct simply marks the fact of possession per se; it sends a formal signal that the head is about to be followed by a genitive dependent – schematically ‘book-**of** John’. This holds for both nominal and pronominal genitive dependents: when a noun takes a possessive-pronoun enclitic, the noun stem assumes a form which is identical or very similar to the Construct (cf. Hebrew *bēt-ī* ‘my house’ in table 10.3). Note that in case-marking languages, the Construct head-marking strategy coexists with dependent marking, viz. genitive case marking on the dependent.

Viewed purely as a word-form, a head noun in Construct can in general (though not always) be seen as formally *reduced* in some way, either phonologically or morphologically or both, and in different ways in different languages (in particular, a Construct form always discards mimation or nunation; see 5.6.). I will illustrate this for several of the old Semitic languages.

Table 10.3: Plain and Construct in several old Semitic languages

	Plain (isolation)	vs.	Construct (with following dependent)
Arabic	<i>bayt-u-n</i> ‘a house’ house-Nom-Indef <i>al-bayt-u</i> ‘the house’ Def-house-Nom <i>muslim-ūna</i> (Pl) ‘Muslims’ <i>muslim-āni</i> (Du) ‘2 Muslims’		<i>bayt-u al-rajul-i</i> ‘the man’s house’ house-Nom the-man-Gen <i>muslim-ū al-balad-i</i> ‘Muslims of the city’ Pl Def-city-Gen <i>muslim-ā al-balad-i</i> ‘2 Muslims of the city’ Du
Akkadian	<i>būt-um</i> ‘(the) house’ house-Nom		<i>būt-Ø</i> house <i>awīl-im</i> man-Gen ‘(the) man’s house’
Hebrew	<i>bayit</i> ‘house’ <i>malka-Ø</i> ‘queen’ <i>sūs-īm</i> ‘horses’		<i>bēt</i> <i>David</i> ‘house-of David’ <i>bēt ha-melek</i> ‘house-of the-king’ <i>bēt-ī</i> ‘my house’ (house-my) <i>malka-t</i> <i>David</i> ‘David’s queen’ <i>malka-t-ī</i> ‘my queen’ (queen-my) <i>sūs-ē</i> <i>David</i> ‘the horses of David’
Gəʿəz	<i>bet</i> ‘house’		<i>bet -a</i> <i>nəguś</i> ‘(the) king’s house’

In Arabic, nouns in isolation are marked as either definite (*al-*) or indefinite (*-n*); but a noun in Construct normally cannot take either of these markers, hence is shorter. In the plural and dual the Construct ending (*-ū*, *-ā*) is shorter than the plain ending (*-ūna*, *-āni*). In Akkadian, for singular nouns, the formal reduction consists in the absence of case marking on the Construct noun (oversimplified somewhat). In Hebrew, some noun stems show a phonological reduction in the Construct form (*bayit* vs. *bēt*). Construct nouns in masc-pl show a special Construct ending *-ē* (which is shorter than *-īm*); on the other hand, fem-sg Construct nouns violate the reducing tendency by adding a sound (*-t*). Finally, in Gəʿəz, quite remarkably, the Construct form is *longer* than the plain form: it is formed by adding the ending *-a*, an ending which (again remarkably) is identical to the accusative case marker of the plain noun. In both Akkadian (singular nouns) and Gəʿəz, formation of the Construct has the effect of removing a case opposition which does get expressed on the non-Construct noun.

Three more general points about the Construct can be made. First, the bond connecting a Construct noun to its following dependent is extremely tight:

- The elements cannot ever be reversed;
- Definiteness can only be marked once on the entire combination, on the dependent noun (never on the head noun), cf. Hebrew *bēt ha-melek* ‘house-of the-king’ above;
- Normally nothing at all can interrupt the sequence of head and dependent.

Second, Biblical Hebrew is written with a system of stress marks which show the accented syllable in each word; but in Hebrew a noun in Construct is normally written as unaccented (or as having only a secondary accent). This indicates that the combination of [HeadNoun + Dependent] in essence functions as a single accentual unit, with the accent (interestingly) always falling on the dependent noun, not the HeadNoun. Plausibly this held not just for Hebrew but for older Semitic as a whole. This leads to the third point. Though Semitic languages lack any morphological category of ‘compound words’, the combination of a Construct noun and its following dependent is structurally very similar to compound nouns in non-Semitic languages. The bond between the two elements is extremely tight, as just noted, and the combination takes only a single accent, as if it were a single word. The only significant aspect of compounding which is missing here is the fact of lexicalization: compound nouns normally are *lexicalized* combinations, whereas in Semitic the [Construct + Dependent] combination can be built up out of any nouns at all.

5.4. Case

Old Semitic has a core system of three cases (‘triptote’). Their basic endings are found in near-identical fashion in Arabic, Akkadian, and Ugaritic, and reconstruct unproblematically to Proto-Semitic: nominative *-u*, accusative *-a*, genitive *-i*. Some languages, notably Akkadian, have one or two other cases or case remnants, e.g. the Akkadian terminative case *-iš* and locative *-um*; but these are marginal compared to the other three. Akkadian also has a dative case, but it exists only for pronouns, not for nouns. Functionally, the nominative is used for the subject of the sentence and for predicate nominals in verbless sentences; the accusative is used for the verbal object, various adverbial functions, and after certain copular verbs and particles; and the genitive is the adnominal case, used for noun possessors and for objects of prepositions.

However, not all noun forms distinguish all three cases. Various kinds of two-case (‘diptote’) declensions are found in Semitic, featuring (language-specifically) all possible two-versus-one syncretisms of the 3 cases:

Nom	vs.	Acc/Gen (= Oblique)
Nom/Gen	vs.	Acc
Nom/Acc	vs.	Gen

In Arabic, diptotes distinguish nominative *-u* vs. an all-purpose oblique *-a* (i.e. Nom vs. Acc/Gen); such Arabic diptotes have the strange characteristic that their inflection becomes triptote if the noun is supplied with the definite article. Nouns taking the external plural and dual endings also show diptote patterning, and not just in Arabic:

	Arabic	Arabic	Akkadian	Akkadian
	Nominative	Oblique	Nominative	Oblique
Plural	<i>-ū(na)</i>	<i>-ī(na)</i>	<i>-ū</i>	<i>-ī</i>
Dual	<i>-ā(ni)</i>	<i>-ay(ni)</i>	<i>-ā(n)</i>	<i>-ī(n)</i>

In Gǝʿəz, owing to phonological change (merger of Proto-Semitic *u, *i > Ø), a diptote case system of a second kind emerged, involving accusative *-a* vs. -Ø for all other case functions (i.e. Nom/Gen vs. Acc). In Akkadian there is still a third type of diptote

system, found in nouns that take a pronominal suffix; in such forms only the genitive case shows a non-zero ending (i.e. Nom/Acc vs. Gen):

Nominative	Accusative	Genitive	
<i>bēl-u(m)</i>	<i>bēl-a(m)</i>	<i>bēl-i(m)</i>	‘lord’
<i>bēl-ka</i>	<i>bēl-ka</i>	<i>bēl-ī-ka</i>	‘your lord’

Moreover, some nouns in Arabic show no case inflection at all. All this produces a case-marking system which, though simple at first glance (the basic *-u/a/i* trichotomy), actually shows a complex mix of declensions. The morphology of case-marking is thus a ‘messy’ phenomenon in Semitic, and can be profitably studied typologically alongside other language families having complex declensional systems that show case syncretisms.

Note finally that in Amharic a completely new accusative case marker *-n* has arisen, which is only used with definite objects.

5.5. Definiteness

Definiteness seems not to have been a morphological category of Proto-Semitic. Akkadian does not indicate definiteness at all, and Gəʿəz only in an incipient or covert way. In those languages which do have a definite article, the formal variation is striking. The article, though always affixal, is a prefix in some languages, a suffix in others. Thus Hebrew has the prefix *ha-*, Arabic has the prefix *al-*, whereas Aramaic uses the suffix *-ā* and South Arabian has the suffix *-n*. Amharic has innovated a new definite suffix *-u* from the old 3sg possessive clitic ‘his’ (see 2.). Nouns which have a pronominal possessive suffix, or which occur in the Construct form (and thus take a following dependent genitive), do not take the article. An indefinite article is found only in Arabic, where its suffixal form (nunation: *-n*) contrasts with the prefixal definite article *al-*, so that ‘definiteness’ is expressed in two different slots:

al-kitābu ‘the book’ vs. *kitābu-n* ‘a book’.

(Note that *-n* is an indefinite marker in Arabic, but a definite marker in South Arabian.)

5.6. Mimation and nunation

In some of the old languages a noun suffix *-m* (mimation) or *-n* (nunation) appears, whose function varies from language to language and is often elusive. In Akkadian mimation appears (inconsistently) when the noun occurs ‘bare’, but not when it takes a pronominal suffix or appears as a Construct form (with following dependent genitive noun). This function is typologically striking: the use of a suffix to mark the *absence* of any following dependent. In Arabic, by contrast, nunation has the function of marking indefiniteness. In South Arabian nunation instead marks definiteness, while mimation (though common) is of unclear function.

5.7. Elative (adjectives)

There is one nominal category which is particular to adjectives, not nouns: the elative of Arabic. This is formed directly from the root, not from any particular derived nominal form, and always has the form 'a-C₁C₂aC₃; it also has its own special 'broken feminine' form C₁uC₂C₃ā. Functionally the elative covers a flexible range of meanings: comparative, superlative, but also simply a high degree of the adjective. Thus 'akbar (from k-b-r 'great') can mean 'greater, greatest, or exceedingly great'. If the elative exists at all outside Arabic, it is only in traces.

6. Morphological categories of the verb

Verbs in the old Semitic languages inflect for many categories: pgn of subject and object, tense-aspect, voice and valence-changing, mood, negation (some of the modern languages), and *binyanim*. Additionally, verbs have a number of derived nominal forms: active participle, passive participle (or in Akkadian 'verbal adjective'), and infinitive or verbal noun. Verbs in Ethiosemitic also have a converb form, sometimes referred to as a 'gerund', which inflects for subject but in a different way from true finite verbs. For discussion of pgn morphemes see 4.; for discussion of the *binyan* system see 3.2.

6.1. Tense-aspect

Formally the most basic tense-aspect opposition in Semitic is binary: a prefixing tense vs. a suffixing tense. In Akkadian and Gə'əz (but not Central Semitic) there are two distinct prefixing tenses, one involving gemination and one not. The functional distribution of these two or three forms varies strikingly from language to language: Akkadian shows one functional pattern, Gə'əz another, and Central Semitic a third. Moreover, within individual languages there is a perennial debate among Semitists as to whether the various functions of the forms are better described and labeled as tenses or as aspects. I will not take any stand on this debate. For convenience I refer to the forms in question as 'tenses'. Also for convenience, I sometimes refer to their functions in Central Semitic as 'perfect' and 'imperfect'. In fact most of the forms can fulfill both tense and aspectual functions in particular environments.

Here I present in tabular form the three patterns of functional distribution just mentioned. The verb forms are given in the 2msg, using the schematic root q-b-r 'bury'. Central Semitic is represented by Arabic.

	Suffixing	Prefixing-I	Prefixing-II
Akkadian	<i>qabrā-ta</i> : Stative	<i>ta-qbur</i> : Past	<i>ta-qabbar</i> : Pres-Future
Gə'əz	<i>qabar-ka</i> : Past	<i>tə-qbər</i> : Subjunctive	<i>tə-qabbər</i> : Pres-Future
Arabic	<i>qabar-ta</i> : Past	<i>ta-qbur-</i> : Pres-Future	—

Although drastically simplified both formally and functionally, the table conveys the basic outline of the three systems. The vertical ordering of the languages also reflects

what most Semitists believe to have been the diachronic development of the systems: the Akkadian system is most archaic, then Gəʿəz, with Central Semitic (here Arabic) the most innovative. Note that in some Central Semitic languages, the Prefixing-I form (normally Present-Future) preserves its archaic past-tense usage in restricted contexts — in Arabic in negatives, in Hebrew in narrative tenses. Thus:

Arabic	<i>ta-qburu</i> ‘you bury’	<i>lam ta-qbur</i> ‘you did not bury’
Hebrew	<i>ti-qbor</i> ‘you bury’	<i>wa-tti-qbor</i> ‘and you buried’

In addition to the basic system presented above, tense-aspect in different Semitic languages can be expressed in four other ways. First, the consonantal CV skeleton of the verb stem can be altered by infixes, gemination, or internal reduplication to express aspectual concepts. These forms look like *binyan* forms, but not all of them are considered to be part of the *binyan* system. Thus the Semitic *binyanim* with geminate second radical, e.g. C₁aC₂C₂aC₃a, can sometimes express pluractionality. Akkadian has an iterative *binyan* with infix *-tan-*, and a form with infix *-ta-* (homonymous but not identical to a *binyan* which is formed with *-ta-*) which expresses the perfect: thus from the root *p-r-s* ‘cut’ we have *ip-tan-arras* and *ip-ta-ras*. And in modern Ethiosemitic a frequentative form (not considered a *binyan*) is formed by internally reduplicating the second syllable (see 3.5.): thus in Amharic from the verb *s-b-r* ‘break’ we have

Plain	<i>säbbärä</i>	Frequentative: <i>säbabbärä</i> .

Second, verb forms can be preceded by various particles (typically proclitic) which convey a particular tense-aspect value: pluperfect, progressive, future, etc. This phenomenon is not particularly common in older Semitic, but is near-universal in modern dialects of Arabic and Neoaramaic.

Third, a non-finite verb form can assume the function of a finite verb, expressing various tense-aspect values. This happens especially with the participle. In modern Hebrew the ‘bare’ active participle (inflecting only for gender and number) has become the normal present-tense form. In modern eastern Neoaramaic, the situation is much more extreme: nonfinite forms, now inflected with various enclitic pgn markers, have taken over the entire verbal system, as will be discussed below (6.5.). In Tigrinya, the converb (gerund) often functions as a finite verb (Voigt 1977, 143ff.).

Fourth, many of the languages, both old and modern, can express various tense-aspect nuances via compound verb tenses, built with a helping verb (notably but not exclusively ‘to be’). In Ethiosemitic these compound tenses are sometimes univerted, in some cases with phonetic shortening, as in Amharic:

yə-säbr-all ‘he breaks’ (from *yə-säbr* + *allä* ‘be’).

Such compound tenses may be constructed (language-specifically) from various forms of the main verb: prefixing tense, suffixing tense, participle, converb. Usually both pieces of the compound show pgn inflection.

6.2. Voice and valence-changing

Voice and valence-changing are expressed predominantly through the derivational *bin-* system. Depending on the language, a given root may form a plain stem, a causa-

tive, a mediopassive, a true passive, an applicative, a reflexive, and/or a reciprocal — alongside other *binyanim* whose value does not have to do with voice, such as the geminate *binyan* (Form II). For morphological details of how this system looks in Arabic, see 3.2. In two languages, Hebrew and Arabic, it is also possible to form the passive of any *binyan* by internal vowel change; for example, in Arabic we have *kataba* ‘he wrote’ vs. *kutiba* ‘it was written’ in Form I, or *ʾa-nzala* ‘he brought (something) down’ vs. *ʾu-nzila* ‘it was brought down’ in Form IV. In languages like Aramaic and Ethiosemitic, passive and middle voice are both expressed by the same *binyan* (in *ta*-).

6.3. Mood

All verbs in Semitic have a special prefixless mini-paradigm for the imperative (distinguishing gender and number). Aside from the imperative, mood in the old Semitic languages is expressed only in the prefixing tense. In Central Semitic, and especially in Arabic, the coding of mood is localized at the slot immediately following the verb stem. Thus in Arabic we have a four-way mood opposition:

<i>ya-ktub-u</i>	‘he will write’ (Indicative)
<i>ya-ktub-a</i>	‘that he (should) write’ (Subjunctive)
<i>ya-ktub-Ø</i>	‘let him write’ (Jussive; also other functions)
<i>ya-ktub-an(na)</i>	‘he will indeed write’ (Energetic)

In plural forms the mood suffixes show syncretism:

<i>ya-ktub-ūna</i>	Indicative
<i>ya-ktub-ū</i>	Subjunctive/Jussive
<i>ya-ktub-un(na)</i>	Energetic

Various parts of this system are found to varying degrees in the other Central Semitic languages.

In Gəʿəz, which has two prefixing tenses, it is the choice between these that expresses mood:

<i>yə-sabbər</i>	‘he will break, he breaks’	(Indicative)
<i>yə-sbər</i>	‘that he break/let him break’	(Subjunctive, Jussive)

In Akkadian what has been traditionally called the ‘subjunctive’ (marked by suffixes *-u* in Old Babylonian, *-ni* in Old Assyrian) is a misnomer: it is not a marker of subjunctive mood but a general-purpose marker of subordinated finite verbs, totally different functionally from the West Semitic subjunctive. Rather, Akkadian expresses mood through preverbal particles, notably the precativ particle *l-* (used for wishes and indirect commands) and the asseverative particle *lū* ‘indeed’ (used in oaths, *inter alia*). Such particles exist in other old Semitic languages as well.

6.4. Negation

In the old Semitic languages, the negator is a separable word (e.g. Arabic *lā*). However, in the modern Ethiosemitic languages unverbated negative verb forms have been created by prefixing or circumfixing a negative particle. For example in Amharic:

<i>säbbärä</i> ‘he broke’	<i>al-säbbärä-mm</i> ‘he did not break’
<i>yə-säbr-all</i> ‘he breaks’	<i>a-y-säbr-əmm</i> ‘he does not break’

Similar circumfixation, though not so clearly univerbated, is frequent in the modern Arabic dialects (schematic example):

<i>katab</i> ‘he wrote’	<i>mā katab-š</i> ‘he did not write’

6.5. The verb system of Neoaramaic

In modern eastern Neoaramaic, the architecture of the verbal system has undergone a fundamental change. The old Semitic prefixing and suffixing tenses (clearly seen in older Aramaic and in modern western Neoaramaic) have disappeared, except for the imperative. In their place a new series of tenses has arisen, built upon historically non-finite forms as base: active participle, passive participle, verbal noun. To these non-finite bases are added a pronominal enclitic to indicate verbal subject, and (if relevant) another enclitic to indicate pronominal object. Other non-personal proclitics and enclitics are added to specify particular tenses that are built upon the given base form. It should be noted that such non-finite-based verb forms are a common areal feature of northern Iraq, northwestern Iran, and eastern Turkey, and their introduction into Semitic Aramaic represents a contact phenomenon (Stilo 1981).

There are many Neoaramaic dialects, all with small differences. In the Amadiya dialect described by Hoberman (1989) there are 5 stems, each serving as a base for one or more verb tenses. Using Hoberman’s terminology, from the root p-t-x ‘open’ we have the bases (1989, 27, 35ff.):

(1) O-stem:	<i>ptox</i>	(old imperative)
(2) J-stem:	<i>patx</i>	(old active participle)
(3) P-stem:	<i>ptix</i>	(old passive participle)
(4) Pt-stem:	<i>ptixa</i>	(old passive participle)
(5) C-stem:	<i>ptaxa</i>	(old verbal noun)

As mentioned, the base is followed by one or two personal pronominal enclitics. These enclitics fall into 3 series, of which only two need be mentioned here: a series called ‘L’ (built on the old Syriac preposition *l-* ‘to’) and a series called ‘A’ without *l-* (which continues the old subject clitics of Classical Syriac, cf. 7.2.). When two such clitics cooccur, they follow the ordering VerbStem-A-L. What is remarkable about this sequence is that, in some tenses, A represents the subject and L the object, whereas in other tenses it is exactly the reverse. Hoberman (1989, 95) gives these examples involving inverse interpretations of the identical suffixes *-ax-* (A) and *-lu* (L):

<i>qam-mpaḷt-ax-lu</i>	‘we removed them’
Past-remove-1pl-3pl	
<i>mpṭṭḷt-ax-lu</i>	‘they removed us’
removed-1pl-3pl	

The difference inheres in the stems: *mpaḷt* is the J-stem, while *mpṭṭḷt* is the P stem. Different stem-types prescribe different semantic roles for the selfsame personal enclitics in the selfsame slots. This phenomenon, too, is an areal feature and its genesis in eastern Neoaramaic involved contact.

7. Syntagmatics

7.1. Complexity of words, degree of synthesis, degree of fusion

Words in most Semitic languages are of medium length. Particles are usually monosyllabic (sometimes as proclitics or enclitics); nouns can sometimes be monosyllabic, verbs seldom. Classical Arabic has the potential for forming quite long words, and there are perhaps a half-dozen 8-syllable words attested in the Koran, e.g.

wa-la-yubaddil-anna-hum
and-Emphatic-he.exchange-Energetic-them
'and indeed he will give (it) to them in exchange' (Koran 24:55)

But this is exceptional. Impressionistically, most words are from two to four syllables long.

This medium average length for words reflects a medium degree of synthesis. In Arabic, verbs can encode simultaneously the categories of subject pgn, object pgn (enclitic), voice, mood, tense/aspect, and *binyan* (derived verb stem); nouns can encode the categories of gender, number, case, definiteness, Construct, and pronominal possessor (enclitic). Polysynthesis is impossible, given the strong constraints against compounding and incorporation in the family (3.4., 3.6.).

Despite the prevalence of root-and-pattern morphology in Semitic, which often makes it impossible to linearly segment off distinct morphemes, nonetheless there is only a medium degree of fusion. Often a given vowel pattern will express just one function — for example, with internal (broken) plurals of nouns. In verbs, several categories can be expressed simultaneously by a given pattern. Thus in the Arabic form *ya-drus-u* 'he learns', the stem *-drus-* conveys voice (active), tense/aspect (imperfect), and *binyan* (Form I). Contrast:

Form I, imperfect, active	<i>ya-drus-u</i> 'he learns'
vs. Form I, imperfect, passive	<i>yu-dras-u</i> 'it is (being) learned'
Form I, perfect , active	<i>daras-a</i> 'he learned'
Form II , imperfect, active	<i>yu-darris-u</i> 'he teaches'

Here three categories are expressed fusionally through the choice of vowel pattern. This is probably the maximum. Other verbal categories (pgn of subject, pgn of object, mood) are expressed by means of their own clearly separable affixes. The pgn markers are themselves fusional, often inseparably combining person, gender, and number (again, three categories) into a single portmanteau morpheme.

7.2. Clitics

All the old Semitic languages have a series of enclitic pronouns which can be attached to verbs, nouns, prepositions, and some particles to express a pronominal complement of the given host; thus in Arabic:

<i>ra'aytu-hu</i> 'I saw him'	<i>baytu-hu</i> 'his house'
<i>'inda-hu</i> 'with him'	<i>lākinna-hu</i> 'but he'

Additionally, Classical Syriac (Aramaic) has a distinct series of enclitic *subject* pronouns, essentially shortened versions of the independent pronouns, which the language makes heavy use of to express the subject in zero-copula sentences.

Semitic also has a small number of proclitic monosyllabic prepositions which are written and pronounced as part of the host word: *bi-* ‘in’, *li/la-* ‘to’, *ka-* ‘like’, and *mi-* or *ʾəm-* ‘from’ are some of the most common. And there are a variety of clitic particles, different in different languages. The general Semitic conjunction *wa-* ‘and’ is proclitic; Arabic has verbal proclitics like *sa-* ‘Future’, *li-* ‘in order that’, *la-* ‘Emphatic’, *ʾa-* ‘Question’. There are also enclitics in some languages, as for example in Gəʿəz *-sa* ‘but’, *-hi/-ni* ‘even’, *-ke* ‘therefore’, *-ʾa* ‘Quotative’; the multipurpose Akkadian enclitic *-ma* (roughly ‘and’) is another case in point.

7.3. Some notes on linear ordering of morphemes

Usually only a single enclitic object pronoun can be attached to a given verb. In Arabic, Gəʿəz and Akkadian a verb can take two enclitic pronouns, representing notional direct object (DObj) and indirect object (IObj). These always occur in the order V-IObj-DObj, a pattern which recurs elsewhere in Afroasiatic (Gensler 1998). In Akkadian, the IObj pronoun is taken from the language’s special dative series; in Arabic and Gəʿəz both pronouns are drawn from the same single series of pronouns. Thus in Arabic:

zawwajnā-ka-hā ‘we married her to you’ (Koran 33:37)
we.married-2msg-3fsg.

In the unverbated compound tenses of modern Ethiosemitic languages (of the form Verb + BE), an object pronominal suffix is usually positioned *between* the main verb and the helping verb; thus Leslau (1995, 421) for Amharic:

yənägr-all ‘he tells’ vs. *yənägr-äññ-all* ‘he tells **me**’.

This is also true for standard Tigrinya. But in at least some Tigrinya dialects, the object marker *follows* the combination of MainVerb + BE (Voigt 2006, 897 on the Mayč’ew dialect).

For the curious phenomenon in eastern Neoaramaic, whereby the selfsame sequence of two enclitic personal markers can have inverse interpretations as subject and object depending on the tense, see 6.5.

In those languages that have case, the case suffix immediately follows the noun stem; it is followed in turn by either nunation/mimation, or a possessor clitic, or nothing. In Arabic:

<i>al-bayt-u</i>	Def-house-Nom	‘the house’
<i>bayt-u-n</i>	house-Nom-Indef	‘a house’ (nunation)
<i>bayt-u-ka</i>	house-Nom-2msg	‘your house’

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11. Syntactic Typology of Semitic

1. Preliminary remarks
2. Noun phrase
3. Simple clause
4. Complex clause
5. Abbreviations
6. References

Abstract

The present article deals with the typological profile of the entire Semitic language family. The relevant syntactical features of the Semitic languages are discussed and exemplified with numerous examples. The article is divided into several subchapters that cover the noun phrase and the simple clause as well as the complex clause. The approach is strictly synchronic and functionally oriented.

1. Preliminary remarks

The present article covers the entire Semitic language family. Some varieties may occur more prominently than others, but it is the aim of this chapter to present data on all the sub-groupings of Semitic. Due to limitations of space and practical considerations, not all linguistic features can be discussed adequately. The methodological approach is strictly synchronic, the methodology used is inductive and functionally oriented.

Synchronically, the typological profile of Semitic is quite diverse. Whereas the syntactic structure of the older languages on the whole exhibits a rather uniform character with only minor deviations from a common type, the modern languages present a typologically multi-faceted picture with greater differences between the individual language groups.

The transcription of the linguistic data has been standardised. In the case of some ancient languages, however, transliteration rather than transcription is used. Akk is transcribed rather than transliterated. The data for modern languages follow the orthography of their sources as closely as the aforementioned standardisation allows.

2. Noun phrase

2.1. General structure

Both types of NP structure, left- and right-branching, are attested, the extremes represented by languages such as CA and Amh:

Table 11.1: Left- and right-headed noun phrase structures

CA (left-headed)	Amh (right-headed)
n – gen <i>naşru llāh-i</i> (Sura 110: 1) help god-GEN 'god's help'	gen – n <i>yä-tāmari māşhaf</i> (Leslau 1995, 192) poss-student book 'a student's book'
n – adj <i>(a)ş-şirāt-a l-mustaqīm-(a)</i> (Sura 1: 6) ART-path-ACC ART-straight-ACC 'the straight path'	adj – n <i>təllək bet</i> (Leslau 1995, 208) big house 'a big house'
n – rel <i>rağulun māta 'abū-hu</i> (Reckendorf 1921, 415) man he=died father-his 'a man whose father died'	rel – n <i>yä-mättu säwočč</i> (Leslau 1995, 81) REL-they=came persons 'people who came'
prp – n <i>'alā l-minbari</i> (Reckendorf 1921, 219) on ART-pulpit 'on the pulpit'	n – pop <i>meda-w (bä-)tačč</i> (Leslau 1995, 632) field-ART in-under 'below the field'

Overall left-headed structures predominate, the right-headed structures being a secondary development in modern Ethio-Semitic (Voigt 2005, 442; Weninger 2005, 735). No language is tyrannically rigid in its NP structure, though, one usually finds elements in other positions, e.g. the definite article which CA preposes (*al-ḥamdu* Sura 1: 2 [ART-praise] 'the praise'), and Amh postposes (*färäs-u* Leslau 1995, 155 [horse-ART] 'the horse'). In addition, there are prepositions in the Amh AP (e.g. *kä-bet-u* ibid., 605 [from-house-his] 'out of his house') and many circumpositions (e.g. *ə-gäbäya wəst* ibid., 639 [in-market inside] 'at the market').

The order of modifiers is rather fixed in many languages. This applies above all to the noun in genitive position, the adjective and the definite article, if present. Exceptions can be found, though, e.g. *Gəz* which usually postposes the genitive (*nəguš-ä käladowon* Dillmann 1866, 1 [king-cst Ch.] 'the king of the Chaldeans'), but also preposes it with *zä-*, cf. *zä-lelit šälästu šälotat* (Praetorius 1886, 122) [poss-night three prayers] 'three prayers for the night'. In *Tna*, modifiers usually precede the head noun incl. the analytical genitive with *nay*, but a noun in genitive function follows, cf. *gäza wanna 'atä käḫti* (Kogan 1997, 433) [house owner that cattle] 'the house of the owner of the cattle'. As for the adjective certain languages show some variation, e.g. *Mand dakia ruşuma* (Nöldeke 1875, 318) [pure sign] 'the pure sign' vs. *ruşumia dakiia* (ibid., 319) [signs pure] 'the pure signs'.

The position of demonstratives or numerals shows more flexibility. Whereas some languages have a rather rigid order, others allow greater freedom. In CA, demonstratives precede their head noun if it has the definite article, otherwise it must follow: *hādā r-rağulu* (Fischer 1997, 200) [this ART-man] 'this man' vs. *kitāb-ī hādā* (ibid.) [book-my this] 'this book of mine'. Modern Ar dialects generally adhere to the classical rules (Brustad 2000, 112ff.), but the order can be reversed: *Mor qāl l-u fayn hād dār-i* (ibid., 123) [he=said to-him where this house-my] 'he said to him: Where is this house of mine?!'. Already older Aram allows demonstratives to precede or follow their head

noun, cf. BA *dnā binyānā* (Ezra 5, 4) [this building] ‘this building’ vs. EA *byr’ znh* (Segert 1975, 323) [house this] ‘this house’.

The general organization of the Semitic NP may be summarised as follows (some language specific features are ignored):

Table 11.2: Attributes in left- and right-headed noun phrases

a.	Left-headed type:									
	num	←	head noun	→	gen	→	adj	→	PP	→
	dmstr				PP		num		dmstr	
	appos						dmstr		appos	
b.	Right-headed type:									
	rel	←	adj	←	gen	←	head noun	→	rel	
	dmstr		gen		adj				appos	
			num		rel					
					AP					
					appos					

This is a simplified depiction which does not take into account that certain nominal elements may be complex themselves. Articles and negators are not included (see 2.2. and 3.8.). It goes without saying that some NP constituents may be absent. Several elements are mentioned more than once because their position in different languages shows some variation. In addition, a number of languages may exhibit deviations from the general structures as presented in table 11.2, cf. the position of the genitive in Tna, a predominantly right-headed language, mentioned above.

Overall Semitic only rarely amasses attributive elements with a head noun. There are usually not more than 2 or 3 attributes. Languages with synthetic structure often choose an analytical construction with one out of several attributes, e.g. BH *‘al sefer dibre hay-yāmim l-malke yisrā’el* (1 Kings 14, 19) [on book events.CST ART-days to-kings.CST Israel] ‘in the book of the chronicles of the kings of Israel’ (PP instead of construct). Additional examples with profuse attributes of one word class only are, for instance, the BH example just cited or Mand *d-šurbta haita erta nahirta taqunta u-rauazta* (Nöldeke 1875, 326) [poss-generation living dazzling shining bright and-resplendent] ‘of the living, dazzling, shining bright and resplendent generation’ and MSA *naṭiḡatu rtifā‘-i ‘as‘ār-i qitā‘-i l-mašārif-i* (Badawi/Carter/Gully 2004, 133) [result rise-GEN prices-GEN sector-GEN ART-banking-GEN] ‘the result of the rise of prices in the sector of banking’.

2.2. (In)definiteness

The main formal features of the article are the following: The definite article is usually an uninflected morpheme (exceptions are, e.g., Ṭur or Amh) preceding (e.g. H, Ar, Omani Mhr, Tig) or following the noun (i.a. Aram, Sab, Amh, Wol). Gəz may use the possessive clitic of the 3rd person as a definite article: *wā-kāmā-zə ḥəlm-u* (Dillmann 1907, 426) [and-as-this dream-his] ‘and this is the dream’. The indefinite article is usually identical with or formed from the numeral ‘one’ and is predominantly preposed (e.g. Mor, Amh, Tna), Ṭur also allows the position after the noun (Jastrow 1993, 38).

In Sab and Ar, there is a distinct morpheme for indefiniteness, e.g. CA *raḡulu-n* (Fischer 2002, 77) [man-INDEF] ‘a man’ and Sab *šlm-m* (Stein, 2003, 83) [statue-INDEF] ‘a statue’. Neo-Mand borrowed the Iranian ending *-i*: *gāvr-i* (Jastrow 1997, 357) [man-INDEF] ‘a man’. In some languages, determiners are put on the attribute, not the head noun, e.g. Sul *hālusta rabt-āké* (Khan 2004, 262) [sister elder-ART] ‘the elder sister’ or Amh *tallək-u bet* (Leslau 1995, 157) [big-ART house] ‘the big house’.

The use of the definite or indefinite article is often optional, cf. Tūr *zlam* ~ *há-zlam* (Jastrow 1993, 38) [one-man] ‘a man’ or Har *gār* ~ *gār-zo* (Wagner 1997, 492) [house-his] ‘the house’. Not all languages possess a distinct morpheme for definiteness or indefiniteness, among these are Akk or Ug.

In many languages incl. the ones without a distinct definiteness morpheme, it is possible to syntactically mark an NP as definite, mostly by means of bipersonal verb forms and/or O markers, e.g. Sy which lacks definiteness morphemes altogether: *qab-lu-h la-gzurtā* (Nöldeke 1898, 219) [they=received-it o-circumcision] ‘they received the circumcision’. Similarly, for instance, in Gəz *rəʾina-hu lä-ʾəgzīʾə-nä* (Dillmann 1907, 427) [we=saw-him to-Lord-our] ‘we have seen our Lord’. The same construction occurs in Gəz in complex NPs, cf. *məhrüt-u lä-ʾəgzīʾəbəher* (ibid., 466) [mercy-his to-God] ‘the mercy of God’. In other languages, there are other means of marking definiteness, e.g. in WNA in which different adjectival bases are used to indicate (in)definiteness, cf. *psōna ifker* (Jastrow 1997, 339) [boy poor.INDEF] ‘a poor boy’ vs. *psōna fķira* (ibid.) [boy poor.DEF] ‘the poor boy’. In addition, demonstratives may have the function of a definite article, cf. Tna *ʾətom kahnat* (Kogan 1997, 431) [those priests] ‘the priests’.

The functions of the definite article can only be described in broad terms. Nouns that refer to entities that have already been mentioned, are universally known or specified in the current context tend to be marked with the definite article (cf. Brustad 2000, 21ff.; El-Ayoubi/Fischer/Langer 2001, 98ff.; Khan 2004, 225ff.). For the latter reason, vocatives are often combined with the definite article as well (see El-Ayoubi/Fischer/Langer 2001, 101 or Waltke/O’Connor 1990, 247). Generic and abstract nouns predominantly have the definite article (i.a. El-Ayoubi/Fischer/Langer 2001, 105ff.; Waltke/O’Connor 1990, 244ff.). The crucial terms to cover the uses mentioned so far are identifiability and accessibility (cf. Givón 2001 I, 459). Since the use of the article is often pragmatically motivated, it allows the speaker a certain freedom in its use, cf. the introduction of the formerly unknown protagonist as definite at the beginning of a narrative in MSA in order to suggest familiarity with the character: *rafaʿati l-fatātu qadama-hā wa-qālati nżur* (El-Ayoubi/Fischer/Langer 2001, 99) [she=raised ART-girl foot-her and-she=said look.IMP] ‘the girl raised her foot and said: Look!’. The concept of a continuum between definite, more salient entities and indefinite, less salient constituents may be a useful concept in dealing with the use of the definite article (see Brustad 2000, 24ff.).

2.3. Attribution I: Genitive

There are four types of genitive construction: (a) juxtaposition of two nouns, e.g. Sul *rēša kālda* (Khan 2004, 260) [head bride] ‘the head of the bride’ or Şan *bazz harīr* (Watson 1993, 175) [material silk] ‘material of silk’; (b) formal change of the head noun, e.g. Akk *šalam fīt-im* (von Soden 1995, 236) [figure.CST clay-GEN] ‘figure of clay’

(from *šalmum*). Of the languages with case endings, only Akk deletes the short vowels before the genitive, the others keep them, cf. Ug *šb-u anyt* (Tropper 2000, 843) [crew-NOM ship] ‘ship’s crew’; (c) special ending on the head noun, e.g. Gəz *həzb-ä ’əsra’el* (Dillmann 1907, 425) [people-CST I.] ‘the people of Israel’ (from *həzb*) or WNA *berč-il ġabrōna* (Arnold 1990, 301) [daughter-CST man] ‘the daughter of the man’ (from *berča*); (d) analytical marker, sometimes with possessive clitics on the head noun, e.g. MH *ha-še’ela šel dan* (Schwarzwald 2001, 53) [ART-question POSS D.] ‘Dan’s question’. The genitive exponent may be of nominal, pronominal or prepositional origin (cf. Brockelmann 1913, 237ff.).

The traditional term construct state is commonly used for the first three groups (a) – (c). Different genitive constructions may exist in one language side by side with little or no semantic difference, e.g. groups (b) and (d) in Mand (Nöldeke 1875, 308ff.) or constructions (a) and (d) in Tna (Kogan 1997, 433).

Languages with a definite article predominantly do not allow it on the head noun before the genitive (CA *rasūlu llāh-i* Wright 1898, 200 [apostle god-GEN] ‘the apostle of god’, not **ar-rasūlu llāhi*), but others do, e.g. Tig *la-wəlād la-dəgge* (Raz 1983, 35) [ART-boys ART-village] ‘the boys of the village’ (= *wəlād la-dəgge*).

In a genitive construction with construct state, it is usually not permitted to have more than one head noun with a genitive, but it is quite common, for instance, in Sab, cf. *nš^c w-s₂šy s₂n^m* (Nebes/Stein 2004, 461) [harm.CST and-malice.CST enemy] ‘harm and malice of an enemy’. With the analytical genitive construction, the problem does not arise, cf. Amh *yä-betä=krəstiyan țariya-w-ənnā mäsārät-u* (Leslau 1995, 192) [POSS-church roof-its-and foundation-its] ‘the roof and foundation of a church’.

Adverbs or APs are permitted in genitive position, particularly after a participle, cf. Sy *māyt-ay qallilāyit* (Nöldeke 1898, 157) [dying.PL-CST quickly] ‘who die fast’.

In rare cases, mostly in poetic language, deviations from the standard genitive constructions occur, cf. Gəz *sālam lā-yared səbhat-ä mälā’əkt lā-hawwaš-e* (Dillmann 1866, 36) [salute to-Y. glory-CST angels to-watcher-CST] ‘salute to Yared, the watcher of the glory of the angels’ with the genitive noun before its head in construct or Akk *ša dadmī abrātī-šin* (von Soden 1995, 239, Old Babylonian) [POSS settlements.GEN populace-their] ‘the populace of the settlements’ with analytically marked genitive and postposed head noun with possessive clitic.

The structure of the AP is in general equivalent to the genitive construction. The adposition serves as the head as shown by the genitive government: CA *li-l-’insān-i* (Sura 12: 5) [to-ART-man-GEN] ‘to man’. Adpositions may be combined, usually to specify their semantic range, e.g. Gəz *’əm la’lā* (Dillmann 1907, 398) [from on] ‘down/away from’. Repetition of the preposition may have disjunctive meaning, cf. Gəz *lā-llā bā’al* (ibid., 392) [to-to feast] ‘at every feast’. As with the genitive construction, there are analytical APs with cataphoric possessive clitic, cf. Sy *’l-aw d-rašši’ā* (Brockelmann 1962, 27*) [against-him POSS-impious] ‘against the blasphemer’. Ethio-Semitic is conspicuous for the existence of many post- and circumpositions, e.g. Zay *lā-ğār ’anči* (Meyer 2005, 275) [from-house backside] ‘behind the house’.

The genitive encompasses possessive functions (subjective, objective) and general notions of affiliation, i.a. material, quality, time and place (see Brockelmann 1913, 248ff.). It often replaces compound nouns: MSA *ğurfatu nawm-in* (Badawi/Carter/Gully 2004, 135) [room sleep-GEN] ‘a bedroom’. The genitive after certain nouns may serve to substitute other word classes, cf. BH *bən šāmən* (Isa 5, 1) [son.CST fat] ‘fertile’.

It may also have superlative meaning, e.g. Bab *'tyrt' d-yrwšlym* (Schlesinger 1928, 69) [rich.F POSS-Jerusalem] 'the richest woman of Jerusalem'. The same construction is used with specific elative morphology: CA *'afḏalu mra'at-in* (Wright 1898, 227) [more=excellent woman-GEN] 'the best woman'. Only rarely does inalienable possession occur. In Țur, pronominal clitics mark inalienable possession after certain nouns (mostly kinship and body parts), whereas the possessive suffixes don't have any restrictions in their use: *bab-e* (Jastrow 1992, 35) [father-his] 'his father' vs. *û-bāyt-āyde* (ibid., 58) [ART-house-his] 'his house'.

In addition to the genitive construction discussed so far there is another one termed 'unreal annexation' after adjectives and participles, cf. Ug *qsr npš* (Tropper 2000, 846) [short.CST soul] 'despondent' or CA *tāhiru l-qalb-i* (Wright 1898, 221) [pure ART-heart-GEN] 'pure in heart'. These phrases can be analysed as exocentric possessive syntagms (Diem 1986, 250). Unlike the normal genitive construction, the definite article may be used on the head: CA *al-ḡa'du š-ša'ar-i* (Wright 1898, 222) [ART-curly ART-hair-GEN] '(the one) with the curly hair'. As for the position of the genitive, see section 2.1.

2.4. Attribution II: Apposition and adjective

An apposition tends to have the same case marking as its head noun and is joined asyndetically, e.g. CA *'ilā širāt-in mustaqīm-in širāt-i llāh-i* (Reckendorf 1921, 71) [to path-GEN straight-GEN path-GEN god-GEN] 'to a straight path, the path of god'. As against the example just cited a preposition may rarely be repeated, e.g. OA *l-mr'-h l-mlqrt* (Segert 1975, 414) [to-lord-his to-M.] 'to his lord Melqart'. Some appositions are marked with accusative, especially after pronouns, cf. CA *'antumū l-mu'min-ina* (Fischer 2002, 175) [you ART-believers.ACC] 'you, the believers'. A special kind of apposition is the so-called permutative in which the dependent element of a genitive construction can be placed in front in order to shift the semantic weight of the phrase, cf. CA *taqtud-a bard-a mā'-i-hā* (Wright 1898, 286) [Taqtud-ACC coldness-ACC water-GEN-its] 'Taqtud, the coldness of its water' = 'the coldness of the water of Taqtud'. The analytical genitive discussed in 2.3. may be analysed as apposition as well (Goldenberg 1998, 49ff.).

Apposition is quite common with titles, materials, measurements and features, often with explanatory or intensifying notions. It frequently replaces adjectives, e.g. BH *dbārim niḥumim* (Zech 1, 13) [words comfort] 'comforting words'.

Adjectival attributes admittedly share some features with apposition. The (in)definiteness markers are reiterated, cf. BA *qiryā mārāqtā u-bištā* (Ezra 4, 12) [town.DEF rebellious.DEF and-evil.DEF] 'the rebellious and evil town', and head as well as dependent share the same case, cf. Sura 1: 6 in table (11.1). But the use of a preposition exclusively before the head of the NP supports the attributive analysis, e.g. MSA *ḥilāla l-'a'wāmi l-māḏiyati* (Badawi/Carter/Gully 2004, 208) [during ART-years ART-past] 'during recent years'. Additional indubitable cases of attribution can be found, e.g. in Țur *û-kālbó-komo* (Jastrow 1992, 21) [ART-dog-black] 'the black dog' (stress group) or in RH *'eḏuḥ hā-riṣṣonā* (Fernández 1997, 26) [testimony ART-first] 'the first testimony' (definite article on the attribute only) (see also 2.2.). Nevertheless, an adjective may be used appositionally for special emphasis, cf. BH *'eṭ bin-kā 'eṭ yhiḏ-kā* (Gen 22, 2) [o son-your o sole-your] 'your only son' (with the repetition of the O marker).

Other agreement features are gender, number and status, e.g. MSA *qiṣṣ-at-u-n ṭawīl-at-u-n* (Badawi/Carter/Gully 2004, 102) [story-F-NOM-INDEF long-F-NOM-INDEF] ‘a long story’. The definite article is used after a possessive clitic, cf. BH *w-ʔet yād-kā ha-ḥāzāqā* (Deut 3, 24) [and-o hand-your ART-strong] ‘and your strong hand’. The scope of the agreement rules may be restricted. There are many exceptions or rules limited to single languages, e.g. the almost random use of gender and number markers in Gəz (i.a. *zəkat bəlu* Dillmann 1907, 478 [skin=bottles old.M.SG] ‘old skin bottles’) or the Ar marking of non-person plurals as feminine singular (CA *kunūz-an kaṭīr-at-an* Wright 1898, 273 [treasures-ACC numerous-F.SG-ACC] ‘great treasures’). Some adjectives may lack inflection altogether, e.g. Sy *qallil yawmāṭā* (Nöldeke 1898, 162) ‘few days’.

Adjectives are usually adjacent to their head noun, but some distance is possible, cf. BA *w-šinnayin di parzēl l-ah raḥrḥān* (Dan 7, 7) [and-teeth poss iron to-it big] ‘and it has big iron teeth’ or Gəz *ḥəzb-ä ‘abiy-ä yəkāwwən ‘abrəham wä-bəzuḥ-a* (Dillmann 1907, 480) [people-ACC big-ACC he=will=be A. and-numerous-ACC] ‘Abraham will become a big and numerous people’.

In rare cases, especially in Aram, even analytical marking occurs, cf. Mand *mn atra d-npiš* (Drower/Macuch 1963, 303) [from place poss-exalted] ‘from an exalted place’ or Qar *báxta d-mḥāqqə* (Khan 2002, 280) [woman poss-true] ‘a true woman’. The tendency in Aram to extend the marking with *d-* in the NP is conspicuous (cf. the attributive PP subsequently).

An AP may be an attribute as well, e.g. BH *brīṭ ‘olām bən ‘ēlōhim u-bən kāl nēpēš ḥayyā* (Gen 9, 16) [covenant eternity between god and-between all soul living] ‘a perpetual covenant between god and all living creatures’. In Aram, such attributive PPs may be marked with *d-*, cf. Sy *ba-qrāḇe qšayyā d-‘am arḳas* (Nöldeke 1898, 278) [in-battles hard poss-with demons] ‘in the hard battles with the demons’.

An attributive adjective can have superlative meaning, cf. BH *šlōšet bnē yišay hag-dōlim* (1 Sam 17, 13) [three sons.CST J. ART-big] ‘Jesse’s three oldest sons’.

Several adjectival attributes can be combined syndetically or asyndetically. As for the position of the various attributes, see section 2.1.

2.5. Quantifiers incl. numerals

While ordinal numbers are in general treated like adjectives, the same applies to the cardinal numbers for ‘one’ and ‘two’ only (exceptions occur, e.g. Sab, see Stein 2003, 111). Otherwise, the syntax of cardinal numbers is more diverse: It may be equivalent to the construction of the adjective, the apposition or the genitive. Different syntactical options may exist in one language side by side with hardly any semantic difference. As shown by the use of the definite article, numbers are adjectives in CA, e.g. *aṭ-ṭalātatu riḡāl-in* (Wright 1898, 244) [ART-three men-GEN] ‘the three men’ (‘unreal annexation’, section 2.3.); the same applies to Amh (Hartmann 1980, 250). In other languages, the numerals are in all likelihood substantives, cf. Sab with preposed definite numeral and definite noun, e.g. *ʔrbʕtn w-ʕs₂rnhn ʕlmn* (Stein 2003, 116) [four.DEF and-twenty.DEF statues.DEF] ‘the 24 statues’.

There are three constructions of numerals: (a) apposition before or after the noun, e.g. BH *ʔattudim ḥāmīššā* (Num 7, 17) [male=goats five] ‘five male goats’ vs. *šlōšet bānim* (Gen 29, 34) [three sons] ‘three sons’; (b) construct state before genitive, e.g. CA

‘*ašaratu l-ḡilmat-i* (Wright 1898, 244) [ten ART-slaves-GEN] ‘the ten slaves’; (c) adjectival attribute, cf. CA *ar-riḡālu l-ḥamsatu* (ibid., 243) [ART-men ART-five] ‘the five men’ or Amh *hulätt-u ḳimännōčč* (Leslau 1995, 252) [two-ART enemies] ‘the two enemies’.

The numerals from 3 to 10 (and 11 to 19), unlike the numbers 1 and 2, generally are in disagreement with the objects numbered with respect to gender (see the examples cited). Whereas this rule is strictly adhered to, for instance, in CA, BH or Sy, it is simplified or abolished in a number of languages, e.g. ʿTur (Midīn) ‘*āšrō-gāwre* ‘ten men’ and ‘*āšrō-niše* ‘ten women’ (Ritter 1990, 44).

The order in higher numbers is usually 1000–100–10–1 (Akk, Aram, Gəz, Amh, Tig), the reverse order is only found in Sab (1–10–100–1000). CA (and ʿTur) prepose the unit to the ten: 1000–100–1–10. Ug shows a great deal of variation (see Tropper 2000, 388ff.), the higher unit ordinarily comes first, but there are exceptions. In most languages, numbers are joined by the conjunction ‘and’, in others asyndetically (i.a. Amh).

The object counted is from the number 3 onwards predominantly in plural (i.a. Akk, Sab, BH, Sy), although most languages allow singular, too, often for some frequent nouns, cf. next to each other in BH *bən tišim šānā w-ṭeša’ šānim* (Gen 17, 1) [son.CST 90 year and-9 years] ‘99 years old’. In some languages, both singular and plural are allowed without any discernible discrimination (i.a. Tna, Amh). CA has very strict rules: Numbers 3–10 with genitive plural, 11–99 with accusative singular and even hundreds or thousands with genitive singular.

There are several constructions of quantifiers: (a) juxtaposition before or after the noun, e.g. Qar *kúd šā’ta* (Khan 2002, 282) [each year] ‘each year’; (b) genitive construction, e.g. MSA *ba’du l-ḡinsīyāt-i l-’aḡnabīyat-i* (Badawi/Carter/Gully 2004, 228) [part.CST ART-nationalities-GEN ART-foreign-GEN] ‘certain foreign nationalities’; (c) permutative apposition (section 2.4.), e.g. Sy *koll-āh mḏittā* [all-its town] ~ *mḏittā koll-āh* [town all-its] ‘the whole town’ (Nöldeke 1898, 164); (d) repetition of the noun in distributive meaning, e.g. Amh *ṭwat ṭwat* (Leslau 1995, 147) [morning morning] ‘every morning’.

Often in one language, there are different constructions available, cf. in Amh also *bä-yyä-mändär-u* (ibid., 148) [in-every-village-ART] ‘in every village’. Sometimes, each construction is associated with a different meaning, cf. ʿTur *kūl-yāwmo* [all-day] ‘every day’ vs. *ú-yāwmo kul-e* [ART-day all-its] ‘the whole day’ (Jastrow 1993, 40ff.).

2.6. Relative clauses

Three types of relative clauses are attested: (a) externally headed relative clauses with or without a relative particle; (b) headless relative clauses that have the same functional range as any NP; (c) nominalized relative clauses that may or may not be joined to a head noun.

The externally headed relative clauses are subordinated to a head noun and may be introduced by a deictic element which, however, does not have pronominal value. The syntactical function of the head noun within the relative clause is indicated by way of a resumptive pronoun that is only optional in O function. The relative clause is in apposition to the head noun. Cf. Sab *šlm-n d-dhb-n d-b-hw ḥmd* (Stein 2003, 145) [statue-ART POSS-bronze-ART REL-in-it he=thanked] ‘the statue of bronze through which

he thanked'. Asyndesis is common as well, cf. Tur *ḥāwro oṭewa gab-a* (Jastrow 1993, 286) [friend he=came to-her] 'a friend that used to come to her'.

The relative particle is commonly an indeclinable morpheme, but in rare cases it shows agreement, if reduced, e.g. OAkK or CA. It is frequently identical with the genitive exponent (i.a. Akk, Sab, Sy). The use of a relative particle may be either rather optional (e.g. BH and NA) or determined by the (in)definiteness of the head noun (in particular Ar) or the tense of the relative clause (i.a. Har or Gu).

The nominal status of the relative clause in Semitic is shown by the fact that (a) it may be used asyndetically after the construct state of the head noun, particularly in Akk and Sab, e.g. Akk *bīt imqut-u ippeš* (von Soden 1995, 268) [house.CST it=fell-SUB he=builds] 'he builds the house that collapsed' or Sab *s₁b't s₁b'* (Nebes/Stein 2004, 480) [campaign.CST he=undertook] 'the campaign that he undertook', and that (b) it may be combined with nominal determiners or possessive clitics, especially in modern Ethio-Semitic, e.g. Amh *yä-mätta-w säw* (Leslau 1995, 83) [REL-he=came-ART man] 'the man who came'.

Headless relative clauses are introduced by the relative particle or interrogative and indefinite pronouns, cf. Gəz *zä-'amnä yədəḥən* (Dillmann 1907, 528) [REL-he=believed he=is=saved] 'he who believes will be saved' or MSA *laysa man yuwaqqī'u l-ī šahā-dat-ī* (Badawi/Carter/Gully 2004, 506) [is=not who he=signs to-me certificate-my] 'there is no one who will sign my certificate for me'.

The nominalized relative clause with or without head noun is especially common in Ar, usually in texts of a high literary style. It consists of a preposed, usually adjectival or participial predicate and a postposed subject. The agreement is divided, case and definiteness are determined by the head, gender and number by the embedded subject, cf. *ṭābit-u bnu qurrata l-muqaddam-u ḍikru-hū* (Diem 1998, 27) [T-NOM ibn Q. ART-preceded-NOM mention-his] 'the aforementioned Tābit ibn Qurra' or *ma'a l-munkasirati qulūbu-hum* (ibid.) [with ART-broken hearts-their] 'with those whose heart is broken'.

The strong nominalization in this construction which is indicated by the nominal nuclei and the use of the definite article shows a higher degree of syntactic integration than the other types of the relative clause. This correlates with a tighter semantic relationship between the head and the nominalized relative clause (Diem 1998, 35, 69). In other languages, this construction is rare and mostly confined to expressions with the noun 'name', cf. Sy *ḥaḇr-eh d-mār peṭros akki šm-eh* (ibid., 196) [friend-his POSS-M. P. A. name-his] 'the friend of Mār Peṭros called Akki'. For the position of the relative clause, see section 2.1.

2.7. Pronouns

Pronouns can have modifiers, but probably only as appositions. Since appositions with 1st and 2nd person pronouns are basically marked with accusative in Ar (section 2.4.), only nouns after 3rd person pronouns could be analysed as attributive, cf. MSA *wa-humu l-kirāmu* (El-Ayoubi/Fischer/Langer 2001, 480) [and-they ART-generous.PL] 'and they, the generous ones'. But since oblique case is used when the attribute refers to an oblique pronoun, as in MSA *'an-hā hiya l-'umm-i* (ibid.) [from-her she ART-mother-GEN] 'from her, the mother', the analysis as an apposition is to be preferred.

The appositional use of pronouns, either before or after the head noun, is quite common. Cf. Sy *w-hu haw yawmā* (Nöldeke 1898, 172) [and-it that day] ‘and that day’ or *l-ḥaḍ-u allāhā* (ibid., 167) [o-one-he god] ‘the one god’. Also after personal clitics, e.g. BH *’itt-ānu ’ānahnu* (Deut 5, 3) [with-us we] ‘with us’ or BA *ruh-i ’ānā dāniyyel* (Dan 7, 15) [spirit-my I D.] ‘my, Daniel’s, spirit’. There are also appositional possessive pronouns, e.g. Gəz *kokāb-ä zī’a-hu* (Dillmann 1907, 342) [star-ACC POSS-his] ‘his star’ or ʿTur *wāht diḍ-i* (Jastrow 1992, 65) [time poss-my] ‘my time’.

All the appositional uses mentioned generally serve an emphatic role, though its exact nature may be hard to determine.

The pronominal clitics are usually combined with prepositions, but Amh uses the free pronouns instead, cf. *lä-ne* (Leslau 1995, 49) [**lä-əne*, to-I] ‘to me’. Similarly in ʿTur, e.g. *b-uwe* (Ritter 1990, 3) [**b-huwe*, in-he] ‘in him’. The same applies to postpositions, cf. Har *ān-be* (Wagner 1997, 490) [I-with] ‘with me’.

In Amh, the personal pronouns may be combined with the definite article to express insistence, e.g. *əne-w* (Leslau 1995, 49) [I-ART] ‘I myself’.

A cataphoric pronoun in a genitive or prepositional construction is quite common, e.g. in Aram and Gəz (section 2.3.).

3. Simple clause

3.1. Nucleus

All word classes may have predicative function in an NVC (i.a. Brockelmann 1913, 87ff.). A noun as a predicative is generally marked with nominative, cf. Akk *anāku-ma re’-ūm mušallim-um* (von Soden 1995, 224) [I-PART shepherd who gives well-being, but accusative is, though rarely, possible as well, cf. CA *fa-qultu ’a-ḥaqq-an mā taqūlu* (Wāq. 114) [then-I=said q-truth-ACC what you=say] ‘I asked: Is what you say true?’. Note also *fa-qultu yā ’ābah ’a-ḥaqq-un mā taqūlu* (ibid., 115) [then-I=said o father q-truth-NOM what you=say] ‘I said: O father, is what you say true?’.

While an NVC usually consists of at least two elements (S and pred), clauses with only one occur under certain conditions, especially in CA, e.g. after a presentative particle *fa-’idā n-nabīyu* (Brockelmann 1913, 36) [then-lo ART-prophet] ‘then there was the prophet’.

A free pronoun may be inserted optionally as a copula, e.g. BH *’ellē hēm mišphōt haq-qhātī* (Num 3, 27) [these they families.CST ART-K.] ‘these are the families of the Kohathites’, also with disagreement of person as in BA *’ant hu rešā di dāhābā* (Dan 2, 38) [you he head poss gold] ‘you are the head of gold’.

In some languages, there is a distinct copula with or without full inflection, cf. Sy *it attirē w-meskenē* (Nöldeke 1898, 232) [COP rich.PL and-poor.PL] ‘there are rich and poor (people)’ besides *w-gaww-āh* [...] *it-ēh orešlem* (ibid., 233) [and-inside-its cop-it J.] ‘and its inside is Jerusalem’. Some copulae are always fully inflected, cf. Amh *āñña bal-əñna mist nān* (Leslau 1995, 271) [we husband-and wife cop.we] ‘we are husband and wife’ or Qar *bāš-ina* (Khan 2002, 126) [good-cop.they] ‘they are good’. In Akk, there is a distinct predicative inflection for any noun incl. verbal adjectives, the so-

called stative, e.g. *ṣeḥir* (Buccellati 1997, 85) [small.PRED.he] ‘he is small’ (from *ṣeḥrum*). Sometimes, prepositions with personal clitics have predicative function, often with specific meaning, e.g. Gəz *bo(ttu)* [in.him] ‘he has’: Rarely with nominative, *zā-bomu təbāb* (Dillmann 1865, 481) [REL-in.them wisdom] ‘those who have wisdom’, but usually with accusative *ʾasmā bo bəzuḥ-a tərīt-ä* (Dillmann 1907, 437) [for in.him much-ACC wealth-ACC] ‘for he has great wealth’.

There are past forms of the copula as well, either as an enclitic past marker, e.g. Tūr *hārke-wāy-no* (Jastrow 1993, 34) [here-was-I] ‘I was here’ or as a distinct verbal root, e.g. CA *kāna huwa wa-ʾaḥū-hu muʾallimayni* (Wright 1898, 99) [he=was he and-brother-his teachers.ACC] ‘he and his brother were teachers’. Note here the marking of the predicative with accusative (also in Gəz after *konä*). The predicative in CA may be marked with preposition as well, *wa-ʾinna-humā la-bi-ʾimāmin mubīnin* (Sura 15: 79) [and PART-they.DU verily-in-example clear] ‘they both are a clear example’. This is quite common with negation.

A predicative adjective often has comparative meaning, either without formal marking, e.g. BH *hinne ḥākām ʾattā mid-dāniʾel* (Ezek 28, 3) [lo wise you from-Daniel] ‘look, you are wiser than Daniel’, or with elative morphology, cf. Tūr *aḥun-ūḥ rāb min-ūḥ-yo* (Jastrow 1992, 147) [brother-your bigger from-you-cop] ‘your brother is older than you’ (from *rabo*). A separative adposition (‘from’) serves as the comparative particle (‘than’), only Akk uses the locative *eli* ‘on’ instead (von Soden 1995, 112).

Apart from basic existential propositions, non-verbal predicates may denote material, content, measure, price, time or abstract features (Brockelmann 1913, 41ff.).

The verb is the prototypical nucleus and distinguishes the syntactically most relevant categories like TAM, diathesis or verbal stem. Some languages may expand a mostly intransitive verbal nucleus with an AP coreferential with S the exact function of which is difficult to determine, e.g. Sy *miṭ lhon* (Nöldeke 1898, 169) [they=died to=them] ‘they died’ (= *miṭ*). Additionally, a finite verb may be accompanied by an infinitive for emphasis, e.g. BH *u-makke ʾāb-iw w-ʾimm-ō moṭ yumāt* (Exod 21, 15) [and-striking.CST father-his and-mother-his die.INF he=is=killed] ‘whoever strikes his father or his mother must be put to death’.

Two verbs may be combined to form a complex nucleus in a wide variety of different constructions. The second verb may be balanced or deranked. Common are asyndesis with finite or infinite verbs, e.g. Sy *qaddem ḡer ešaʾyā awteḥ ʾlay-hon dayyānē* (Nöldeke 1898, 264) [he=did=beforehand namely I. he=set over-them judges] ‘for Isaiah appointed judges over them before’ and CA *yā rasūla llāhi lam tazal ʾan-nī muʾriḍ-an* (Wāq. 116) [o messenger.CST god not you=ceased from-me keeping=aloof-ACC] ‘o messenger of god, you still keep aloof from me’, or syndesis, e.g. Akk *isaddarū-ma ištēn manā kaspam [...] inaddinū* (Streck 2006, 64) [they=do=regularly-and two mina silver they=give] ‘they will pay two mina silver by instalment’. The function verb serves to convey additional semantic nuances (*Aktionsarten*).

3.2. Agreement

A non-verbal nucleus basically shows full agreement in number and gender with its subject, but there are language-specific exceptions. Certain nominal patterns or semantic fields in CA do not receive feminine marking, cf. *halaka wa-ʾummu rasūli llāhi*

ḥāmilun bi-hī (b. Hiš. 102) [he=died and-mother messenger god pregnant.SG.M with-him] ‘he died, when the mother of the messenger of god was pregnant with him’ (natural female state). Predicatives may lack agreement, e.g. Amh *tāmariwočč-u sänäf naččāw* (Leslau 1995, 210) [students-ART lazy.SG COP.they] ‘the students are lazy’ (besides *sänäfočč*). This may apply to preposed predicates in general, cf. Mand *triš b-riš-aihun klilia* (Nöldeke 1875, 421) [put.SG.M on-head-their crowns] ‘crowns are put on their head’. In Ar, non-person plurals basically have feminine singular agreement, e.g. CA *al-’alwānu muḥtalifatun* (Fischer 2002, 167) [ART-colors different.SG.F] ‘the colors are different’. This also applies to the verbal nucleus, cf. *tumma qasat qulūbu-kum* (Wright 1898, 290) [then became=hard.SG.F hearts-your] ‘then your hearts became hard’.

Although a verbal nucleus in general shows full agreement as to person, gender and number with A or S, there are many exceptions. A preposed verb often has reduced agreement, cf. BH *yhi m’qroṭ bi-rqia’ haš-šāmayim* (Gen 1, 14) [it=may=be lights in-firmament ART-heaven] ‘let there be lights in the firmament of heaven’. This often applies to gender as well, cf. CA *fa-lammā hāgara n-nisā-u ’ilā rasūli llāhi* (b. Hiš. 754) [then-when he=migrated ART-women-NOM to messenger god] ‘when the women migrated to the messenger of god’. A postposed verb shows reduced agreement only rarely. Constructions *ad sensum* are possible, cf. BA *w-ribbō ribḥān qōdām-phi yqumun* (Dan 7, 10) [and-myrriad.CST myriads before-him they=stand] ‘ten thousand times ten thousand stood before him’.

Other cases of agreement reduction occur in verbal chains, e.g. CA *ḡa’ala yalūmu-hū* (Wright 1898, 108) [he=began he=reproaches-him] ‘he began to reproach him’ (tense), or in auxiliary verbs, cf. Amh *yəṣəfu nəbbār* (Leslau 1995, 316) [they=write was] ‘they used to write’ (person, gender, number). Complete reduction of agreement features is attested with the masdar (the infinitive, the verbal noun), e.g. in the BH absolute infinitive, *way-yomər mošə ’el hā-’ām zākər ’et hay-yom haz-zə* (Ex 13, 3) [and-he=said M. to ART-people remember.INF O ART-day ART-this] ‘and Mose said to the people: Remember this day’, or in Sab infinitive chains, *w-y’tmw w-tqdmn w-rtḏhn* (Nebes/Stein 2004, 482) [and-they=regrouped and confront.INF and join=battle.INF] ‘and they regrouped, confronted and joined battle’.

Although Semitic languages are pro-drop, a pronoun may still be used for emphasis, e.g. Sy *en atton tešbon* (Nöldeke 1898, 166) [if you you=want] ‘if you want’.

Semitic shows strong tendencies toward head-marking, with the verb bearing the most relevant grammatical information, e.g. Akk *ulabbiš-šu* (von Soden 1995, 136) [she=clothed-him] ‘she provided him with clothing’. Since noun inflection or marking of relational functions occur as well, features of double-marking are equally evident, cf. Amh *šum-u-n bāklo räggäčč-əw* (Leslau 1995, 423) [official-ART-O mule it=kicked-him] ‘a mule kicked the official’.

3.3. Valence and its manipulation

Valence is determined by the lexicon. This applies to the number of core arguments and their formal features (direct vs. oblique). There may be one, two, three and, though very rarely with some causative verbs, four core arguments. The distinction between predicative peripheral adpositions licensing their object and non-predicative adpositions marking core arguments is of crucial importance, cf. CA *ḡaraba-hū bi-l-’ašā* (Fi-

sch 2002, 137) [he=hit-him with-ART-cane] ‘he hit him with the cane’ (predicative) vs. *tumma nšarafa* ‘*abdu l-muṭṭalibi* ‘*āḥiḍan bi-yadi* ‘*abdi llāhi* (b. Hiš. 100) [then he=left ‘A. al-M. holding PRP-hand ‘A.] ‘then ‘Abd al-Muṭṭalib left holding the hand of ‘Abdal-lāh’ (non-predicative).

Semitic possesses two means of valence manipulation, causativisation which increases the number of arguments by one, and passivisation which generally decreases it by one. Causative is a separate verbal stem in most languages, e.g. *Ṭur mādmih* ‘put to sleep’ vs. *domih* ‘sleep’ (Jastrow 1992, 79).

The passive usually blocks A out and thus reduces the arguments by one. Oblique marking of A in passive with separative, instrumental or directional-locative adpositions is as a rule rare, but cf. i.a. Sy *aykannā d-nethzē men kolnāš* (Brockelmann 1962, 31*) [in=order that-he=is=seen from everyone] ‘that he is seen by everyone’. There are three types of passive in Semitic: (a) passivisation with full promotion of O to S, e.g. Akk *awil-um iddāk* (Buccellati 1996, 425) [man-NOM he=is=killed] ‘the man will be killed’; (b) passivisation with incomplete promotion of O which keeps its O marking, with or without verbal agreement, e.g. BH *’ēl ’arba’at ’ellē yulldu l-hā-rāpā* (2 Sam 21, 22) [o 4.CST these they=were=born to-ART-R.] ‘these 4 were descendants of Rapha’ and *way-yušaḇ ’ēl mōšē w-’ēl ’ahārōn ’ēl par’ō* (Exod 10, 8) [and-he=was=brought=back o M. and-o A. to Pharaoh] ‘Moses and Aaron were brought back to Pharaoh’; (c) passivisation without any promotion (prepositional verbs), e.g. CA *lam yufraḡ min ’amri-hī* (b. Hiš. 1013) [not was=finished PRP matter-his] ‘his burial arrangements were not finished’. The passive may be used for intransitive states, cf. Zay *tārābhunu* (Meyer 2005, 328) ‘I was hungry’. The passive may be lacking entirely, e.g. in most NENA dialects.

3.4. Relational behaviour

Semitic shows accusative behaviour almost without exception as proven by verbal agreement (section 3.2.) and the unmarked word order patterns in which A and S take up the same position, cf. i.a. CA (and prose Ug) VS/VAO with A/S immediately after the verb or Akk and Amh SV/AOV with A/S at the beginning of the clause (Waltisberg 2002, 46). Languages with free linearisation are of no use in this regard. As for case marking, see section 3.5.

Ergative agreement patterns occur in NENA (e.g. Jewish Sanandaj, G. Khan, p.c.; cf. also Khan 2007).

The fact that many languages, especially with reduced or lost case endings, show DOM is also important evidence for the accusative nature of Semitic morphosyntax: O is the marked relational primitive. Cf. Tig *’əḡəl ’ənās ’asrā’elāy la-laharrēm ’ənās māsraḡ ra’a* (Raz 1983, 83) [o man Israelite REL-he=beats man Egyptian he=saw] ‘he saw an Egyptian man who was beating an Israelite’ vs. *rabbī ’astar wa-mədər faṭra* (ibid., 94) [god heaven and-earth he=created] ‘god created heaven and earth’. DOM markers are mostly prepositions (e.g. Aram *l-*, BH *’ēl*) or suffixes (Amh *-n*, Wol *-nä*). Their use may be restricted, e.g. MSAL *tə-* with pronouns only or CA *li-* almost exclusively after participles or masdars. DOM markers usually occur for specific pragmatic reasons, most commonly definite and/or salient NPs (i.a. Khan 1984).

Movement verbs (S>LOC) often exhibit behaviour morphosyntactically similar to transitive verbs (A>O), e.g. BH *w-ṣe haš-šādē* (Gen 27, 3) [and go=OUT.IMP ART-field]

‘and go out into the field’, or even *ḥeṣṣ meṣṣ baḥḥel tḥoʿ-ḥkâ* (Ezek 32, 11) [sword king B. it=will=come-you] ‘the sword of the king of Babylon will strike you’. Such verbs can be fully passivised, cf. CA *faʿ-utiya mālik-un bi-dālika* (b. Hiš. 879 = Ṭab. 1678) [then-come.PAST.PASS.3SG.M M.-NOM with-that] ‘that (message) was brought to Mālik’.

Verbal referentialisation with masdars allows the direct genitival joining of the underlying A/S or O and thus neutralizes diathesis, cf. CA *qatlu ʾaḥī-hi* (Fischer 2002, 101) [kill.INF brother.GEN-his] ‘the fact that his brother has (been) killed’. Verbal government can also be found in Amh *səra-w-ən tolo lä-mäčärräs* (Leslau 1995, 828) [work-his-o quick to-finish.INF] ‘to finish his work quickly’. Additional NPs receive direct or oblique marking, e.g. MSA *ḥawla ʾidmāni-hā t-tadhīn-a* (Badawi/Carter/Gully 2004, 238) [about be=addicted.INF-her ART-smoking-ACC] ‘concerning her addiction to smoking’ and *baʿda faqdi-hī li-zawḡati-hī* (ibid., 239) [after lose.INF-his PRP-wife-his] ‘after his loss of his wife’.

BH allows a free NP in A/S function with the infinitive, cf. *lā-nus šammā ḥā-roṣṣaḥ* (Num 35, 6) [to-flee.INF there ART-murderer] ‘so that a person who has killed someone may flee there’.

3.5. Case and AP functions

Semitic basically codes pragmatic functions of referents (on this Givón 2001 I, 203ff.). The unmarked cases are nominative which marks A/S functions as well as the nominal predicative and genitive which is the adnominal case after nouns and adpositions. Accusative is the marked case and has a wide range of functions (O, many adverbial functions, predicative marking, circumstantial qualifications, specification). It seems as if accusative and absolute state (zero morpheme) alternate in Akk in adverbial function (cf. Buccellati 1996, 370ff.). In Ar, accusative has A/S functions after certain particles, e.g. CA *ʾinna l-ʾinsān-a la-fī ḥusrin* (Sura 103: 2) [indeed ART-man-ACC verily-in loss] ‘verily man is in loss’. Accusative further marks absolute objects from cognate roots, mostly masdars which specify the semantic content, cf. MSA *yaṣīfu waṣf-an da-qīq-an* (Badawi/Carter/Gully 2004, 146) [he=describes describing-ACC accurate-ACC] ‘he describes accurately’.

Some languages have free oblique pronouns, e.g. Ug *nmgn hwt* (Tropper 2000, 212) [we=give=a=present him] ‘we give him a present’.

Only Akk possesses a specific pronominal dative, e.g. *aṭrud-akkuš-šu* (von Soden 1995, 137) [I=sent-to=you-him] ‘I sent him to you’. Otherwise, IO has oblique marking. Secondary cases in Akk are locative, *bīt-ūm* (Buccellati 1996, 151) [house-LOC] ‘in the house’, and terminative, *bīt-iš* (ibid.) [house-TRM] ‘towards the house’. Some languages neutralise the distinction between O and IO with pronominal clitics, cf. Gəz *kāmā yəfānnaw-o lä-sem wāld-u* (Dillmann 1866, 16) [that he=sends-him PRP-S. son-his] ‘that he sends his son Sem’ vs. *wā-sobā kon-o ʾašārtu wā-ḥammāstu ʾamāt* (ibid.) [and-when it=was-to=him ten and-five year] ‘and when he was 15 years old’.

Certain APs may fill an argument position, cf. Sy *wa-l-men-hon ašlem l-yaqdānā ḡ-nurā* (Brockelmann 1962, 65*) [and-o-from-them they=committed to-blaze poss-fire]

‘and some of them were committed to the fire’. Non-predicative adpositions are very common (section 3.3.).

Expressions of possession normally follow the rules of the NVC, e.g. Amh *ləḡočč all-u-ññ* (Leslau 1995, 439) [children cop-they-to=me] ‘I have children’, but they may optionally mark the possessum as O, cf. MH *yeš la-nu et ha-sfarim* (Berman 1997, 330) [COP to-US O ART-books] ‘we have the books’.

3.6. Reflexivity

There are three reflexive constructions: (a) lexical reflexives by means of specific verbal stems that reduce the argument number of the underlying verb by one, e.g. Amh *šäššägä* ‘he concealed’ vs. *täššäšägä* ‘he concealed himself’ (Leslau 1995, 463). Such forms may be considered a medio-passive often denoting the passive as well, the example cited also means ‘he was concealed’; (b) coreference reflexives in O function, e.g. Qar *b-āda yōma mxäləš rōx-əḥ* (Khan 2002, 273) [in-this day he=saves soul-his] ‘nowadays, he saves himself’. Such pronouns are mostly derived from nouns denoting body parts and the like (cf. Rubin 2005, 19ff.); (c) pronominal reflexives formally unmarked for reflexivity, often in APs, e.g. BH *wayya‘aš lə ‘əhud ḥeṣṣəḥ* (Judg 3, 16) [and=he=made to=him E. sword] ‘and Ehud made himself a sword’; also Tur *w-āq-qāqwone-ze* [...] *koqorən kokürhün-ne ‘äl ḥāwro* (Jastrow 1992, 68) [and-ART-partridges-FOC they=cry they=search-to=them PRP companion] ‘and the partridges cry and search a companion for themselves’.

The combination of kinship terms or nouns such as ‘part’, ‘one’, ‘friend’ and the like is often used to express reciprocity, cf. CA *fa-‘aqbala ba‘du-hum ‘alā ba‘din* (Brockelmann 1913, 328) [then-it=came part-their on part] ‘they approached each other’. Some languages have specific pronouns, e.g. Sy *‘am ḥdāḏe* (Nöldeke 1898, 179) ‘with each other’ (from *ḥad* ‘one’). In addition, there exist specific verbal stems, e.g. Gəz *tāmakärä* (Dillmann 1907, 155) ‘advise one another’ (from *mākärä* ‘advise’).

3.7. TAM

The older languages basically use a relative tense system in which the past tense marks the time prior to the reference point, whereas the non-past tense marks the time simultaneous with or following the reference point (i.a. Comrie 1985, Bartelmus 1982, Streck 1995, Weninger 2001). The past tense principally subsumes the function of the perfective, and the non-past tense the imperfective aspect. Copulae neutralise aspect and distinguish present and past only, e.g. Tur *–yo* ‘is’ vs. *–wa* ‘was’ (Jastrow 1993, 33ff.). Complex tenses formed with the verbal base and auxiliary ‘be’ (mostly in past tense), i.a. in Sy, CA or Amh, are often used to mark aspectual distinctions, e.g. CA *fa‘ala* (past) vs. *kāna yaf‘alu* (‘was’ + non-past) in Nebes (1982, 188).

In some languages, the active participle is incorporated into the verbal system with simultaneous/present function, e.g. Sy *āp ḥāšā mqabbəl-nā puqdān-eh* (Nöldeke 1898, 202) [also now receiving-I order-his] ‘I receive his order even now’.

The situation in BH as to the functions of the tenses is very complex, note in particular the opposite function of the past and non-past base after the conjunction *w(a)*-‘and’ (cf. i.a. Bartelmus 1982, 66ff.).

Special uses of the tense bases are, i.a., the past base in jussive function (future reference point), e.g. Akk *lirkus* (von Soden 1995, 132) ‘he may/shall bind’ (from *irkus* ‘he bound’) or the use of the past tense in the matrix clause of conditional complexes in CA, e.g. ‘in *mana’ū-nā qātalnā-hum* (Reckendorf 1921, 485) [if they=hindered-us we=fought-them] ‘if they hinder us, we will fight them’.

The modern tongues sometimes show tendencies toward an absolute tense system, especially conspicuous is MH, cf. *siparti* ‘I told’, [*ami*] *mesaper* ‘I tell’ and *asaper* ‘I will tell’ (Schwarzwald 2001, 39), but features of relative and absolute tense systems are usually intertwined. The aforementioned aspectual considerations play a significant role as well (i.a. Brustad 2000, 165ff.).

Many modern languages specifically mark the indicative as opposed to the subjunctive/jussive, e.g. Eg *bi-tišrabi šāy* [INDC-you.F=drink tea] ‘do you drink tea?’ vs. *tišrabi šāy* [you.F=drink tea] ‘would you like to drink some tea?’ (Brustad 2000, 247) and Amh *yäsäbr-all* (Leslau 1995, 344) [he=breaks-INDC] ‘he breaks/will break’ vs. *s-isäbr* (ibid., 306) [while-he=breaks] ‘while he breaks’. In MSAL, the marking pattern is reversed, with the subjunctive having a specific morpheme in most forms (Simeone-Senelle 1997, 404ff.).

Older Semitic languages do not seem to morphologically mark epistemic modality, only deontic. Most common is a jussive mood, e.g. BA ‘*ēlāhayyā di šmayyā w-’arqā lā ‘ābaḏu yeḇaḏu me-’ar’ā* (Jer 10, 11) [gods REL heaven and earth not they=made they=shall=perish from-the=earth] ‘the gods that did not make heaven and earth shall perish from the earth’ or Tig *barhat tēgba’* (Raz 1983, 68) [light it=shall=be] ‘let there be light’. A cohortative for first person can be found, for instance, in BH ‘*ēlāk-ā-nnā w-’āšub-ā ‘ēl ‘aḥ-ay* (Ex 4, 18) [I=go-COH-EMPH and-I=return-COH to brothers-my] ‘let me go and return to my brothers’. There is an energetic mood for emphatic affirmation, e.g. CA *la-tarawu-nna l-ḡaḥīma* (Sura 102: 6) [verily-you=see-ENER ART-hell=fire] ‘you shall certainly see hell-fire’. The clause-initial particles Ar ‘*inna* and BH *hinne* may have a similar function underlining the factual status of the proposition (for Ar Bloch 1986, 102ff.), cf. BH *w-hinne ‘ānoḳi ‘imm-āk* (Gen 28, 15) [and-behold I with-you] ‘behold, I am with you’ or CA ‘*inna llāha ‘alā kulli šay’in qadīrun* (Sura 2: 20) [behold god on all thing powerful] ‘god has power over all things’.

3.8. Negation

There are generally three kinds of negation: (a) negations of the NVC, either simple negators like Mand *lau* and Gəz ‘*akko*, negative copulae like BH ‘*en* and Sy *layt* (inflected with pronominal clitics) or verboids like CA *laysa* and Amh *aydällämm/yäl-lämm*; (b) verbal negators, either for indicative or jussive only such as Ug *l* vs. *al* and BH *lō* vs. ‘*al*, or without modal distinction such as Sy *lā* or Gəz/Tig ‘*i*-. Their position is in general directly in front of the verb, e.g. BA *lā hištkaḥ* (Dan 6, 24) [not was=found] ‘was not found’, circum-negations also occur, e.g. Amh *al-säbbärä-mm* (Leslau 1995, 292) [not-he=broke-not] ‘he did not break’; (c) negations of single terms like Sy *lā-wā ~ law* or CA *ḡayr*-.

The functional scope of the various negators often overlaps in that CA *laysa*, for instance, also negates single terms, or BH *lō* comprises all three kinds, though rarely in NVC. Subordinated clauses generally use the same negators as independent ones. Exceptions are rare, e.g. BH *pēn* ‘so that not’. The position of the negator at the end of a clause in MSAL is remarkable, e.g. *hēt hēst-ī hoh lā* (Simeone-Senelle 1997, 414) [you like-me I not] ‘you are not like me’. The negation of the imperative, though generally prohibited, is sometimes allowed in NENA, e.g. Sār *lā dmūh* (Younansardaroud 2001, 204) [not sleep.IMP] ‘don’t sleep’.

Typologically, CA is particularly conspicuous for the wealth of its negators with strict rules as to their occurrence (i.a. Wright 1898, 299ff.). In addition, *wa-lā* ‘and not’ may be used for the continuation of any negator (Reckendorf 1921, 335). The scope of the negation may extend to a coordinated clause, cf. BH *w-lō giddalti baḥurim rōmamti bṭulot* (Is 23, 4) [and-not I=raised young=men I=brought=up virgins] ‘and I did not raise young men nor brought up virgins’.

Double negators may strengthen the negation, e.g. Gəz *wä-’i-mahsə-a bāggə’ i-bäla’ku ’əm-’abagə’i-kä* (Dillmann 1907, 509) [and-not-lamb-cst sheep not-I=ate from-sheep-your] ‘not even a young ram of your flock have I eaten’, or have positive meaning, e.g. Sy *w-lā meṭṭol d-ḥalḥodaw it-aw-wā lā eštma’* (Nöldeke 1898, 256) [and-not because REL-alone COP-he-was not he=was=heard] ‘he did not, because he was alone, remain unheard’.

Due to ellipsis the scope of the negation may be reversed, e.g. in oaths: BH *nišba’ YHWH šbā’ot lēmōr ’im lō ka’āšer dimmiṭi kēn ḥayyā’ā* (Isa 14, 24) [he=swore Y. Z. as=follows if not as I=intended so it=was] ‘YHWH Zebaoth swore: Just as I have intended, so it will be’.

The focus structure of a negative clause basically remains morphosyntactically unmarked, but cf. Zay *’ēyā-mi wāmātāt ’alfāču* (Meyer 2005, 300) [I-FOC come.INF I=do=not=want] ‘even I did not want to come’.

Nouns like ‘nobody’ or ‘nothing’ are mainly paraphrased, e.g. MSA *al-yawm-a lā yaḡṛu ’aḥadun* (Badawi/Carter/Gully 2004, 471) [ART-day-ACC not he=comes one] ‘no one will come today’ or BH *lō yippālē mimm-kā kāl dāḥār* (Jer 32, 17) [not it=is=hard from-you all matter] ‘there is nothing too hard for you’.

3.9. Pragmatic considerations

Semitic uses different strategies to emphasise the pragmatic importance of a constituent. Especially common is the use of certain particles, mostly enclitics. In Ethio-Semitic, there is, apart from obligatory, i.e. grammatical, focus marking (see Meyer 2005, 290ff.), a pragmatically controlled non-obligatory focus, e.g. *’ēyā-m* (ibid., 298) [I-FOC] ‘(do you mean) me?’ (after a demand). The overall function is often cataphoric or anaphoric (ibid., 298ff.), e.g. *’ēyā šāggār yāhīdānāhu. ’atā-hō?* (ibid., 303) [I A.=A. I=go you-FOC] ‘I am going to Addis Ababa. What about you?’. Topic and focus markers include Sab *m(w)*, e.g. *b-m-hwt ḥrfn* (Stein 2003, 229) [in-TOP-that year] ‘in that same year’ (anaphoric) or Tur *–ze*, e.g. *mḥalāqla ruḥa l-u-tyoro m-āz-zūḥte w-ono-ze [...]* *mīdli b-id-i* (Jastrow 1992, 111) [it=threw itself to-ART-orchard from-ART-fear and-I-FOC I=took in-hand-my] ‘(the snake) threw itself for fear to the orchard, while I took (a piece of wood) in my hand’. Similarly, Gəz *–assā* often marks contrast, e.g. *wä-barok-assā nās’a*

ḥamädä (Dillmann 1866, 4) [and-B.-FOC he=took ashes] ‘Baruch now took ashes’ (after a sentence on Jeremiah).

In modern Ethio-Semitic, the position right in front of the clause-final verb is pragmatically prominent, cf. Amh (Hartmann 1980, 398ff.) or Zay (Meyer 2005, 334).

The Semitic passive is a common device to highlight the undergoer by completely deleting the actor (see section 3.3.). Oblique marking of the actor is also possible, though (ibid.).

The use of independent pronouns after possessive clitics may have a focussing function as well (see section 2.7.; also Bloch 1986, 1ff.). As for pragmatically motivated word order variation, see section 3.10.

3.10. Linearisation

The unmarked positions of the verbal nucleus are the following: (a) clause-initial, e.g. Ug (poetic), CA, BH, Sab; (b) clause-final, e.g. Akk, modern Ethio-Semitic; (c) second position, e.g. Ug (prose), MH, Ar dialects; (d) unrestricted, e.g. Sy, Mand, Gəz. Pragmatically conditioned variation is possible, though, e.g. BH which prefers verb-second position for contrast, e.g. *’aḥrām yāšaḥ b-’eṣeš knā’an w-lot yāšaḥ b-’āre hak-kikkār* (Gen 13, 12) [A. he=settled in-land K. and-L. he=settled in-towns.CST ART-plain] ‘Abram settled in the land of Kanaan, but Lot settled in the towns of the plain’. This may also be analysed as a device for background information, cf. *w-yosef huraḍ miṣrāymā way-yiqn-ḥu poṭipar* (Gen 39, 1) [and-J. he=was=brought=down to=E. and-he=purchased-him P.] ‘now Joseph had been brought down to Egypt. Potiphar purchased him’.

The linearisation in the NVC is either determined by pragmatic considerations or dependent on formal criteria like (in)definiteness, e.g. CA which puts an indefinite S in clause-final position, *fī l-bayti raḡulun* (Reckendorf 1921, 8) [in ART-house man] ‘a man is in the house’.

The ordering of the nominal constituents in a verbal clause often seems to be pragmatically controlled as well, cf. Ug *w-ḥmšm ksp lqh mlk gbl* (Tropper 2000, 873, cf. also 880) [and-fifty silver he=took king B.] ‘and the king of Byblos took fifty (shekel) silver’ or Amh *yəḥ-ən wāmbār yohannās sār-ra-w* (Hudson 1997, 480) [this-o chair Y. he=made-it] ‘Yohannes made this chair’ (cf. section 3.9.). The weight of the NP may determine its position as well, cf. Akk *kasap tamkār-um išqul-u bēl amtīm išaqqal* (von Soden 1995, 228) [silver.CST merchant-NOM he=paid-SUB master.CST maid he=pays] ‘the owner of the maid pays the silver that the merchant paid’. In many languages, though, A usually precedes O.

Interrogatives are most commonly put clause-initial, e.g. BA *man šām lqom f’em* (Ezra 5, 3) [who he=set to=you order] ‘who gave you authority?’ or in front of the nucleus, cf. Tur *em-ūḥ qāy koḥāyro eb-ūḥ hāwḥa* (Jastrow 1992, 38) [mother-your why she=looks in-you so] ‘why does your mother look at you like this?’.

A common device for emphasising the pragmatic importance of a constituent is left-dislocation (nominative): Gəz *kʷəllu ’əṣ zā-i-yəfārri fəre sānnay-ä yəgäzzəməww-o* (Dillmann 1907, 505) [all.NOM tree REL-not-it=grows fruit good-ACC they=cut=down-it] ‘every tree that doesn’t grow good fruit is cut down’.

Especially in modern Ethio-Semitic, cleft sentences are very common for focussing, e.g. Amh *nägä əgər kwas čäwata yämm-ihedu-t tämaročč-u naččäw* (Leslau 1995, 106) [tomorrow foot ball game REL-they=go-ART students-ART COP.they] ‘the ones who will go tomorrow to a soccer game are the students’. The exact construction is dependent on the element to be focussed, so *tämaročč-u əgər kwas čäwata yämm-ihedu-t nägä näw* (ibid.) [students-ART foot ball game REL-they=go-ART tomorrow COP.it] ‘it is tomorrow that the students go to a soccer game’.

4. Complex sentence

4.1. Parataxis/hypotaxis

Parataxis may be formed either syndetically with conjunctions of various semantic content, e.g. BA *wa-‘änä lä b-hâkmâ di ‘ütay bi min kâl hayyayyâ râzâ dnâ gëli li lâhen ‘al dibraṭ di pišrâ l-malkâ yhoḏ’un* (Dan 2, 30) [and-I not in-wisdom REL COP in=me from all living.PL secret this it=was=revealed to=me but on sake REL the=interpretation to-the=king they=inform] ‘this mystery was not revealed to me because I possess more wisdom than any other living ones but so that the king understands the interpretation’, or asyndetically, often with explanatory nuance, e.g. CA *ṭumma hudima suwā’un ha-dama-hū ‘amru bnu l-‘āši* (Wāq. 6) [then it=was=overthrown S. he=overthrew-him ‘A. ibn al-‘Āš] ‘then (the idol of) Suwā’ was overthrown, ‘Amr b. al-‘Āš did it’.

Parataxis is also used to convey other meanings, e.g. consecutive as in Sy *l-aykā koll-an arheqn ḥnan w-qāmt at* (Nöldeke 1898, 261) [to-where all-us we=departed we and-you=stood=up you] ‘whither did all of us go away so that you stood up?’, final as in Akk *šurk-am-ma balāt-a lubūr ana dāri* (von Soden 1995, 259) [grant.IMP-to=me-and life-ACC I=remain=in=good=health.JUSS to eternity] ‘grant me life so that I remain in good health forever’ (jussive in second clause) or conditional as in BH *w-‘āzab ‘eṭ ‘āb-iw wā-meṭ* (Gen 44, 22) [and-he=left o father-his and-he=died] ‘and if he leaves his father, he will die’.

The main hypotactic techniques comprise deranked tense forms, joined syndetically or asyndetically, e.g. Ug *qm yṭ’r w-yšlḥm-nh* (Tropper 2000, 911) [he=stood=up he=prepares and-he=feeds-him] ‘he stood up to prepare (the table) and give him food’ or CA *fa-daḥaltu ‘alā ‘abī ḡahlin wa-huwa yataḥallaqu bi-ḡalūqin* (Wāq. 66) [then-I=entered on ‘A. Ḡ. and-he he=puts=on=perfume with-perfume] ‘I entered at ‘Abū Ḡahl’s when he was putting on perfume’ (circumstantial clause with *wa-*), conjunctive clauses some of which may be marked for subordination (subjunctive), e.g. Sy *‘aḏ lā neṣṭleb yab dm-eh* (Nöldeke 1898, 200) [until not he=is=crucified he=gave blood-his] ‘he gave his blood before he had been crucified’ or MSA *qābil-nī ba‘da ‘an tušāhid-a l-filma* (Badawi/Carter/Gully 2004, 599) [meet.IMP-me after that you=watch-SUB ART-film] ‘meet me after you have seen the film’, as well as nominal subordination by means of participles and converbs (section 4.3.). Complement clauses may be either conjunctive, e.g. Ug *w-tḏ’ ilm k mtt* (Tropper 2000, 902) [and-they=know.JUSS gods that you=died] ‘so the gods know that you have died’, or infinitival, e.g. Gəz *yalāmməd ‘ahyəwo ‘ahadä* (Dillmann 1907, 453) [he=is=accustomed grant=life.INF one] ‘he was accustomed to grant one person his life’.

Syndetic constructions are in general functionally more variable than asyndetic ones, cf. i.a. CA asyndetic non-past in modal function vs. syndetic non-past in circumstantial clauses with a wide range of possible meanings (Waltisberg 2009, 235ff.).

In many languages, coordinative conjunctions may introduce the matrix clause after preposed dependent clauses, e.g. Gəz *wä-ʾəmzə sobä zäbät-o wä-ʾaḥmām-o wä-gʷäyyä wästä gädām wä-ʾašlälä tahtä* ‘om (Dillmann 1866, 34) [and-then when he=beat-him and-he=harmed-him and-he=fled to wilderness and-he=sought=shade under tree] ‘and then, when he beat him and harmed him, he fled into the wilderness and sought shade under a tree’. This applies in particular to conditional sentences, e.g. CA *law qadimtu l-madīnata fa-naḏartu mā yaqūlu muḥammadun* (Wāq. 97) [if I=came ART-M. then-I=looked what he=says M.] ‘if only I came to Medina, then I would hear what Muhammad says’. The distinction between factual and counterfactual condition is generally conveyed by means of different conjunctions, cf. as against the CA example just cited the factual condition quoted in section 3.7.

The hypotactic techniques discussed above are linguistic phenomena of quite diverse quality and can only very inadequately be covered by the traditional terms coordination and subordination. Especially problematic are, for instance, the circumstantial clauses introduced by the conjunction ‘and’, certain asyndetic constructions or the nominal subordination with participle and converb (section 4.3.). Therefore, the model of *Junktion* (Raible 1992) which assumes that syntactic techniques can be ordered according to their relative level of dependency between the poles aggregation and integration, may be successfully applied to Semitic (for CA, cf. Waltisberg 2009, 55ff.).

4.2. Position of the dependent clause

The overall organisation of complex clauses basically corresponds to the structure of the noun phrase established in section 2.1.: Left-headed languages predominantly postpose dependent clauses, whereas right-headed languages prepose them. Cf. CA *fa-ʾarsala ʾilay-him wahrizu bn-an la-hū li-yuqātil-a-hum* (b. Hiš. 43) [then-he=sent to them W. son-ACC to-him so=that-he=fights-SUB-them] ‘Wahriz sent one of his sons to them so that he fights them’ vs. Amh *yəh-ənnən wānz əndet əndämmiššaggār alawḳəmm* (Leslau 1995, 837) [this-o river how that=he=crosses I=don’t=know] ‘I don’t know how he will cross this river’. But whereas right-headed languages barely allow any variation in the position of dependent clauses, left-headed languages are more flexible. Especially conditional and temporal clauses are often preposed (see 4.1.). In addition, modern varieties may acquire more flexibility than their predecessors. CA, for instance, did not allow for conjunctive dependent clauses like final or circumstantial clauses to be preposed, but in modern written or colloquial Ar this is perfectly acceptable, e.g. Eg *ʾāh wə-humma mašyīn nīsi šanṭit-u mʾā-hā* (Brustad 2000, 340) [oh and-they leaving.PL he=forgot bag-his with-her] ‘oh, when they were leaving he forgot his bag with her’. On the whole, though, the traditional ordering still predominates.

4.3. Nominal subordination

The masdar is used for dependent clauses mostly in temporal or final function, often combined with adpositions, cf. Mand *maṭui-ai bit ṭabia sigdūt* (Nöldeke 1875, 389)

[come.INF-my house.CST good.PL I=worshipped] ‘when I came to the house of the good ones, I worshipped’ or Gəz *’asəṛəww-omu kālasəst-ä lä-’andədot-omu* (Dillmann 1907, 458) [bind.IMP.PL-them sheaves-ACC to-burn.INF-them] ‘bind them in sheaves to burn them’. A masdar may be in genitive position, e.g. BH *ki b-yom ’ākāl-kā mimm-ənnu mōt tāmūt* (Gen 2, 17) [for in-day eat.INF-your from-it die.INF you=die] ‘for when you eat from it, you will surely die’.

Ethio-Semitic developed a converb, mostly for temporal clauses, e.g. Amh *bärr-u-n kāfəč-če s-əgäba səlḱ tädäwwälä* (Leslau 1995, 358) [door-ART-O open.CV-I while-I=enter telephone it=rang] ‘as I opened the door and entered, the telephone rang’, but also in other functions, e.g. causal *zānb-o qärrän* (ibid., 359) [rain.CV-it we=remained] ‘because it rained, we could not go’ or modal *anḱ-äw gäddälu-t* (ibid., 360) [strangle.CV-they they=killed-him] ‘they killed him by strangling (him)’. A negative converb is extremely rare, but cf. Gəz *təgeggayu ’i-ya’mirä-kəmu māṣahəftä qəddusatä* (Weninger 2001, 231) [you=err not-know.CV-you books holy] ‘you err since you do not know the holy scriptures’. In Tna, the converb may be used not only in dependent clauses, but also independently, usually with resultative meaning, e.g. *məs män mäsi’-ki* (Kogan 1997, 439) [with who come.CV-you] ‘with whom have you come?’.

Especially in Ar, the participle may be used as an adjunct in accusative, either to convey a resultative meaning, e.g. CA *’anna rasūla llāhi ḥaraḡa ’āṣib-an ra’sa-hū* (b. Hiš. 1006 = Ṭab. 1803) [that messenger god he=went=out binding-ACC head-his] ‘that the messenger of god went out with his head bound up’, or to denote the identity of the two conjoined states of affairs, e.g. *bāta rasūlu llāhi sāhir-an ’awwala laylatin* (Ṭab. 1341) [he=spent=the=night messenger god being=awake-ACC first night] ‘the messenger of god spent the first night awake’. All the constructions discussed in this section show a high degree of finiteness reduction.

4.4. Raising

Some languages exhibit the construction commonly known as raising. Two clauses the first of which typically contains a verb of perception are combined such that the subject of the second clause is realized as the object of the first. The matrix verb thus governs not only a nominal constituent, but a whole proposition. The embedded clause may contain different nuclei dependent on the desired temporal reference. The masdar is not used in raising.

The O phrase may be direct, marked with accusative, e.g. Gəz *wä-sobeḥa rə’iku rə’əs-ä mäwə’əl dibā mänbär-ä səbhəti-hu yənəbbər* (Enoch 60, 2) [and-then I=saw head-CST days on throne-CST glory-his he=sits] ‘and then I saw the head of the days sitting on the throne of his glory’, or oblique, marked adpositionally, e.g. CA *fa-qāla nṣurū ’ilā fay’i š-šaḡarati māla ’alay-hi* (Ṭab. 1125) [then-he=said look.IMP.PL to shadow ART-tree it=leant over-him] ‘he said: Look how the shadow of the tree moved over him’. The fact that the object is not an argument of the matrix verb is shown by the seemingly reflexive use of the pronominal clitics that is otherwise forbidden, cf. CA *wa-la-qad ra’aytu-nī yawma’idin ’altaqītu ṭalāṭata ’adru’in* (Wāq. 96) [and-indeed-PART I=saw-me then I=collect three breast=plates] ‘I was then present and collected three breast-plates’.

In Northwest-Semitic, raising is only possible with embedded participles denoting simultaneous actions, e.g. BA *w-haškaḥu l-dāniyyel bāʿe u-miṭḥannan qōdām ʾēlāh-eh* (Dan 6, 12) [and-they=found o-Daniel praying and-begging before god-his] ‘and they found Daniel praying and asking for help before his god’. In CA, the participle in raising primarily denotes resultative states, e.g. *fa-wağadtu-hū ġālis-an fī nafarin min ʾaṣḥābi-hī* (Ṭab. 1451) [then-I=found-him sitting-ACC in persons from companions-his] ‘I found him sitting among some of his companions’.

In other languages, different constructions after verbs of perception are attested, cf. Akk *ešmē-ma kīs-um šalmat* (Streck 2006, 64) [I=heard-and bag-NOM it=is=intact] ‘I heard that the money-bag is intact’, or Gəz which otherwise knows raising, e.g. *wä-rākāb-omu ʾənzä yənāwwamu* (Weninger 2001, 116) [and-they=found-them while they=sleep] ‘and he found them asleep’.

After the common matrix verbs of raising, CA also allows a different construction with a syndetic circumstantial clause, e.g. *fa-ʾalfaw-hu wa-huwa nāʾimun* (Ṭab. 1157) [then-they=found-him and-he sleeping] ‘they found him asleep’. This construction occurs considerably more rarely than raising, though.

5. Abbreviations

A	agentive (transitive subject)
acc	accusative
adj	adjective
Akk	Akkadian
Amh	Amharic
AP	adpositional phrase
appos	apposition
Ar	Arabic
Aram	Aramaic
art	definite article
BA	Biblical Aram
Bab	Babylonian Aram
BH	Biblical H
CA	Classical Ar
coh	cohortative
cop	copula
cst	construct state
cv	converb
def	definite
dmstr	demonstrative
DOM	differential O marking
du	dual
Eg	Egyptian Ar
EA	Egyptian Aram
emph	emphatic (particle)
ener	energetic

f	feminine
ff.	following page(s)
foc	focus
gen	genitive (marker)
Gəz	Gə'əz
Gu	Gurage
H	Hebrew
Har	Harari
imp	imperative
indc	indicative
indef	indefinite
inf	infinitive
IO	indirect O
juss	jussive
LOC	locus ~ locative
m	masculine
Mand	Mandaic
MH	Modern H
Mhr	Mehri
Mor	Moroccan Ar
MSA	Modern Standard Ar
MSAL	Modern South Arabian Languages
n	noun
NA	Neo-Aramaic
NENA	North-Eastern NA
nom	nominative
NP	noun phrase
num	numeral
NVC	non-verbal clause
O	objective (marker) (transitive object)
OA	Old Aram
OAkk	Old Akk
part	particle
pass	passive
past	past tense
p.c.	personal communication
pl	plural
pop	postposition
poss	possessive (marker)
PP	prepositional phrase
pred	predicative
prp	preposition
q	question marker
Qar	Qaraqosh NA
rel	relative clause/particle
RH	Rabbinic H
S	subjective (intransitive subject)

Sab	Sabaic
Şan	Şan‘ānī Ar
Sär	Särdä:rīd NA
sg	singular
sub	subjunctive
Sul	Sulemaniyya NA
Sy	Syriac
TAM	tense-aspect-mood
Tig	Tigre
Tna	Tigrinya
top	topic
trm	terminative
Ṭur	Ṭuroyo
Ug	Ugaritic
V	verb
WNA	Western NA
Wol	Wolane

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IV. The Semitic Languages and Dialects II: East Semitic

12. Akkadian in General

1. The attestation of Akkadian and its dialects
2. The position of Akkadian within Semitic and its main distinctive characteristics
3. Cuneiform writing
4. References

Abstract

Akkadian is attested in Mesopotamia roughly from the second half of the third millennium B.C. until the first centuries of the Christian era. It belongs to the East Semitic branch of Semitic, and is generally a typical Semitic language, although it has developed a few specific features of its own. Already in the earliest texts, there is evidence for dialect variation. In the third millennium, at least three separate dialects can be identified: the dialect of Mari and Tell Beydar, Sargonic Akkadian, and Ur III Babylonian. In the second millennium, this crystallised into a stable division between Assyrian in the North and Babylonian in the South, in addition to the literary language of Standard Babylonian, which was not restricted to a particular area. Akkadian is written in the cuneiform script, which is basically syllabic and generally offers an accurate and reliable rendering of the underlying language. Most of cuneiform's shortcomings can be remedied by the use of spelling variation, internal reconstruction, comparison with other Semitic languages, study of Akkadian loanwords in neighbouring languages, and in particular through the highly systematic 'root-and-pattern' system which Akkadian shares with the rest of Semitic.

1. The attestation of Akkadian and its dialects

In terms of the quantity of extant text material, Akkadian is by far the best attested Semitic language in the ancient world prior to the appearance of Arabic in the historical record. It was spoken in Mesopotamia, a region which roughly coincides with present day Iraq, and takes its name from the city of Akkad (or Agade), the capital of the Sargonic Empire (ca. 2350–2170 B.C.). The oldest available documentation suggests that Akkadian was the dominant language in the North of Mesopotamia and gradually spread to the South during the second half of the third millennium B.C., at the cost of Sumerian.

The earliest traces of Akkadian (omitting Eblaite, cf. Section 2) are personal names. Already in the Early Dynastic IIIa texts from Fāra and Tell Abū Šalābīḥ (ca. 2600–2450) Semitic personal names occur which are arguably Akkadian (Biggs 1967; Kreber-

nik 1998, 260ff.; Sommerfeld 2010, 81ff.). They continue to be our most important source in the subsequent Pre-Sargonic period (ca. 2450–2350) (Westenholz 1988; Sommerfeld 2010, 95ff.). In addition, a few Akkadian words are found on ‘kudurrus’ (boundary stones) from the Pre-Sargonic period, which were written in Akkadian but consist almost exclusively of logograms: a verb form such as *iš-du-du* ‘they measured’, a noun such as *è-da-su* ‘its border’ (i.e. *yitāsu*), and the prepositions *in* ‘in, from’ and *āš-dè* ‘from’ (Gelb, Steinkeller and Whiting 1991, 11ff.).

A third possible source may be the Akkadian loan words found in early Sumerian texts from the Jemdet Nasr and Early Dynastic I and II periods (ca. 3200–2600 B.C.). A large number of possible instances have been proposed and discussed in the literature, but almost all of them are controversial. In a recent critical evaluation, Sommerfeld (2006) has cast serious doubt on the occurrence of any Semitic elements in these periods. It is only in the Early Dynastic IIIa period, thus contemporary with the earliest personal names, that reliable instances of Semitic loan words in Sumerian are recorded in the Fāra and Tell Abū Šalābīkh texts (Krebern timer 1998, 265 and 269ff.).

Despite the scarcity of data, there is some evidence of dialectal divergence as early as the Pre-Sargonic period. It concerns in particular the distribution of the vowels *e* and *i*, the reflexes of the Proto-Semitic sibilants, and the reduction or loss of guttural consonants (Sommerfeld 2010, 143ff.). An illustrative example is the common personal name *Yišma’-ilum*, which is usually spelled *Iš-mā-i-lum*, from **yišma’-ilum* ‘the god has heard’ in the third millennium, but appears as *Iš-me-i-lum* or *Iš-me-lum* (also spelled *Ēš-me-lum*) in texts found in Nippur and further south (Westenholz 1988, 115ff.; Edzard 1998/2001, 108; Sommerfeld 2010, 145 ff). These forms show the typically Babylonian features of the loss of the guttural consonants and the concomitant raising of *a* to *e*. It is therefore attractive to see in such forms the first attestations of the later Babylonian dialect, although we must await further data to confirm this possibility.

Connected texts in Akkadian first appear around 2400 B.C. From the outset they show a considerable dialectal diversification, even though the scarcity of the sources makes it difficult to gain a complete picture of the situation. At least three dialects can be identified:

- (1) The earliest group of texts is a small corpus found in the far North of Mesopotamia, in Mari and Tell Beydar (ca. 2400). According to the few distinct features we can identify, they represent a dialect which is particularly conservative in its phonology and morphology (see Charpin 1987, 89ff. and Ismail et al. 1996, 69ff.).
- (2) By far the most important third millennium dialect in terms of the quantity of extant texts is Sargonic Akkadian (from ca. 2350 onwards)(see ch. 13). In principle, Sargonic Akkadian is the official language of the Sargonic Empire (Sommerfeld 2003), but it is convenient to apply this term more generally to all Akkadian texts which belong to the Sargonic period both geographically and chronologically. They comprise royal inscriptions, administrative documents, letters and a few literary texts. A recent description of Sargonic Akkadian writing and grammar is Hasselbach 2005, which replaces Gelb’s pioneering study (Gelb 1952 and 1961). Sargonic Akkadian itself is not uniform: there are significant internal differences, mainly between conservative and innovating varieties. These varieties are partly dependent on genre, with the royal inscriptions and texts emanating from the Sargonic bureaucracy in general as conservative, and other texts as more innovating (Sommerfeld 2003), and partly geographic, with southern Babylonia as most conserva-

tive, and the more northern regions, in particular the Diyala, as innovating (Hasselbach 2005, 231ff.).

- (3) From the subsequent Ur III period (ca. 2110–2000 B.C.), very few texts in Akkadian have been preserved. The language they show is the direct ancestor of the second millennium Babylonian dialect (Hilgert 2002, 168).

The second and first millennia B.C. show a clear distinction between two dialects: Assyrian in the Northeast and Babylonian in the rest of Mesopotamia (see ch. 14). Babylonian can be directly derived from its third millennium ancestor Ur III Babylonian, as already stated above. There are no third millennium traces of Assyrian, but in view of the marked dialectal differences from all other dialects, it must already have been there in this period. Since it does not share a number of Sargonic Akkadian innovations, it cannot be a descendant of Sargonic Akkadian, but represents a separate branch of ‘Proto-Akkadian’.

On a linguistic and historical basis, second and first millennium Babylonian can be divided into Archaic Babylonian (ca. 2000–1900), Old Babylonian (ca. 1900–1600), Middle Babylonian (ca. 1400–1000), Neo-Babylonian (ca. 1000–600), and Late Babylonian (from ca. 600 until the end of Akkadian as an administrative language). The boundaries between the stages coincide with major gaps in our documentation: most dialects are separated by several centuries with few extant texts. On the basis of the same criteria, the history of Assyrian can be divided into Old Assyrian (ca. 1950–1730), Middle Assyrian (ca. 1500–1000), and Neo-Assyrian (ca. 1000–600).

This geographical and chronological classification is intersected by the literary dialect of Standard Babylonian, which goes back to literary Old Babylonian but gradually incorporated more and more features of the contemporary language of the scribes who used it. Standard Babylonian was used over the whole of Mesopotamia, including Assyria. In the middle of the first millennium, Akkadian also came to be used as a *lingua franca* in other regions of the Middle East; for this so-called ‘Peripheral Akkadian’, see ch. 16.

In the Neo-Babylonian and Neo-Assyrian period, Akkadian as a spoken language was gradually replaced by Aramaic (see ch. 17). It is difficult to determine when it finally became extinct but the third or second century B.C. may be a plausible guess; Westenholz (2007, 293) suggests ‘by 100 B.C.’. However, as a learned language Akkadian survived several centuries more. The latest datable cuneiform texts come from the first century A.D.; how long it persisted after that is a matter of debate. Geller (1997, 63ff.) argues that the active use of cuneiform survived into the third or even fourth century, but this has recently been questioned by Westenholz (2007, 294ff.).

2. The position of Akkadian within Semitic and its main distinctive characteristics

Akkadian is classified as either the main or the only representative of the East Semitic branch of Semitic, depending on whether Eblaite is regarded as a separate language and thus a sister of Akkadian, or as a dialect of Akkadian. Protagonists of the former view include Huehnergard (2006, 3ff.), Rubio (2006, 121), Kouwenberg 2010, 22f; the latter view is particularly held by Krebernik (1996) and Edzard (2006).

In many respects, Akkadian is a typical Semitic language, with an intricate morphology, based on the ‘root-and-pattern’ system, a predominance of trilateral verbal roots, and a highly developed system of verbal derivation. However, several characteristics set it apart from the West Semitic languages. The most important are:

- (1) In phonology: the loss of most ‘guttural’ consonants, see further Section 3.2 sub (4).
- (2) In the morphosyntax of the verb: the incorporation of two original derivational categories into the basic stem, namely the present (or imperfective) with gemination (*iparrVs*) and the perfect with an infix *t* (*iptarVs*); the existence of a suffix conjugation (*parVs*) with resultative function, formally corresponding to the West Semitic perfect (*qatVla*); and the rise of a set of derived verbal stems to express verbal plurality, the ‘TAN-stems’.
- (3) In the morphosyntax of the noun: the almost exclusive use of suffixation for nominal derivation, rather than ‘internal inflection’.
- (4) In syntax: the clause-final position of the finite verb.

3. Cuneiform writing

Almost all Akkadian texts are written in cuneiform script. A few Akkadian words are preserved in Greek transcriptions from the very latest period that Akkadian was in use, but their number is insignificant. Nevertheless, they give some impression of the traditional pronunciation of Akkadian by scholars of this period, for whom it was undoubtedly a learned language. The texts in question were (re-)edited and discussed by Geller 1997, 64ff.; see also Knudsen 1990 and Westenholz 2007.

In this short chapter, only the most basic features of cuneiform writing are outlined; for a more detailed description, see Reiner 1966, 23ff. and 1973; a concise account focused on Old Babylonian is Huehnergard 2005, 68ff. This chapter concentrates in particular on the relationship between cuneiform writing and our knowledge of Akkadian.

3.1. The nature of cuneiform writing

Akkadian cuneiform writing consists of syllabic signs (‘syllabograms’), which represent a syllable or part of it, logograms (word-signs), which indicate a whole word and may replace a syllabically spelled word, and determinatives, which serve to classify a noun as belonging to a specific semantic field. For instance, the noun *awīlum* ‘man’ may be written syllabically *a-wi-lu-um* or with the logogram *lú*. A logogram may be accompanied by a ‘phonetic complement’, i.e. a syllabic sign indicating the intended reading of (part of) the final syllable, e.g. *a.šà-lum* or *a.šà-um* for *eqlum* ‘field’ (Nom Sg). Just as in this example, a phonetic complement often specifies the grammatical function of a noun, or disambiguates a logogram with more than one meaning, e.g. *an-ú šamû* ‘heaven’ versus *dingir-lum* ‘god’ (where both *an* and *dingir* are expressed by the sign AN). A determinative may be added to both logograms and syllabically written words. Most of them precede the noun they qualify, e.g. *GIŠ* for wooden objects (*^{GIŠ}MÁ* or *^{GIŠ}e-le-ep-pu-um* ‘ship, boat’), but a few follow it, e.g. *KI* for cities (*Ma-ri^{KI}* ‘(the city of) Mari’).

The basic tools for finding the values of cuneiform signs are von Soden/Röllig 1948 (fourth and latest edition 1991), which is a list of syllabic signs used in Akkadian, and Labat 1988 and Borger 2003, which not only include syllabic values, but also logograms and determinatives.

A striking feature of cuneiform writing is the widespread polysemy of the signs. Several signs may occur as syllabogram, logogram and determinative according to the context. Moreover, many syllabograms combine several totally dissimilar values. The sign BAD, for instance, has the values *be*, *bad/t/t*, *mid/t/t*, *til*, *z/šiz/š*, *sun* and *úš*, to mention only the most common. As a result, the number of theoretical solutions for a given string of cuneiform signs is very large. This may cause problems in the initial stages of interpretation; the steps and procedures used (usually intuitively) to find the correct reading are made explicit and discussed in detail in Reiner 1973.

This chapter henceforth concentrates on syllabic signs, since they are the only ones which give us direct information about the language. A syllabic sign may indicate a single vowel (symbolized as V), consonant plus vowel (CV), vowel plus consonant (VC), and consonant plus vowel plus consonant (CVC). In late texts, some of the CVC-signs may also be used for a bisyllabic sequence CV₁CV₁ under certain conditions, see Deller 1962 and Renger 1971, 37. A closed syllable can be expressed by a CV- plus a VC-sign or by a CVC-sign, if this is available (see the next section), e.g. *patrum* 'knife' can be written *pat-rum*, *pa-at-rum*, *pat-ru-um* or *pa-at-ru-um*. In principle, the string of syllabic signs follows the natural syllabification of the word. If it does not, we have a so-called 'broken spelling', which is discussed in Section 3.2 sub (4).

A long vowel may be indicated by a plene spelling consisting of the extension of a CV-sign by means of the corresponding V-sign, e.g. *ša-al-ma-a-ku* 'I am well', which represents *šalmāku*. Gemination of consonants may be indicated by writing (C)VC₁-C₁V(C), e.g. *ša-ar-ra-qu-um* 'thief' for the noun *šarrāqum*. Both procedures are optional, see further Section 3.2 sub (3).

In cuneiform writing each word can be spelled in many different ways, but the actual degree of variation is significantly reduced if we consider individual dialects and/or genres. Each dialect has its own syllabary with its own conventions and 'fashions', not to mention its own sign forms. However, there is a clear correlation between genre and the predilection for syllabic or logographic writings. Letters, legal documents and literary texts are predominantly written syllabically. Logograms are particularly frequent in Standard Babylonian texts of a 'scientific' nature, such as astronomical and medical texts, and omen texts in general. Logographic writing of verb forms, for instance, is virtually restricted to these genres.

A final point to be noted concerns the conversion of cuneiform writing to modern writing systems, in particular the Latin alphabet. One should distinguish between transliteration and normalization, also called (phonemic) transcription. In a transliteration, there is a one-to-one correspondence between the cuneiform signs and their modern equivalents. It should be unambiguous and reversible. A normalization consists of the actual Akkadian word which is expressed by the signs. The word for 'man' in Old Babylonian, for instance, is *a-wi-lu-um*, *a-wi-lum* or *lú* in transliteration, but *awilum* in normalization. In normalization, determinatives are omitted and logograms are replaced by their Akkadian equivalent. A normalization should also include information which is not expressed by the cuneiform signs, such as the fact that the initial *a* of *awilum* is short and its middle *i* long. Such data have to be supplemented from other sources, which makes a normalization subjective or even conjectural to some extent.

There is a long-standing debate about the most appropriate method of transliteration. There are basically two procedures, which one might call the ‘von Soden system’ and the ‘Gelb system’ on the basis of their most explicit protagonists (von Soden/Röllig 1991, xviif.; Gelb 1970). The von Soden system aims at making the transliteration transparent – also for non-specialists – by selecting precisely that value which is required by what is presumed to be the ‘correct’ form of the word according to our general knowledge of Akkadian grammar. The Gelb system, on the other hand, aims to render the signs in a more neutral way by means of a basic value, without attempting to approximate the assumed shape of the word in all details.

A good illustration is the way these methods handle the sign ŠI. Old Babylonian normally uses the signs ŠI and ŠE for the syllables /ši/ and /še/, respectively, but occasionally ŠI is used where we would expect ŠE. This happens, for instance, in the form *ú-ŠI-ši* ‘he caused to go/come out’, the Š preterite of the verb *wašû*. There are good reasons to assume that the actual standard form is *ušēši*. The von Soden system makes this explicit by transliterating *ú-še₂₀-ši*, assigning the additional value *še₂₀* to the sign ŠI. The Gelb system, on the other hand, writes *ú-ši-ši* and leaves it to the reader to infer the exact phonological form. Note that we need the value *še₂₀* anyway for spellings such as *še₂₀-e-er-ra-am* ZA 79, 16: 20 ‘child’ (Acc Sg), i.e. *šerram*, which in the Gelb system assumes the awkward and misleading transliteration *ši-e-er-ra-am*.

Of the two procedures, the von Soden system is more user-friendly, but has the disadvantage that it may lead to a proliferation of sign values (as in *še₂₀*), and that it runs the risk of concealing existing variation and of putting the form into a straight-jacket of preconceived ideas about what Akkadian should look like. It is conceivable, for instance, that some scribes wrote *ú-ŠI-ši* rather than *ú-še-ši* because they actually used a variant form *ušīši*. The von Soden system fails to take this possibility into account in a sufficiently explicit way.

3.2. Cuneiform writing and Akkadian grammar

These and similar cases raise the question of how accurately cuneiform writing reflects the phonology and morphology of Akkadian, and what means we have to remedy its shortcomings. As a syllabic script, it indicates both consonants and vowels and in this respect it is superior to the consonantal writing systems used in the Ancient Near East, such as the Egyptian hieroglyphs and the alphabetic scripts of West Semitic. However, cuneiform writing is not in all respects an ideal vehicle for expressing Akkadian, especially because it was not devised for this purpose. In earlier times it was used for Sumerian, an unrelated language with quite a different structure and in particular quite a different phoneme inventory, which lacked many of the typically Semitic phonemes of Akkadian, such as the ‘guttural’ and the glottalic (traditionally called ‘emphatic’) consonants. Apart from logograms and determinatives, the Akkadian scribes took over the syllabograms they found in Sumerian, and only very gradually and haphazardly created new signs to fill the gaps. They never achieved a system with a one-to-one relationship between syllabograms and syllables. It is especially with regard to the older stages of Akkadian that our knowledge is marred by uncertainties caused by the syllabary.

On the other hand, these uncertainties can often be remedied, entirely or partly, by indirect evidence. Depending on the problem in question, this may come from spelling variation within and across dialects of Akkadian, internal reconstruction, comparison with other Semitic languages, and study of Akkadian loanwords in neighbouring languages. We are also greatly helped by the structure of Akkadian as a Semitic language, in particular the ‘root-and-pattern’ system, which includes a limited number of fixed patterns to which verbal and deverbal forms (including adjectives), and a large part of the nouns belong.

Four areas of Akkadian phonology are particularly affected by the shortcomings of the syllabary: the distinction of homorganic stops and sibilants (1), the distinction between *i* and *e* (2), the indication of vowel length and consonant gemination (3), and the expression of the weak consonants *w*, *y* and *ʾ* (4). The following is a brief discussion of these affected areas.

- (1) Akkadian inherited from Proto-Semitic a three-way opposition between voiceless, voiced and glottalic dentals (*t*, *d* and *t̤*), velars (*k*, *g* and *q* (= *k̤*)), and sibilants (*s*, *z* and *š*), and a two-way contrast between labials (*p* and *b*). This is only rarely reflected in the spelling. There are mostly one or two distinct signs, but the exact way these consonants are distinguished or not will differ according to dialect and to opposition. At the end of a syllable, there is never a distinction between the voiceless, voiced and glottalic consonants.

There is no reason, however, to assume that this non-distinction reflects an actual merger. All other evidence demonstrates that it is purely a matter of orthography. To mention only one example, Old Assyrian normally uses a single sign for all labials, dentals, velars and sibilants, both at the beginning and at the end of a syllable. In Middle Assyrian, however, which uses a quite different and much more accurate syllabary, the different phonemes reappear in their original distribution. Since Middle Assyrian is in all important respects a direct descendant of Old Assyrian, this means that they must have existed in Old Assyrian as well. However, it is often impossible to establish the exact shape of words which are only attested in Old Assyrian and do not have a clear etymology.

- (2) The phonological status of *e* in Akkadian is weak: it is a secondary phoneme and mainly occurs as a conditioned variant of *a* or *i* (von Soden 1995, 14 §9h). Accordingly, many signs do not discriminate between *i* and *e* (e.g. LI, KI, SI, DI, IG, IZ, IM). For other syllables, there are two or more signs, but they are not distinguished consistently, e.g. BI is also used as *bé*, and *be* (i.e. the sign BAD) as *bí*, IŠ is also used as *eš*₁₅ and EŠ as *iš*. Only a few cases show a fairly consistent distinction, e.g. TI versus TE in Babylonian. In Old Assyrian, the vowel signs I and E themselves seem to be the only signs which distinguish between *i* and *e*.

Here, it is the root-and-pattern system which often enables us to decide the matter, at least when dealing with a motivated word: in summary, *e* is opted for when the corresponding pattern has *a*, and *i* when it has *i*.

- (3) Vowel length and consonant gemination are contrastive in Akkadian. A long vowel can be indicated by a plene spelling, and gemination by the sequence (C)VC₁-C₁V(C), as noted in Section 3.1. However, both procedures are used inconsistently. To complicate matters, we also find occasional plene spellings for vowels which for morphological reasons cannot possibly be long. The graphic indica-

tion of consonant gemination varies widely according to dialect. In third millennium Akkadian and in Old Assyrian, for instance, it is hardly ever found. The omission of vowel length and gemination does not cause a serious problem. First of all, if they are indicated in some exemplars of a particular word or category, it may safely be concluded that they also occur in cases where they are not written. Moreover, even without explicit spellings the occurrence of these phenomena is accurately reconstructible from two phonological rules which are sensitive to syllable length: the vowel syncope rule, which syncopates the second of two consecutive short syllables, and the Assyrian vowel assimilation rule, which assimilates a short *a* in the penultimate syllable to the vowel of the final syllable (von Soden 1995, 15ff.). Finally, also in this case the fixed patterns of the root-and-pattern system are a great help. Accordingly, it is only in unmotivated words that vowel length and gemination may be difficult to establish.

- (4) By far the most problematic point concerns the expression of the weak consonants *w*, *y* and *ʕ*. From Proto-Semitic Akkadian inherited the semi-vowels *w* and *y* and four ‘guttural’ consonants, i.e. the laryngeals **ʕ* and **h*, and the pharyngeals **c* and **h*, all of them phonemes for which the Sumerian syllabary did not have signs. A process of weakening and the loss of the gutturals had already started in the earliest attested period of Akkadian. Their at least partial preservation in Sargonic Akkadian is shown by a number of special signs, such as É for /ħa/ or /ha/, MÁ for /maʕ/ or /maḥ/ (Hasselbach 2005, 73ff.). The use of these signs is often inconsistent and their phonological interpretation problematic.

In second millennium Akkadian, the gutturals have become glides or *ʕ*, which is now the only remaining guttural. To indicate *w*, *y* and *ʕ*, the Akkadian scribes had recourse to various makeshift devices which differ according to dialect, or simply left them unexpressed. First of all, they used a set of syllabic signs, which are unusual in that they are indifferent to the quality of the vowel, and reversible, i.e. they can indicate both a CV and a VC syllable (Reiner 1964): the sign PI for *w* plus any vowel, and in Babylonian and later Assyrian the ligature I+A for *y* plus any vowel. Old Assyrian sporadically uses I for *y*, but mostly leaves it unexpressed. These signs can also indicate any vowel plus *w* and *y*, respectively, in the very rare cases where these sequences occurred, since Akkadian does not normally have diphthongs. For *ʕ*, there is no specific sign in the early dialects, and it is only in Middle Babylonian and Middle Assyrian that a special *ʕ*-sign appears, which is indifferent to vowel quality and reversible, just as the signs for *y* and *w*.

Before the appearance of the *ʕ*-sign, the usual way to indicate *ʕ* was by simply leaving it out. In some environments, this leaves a trace in the presence of a ‘broken spelling’, which violates the normal syllabification rules, i.e. a sequence such as (C)VC-V(-), (C)VC-VC(-) and (C)V_i-V_j(C) in Babylonian nouns such as *pi-ir-ú* or *pi-ir-um* ‘offshoot’ and *da-um-ma-tum* ‘darkness’, which stand for *piʕu(m)* and *daʕummatum*. In Old Assyrian, broken spellings are the only indication of the presence of *ʕ*. Old Babylonian could also indicate *ʕ* by means of the signs which actually indicate the velar fricative /ħ/, i.e. ĤA may also stand for /ʕa/, AĤ for /aʕ/, etc. (Kouwenberg 2010, 520ff.).

However, broken spellings are a seriously deficient device for the expression of *ʕ*. First, they are only unambiguous after a consonant and between different vowels, as in the examples given above. Between identical vowels they are ambiguous: a sequence such as *ša-al* may stand for a single syllable /šal/ or /šāl/ and for a two-syllable unit /šaʕal/ or even /šaʕʕal/. If a two-syllable unit is intended, this may be indicated by

an extra vowel: *ša-a-al*; however, this spelling may also indicate a long vowel. Second, broken spellings give no information about ' in word-initial and syllable-final position. Third, they do not specify the nature of the weak consonant. In particular in Old Assyrian, where *y* is often left unexpressed, they may indicate not only ' but also *y*.

Since the development of the weak consonants and the occurrence or non-occurrence of vowel contraction are major issues in Akkadian grammar, and a defining point of contrast between Babylonian and Assyrian, the ambiguity of broken spellings is a significant shortcoming. It leads to widespread uncertainty about words which possibly contain an intervocalic syllable boundary. For instance, only by means of indirect evidence and internal reconstruction can we establish that one must interpret the spelling *i-ša(-a)-al* 'he asks' as *išâl* in Babylonian but as *iša'al* in Assyrian.

Generally speaking, then, cuneiform writing offers a fairly accurate and reliable picture of Akkadian phonology and morphology, with the reservation that where glides and (former) gutturals are involved, there is a relatively high degree of uncertainty which can only be partly remedied by indirect evidence.

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13. Eblaite and Old Akkadian

1. Akkadian in the third millenium
2. Eblaite
3. Sargonic Akkadian
4. References

Abstract

This article describes the oldest attested stages of Akkadian from the 3rd mill. BC., including the language from Ebla. The focus lies on clarifying the position of the two best attested sub-corpora, Eblaite and Sargonic Akkadian, within the history of the Akkadian language. Eblaite is classified as an archaic Akkadian dialect and Sargonic Akkadian as an early form of Babylonian.

1. Akkadian in the third millenium

The earliest traces of Akkadian are personal names and loanwords in Sumerian texts. They certainly go back to the Early Dynastic III period (Fāra and Tall Abū Ṣalābīḥ),

i.e., to ca. 2650 BC., e.g.: Personal names *Áš-da-il* /*ʿAšta-il*(?) ‘With god’. *I-ti-đID* /*Yiddin-nah(a)rum*/ ‘The river god has given’. Loanwords in Sumerian: *ma-na* ‘mina’ < *manā’um*, *bur-šu-ma* ‘old man’ < *puršumum*, *dam-gàra* ‘merchant’ < *tamkārūm*, *in* ‘in’ < *in*, *ù* ‘and’ < *u*. In spite of the doubts raised by Sommerfeld 2006 and 2010, 83, perhaps even earlier traces of Akkadian can be found in cuneiform texts from the Ġamdat Našr and Early Dynastic I and II periods (ca. 3200–2700 BC). The earliest certain Akkadian text is the Šamaš hymn IAS 326+342 (ca. 2650 BC, cf. Krebernik 1992). The texts from Mari and Tall Baydar in northern Mesopotamia date to ca. 2400 BC. Whereas the language of the Mari texts has some similarities with the language of Ebla, the language of the Tall Baydar texts has not, but shares characteristics with the language of the texts from Mari, Nippur, Adad and Isin (Fronzaroli 2005, 161f.). Sommerfeld 2010 provides a comprehensive overview over the Akkadian material before the rise of the dynasty of Akkad, excluding Ebla and Tall Baydar. For further details see also ch. 12.1.

Substantial Akkadian text corpora have been found in Ebla (ca. 2350 BC) and from the period of the Old Akkadian empire (ca. 2350–2150 BC). The following article concentrates on these text corpora. For Ur III-Akkadian (ca. 2100–2000 BC) see the short remarks in ch. 14.2.1.

Note that in this article the basic transliteration system of I. J. Gelb is used (cf. Krebernik 1982, 179). For the phoneme going back to Proto-Semitic */š/ and */š/ and written with S-signs I use the phonemic symbol /š/ (as in Amorite names; see ch. 19); Edzard 2006 has /š/ instead and Hasselbach 2005 /s/.

2. Eblaite

The ancient city of Ebla lies ca. 60 km south of Aleppo in Northern Syria. After the discovery of the Ebla tablets in the 1970s, the study of Eblaite began with the study of lexical texts (Krebernik 1982; 1983) and personal names (Krebernik 1988a; 1988b). The numerous tablets (ca. 2400 complete tablets and ca. 14 000 fragments with together ca. 300 000 words, cf. Streck 2011) from Ebla are written largely sumerographically which means that they only yield limited information on the Eblaite language. Nevertheless, after almost 40 years of Ebla studies enough material is also known from non-lexical texts to evaluate their language (Edzard 2006). However, even phonographically written text passages are not easy to analyze because the Ebla cuneiform orthography is ambiguous and does not always represent the underlying language precisely. The following sketch of the Eblaite language is essentially based on recent articles. Older studies (especially by P. Fronzaroli) can be found easily through the bibliographies of these articles.

2.1. Phonology

2.1.1. Phonemic inventory: consonants

The phonemic inventory of Eblaite consists of the following consonantal phonemes (Krebernik 1985; 1996, 236): Bilabials: /b/, /p/, /m/, /w/. Interdentals: /d/ (distinct in

Eblaite as opposed to Sargonic Akkadian where */ǧ/ > /z/), /t/. Dentals: /d/, /t/, /ṭ/, /n/, /r/. Affricates: /z/, /s/, /š/ (< */š/, */ǧ/, */z/). Laterals: /l/, /ś/ (< */š/, */ś/; for a lateral pronunciation see 2.1.8., below). Prepalatal: /y/. /Palatals: /g/, /k/, /q/. Velars: /ḡ/, /ḡ/. Glottals: /ʔ/, /h/, /ʕ/, /ḥ/. For the cuneiform orthography of these phonemes cf. Krebernik 1982, 1983, 1985 (contrasting it with the orthography of Sargonic Akkadian); Rubio 2006, 113–119 (contrasting it with the orthography of Early Dynastic Akkadian).

2.1.2. Vowels

Besides the Proto-Semitic vowels /a/, /i/ and /u/ (both short and long) Eblaite rarely has /e/ < */a/ (Krebernik 1983, 12 with n. 39; 1985, 59): *ib-tum* /ʕebdum/ < */ʕabdu/ 'slave'. However, /a/ in the vicinity of /ʕ/ and /ḥ/ is preserved in most cases.

2.1.3. Diphthongs

The diphthongs /aw/ and /ay/ are normally preserved (Krebernik 1996, 236f. n. 3; 238): *ba-nu* /baynum/ 'tamarisk', *a-(wa-)mu* /yawmū/ 'days'. But monophthongization is also attested: *mi* /mī/ < */may/ 'water'.

2.1.4. */ya/ > /yi/

*/ya/ may become /yi/ (Krebernik 1996, 238): *i-mi-tum* /yimittum/ 'right hand'.

2.1.5. /m/

/m/ is often assimilated to a following consonant (Krebernik 1996, 237): *si-tum* /šittum/ < */šimtum/ 'sign'.

2.1.6. Barth's law invalid

Barth's law according to which the noun pattern *maPRaS* becomes *naPRaS* when there is a labial in the root is invalid (Krebernik 1996, 237; Huehnergard 2006, 5): *má-ma-du* /ma'madum/ 'support'.

2.1.7. /n/

/n/ assimilates to the feminine suffix /t/, but does not assimilate in other forms (Huehnergard 2006, 5 n. 18): *ali-mi-tum* /ya/yimittum/ < */ya/yimintum/ 'right hand', but *an-da* /anta/ 'you'. Cf. 2.4.12 for the assimilation of /n/ in verbs I-n.

2.1.8. /š/ > /l/

/š/ preceding dental occlusives may become /l/ (Krebernik 1982, 217; 1996, 237): *dal-da-i-bù* /taltah(ḥ)ibum/ (root ŠHB ‘to withdraw’). A similar development can be observed 1000 years later in Middle Babylonian and Middle Assyrian (for rare Old Babylonian examples cf. Streck 2006, 238), pointing to a lateral pronunciation of /š/ inherited from the Proto-Semitic lateral */š/ (Streck 2006, 241; 243–245).

2.1.9. Reduction of /l/ and confusion of /r/ and /l/

/l/ may be reduced to /ʔ/, /y/ or perhaps zero, and /r/ may be written with syllabograms for /l/. Both developments are generally attributed to substrate influence (Krebernik 1996, 237; 243; Huehnergard 2006, 4f.; cf. also Edzard 2006, 79 for forms of *labānum* ‘to make bricks’ and *halākum* ‘to go’): *ba-a-ḥu-um* /paʔāḥum/ < */palāḥum/ ‘to fear’, *ba-ga-lum* /baqalum/ < */baqarum/ ‘cow’; note, however, that also in the Ur III period /r/ and perhaps also /l/ between vowels can be reduced (Hilgert 2002, 471 n. 102 and 194–196), and that even later in Mari /l/ and /r/ sometimes interchange and /l/ can perhaps be reduced (Streck 2000, 129).

2.2. Morphology of pronouns

2.2.1. Independent personal pronouns nominative

Independent personal pronouns nominative (Edzard 2006, 77f.): 1. sg. *an-na* /ʔana/ ‘I’, 2. sg. m., *an-da* /ʔanta/ ‘you’, 3. sg. m. *su-ú* /šū/, *su-wa* /šuwā/ ‘he’, 2. pl. m. *an-da-nu* /ʔantanu/ ‘you’. The 1. sg. does not have the longer form *anāku* known elsewhere in Akkadian. The 3. sg. m. has two forms, the form /šuwā/ according to Edzard 2006, 77 being the older one. The 2. pl. m. differs from Akkadian *attunu*. Huehnergard 2006, 4 explains the form as an analogical formation: *šū* : *šunu* :: *ʔanta* : *ʔantanu*.

2.2.2. Independent personal pronouns genitive

Independent personal pronouns genitive (Edzard 2006, 78): 2. sg. m. *gú-wa-du* /kuwātu/ ‘you’, 3. sg. m. *su-wa-a* /šuwāya/ ‘him’, 1. pl. *ni/ne-a-a* /niʔaya/ ‘us’.

2.2.3. Independent personal pronouns dative

Independent personal pronouns dative (Edzard 2006, 78): 2. sg. m. *gú-a-si* /kuwāši/ ‘you’, 3. sg. m. *su-wa-si* /šuwāši/ ‘him’.

2.2.4. Independent personal pronoun accusative

Independent personal pronoun accusative (Edzard 2006, 78): 2. sg. m. *gú-wa-ti* /ku-wāti/ ‘him’.

2.2.5. Pronominal suffixes genitive

Pronominal suffixes genitive (Edzard 2006, 78): 1. sg. /-ī/ ‘my’, 2. sg. m. *ga* /-ka/ ‘your’, 2. sg. f. *ki* /-ki/ ‘your’, 3. sg. m. *su* /-šu/ or (i)š /-(i)š/ ‘his’, 3. sg. f. *sa* /-ša/ ‘her’, 1. dual *na-a* /-naya/ ‘our’, 3. dual *su-ma(-a)* /-šumaya/ ‘their’, 1. pl. *na* /-na/ ‘our’, 2. pl. m. *gú-nu* /-kunu/ ‘your’, 3. pl. m. *sa-nu* /-š(a)nu/ ‘their’, 3. pl. f. *si-na* /-šina/ ‘their’. The 1. dual is also attested in Ugaritic as *ny* (Troppe 2000, 227). For the 1. pl. also /-ni/ might be attested (Edzard 2006, 77). The 3. pl. m. is tentatively analyzed by Edzard 2006, 77 as /šnu/ and compared with Old Assyrian *-šnu* (Hecker 1968, 76). However, an unexpected /a/ is also found in *ʾantanu* (see 2.2.1., above).

2.2.6. Pronominal suffixes dative

Pronominal suffixes dative (Edzard 2006, 78): 2. sg. m. *kum* /-kum/ ‘you’, 3. sg. m. *šum* /-šum/ ‘him’, 1. pl. *ne-a-ti* /-niʾāti/ ‘us’. The last form is also attested in Old Assyrian (Hecker 1968, 76; Edzard 2006, 77), whereas Old Babylonian has *-niʾāšim*.

2.2.7. Pronominal suffixes accusative

Pronominal suffixes accusative (Edzard 2006, 78): 2. sg. m. *ga* /-ka/ ‘you’, 3. sg. f. *si* /-ši/ ‘her’.

2.2.8. Determinative pronoun

Determinative pronoun (Edzard 2006, 78): nominative dual *ša-a* /taya/ ‘they of’, nominative pl. f. *ša-du* /tatu/ ‘they of’, accusative sg. m. *ša* /ta/ ‘him of’, obliquus pl. m. *šu-ti* /tūti/ ‘they of’, obliquus pl. f. *ša-ti* /tāti/ ‘they of’. Edzard 2006, 78 also quotes genitive sg. m. *su-wa-ti(?)* and obliquus pl. f. *sa-ti*, both suspicious because of the spelling with *s*.

2.3. Morphology of nouns

2.3.1. Mimation and masculine plural

The noun has mimation in the sg. and in the pl. with the suffixes /-ātum/ (f.) and /-ūtum/ (m. of the adjective). The masc. pl. ends in /-ū/ (Krebernik 1996, 238): *mu-šum* /mūšum/ ‘night’, *i-mi-tum* /yimittum/ ‘right hand’, *ʾa-mu-tum* /ḥammūtum/ ‘hot’, *a-(wa-)mu* /yawmū/ ‘days’.

2.3.2. Plural of masculine adjectives

Adjectives form the pl. masc. in /-ūtum/ (Krebernik 1996, 238): *ʾà-mu-tum* /ḥammūtum/ ‘hot’.

2.3.3. Locative and terminative

Besides the three common Semitic cases nominative, genitive, accusative, Eblaite has, like Akkadian, a locative ending in /-ūm/ and a terminative ending in /-iš/ (Krebernik 1996, 238; Edzard 2006, 82): *ga-tum-ma ga-ti-iš* /qātūmma qātīš/ ‘from hand to hand’.

2.3.4. Status absolutus ending in /a/

Like Amorite (ch. 19.3.2), nouns in Eblaite personal names also show a status absolutus ending in /a/ (Krebernik 1988a, 45 ff.; 1988b, 9; 1996, 244): *A-ba₄-il* /ʾAba-ʾil/ ‘The god is father’. In other names we find a status absolutus without ending: *ᵈDa-gan-li-im* /Dagan-liʾim/ ‘Dagan is tribe’.

2.3.5. Abstract suffix /-ūtum/

Edzard 2006, 81 mentions abstract nouns with suffix /-ūtum/: *ba-lu-tum* /baʾlūtum/ ‘lordship’.

2.4. Morphology of verbs

2.4.1. Personal affixes in the G(t(n))- and N-stems

The personal affixes in the G(t(n))- and N-stems are (Edzard 2006, 79f.): 1. sg. *a-na-za-ab* /ʾa-naššab/ ‘I stand’, 2. sg. m. *da-na-za-ab* /ta-naššab/ ‘you stand’, 3. sg. m. *i-a-ba-an* /yi-labban/ ‘he makes bricks’, 3. sg. f. *ti-a-ba-an* /ti-labban/ ‘she makes bricks’ and *da-ne-a-al₆* /ta-nīʾal/ ‘she lies’, 3. dual m. *ib-šè-a* /yi-bṭiy-ā/ ‘they existed’, 3. dual f. *ti-na-ga* /ti-nāq-ā/ ‘they moan’, 1. pl. *na-na-za-ab* /na-naššab/ ‘we stand’ and *ne-sa-ba-ar* /ni-šappar/ ‘we send’, 3. pl. m. *dib-da-ru₁₂* /ti-pṭar-ū/ ‘they untied’, and *ib-da-su-gu* /yi-ptāššūq-ū/ ‘they were constantly in difficulties’. Thus in the 3. sg. f. and 1. pl. we have /a/- and /i/-prefixes. In personal names, apparently the prefix /ya/ is also very rarely attested besides /yi/ or the 3. sg. m. (Krebernik 1988a, 52; 1996, 244). The choice of the vowel does not follow Barth’s law (Krebernik 1996, 244). The 3. pl. m. has /ti/- or /yi/-prefixes (cf. also 2.4.2, below), also known from Mari-Akkadian, Amarna-Canaanite and Ugaritic (Krebernik 1996, 245; Tropper 2000, 432f.; Edzard 2006, 80; note that Ugaritic also has both prefixes).

2.4.2. Personal affixes in the D(t)- and Š(t)-stems

In the D(t)- and Š(t)-stems we find the following prefixes (Edzard 2006, 79): 1. sg. *ù-sa-ti-am*₆ /ʔu-šaydi'am/ 'I let know', 2. sg. m., *du-a-ḥa* /tu-ʔaḥḥaw/ 'you make an alliance', 2. sg. f. *du-ba-da-i* /tu-pattaḥ-ī/ 'you open', 3. sg. m. *uš-da-ti-ma* /yu-šta'tim/ 'he put together', 3. dual m. *uš-ga-i-na* /yu-škayyin-ā/ 'they prostrated themselves', 1. pl. *nu-da-bí-am*₆ /nū-tabbilam/ 'we (constantly) brought', 2. pl. m. *du-ba-ra-ù* /tu-barra'-ū/ 'you make hungry', 3. pl. m. *du-ti-ù* /tu-ddi'-ū/ 'they finished', 3. pl. f. *uš-a-na-ga* /yu-šyan-naq-ā/ 'they suckle'. Noteworthy is the 2. pl. m. with /ū/-suffix, compared to /ā/ in Akkadian. The 3. pl. has /tu/- and /yu/-prefixes, cf. 2.4.1., above.

2.4.3. Tense system and imperative

Besides a preterite *yiPRuS*, Eblaite has a present tense *yiPaRRaS* (Krebernik 1988a, 59; 1996, 245; Edzard 2006, 79f.): preterite *iš-al*₆ /yiš'al/ 'he asked', present *ti-a-ba-an* /tilabban/ 'she makes bricks'. It is unclear whether forms with infixes /ta/ are Akkadian-like perfects or rather preterites of /ta/-stems (cf. Krebernik 1988a, 57f.; 1996, 244; Edzard 2006, 79f.). There are no traces of a dynamic suffix-conjugation *QaTaLa* (Krebernik 1988a, 45f.; 1996, 244; Huehnergard 2006, 4); for the stative see 2.4.4, below. The imperative is also attested (Edzard 1996, 79): sg. m. *zi-in* /zin/ 'weigh!', dual *me-li-ga* /milkā/ 'give advice!'.

2.4.4. Stative

Like Akkadian and Amorite (see ch. 19.3.3.1), Eblaite has a stative (Krebernik 1988a, 45; 1996, 244; Edzard 1996, 79): 3. sg. m. *ì-lum-na-im* /ʔlum-na'im/ 'The god is pleasant', 3. pl. m./f. *da-nu-nu/na* /dannunū/ā/ 'they are strengthened'. Infinitive and participle have the Akkadian forms *PaRāS* and *PāRiS* (Edzard 2006, 79): *ʔa-a-ki* /halākim/ 'to go', *a-bí-nu-um* /lābinum/ 'brickmaker'.

2.4.5. Ventive

Some verbal forms have an ending *-am*₆ (sign AN), almost certainly a form corresponding to the Akkadian ventive/pronominal suffix dative 1. sg.: *ù-sa-ti-am*₆ /ʔušaydi'am/ 'I announced', *nu-da-bí-am*₆ /nūtabbilam/ 'we brought'. Edzard 2006, 80ff. reads /an/ and connects the form to the West Semitic *Energicus* which in his mind developed to the Akkadian ventive under Sumerian influence. Since the dative pronouns and the nouns have mimation (see 2.2.6 and 2.3.1., above) a reading /am/ is much more probable. For the present moment it cannot be decided whether this suffix has the function of the Akkadian ventive/pronominal suffix dative 1. sg. or of the West Semitic *energicus*.

2.4.6. D-stem

The D stem has /u/-prefixes (see 2.4.2., above). The participle has the form *muPaRRiS* (Edzard 2006, 79): *mu-a-bí-iš-tum* /mulabbištum/ 'woman who clothes'. The infinitive

and stative have either /a/ or, more rarely, /u/ in the first syllable (Krebernik 1996, 239; 245; Edzard 2006, 79; 81); thus patterns known from later Assyrian and Babylonian coexist: *ga-du-ru*₁₂ /qaṭṭurum/ ‘to fumigate’, *da-nu-nu/na* /dannunū/ā/ ‘they are strengthened’, *ù-bu-tum* /uBBuṭum/(?) ‘bound’. See also 2.4.7., below, for either /a/ or /u/ in the Š-stem.

2.4.7. Š-stem

The causative stem has a /š/-prefix (Krebernik 1996, 239; Edzard 2006, 80): *uš-a-na-ga* /yušyannaqā/ ‘they suckle’. This present tense form with lengthening of the second radical looks like an Akkadian ŠD-stem; Huehnergard 2006, 5 thinks that this formation of the Š present is the earlier Semitic form preserved in Eblaite. As in the D-stem (see 2.4.6., above), the infinitive has either /a/ or /u/ in the first syllable: *sa/su-bù-tum* /ša‘buṭum/(?) ‘bound’. A H-stem doesn’t exist in Eblaite.

2.4.8. N-stem

N-stem (Edzard 2006, 80): *i-ba-ti-’à-am*₆ /yippatiḥam/ ‘it was opened’.

2.4.9. Stems marked by an infix /t/

Besides the four main stems, Eblaite has stems marked by an infix /t/ with probably reciprocal, passive or pluralic meaning (Krebernik 1996, 238f.; Edzard 2006, 79ff.). See for the Gt(n) present *ib-da-su-gu* /yiptaššūqū/ ‘they are in difficulties’, preterite *dib-ti-sa-ag* /tiptišaq/ ‘she was scarce’. Dt(n) preterite (or an Akkadian type perfect?): *nu-da-bí-am*₆ /nūtabbīlam/ ‘we (constantly) brought’, Št present *du-uš-da-a-da-mu* /tušta’attamū/ ‘they put together’, preterite *uš-da-ti-ma* /yušta’tim/ ‘he put together’. The infixes /ta/ and /ti/ are attested without clear distribution (Edzard 2006, 80f.). Typical for Eblaite are infinitives of these stems with both a prefixed and an infixed /t/ (Krebernik 1996, 238–240; Edzard 2006, 80; Huehnergard 2006, 5): Gt(n) *da-da-gu-bù-um* /tattakpum/ ‘to gore each other’, *dar-da-bí-tum* ‘tartappidum/ ‘to roam’, *du-uš-da-gi-lum* /tušta’kilum/ ‘to square’ (lit. ‘to make eat one another’).

2.4.10. Weak verbs in general

The morphological analysis of weak verbs is often hampered by the ambiguous orthography. Thus, e.g., it remains unclear whether a form *’a₅-si* should be interpreted as /’ašši/ ‘I took’ (Edzard 2006, 79) or as /’aššī/. *nu-da-bí-am*₆ can stand for /nūtabbīlam/ (Edzard 2006, 80) or for /nuwtabbīlam/ ‘we brought’.

2.4.11. Verbs with /ʔ/

/ʔ/ between vowels seems to be strong (Edzard 2006, 79ff.): *du-a-ḥa* /tuʔaḥḥaw/ ‘you make an alliance’, *du-uš-da-a-da-mu* /tuštaʔattamū/ ‘they put together’, *du-ba-ra-ù* /tubarraʔū/ ‘they make hungry’. For syllable closing /ʔ/ see ʔ₅-si 2.4.10.

2.4.12. Verbs I-n

In verbs I-n /n/ assimilates to a following consonant (Edzard 2006, 79): ʔ₅-si /ʔašši/ (or /ʔašši/ ‘I took’ (root NŠ)). Cf. 2.1.7 for the assimilation of /n/ in nouns.

2.4.13. Verbs I-w

Verbs I-w are attested with /u/- and /a/-prefixes (Krebernik 1996, 245): *Da-bīl-da-mu* /Tawbīl-damu/, *Du-bīl-da-mu* /Tū/ubil-damu/, both names meaning ‘Damu has brought’. The imperative is formed without /w/ (Edzard 2006, 79): *zi-in* /zin/ ‘weigh!’ (root WZN). Cf. also the verbal noun *šu-ba-du/tum* /tub(a)tum/ ‘dwelling’ (root WTB) (Krebernik 1996, 240).

2.4.14. Verbs I-y

Verbs I-y are inflected strong (Edzard 2006, 80): *uš-a-na-ga* /yušyannaqā/ ‘they suckle’, *ù-sa-ti-am₆* /ʔušaydiʔam/ ‘I announced’.

2.4.15. Verbs II-y/w

Some verbs II-y/w are inflected as mediae /ī/ and /ā/: *da-ne-a-al₆* /tanīʔal/ ‘she lies’, *ti-na-ga* /tināqā/ ‘they moan’. On the other hand the following form shows a strong /y/: *uš-ga-i-na* /yuškayyinā/ ‘they prostrated themselves’ (cf. a similar formation in Akkadian: /uškaʔin/).

2.4.16. A verb III-y

The form *iš₁₁-da-wa* (Edzard 2006, 79) for /yittawwā/ ‘they remain’ (root TWY) appears with a weak /y/.

2.4.17. Quadriliteral verbs

Quadriliteral verbs follow the N-stem pattern and thus correspond to the Akkadian inflection type *naBaLKuTum* (Krebernik 1996, 239): infinitive N *na-bar-su-um* /naBaR-Suʔum/ (root unknown), participle Ntn *ma-wu mu-da-bar-si-ù-tum* /māwū muttaBBaR-Siʔūtum/.

2.5. Syntax

2.5.1. Word order

Besides the word order SOV, well known from Akkadian and attributed to Sumerian influence, Eblaite also has the word order VSO, a retention from Proto-Semitic (Huehnergard 2006, 4), and SVO. SOV: ^dUTU ... Û.SAR ... Ì.DU ‘Šamaš brought the Û.SAR’ ARET 5, 6 (Quaderni di Semitistica 18, 80) C14.3–C15.5. VSO: BA₄.TI ENGAR^{giš}APIN ‘The ploughman brought the plow’ ARET 5, 6 (Quaderni di Semitistica 18, 76) C8.1. SVO: *a-bí-nu-um i-a-ba-nu* SIG₄.GAR /lābinum yilabban libittam/ ‘The brick-maker makes the brick’.

2.5.2. Attributive adjectives

Attributive adjectives follow the substantive they qualify (Krebernik 1996, 238): *a-(wa-)mu ṣ̣a-mu-tum* /yawmū ḥammūtum/ ‘hot days’.

2.6. Lexicon

2.6.1. Isoglosses with Akkadian

The lexicon of Eblaite shares many isoglosses with Akkadian (Krebernik 1996, 240f.): Particles: *su-ma* /šumma/ ‘if’, *in* /in/ ‘in’, ^a₅(NI)-*na* /ana/ ‘to’. Numeral: *li-im* /li’im/ ‘thousand’. Nouns: *su-mu-um* /šumum/ ‘name’ with the /u/-vowel typical for Akkadian, *la-ṣ̣a-tum* /raḥ(a)tum/ ‘hand’. Verbs: *ba-ša-um* /baṣā’um/ ‘to exist’, *ba-ša-šu-um* /paṣāṣum/ ‘to anoint’.

2.6.2. Non-Akkadian Semitic words

Non-Akkadian Semitic words are most probably due to Northwest Semitic influence: Particle: *ab* /āp/ ‘also’ (Huehnergard 2006, 4). Numeral: *ri-pap* (or *ri-pa₄*) /ribab/ or /ribba/ ‘ten thousand’ (Krebernik 1996, 246). Noun: *qi-na-lum* /kinnārum/ ‘harp’ (Krebernik 1996, 242). The name *Mi-ga-il* /Mī-ka-’il/ ‘Who is like god?’ contains the non-Akkadian, Northwest Semitic words /mī/ and /ka/ (Krebernik 1996, 247).

2.6.3. The preposition /šin/

Typical for Eblaite is the preposition *si-in* /šin/ ‘towards’ which might be related to Sabaean *s₁wn* ‘toward’.

2.7. The Position of Eblaite within the Semitic languages

In the following, recent statements on the position of Eblaite within the Semitic languages are quoted.

2.7.1. Krebernik 1996

Krebernik 1996, 249 draws the following conclusion: ‘The majority of the Semitic material present in the various types of sources reflects a single language. This language is so closely related to Akkadian that it may be classified as an early Akkadian dialect. Various characteristic features indicate that it is not simply Mesopotamian Akkadian imported as a written language together with the cuneiform writing system. Some presumably non-Semitic influences point, assuming that they have rightly been ascribed to the non-Semitic stratum attested in the Ebla texts themselves, to a local origin of this Akkadian dialect. Non-Akkadian Semitic elements in the onomasticon and in the vocabulary show the presence of speakers of other Semitic languages, presumably the ancestors of later Northwest Semitic.’

2.7.2. Tropper 2003

Tropper 2003, 653: Eblaite belongs ‘aufgrund seiner markanten morphologischen Übereinstimmungen mit dem Akkadischen in eine gemeinsame Sprachgruppe mit dem Akkadischen ... Es handelt sich dabei um keinen (weiteren) akkadischen Dialekt, sondern um eine eigenständige ostsemitische Sprache neben dem Akkadischen.’ Tropper argues that ‘die linguistischen Differenzen zwischen den etablierten Dialekten des Akkadischen ... entschieden geringer bzw. unwesentlicher sind als die zwischen dem Eblaitischen einerseits und dem Akkadischen andererseits’ (Tropper 2003, 653). He specifically mentions the infinitives with double /t/ (see 2.4.9., above) and the lexicon including the prepositions (ib. 652f.).

2.7.3. Fronzaroli 2005

Fronzaroli 2005, 156: ‘D’autres enfin jugèrent qu’il s’agissait d’une langue appartenant au sémitique archaïque, comme l’akkadien, mais suffisamment marquée pour pouvoir être considérée comme indépendante de ce dernier. D’après moi cette appréciation ... semble ... la plus correcte.’

2.7.4. Huehnergard 2006

Huehnergard 2006, 4f.: ‘There are probably very few scholars who would maintain that Eblaite is to be considered part of West Semitic ... There are a few probable innovations that characterize Eblaite but non Akkadian, and another set of probable shared

innovations that uniquely characterize all of Akkadian but not Eblaite ... Eblaite constitutes an innovative branch within East Semitic ... Eblaite and Akkadian should be considered separate, coordinate branches of East Semitic’.

2.7.5. Edzard 2006

Edzard 2006, 83: ‘So möchte ich denn den Streit über die Klassifizierung des Eblaitischen dadurch schlichten, daß ich sage ...: wir haben es mit einem altakkadischen Dialektkontinuum zu tun.’

2.7.6. Krebernik 2006

Krebernik 2006, 84 states: ‘The question of whether ‘Eblaite’ should be called an Akkadian dialect or a second East Semitic language is basically a matter of terminology, depending on the notion of ‘dialect’ one adopts. If one takes into consideration the numerous morphological and lexical characteristics shared by both Mesopotamian and Eblaite Akkadian, and, on the other hand, the numerous morphological and lexical differences between modern Arabic dialects, I would prefer to regard ‘Eblaite’ as an Akkadian dialect.’

2.7.7. Conclusion

In my mind, the classification of Eblaite as an Akkadian dialect is preferable to a classification as a distinct East Semitic language. I do not see that Eblaite is more distinct from Assyrian and Babylonian than these two dialects from each other. In fact, distinct morphological innovations are only very few: see 2.2.1. (*ʾantanu*/), 2.4.1., 2.4.2. (*/t/-*prefixes in the 3. pl.), 2.4.9. (infinitives with double */t/*). See also the preposition */šin/* (2.6.3.). Many other distinct features are shared retentions not diagnostic for a classification: 2.1.1. (phonemic inventory), 2.1.3. (diphthongs preserved), 2.1.5. (Barth’s law not valid), 2.2.1. (*ʾanā*), 2.2.5. (dual of pronominal suffixes), 2.2.8. (inflected determinative pronoun), 2.3.4. (status absolutus in */a/*), 2.4.1. (prefixes with */ya-/* and */na/*), 2.4.2. (*/-ū/-*suffix for the 2. pl.), 2.5.6., 2.4.7. (*/a/-*vowel in forms without prefix of the D- and Š-stems), 2.4.7. (present */uśyannaqā/*), 2.4.11. (strong */ʾ/*), 2.4.13. (*/-aw/-* preserved), 2.4.14. (strong inflection of verbs I-y), 2.5.2. (VSO word order). Some phonological and lexical features are probably due to Northwest Semitic or non-Semitic influences: 2.1.9. (reduction of */l/*), 2.6.2. (Northwest Semitic loans). Distinctly Assyrian features are only 2.2.6. (pronominal dative suffix */-niʾāti/*) (a shared retention?) and perhaps 2.2.5. (suffix */-šanu/*). On the other hand, a typical Babylonian innovation is: 2.4.6., 2.4.7. (*/u/-*vowel in prefixless forms of the D- and Š-stems, only rarely attested however). Another typical Babylonian feature is 2.2.3. (independent personal pronoun dative, an innovation under Sumerian influence since Sumerian has dative prefixes?). Note also that Eblaite does neither have the Assyrian type vowel harmony nor the Assyrian type subordinative. Eblaite shows many archaic features, few morphological innovations not shared by Babylonian and Assyrian, and few innovations and other

features typical for Babylonian. Therefore, as to our present knowledge, Eblaite is best classified as an Akkadian dialect which shares a common ancestor with Babylonian. The historical implication of this conclusion might be that Babylonian spread along the Euphrates, either from south to north or vice versa.

3. Sargonic Akkadian

Sargonic Akkadian is the written language of the Old Akkadian empire (ca. 2350–2150 BC). Text genres are royal inscriptions, incantations, letters, administrative and legal documents, together ca. 1575 texts containing ca. 35 000 words (Streck 2011). Most of the royal inscriptions are only attested from copies from the Old Babylonian period. The most detailed recent description of Sargonic Akkadian (excluding the copies of royal inscriptions from the Old Babylonian period) is Hasselbach 2005, on which the following remarks are mainly based. The classical description of Old Akkadian grammar is Gelb 1961, which also encompasses personal names and the material from the Ur III period. Sommerfeld 2003 tries to clarify the position of Sargonic Akkadian in the history of the Akkadian language (see 3.5.4., below).

3.1. Phonology

3.1.1. No Assyrian type vowel harmony

Old Akkadian does not have the Assyrian type vowel harmony (Hasselbach 2005, 121 f.; cf. ch. 14.3.2.): *tī-ir-ḫa-ti* /tirḫati/ ‘bridal price’ (not */tirḫiti/), *ra-á-bum* /raḫabum/ ‘a kind of vessel’ (not */raḫubum/). The Assyrian vowel harmony is an Assyrian innovation.

3.1.2. */ay/ > /ē/

The diphthong */ay/ becomes /ē/ as in Assyrian, not */ī/ as in Babylonian (Hasselbach 2005, 41 f.; 91 with n. 186): *bi-ti-ís* /bētis/ ‘to the house’. See 3.3.4 below for Hasselbach’s opinion that /ē/ is a shared retention and /ī/ developed from /ē/.

3.2. Morphology of pronouns

3.2.1. Independent personal pronouns

The independent personal pronouns has the 3. sg. m. accusative form *su₄-a* /šū’a/ ‘him’, according to Hasselbach 2005, 149 ‘most likely an archaic form’; see also /šūwa/ in Eblaite, 2.2.1, above. Old Babylonian has *šū’āti* for the accusative, Old Assyrian for

the dative and accusative. For the 3. sg. dual exists the form *su₄-ni-ti* /šunēti/ (Hasselbach 2005, 149), neither attested in Assyrian nor in Babylonian and clearly an archaism.

3.2.2. Pronominal suffixes dual

The pronominal suffixes also have archaic dual forms (Hasselbach 2005, 150–158): genitive 2. dual *ga-ti-ku-ni* /qātīkunē/ ‘your two hands’, accusative 3. dual *li-su-zé-áš-su-ni* /lišūše’aššunē/ ‘he shall release them’, *za-ab-t[i]-su-[ni-ti]* /šabtīšunēti/ ‘seize them!’, dative 3. dual *a-ki-iš-su₄-ni-si-im* /’aqīššunēšim/ ‘I bestowed on them’. Whereas the form /-šunu/ without /t/ resembles the Assyrian forms for the genitive/accusative pl., -šunu and -šina, the forms /-šunēšim/ and /-šunēti/ resemble more Babylonian forms (masc. pl. dative -šunūšim, accusative -šunūti) (Hasselbach 2005, 234).

3.2.3. Pronominal suffix genitive/accusative 3. pl. masc.

The pronominal suffix genitive/accusative 3. pl. masc. has the form /-šunu/: *sar-rī-su-nu* ‘their kings’ (Hasselbach 2005, 153), *id-kè-e-su-nu-ma* /yidkēšunuma/ ‘he called them’ (ib. 157). This corresponds to Assyrian genitive/accusative -šunu, whereas Babylonian has genitive -šunu and accusative -šunūti.

3.2.4. Determinative pronoun

The determinative pronoun still inflects for case, gender and number (Hasselbach 2005, 161–164), e.g., sg. masc. nominative /šu/, genitive /ši/, accusative /ša/. This is an archaism; in Assyrian and Babylonian only the uninflected form *ša* survives.

3.3. Morphology of nouns

3.3.1. Dual

The dual is still fully productive (Hasselbach 2005, 179; Gelb 1961, 139): *si-ta i-ša-ab-ta-an* /šittā iššabtān/ ‘two rings’, *ša-al-mi-in an-ni-in* /šalmīn annīn/ ‘these two statues’, *a-ḥa-tā-ki sa-lim-tā* /aḥātāki šalimtā/ ‘your two sisters are well’. In Babylonian and Assyrian the dual is restricted to certain words, e.g., words designating body parts.

3.3.2. Terminative

The terminative ending in /-iš/ is more productive than in Old Babylonian or Old Assyrian and is used in the same sense as the preposition *ana* (Hasselbach 2005, 181): *e-ra-si-iš* /’erāšīš/ ‘to cultivate’, *bi-ti-iš* /bētīš/ ‘to the house’.

3.3.3. Genitive singular in the construct state

The genitive sg. in the construct state still ends in /-i/ whereas in Old Babylonian and Old Assyrian this ending was lost (Gelb 1961, 145; Hasselbach 2005, 183): *in É-ti* PN /bēti/ ‘in the house of PN’.

3.3.4. Obliquus plural masculine /-ē/

The obliquus pl. masc. ends in /-ē/ as in Assyrian and not in /-ī/ as in Babylonian (Hasselbach 2005, 179 f.; 184): *uš-se₁₁* /ʰuššē/ ‘foundations’, *iš-gi-ni* /iškinē/ ‘additional payments’. Cf. Hasselbach 2005, 91 n. 186 for the opinion that /-ē/ in Sargonic Akkadian and in Assyrian is a shared retention and that Babylonian /-ī/ developed from /-ē/.

3.4. Morphology of verbs

3.4.1. Prefix 3. singular masculine /y-/

The prefix of the 3. sg. m. has initial /y-/ , regularly distinguished in the script from word initial /ʰ/ (Gelb 1961, 157ff.; 162; Hasselbach 2005, 191; 195; 212: *i-ti-in* /yiddin/ ‘he gave’ (spelling with *i* for /yi/ against *ì* for /ʰi/), *u-bi-lam* /yu/ūbilam/ ‘he brought’ against *ú-ma* /ʰu/ūmā/ ‘I swear’. In Old Assyrian and Old Babylonian this /y/ was lost.

3.4.2. Prefix 3. singular feminine /ta-/

The prefix of the 3. sg. fem. is /ta-/ (Hasselbach 2005, 191;195): *da-ti-in* /taddin/ ‘she gave’. The same prefix is attested in Assyrian, a shared retention, whereas Babylonian has /ʰi/ < */yi/ for both masc. and fem.

3.4.3. Precative

The precative has the same prefixes as in Babylonian, i.e., in the G-stem *li-* for the 3. person, *lu-* for the 1. sg., in the D- and Š-stems *li-* for the 3. person and *lu-* for the 1. sg. (Hasselbach 2005, 200–202): *li-li-ik* /lillik/ ‘he shall go’, *lu-uš-ku-ul-kum* /luš-qulkum/ ‘I shall weigh out for you’, *li-da-ni-in* /lidannin/ ‘he shall strengthen’, [*lu-sa*]-*bí-l[a]-kum* /lušābilakkum/ ‘I shall send you’. Cf. the Assyrian prefixes G-stem *la-* for the 1. sg. and *lu-* for both 3. person and 1. sg. in the D- and Š-stems. According to the analysis of Testen 1993, 6–8, Streck 1995 Anm. 480 and Streck 1998, 319ff. no. 5.21, the Assyrian forms are archaic and the Babylonian forms innovations; for a different analysis cf. Huehnergard 1983, 588.

3.4.4. Subordinative

In a few cases in texts from southern Babylonia and from Kiš, Sargonic Akkadian uses the subordinative marker *-ni* after verbal forms ending in a vowel (Hasselbach 2005, 206): *da-ba-ša-ḫi-ni* /tapaššaḫīni/ ‘you shall verily find peace (affirmative use in an oath)’. Texts from the Diyāla region do not mark the subordinative in this environment. The subordinative marker */-u-ni/* mainly occurs in royal inscriptions in a specific formula: *u-sa-za-ku-ni* /yušassakuni/ ‘(who) removes’. The most frequent subordinative marker is */-u/* after consonants: *im-ḫu-ru* /yimḫuru/ ‘(who) received’. Whereas the absence of */-ni/* after vocalic ending connects Sargonic Akkadian of the Diyāla region with Babylonian, */-ni/* after vowels in southern Babylonia and in Kiš as well as combined */-u-ni/* also occur in Assyrian (Hasselbach 2005, 207–209). Hasselbach 2005, 209 and 2007, 38 with n. 46, thinks that */-ni/* after a vocalic ending was lost in Sargonic Akkadian of the Diyāla region and in Babylonian so that unmarked verbal forms in subordinative clauses would be a shared innovation. To my mind, the situation is just the other way round: the Assyrian subordinative in */-ni/* is an Assyrian innovation and the subordinative in */-u/* a shared retention.

3.4.5. Infinitive and verbal adjective D

The infinitive and the verbal adjective of the D-stem have the form *PuRRuSum* as in Babylonian, not *PaRRuSum* as in Assyrian (Hasselbach 2005, 210; 212): *gu-du-si-iš* /quddušiš/ ‘to consecrate’, *zu-ku-na* /zuqqunā/ ‘bearded’.

3.4.6. Preterite D of verbs II-w/y

The preterite D of verbs II-w/y has a weak form (Hasselbach 2005, 228): *u-gi-in* /yukēn/. Cf. Babylonian *ukīn* against the strong Assyrian form *uka”in*.

3.4.7. Verbs III-w/y

Verbs III-w/y show in the present/preterite tense of the G-stem an Ablaut */-ē/* : */-ī/* (Sommerfeld 1999, 20f.; Hasselbach 2005, 228ff.): *a-ga-bi* /ʾaqabbē/ ‘I say’, *dag-bī* /taqbī/ ‘you said’. This Ablaut is neither attested in Assyrian nor in Babylonian where we have *aqabbī/taqbī*. According to Hasselbach 2005, 228 this Ablaut is due to the vowel contraction */ay/* > */ē/* in the present tense. If this is correct, we have to reconstruct an original */a/* : */i/*-Ablaut for these verbs: **/iqabbay/* > */iqabbē/* : **/iqbiy/* > */iqbī/*, also known with some verbs in later Akkadian: see with verbs primae w: *ubbal* : *ubīl*; the verb *alākum*: *illak* : *illik*; in Assyrian the verb *nadānum*: *iddan* : *iddin*. Both in Assyrian and in Babylonian this Ablaut was lost with verbs III-w/y, probably by replacement of the vowel class *a/i* with *i/i*: *iqabbī* < **iqabbīy* : *iqbī* < **iqbiy*. This explanation seems to be preferable to the assumption of a development **iqabbay* > *iqabbī* since, as far as we know, also Assyrian has *iqabbī* and not **iqabbē* as would be expected if */-ī/* was the result of the monophthongization of **/-ay/*.

3.5. Summary

The foregoing investigation can be summarized as follows:

3.5.1. Sargonic Akkadian features not shared by later dialects

/šu'a/, /šunēti/ (3.2.1.). Dual of pronominal suffixes (3.2.2.). Inflected determinative pronoun (3.2.4.). Productive dual of nouns (3.3.1.). Productive terminative ending (3.3.2.). Construct state of the genitive (3.3.3.). Verbal prefixes 3. person /yi-/ (3.4.1.). Prefix /ta-/ (3.4.2.). Ablaut with verbs III-w/y (3.4.7.).

3.5.2. Sargonic Akkadian features shared by Assyrian

*/ay/ > /ē/ (3.1.2.). /-šunē/ without /t/ (3.2.2.). /-šunu/ for genitive/accusative (3.2.3.). Masculine oblique plural /-ē/ (3.3.4.). Subordinative /-ni/ and /-u-ni/ (southern Babylonia and Kiš) (3.4.4.).

3.5.3. Sargonic Akkadian features shared by Babylonian

No Assyrian type vowel harmony (3.1.1.). /-šunēšim/, /-šunēti/ for dative and accusative (3.2.2.). Precative paradigm (3.4.3.). Absence of subordinative /-ni/ (Diyāla) (3.4.4.). *PuRRuSum* (3.4.5.). Weak preterite D of verbs II-w/y (3.4.6.).

3.5.4. Conclusion

Sommerfeld 2003, 582–586 concludes from the features peculiar for Sargonic Akkadian that this language had no direct affiliation with either Babylonian or Assyrian. According to him, Sargonic Akkadian was the native language of the Sargonic kings which became the official chancellery language of the Sargonic empire and was given up after the fall of the dynasty of Akkad. However, based on a list of Sargonic features not shared by later dialects, shared by Assyrian, or shared by Babylonian, similar to but in details different from our list above (3.5.1–3.), Hasselbach 2005, 233–235 and Hasselbach 2007 reaches a different and to my mind more reliable conclusion. According to her, the features not shared by later dialects 'are shared retentions of an earlier stage of Akkadian and consequently they do not represent distinguishing isoglosses for establishing Sargonic Akkadian as an independent dialect.' Cf. the features collected in 3.5.1., above. Also most of the features shared with Assyrian 'are shared retentions and do not subgroup Sargonic Akkadian together with Assyrian' (Hasselbach 2005, 234); cf. the features collected in 3.5.2., with the exception of the subordinative in /-ni/ in texts from southern Babylonia and in Kiš which is probably an Assyrian innovation. The features shared with Babylonian, 'are distinct Babylonian innovations which are not shared by the common ancestor of Babylonian and Assyrian or Assyrian' (Hasselbach 2005, 234). See the features collected in 3.5.3., above, with the exception of the

absence of the Assyrian vowel harmony and the absence of subordinative /-ni/ which to my mind are shared retentions.

Therefore, the overall conclusion drawn by Hasselbach 2005, 234f. seems to be basically correct: ‘This means that Sargonic Akkadian, more specifically, the dialect of the Diyāla region, most likely shares a common ancestor with later Babylonian and might even be considered an early stage of Babylonian ... the innovations shared by the Sargonic dialect of the Diyāla region and Babylonian are significant enough to consider the two members of the same subbranch of Akkadian, as opposed to Assyrian which constitutes a branch of its own’ (Hasselbach 2005, 234f.).

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14. Babylonian and Assyrian

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3. Old Assyrian
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Abstract

A historically arranged sketch of Babylonian and Assyrian, two dialects of Akkadian, which were the dominant languages of Mesopotamia in the second and first millennia BC.

1. Introduction

Babylonian and Assyrian are the two main dialects of Akkadian (A.) attested from the beginning of the 2nd millennium onwards. Their connection to the attested dialects of 3rd millennium A. (ch. 13) is still disputed. Whereas the history of Assyrian cannot be traced back to the 3rd millennium, at least Ur III A. is a predecessor of classical Old Babylonian (cf. 2.1.), and this even seems to be true for Sargonic A. (Hasselbach 2005; differently Hilgert 2002 and Sommerfeld 2003).

General descriptions of A. grammar are mainly based on Old Babylonian (cf. 2.) and/or literary A. (cf. 8.) (Reiner 1966, von Soden 1995, Buccellati 1996, Streck 2007a). For the A. lexicon see AHw. and CAD. A textbook is Huehnergard 1997. There are only very few detailed studies in the historical grammar of A., the most noteworthy of them Deutscher 2000 on sentential complementation.

2. Old Babylonian

For a short grammar of Old Babylonian see Streck 2011a. For monographic studies on specific details of Old Babylonian grammar see Kraus 1984 (on nonverbal sentences) and 1987 (on *Koppelungen*).

2.1. Early Old Babylonian

“Early Old Babylonian” (ca. 2100–1800 BC) is a conventional label for A. in the Ur III period, of early Ešnunna in the Diyāla region east of the Tigris and of Mari in the middle Euphrates region during the so-called šakkanakku period.

The most extensive study is available for Ur III A. (Hilgert 2002). In the Ur III period, most of the documentation is written in Sumerian, a non-Semitic language (ch. 15). According to Hilgert 2002, 2–85, A. documentation is confined to: (a) 101 texts, among them 56 legal and administrative documents, 17 letters, 3 incantations and 25 royal inscriptions. (b) Personal names, e.g., *Šu-Suen-lilabbir-ḥaṭṭam* “May Šu-Suen keep the scepter for a long time”. (c) Loan words in Sumerian texts, e.g.: *erubbatum* “entrance (name of a feast)”, *gerrānum* “wailing”, *ḥazannum* “mayor”, *manzaštum* “position”, *mašlūm* “(leather) bucket”, *muddulum* “salted meat”, *naptanum* “meal”, *nāb/piḥum* “a gold ornament”, *nēkepum* “a tool”, *sapalum* “juniper”.

According to Hilgert 2002, 168, Ur III A. is fundamentally different from Sargonic A. (see ch. 13) and closely connected to classical Old Babylonian (see, however, 1. for a partly different view). The Š-stem of verbs I-’ is of the type *ušaššab/ušāšib* against normal Sargonic *ušeššeb/ušūšib*. Umlaut *a > e* is regularly observed: *epēšum* against Sargonic *epāšum*. Verbs II-’ inflect analogous to verbs II-vocalis: D-stem *urīq* against Sargonic *ura’iq*. Verbs III-’ inflect analogous to verbs III-vocalis, with ’_{3–5} causing umlaut *a > e*: *išmē* against Sargonic *išma’*. Verbs III-vocalis apparently do not have ablaut: *aqabbī/aqbī* against Sargonic *aqabbē/aqbī*.

For Ešnunna see Whiting 1987, for Mari Limet 1976 and Gelb 1992, 164–195.

2.2. Geographical distribution, chronology and text genres of classical Old Babylonian

Classical Old Babylonian (ca. 1800–1500 BC) is attested by 45 000 texts, which together contain ca. 2 560 000 words (Streck 2011b). Classical Old Babylonian is written in Babylonia, the middle Euphrates region (Mari) and northern Syria, in the Diyāla-region and in Elam in south-west Iran. The documentation contains many different

text genres (Lieberman 1977, 9–13): private and royal letters, administrative and legal documents, royal inscriptions, year names, edicts, omen texts, lexical texts, mathematical texts, epics, hymns, prayers, incantations etc. Classical Old Babylonian absorbed the Northwest Semitic language of the Amorites (ch. 19) that was mainly spoken in the Middle Euphrates area and the Syrian steppe (see Streck 2004a for the distribution of the Amorites in Mesopotamia based on a statistics of names); Amorite did not leave any visible imprint on Old Babylonian besides loanwords (cf. 2.7.).

2.3. Changes in the inventory of consonantal phonemes from Eblaite and Old Akkadian to Old Babylonian

From Old A. (including Eblaite) to classical Old Babylonian the phonemic inventory of A. is considerably reduced, most probably under the influence of Sumerian. See table 14.1.

Table 14.1: Reduction of phonemic inventory from Old Akkadian to Old Babylonian

Protosemitic	d	t	š	š	h	ḥ	ʿ	ḡ	ḥ
Ebla	d (Š)	t (Š)	š (S)	š (S)	h	ḥ	ʿ	ḡ	ḥ
Old A.	z (Z)	š (Š)	š (S)	š (S)	h	ḥ	ʿ	ḡ	ḥ
Old Babylonian	z (Z)	š (Š)	š (S)	š (S)	(ʿ)	(ʿ), ḥ	(ʿ)	(ʿ), ḥ	ḥ

The interdentals, which in Eblaite were still distinct phonemes (both written with Š-signs), become /z/ (written with Z-signs) and /š/ (written with Š-signs) in Old A. and Old Babylonian. Protosemitic /š/ which in Ebla and Old A. was merged with Protosemitic /š/ into /š/ (written with S-signs) now merges with Protosemitic /t/ into /š/ (written with Š-signs). /h/, /ḥ/, /ʿ/ and /ḡ/, which in Eblaite and Old A. were still distinct phonemes, get lost – probably under Sumerian influence, see ch. 15) and are either re-placed by secondary /ʔ/ or merge with /ḥ/ (see Tropper 1995 for /ḥ/ and Kogan 2001 for /ḡ/).

2.4. Personal pronouns

Table 14.2. presents the personal pronouns of Old Babylonian. Noteworthy is the existence of independent genitive and accusative pronouns (*jāʾum* “mine”, *jāti* “me” etc.) and of dative pronouns, independent as well as suffixed (*jāšim*, *-am* etc. “to me” etc.). For Sumerian influence on the pronominal system see ch. 15. The *s*-variants of the suffixed pronouns of the 3rd person appear after dentals (/d/, /t/, /ṭ/) and affricates (/s/, /z/, /š/): **būt-šu* “his house” > [*būsu*], traditional transcription *bīssu* (see Streck 2006, 228–233).

2.5. Nominal inflection

Table 14.3. presents the nominal inflection of Old Babylonian in the Status rectus (*šarrum* “king”, *šarratum* “queen”, *libbum* “heart”, *ilum* “god”, *šēpum* “foot”, *šittān* “two thirds”, *dannum* “strong”).

Table 14.2: Personal pronouns in Old Babylonian

	Nominative		Genitive		Dative		Genitive/ Accusative	
	independent		independent	suffixed	independent	suffixed	independent	suffixed
1. singular commune	<i>anāku</i>		Singular masc. <i>jā'um/jām</i> , Singular fem. <i>jattum/h</i> Plural masc. <i>jā'ūtun</i> Plural fem. <i>jātun</i>	-ī, -ja, -'a	<i>jāšim</i>	-am, -m, -nim	<i>jāti</i>	-ni
2. singular masculine	<i>atta</i>		Singular masc. <i>kām</i>	-ka	<i>kāšim</i>	-kun	<i>kāta</i>	-ka
2. singular feminine	<i>atti</i>		Singular fem. <i>kattun</i> , Plural masc. <i>kuttun</i> Plural fem. <i>kātun</i>	-ki	<i>kāšim</i>	-kim	<i>kāti</i>	-ki
3. singular masculine	<i>šū</i>		Singular masc. <i>šām</i> ,	-šu/-su	<i>šū'āšim</i> ,	-šum, -sum	<i>šū'āti, šāti</i>	-šu, -su
3. singular feminine	<i>šī</i>		Singular fem. <i>šattun</i> Plural masc. <i>šuttun</i>	-ša/-sa	<i>šī'āšim</i>	-šim, -sim	<i>šī'āti, šāti</i>	-ši, -si
1. plural commune	<i>nīnu</i>		Singular masc. <i>nām</i> Singular fem. <i>nijattum/nuttum</i> Plural masc. <i>nuttum</i>	-ni	<i>nī'āšim</i> ,	-nī'āšim	<i>nī'āti</i>	-nī'āti
2. plural masculine	<i>attunu</i>	—	—	-kunu	<i>kunūšim</i>	-kunūšim	<i>kunūti</i>	-kunūti
2. plural feminine	<i>attina</i>	—	—	-kina	[<i>kināšim</i>]	-kināšim	<i>kināti</i>	-kināti
3. plural masculine	<i>šunu</i>		Plural masc. <i>šinām</i>	-š/sunu	<i>šinūšim</i>	-š/sunūšim	<i>šinūti</i>	-š/sunūti
3. plural feminine	<i>šina</i>			-š/sina	[<i>šināšim</i>]	-š/sināšim	<i>šināti</i>	-š/sināti

Table 14.3: Nominal inflection in Old Babylonian

	Substantive, masculine	Substantive, feminine	Adjective, masculine
Singular, nominative	<i>šarr-um</i>	<i>šarr-at-um</i>	<i>dann-um</i>
Singular, genitive	<i>šarr-īm</i>	<i>šarr-at-īm</i>	<i>dann-īm</i>
Singular, accusative	<i>šarr-am</i>	<i>šarr-at-am</i>	<i>dann-am</i>
Singular, locative	<i>libb-ūm</i>	—	—
Singular, terminative	<i>il-iš</i>	—	—
Dual, nominative	<i>šēp-ān</i>	<i>šit-t-ān</i>	—
Dual, obliquus	<i>šēp-īn</i>	<i>šit-t-īn</i>	—
Plural, nominative	<i>šarr-ū</i>	<i>šarr-ātum</i>	<i>dann-ūtum</i>
Plural, obliquus	<i>šarr-ī</i>	<i>šarr-ātīm</i>	<i>dann-ūtīm</i>

Mimation is part of the case suffixes and has no function with respect to (in)determination (*šarrum* “a king” as well as “the king”; Diem 1975). The dual which in Old A. was productive is now mainly only used with body parts and certain numerals (*šēpān* “two feet”, *šittān* “two thirds”).

The masculine substantive in the singular, besides the three common Semitic cases nominative, genitive and accusative, has two further cases, a locative (*libbūm* “in the heart”) and a terminative (*ilīš* “to god”), mainly used in literary texts (Groneberg 1978/1979) or frozen in various particles (e.g., *elēnūm* “above”). For the length of the locative suffix see Buccellati 1996, 152 and Neo-Babylonian plene spellings like *lib-bu-ú* etc. (AHw. 550). Both locative and terminative are also sparsely attested in other Semitic languages (Tropper 2000, 320 and 326); their higher productivity in A. might have been developed under Sumerian influence (see the Sumerian locative *é-a* “in the house” and the terminative *é-še* “into the house”).

In the masculine plural, the suffixes of adjectives differ from those of substantives (*šarrū dannūtum* “strong kings”).

2.6. Verbal inflection: general remarks

The inflection of the A. verb distinguishes: 3 tenses (present, preterite, perfect); 7 moods (imperative, prohibitive, precative, cohortative, vetitive, affirmative, irrealis); 4 verbal nouns (stative, participle, infinitive, verbal adjective); 1 form of syntactic subordination (subordinative); 1 form of marking the direction of a situation (ventive).

2.7. Verbal stems

Table 14.4. presents the verbal stems (root consonants in capitals (*PRS*)).

Old Babylonian and A. in general have 11 current verbal stems (Edzard 1965). G is the unmarked stem. D is characterized by length of the second root consonant and has factitive or plural meaning (“he decides many cases”) (Kouwenberg 1997; Streck 1998a). Š is characterized by a prefix *š* and has causative meaning (“he has (him) decide”). N is characterized by a prefix *n* and has passive/reciproce/reflexive meaning (“he is decided”) (Lieberman 1986, 596; Testen 1998, 137f.; 141 Anm. 21). Gt/Dt/Št are characterized by

Table 14.4: Verbal stems in Old Babylonian

Verbal stem	Infinitive	Present	Preterite	Perfect	Stative
G	<i>PaRāSum</i>	<i>iPaRRaS</i>	<i>iPRuS</i>	<i>iPtaRaS</i>	<i>PaRiS</i>
D	<i>PuRRuSum</i>	<i>uPaRRaS</i>	<i>uPaRRiS</i>	<i>uPtaRRiS</i>	<i>PuRRuS</i>
Š	<i>šuPRuSum</i>	<i>ušaPRaS</i>	<i>ušaPRiS</i>	<i>uštaPRiS</i>	<i>šuPRuS</i>
N	<i>naPRuSum</i>	<i>ipPaRRaS</i>	<i>ipPaRiS</i>	<i>ittaPRaS</i>	<i>naPRuS</i>
Gt	<i>PitRuSum</i>	<i>iPtaRRaS</i>	<i>iPtaRaS</i>	–	<i>PitRuS</i>
Dt	<i>PutRRuSum</i>	<i>uPtaRRaS</i>	<i>uPtaRRiS</i>	<i>uPtataRRiS</i>	–
Št	<i>šutaPRuSum</i>	<i>uštaP(aR)RaS</i>	<i>uštaPRiS</i>	<i>uštataPRiS</i>	<i>šutaPRuS</i>
Gtn	<i>PitaRRuSum</i>	<i>iPtanaRRaS</i>	<i>iPtaRRaS</i>	<i>iPtataRRaS</i>	<i>PitaRRuS</i>
Dtn	<i>PutRRuSum</i>	<i>uPtanaRRaS</i>	<i>uPtaRRiS</i>	–	<i>PutRRuS</i>
Štn	<i>šutaPRuSum</i>	<i>uštanaPRaS</i>	<i>uštaPRiS</i>	–	<i>šutaPRuS</i>
Ntn	<i>itaPRuSum</i>	<i>ittanaPRaS</i>	<i>ittaPRaS</i>	–	<i>itaPRuS</i>

an infix *t* and combine reciprocal/reflexive/passive meaning and the meaning of the main stems (Streck 2003a). Gtn/Dtn/Štn/Ntn (Edzard 1996) are characterized by an infix *tan* in the present tenses. The other forms of Gtn are characterized by an infix *t* + length of the second root consonant (Renger 1972, 230; Steiner 1981, 17; Kouwenberg 1997, 69–79; Streck 1998a, 527–529 2.2); the other forms of Dtn/Štn/Ntn are characterized by an infix *t* and thus are identical with the corresponding forms of Dt and Št (Renger 1972, 230, Edzard 1996, 17; Kouwenberg 1997, 78). Gtn/Dtn/Štn/Ntn combine plural meaning and the meaning of the main stems (e.g., „he always decides“).

2.8. Personal affixes

See table 14.5. for the Old Babylonian affixes that distinguish person, gender and number in the tenses and in the imperative:

Table 14.5: Verbal affixes in Old Babylonian

Verbal stems	Tenses		Imperative (all verbal stems)
	G, Gt, Gtn, N, Nt, Ntn	D, Dt, Dtn, Š, Št, Štn	
1. Singular commune	<i>a-</i>	<i>u-</i>	
2. Singular masculine	<i>ta-</i>	<i>tu-</i>	<i>-Ø</i>
2. Singular feminine	<i>ta- ... -ī</i>	<i>tu- ... -ī</i>	<i>-ī</i>
3. Singular commune	<i>i-</i>	<i>u-</i>	
1. Plural commune	<i>nī-</i>	<i>nu-</i>	
2. Plural commune	<i>ta-... -ā</i>	<i>tu- ... -ā</i>	<i>-ā</i>
3. Plural masculine	<i>i-... -ū</i>	<i>u- ... -ū</i>	
3. Plural feminine	<i>i-... -ā</i>	<i>u- ... -ā</i>	

2.9. The tenses

The present tense designates non-anteriority, the preterite anteriority. The perfect tense is morphologically identical with the preterite of the *t*-stems; it is never a perfect

in the sense of the English present perfect but designates anteriority + posteriority with two different reference points. The difference between preterite and perfect is one of markedness: whereas the preterite is only marked for anteriority the perfect is marked both for anteriority and posteriority. Therefore, only the preterite can be used for anteriority in the past in conditional and subordinate clauses. For temporal progress or for anteriority in the future, the perfect in Old Babylonian is the normal form, but the unmarked preterite is sometimes also used. In short, the uses of the three tenses can be summarized as in table 14.6:

Table 14.6: Tenses in Old Babylonian

	Main clause	Conditional clause	Subordinated clause
Present	Present (“he is doing”) Future (“he will do”) Plurality in the past (“he used to do”)	Plurality (“if he constantly does”) Modality (“if he wants to do”)	Simultaneity (“when he is/was doing”) Posteriority (“that he will do”)
Preterite	Past (“he did”) Past, (English) Perfect (“he has done”) Anteriority in the past (“he had done”) Temporal progress (“(he did) and he did”)	Anteriority in the past (“if he did (yesterday)”) Anteriority in the future (“if he does”)	Anteriority in the past (“after he had done”) Anteriority to the main clause in the future (“when he has done”)
Perfect	Temporal progress (“(he did) and then he did”)	Anteriority in the future (“if he will have done”)	Anteriority in the future (“when he will have done”)

For the tenses in A. see Streck 1995a and b; Streck 1998b; 1999b; 2007a, 59–63; also, with some minor differences, Metzler 2002; with very different conclusions Kaplan 2002, Cohen 2006. Cf. 5.5. for the use of the perfect tense from Middle Babylonian onwards, 8.6. for the use of the present tense in literary texts and 9.10. for the use of the preterite tense in Neo- and Late Babylonian. For the tense system of Sumerian which might have influenced the A. tense system (or vice versa) see ch. 15.2.9. For similar tense systems of other non-Semitic Ancient Near Eastern languages and the question whether we deal with an areal phenomenon see Streck 1998b, 192–195.

2.10. The stative

The stative, which is conjugated by suffixes, designates states regardless of tense (“he is/was/will be good”); its nature as (more) verbal or nominal is debatable (Kouwenberg 2000). It seems best to analyse it as a verbal noun. The paradigm is presented in table 14.7. (the root consonants are presented in capitals, *DMQ*).

For possible Sumerian influence on the morphology and use of the stative see ch. 15.

2.11. The subordinative

The subordinative suffix *-u* marks the verbal predicate of subordinate sentences: *warka abum ana šimtim ittalku* Kodex Hammurapi § 167 “after the father has died”. No other

Table 14.7: The stative in Old Babylonian

	Singular	Plural
3. masculine	<i>DaMiQ</i> „he is/was good“	<i>DaMQū</i> „they are/were good“
3. feminine	<i>DaMQat</i> „she is/was good“	<i>DaMQā</i> „they are/were good“
2. masculine	<i>DaMQāta</i> „you are/were good“	<i>DaMQātunu</i> „you are/were good“
2. feminine	<i>DaMQāti</i> „you are/were good“	<i>DaMQātina</i> „you are/were good“
1. commune	<i>DaMQāku</i> „I am/was good“	<i>DaMQānu</i> „we are/were good“

Semitic language has such a subordinative (for the Assyrian subordinative in *-ni*, used together with *-u*, cf. 3.4.); on the other hand, several Ancient Near Eastern languages of different families show forms with similar functions (Sumerian: *-a*, Elamite *-a*, Hurrian *-šše*, which most likely represents an areal phenomenon (Streck 1998b, 193; for Sumerian see ch. 15).

2.12. Amorite loanwords

In Old Babylonian some 90 loanwords from Amorite (ch. 19) can be found (Streck 2000, 82–128). Most of these loanwords are attested in the core area of the Amorites in the middle Euphrates area and northern Syria (Mari, Tuttul, Qaṭna, Rimāḥ). Some loanwords are attested in Babylonia; among the latter, a group of literary words is remarkable (cf. 8.6.). Most Amorite loanwords are confined to the Old Babylonian period and are represented with less than five instances. The loans belong to the following semantic fields:

- (a) Tribal units: *gayyu* “clan”, *gayyišam* “clan for clan”, *ḫibru* “migrating tribal unit”, *limu* “tribe”, *ra’su* “unit”.
- (b) Tribal institutions: *sugāgu* “sheikh”, *sugāgūtu* “office of sheikh”, *zubūltu* “princess”, *abū kahli* “fathers of might” (a designation of the elders), *ta’tāmu* “assembly”.
- (c) Kinship: *ḥammu* “people; older male relative”, *yabamu* “brother-in-law”, *iššu* “woman”, *dāru* “generation”.
- (d) Animal husbandry: *ḥayyātu* “animals”, *šamru/šammuratu/šummuratu* “sheep”, *ti-šānu* “an ovine”, *ḥazzatu* “goat”. Qualifications of ovines: *ḥālu* “to give milk”, *yabisu* “dry (i.e. without milk)”. *buqāru* “cow”, *ḥašāru* “pen”, *merḥū* “overseer over the royal flocks”, *merḥūtu* “office of the overseer over the royal flocks”.
- (e) Nomadic camp: *maskanu* “dwelling”, *maskanū* “inhabitant”, *sakānu* “to settle”, *maškabu* “camp”.
- (f) Topography: *āḥarātu* “far bank of a river, west”, *aqdamātu* “near bank of a river, east”, *bataru* “gorge”, *gab’u* “summit”, *ḥadqu* “steppe”, *ḥamqu* “valley”, *k/qašū* “steppe”, *madbaru* “desert, steppe”, *sawū* “environs” or “desert”, *šūru* “rock”.
- (g) Agriculture: *ḥiršu* “ploughed field”, *maḥappu* “part of a dam”, *yābiltu* “a canal”.
- (h) Hunt: In connection with hunting lions: *ḥalū* “to be sick”, *nissatu* “sickness, weakness”, *saḥātu* “pit for snaring animals”.
- (i) Weaving: *nasāku* “to weave”.
- (j) Messenger service: *mālaku* “messenger”.

- (k) Razzia, military: *sadādu* “to make a razzia”, *saddu* “razzia”, *marādu* “to rebel”, *qatālu* “to kill” (but mostly used in connection with a symbolic act accompanying the conclusion of treaties), *taḥānu* “to wound”.
- (l) Law: In connection with concluding treaties: *ḥāru* “donkey”, *qatālu* “to kill”, *ḥazzu* “goat”. *yālūtu* “alliance”, *madīnātu* “judicial district”, *naḥālu* “to hand over property”, *niḥlatu* “heritage”, *niqmu* “revenge”, *šapātu* “to judge”, *šāpiṭu* “judge”, *šāpiṭūtu* “office of judge”, *šiptu* “court”.
- (m) Religion: *ḥulīlu* “rejoicing(?)”, *qilāsātu* “a festival”.
- (n) Objects: *ḥabalu* “strap”, *ḥimru* “a fermented drink”, *ḥūgu* “bread”, *kinnāru* “lyre”, *marbiqatu* “an ornament”.
- (o) Miscellanea: *abiyānu* “poor”, *aqdamu* “earlier time”, *biqlu* “sprout”, *ḥakū* “to wait”, *ḥarāšu* “to keep silent”, *ḥarāšu* “to keep quiet”, *ḥāziru* “helper”, *ḥikītu* “expectation”, *ḥinnu* “mercy”, *ḥippu* “obstacle”, *māpalā* “speaker”, *-na* (affirmative particle), *naḥāmu* “to be available in abundance”, *naḥmu* “prosperity”, *paḥātu* “fear”, *qaḥālu* “to gather”, *rabbatu* “ten thousand”, *šaḥādu* “to make a present”, *tarṣīātu* “joy”, *yagātu* “complaints”.

The majority of loans fill a semantic gap (cf. 9.11.): words for tribal units and institutions, husbandry, nomadic camp. The topographical terms are also closely connected to nomadic movement in the country. Some loans belong to the semantic fields of typically nomadic activities: hunt and messenger service, weaving and razzia. Terms in the semantic fields of law and religion attest to typical nomadic institutions and traditions. The limited importance of realia is remarkable; it reflects the low significance of the material culture of the nomads for the sedentary people.

Though most of the loans are substantives, verbs are attested as well. Only one particle (*-na*) is borrowed from Amorite. Amorite substantives and verbs are normally fully integrated in the A. inflection system; Amorite morphology is only rarely maintained in loans (ch. 19).

Amorite loans are sometimes also phonologically integrated in A. They thus exhibit Geers' law (**qtl* > *qtl*). However, more often Amorite phonology is retained. Thus /ʾ/ is preserved (written *ḥ*): see *ḥālu*, *ḥamqu*, *ḥāru*, *ḥazzatu*, *ḥibbu*, *ḥūgu*, *merḥū*, *naḥāmu*, *naḥmu*, *taḥānu*. /h/ is preserved in *ḥinnu*. /h/ is preserved (written *ḥ* or with plene vowel): *ḥulīlu*(?), *kahlu*, *qaḥālu*. Post-consonantal /ʾ/ is preserved: *gabʾu* (but see *māl-aku*). Syllable final /ʾ/ is preserved: *taʾtāmu*. Etymological */š/ and */ṣ/ are written *s*, i.e. Amorite /š/: *saḥātu*, *sadādu*, *saddu*, *saḥātu*, *sakānu*, *sawū*, *sugāgu*. Short vowels in open syllables are preserved: *yabamu*, *marbiqatu*, *rab(a)bātu*. */w/ develops into /y/ with verbs I w/y: *yābiltu*, *yagātu*, *yālūtu*. The diphthong /ay/ is preserved: see the spellings *ḥa-a-ri-im*, *ḥa-a-ra-am* and *a-ia-ra-am* for /ʾayra/im/. The noun pattern *maQTaL/maQ-aLL* is preserved when the root contains a labial: *madbaru*, *maškabu*, *maḥappu*, *mā-palū*, *marbiqatu*. Geers' law is not applied in rare cases, such as *qašū* instead of *kašū*.

2.13. Akkadian and Sumerian

Possible or certain Sumerian influences on A. have been noticed in 2.3.–5. and 2.9.–11. See also ch. 15.

3. Old Assyrian

3.1. Geographical distribution, chronology and textual genres

Old Assyrian is only sparsely attested in Assyria (northern Mesopotamia) itself (As-sur). Most of the texts have been excavated in various places in Asia Minor where Assyrian merchants lived in colonies (Kaneš/Kültepe, Hattuša/Boghazköy, Alışar Höyük). Some texts have also been found in Nuzi east of the Tigris. The number of texts in total is about 22 300, which contain ca. 1 311 000 words (Michel 2003, v; Streck 2011b). They date to ca. 1900–1700 BC.

Old Assyrian is confined to fewer textual genres than Old Babylonian: administrative and judicial documents, letters (Michel 2001), royal inscriptions (Grayson 1987), and very few literary texts.

For Old Assyrian grammar in general see Hecker 1968.

3.2. Vowel harmony

The most prominent phonological feature of Old Assyrian and of Assyrian in general is the so-called Assyrian vowel harmony (a term borrowed from Turkish): short /a/ in an open unaccented syllable following an accented syllable assimilates to the vowel in the following syllable; thus, e.g., in the declension of nouns: *áššatam* “wife” (accusative), *áššutum* (nominative), *áššitim* (genitive); in the conjugation of verbs: *íddan* “he gives” (present tense of *nadānum*), *íddunū* “they (m.) give”, *táddinī* “you (f.) give”; *úttaksū* “they (m.) cut” (perfect tense of *nakāsum*), *táttaksī* “you (f.) cut”, both forms without vowel harmony since /a/ is in a closed syllable, but *úttikis* “he cut”.

3.3. Gutturals

According to Kouwenberg 2006, the Proto-Semitic gutturals show the reflexes in Old Assyrian presented in table 14.8.

Note, however, that the evidence presented by Kouwenberg is questionable on several points. Thus, *beārum* can well be interpreted as *be’ārum* (no difference from *be’ālum*), and a spelling *i-li-qī-ú* can well stand for *illiqī(‘)ū* with *ī* as a long vowel taken over in analogy from word final *ī* (*illiqī* “he was taken”).

3.4. Subordinative

Old Assyrian and Assyrian in general have a subordinative suffix *-ni* used alone or in addition to the subordinative suffix *-u* (for the latter cf. 2.11.). *-ni* sometimes also marks subordinate nonverbal sentences. Table 14.9. contrasts Old Assyrian and Old Babylonian forms (subordinative suffixes are marked bold).

Table 14.8: Reflexes of the Proto-Semitic gutturals in Old Assyrian

Proto-sem.	Word initial	Intervocalic	Post-consonantal	Syllable final
*ʾ	(ʾ): (ʾ) <i>aklam</i> “bread”	ʾ: <i>šaʾalum</i> “to ask”	ʾ: <i>išʾal</i> “he asked”	long vowel: <i>wašissu</i> “his departure” < * <i>wašiʾt-šu</i>
*ʿ	(ʿ) + e-coloring: (ʿ) <i>emmudū-</i> “they will impose”	ʿ + e-coloring: <i>beʾalum</i> “to rule” < * <i>baʿalum</i>	ʿ + e-coloring: <i>ibʾel</i> “he ruled” < * <i>ibʿel</i>	long vowel (+ e-coloring): <i>tašbūt</i> (Status constructus) “satisfaction” < * <i>tašbīʾt</i>
*h	(h): (h) <i>awātam</i> “word”	0/glide: <i>bāš</i> “be (singular) ashamed” < * <i>bahaš</i>	0: <i>ibāš</i> “he was ashamed” < * <i>ibhaš</i>	long vowel: <i>bāšā</i> “be (plural) ashamed” < * <i>bahšā</i>
*ḥ	(ḥ) + e-coloring: (ḥ) <i>ešādum</i> “to harvest”	0 + e-coloring/glide: <i>beārum</i> (- <i>bé-a-</i>) “to choose” < * <i>baḥārum</i>	glide y: <i>illiḡū</i> (- <i>qí-ú</i>) “they were taken” < * <i>illiḡhū</i>	long vowel (+ e-coloring): <i>luḡūt</i> (Status constructus) “goods” < * <i>lu-ḡuḥt</i>
*ḡ	ḡ: <i>ḥadārum</i> “to fear”	ḡ: <i>taḡarrim</i> “you write on the envelope”	ḡ: <i>liḡhir</i> “he becomes small”	ḡ: <i>ušaḡdar</i> “he frightens”

Table 14.9: The subordinative in Old Assyrian and Old Babylonian

Old Assyrian	Old Babylonian	Translation
<i>ša iPRus-u</i> , <i>ša iPRus-u-ni</i>	<i>ša iPRus-u</i>	“who (singular) decided”
<i>ša iPRusū-ni</i>	<i>ša iPRusū</i>	“who (plural) decided”
<i>ša iPRus-u-šu-ni</i>	<i>ša iPRus-u-šu</i>	“who decided it”
<i>ša ina ālim wašbat-ni</i>	<i>ša ina ālim WašBat</i>	“who (fem.) sits in the city”
<i>kīma PN aḫūka(-ni)</i>	<i>kīma PN aḫūka</i>	“as PN is your brother”

3.5. Verbal forms

Table 14.10. contrasts characteristic (Old) Assyrian and (Old) Babylonian verbal forms. Whereas in (Old) Babylonian the personal prefix *i-* for the 3. person singular is used for both genders, (Old) Assyrian has *i-* only for the masculine and *ta-* for the feminine. In (Old) Assyrian, infinitive, imperative, verbal adjective and stative of the D- and Š-

Table 14.10: Characteristic differences in the verbal inflection between (Old) Assyrian and (Old) Babylonian

	(Old) Assyrian	(Old) Babylonian
Personal prefix 3. singular feminine	<i>taPRRuS</i>	<i>iPRuS</i>
Infinitive etc. D	<i>PaRRuSum</i>	<i>PuRRuSum</i>
Infinitive etc. Š	<i>šaPRuSum</i>	<i>šuPRuSum</i>
Precative G 1. singular	<i>laPRuS</i>	<i>luPRuS</i>
Precative D 3. singular	<i>luPaRRiS</i>	<i>liPaRRiS</i>

stems have *a* in the first syllable, where (Old) Babylonian has *u*. The (Old) Assyrian precativ forms *laprus* and *luparris* are older than the corresponding (Old) Babylonian ones: they are formed by prefixing *l-* to the indicative forms *aprus* and *uparris*, whereas the (Old) Babylonian forms developed by analogy: *luprus* is analogous to *luparris* (precativ D 1. person singular) and *liparris* analogous to *liprus* (precativ G 3. person singular).

3.6. Lexicon

Table 14.11. presents examples for lexical differences between Old Assyrian and Old Babylonian. For a full description see Kogan 2006.

Table 14.11: Examples for lexical differences between Old Assyrian and Old Babylonian

Old Assyrian	Old Babylonian
Words attested exclusively or predominantly in Assyrian	
<i>ammīum</i> “that”	<i>ullūm</i> “that”
<i>huzīrum</i> “pig”	<i>šaḥūm</i> “pig”
<i>adrum</i> “threshing floor”	<i>maškanum</i> “threshing floor”
<i>kēna</i> “yes”	<i>annali</i> “yes”
<i>pūrum</i> “lot”	<i>isqum</i> “lot”
<i>aršatum</i> “wheat”	<i>kibtum</i> “wheat”
<i>šumkū</i> “onions”	<i>šamaškillū</i> “onions”
Common A. words with special prominence in Assyrian	
<i>abākum</i>	(<i>abākum</i>)
<i>awīltum</i>	(<i>awīltum</i>)
Common A. words with specific meaning in Assyrian	
<i>lapātum</i> “to write”	<i>lapātum</i> “to touch”
<i>naṭālum</i> “to witness”	<i>naṭālum</i> “to look”
Derived verbal stems unattested in Babylonian	
<i>pazārum</i> D “to smuggle”	—
<i>šapākum</i> Gt “to store”	—
Minor lexical differences	
<i>kirānum</i> “wine”	<i>karānum</i> “wine”
<i>širqum</i> “stolen goods”	<i>šurqum</i> “stolen goods”
Idioms typically Assyrian	
<i>libbam nadānum</i> “to encourage”	—
<i>puzram šabātum</i> “to hide”	—

In Old Assyrian texts at least two Hittite loanwords are found, *išhiuli* “treaty” and *išpatalu* “hostel at night” (derived from Hittite *išpant-* “night”) (Kammenhuber 1972–1975 § 2). Some 5–10 words are borrowed from unknown Anatolian languages, e.g., *iknusi* “a container”.

4. Middle Assyrian

4.1. Geographical distribution, chronology and text genres

In contrast to Middle Babylonian (cf. 5.1.), Middle Assyrian (ca. 1500–1000 BC) did not spread to neighbouring cultures and was confined to the Middle Assyrian kingdom. Middle Assyrian is attested in Assyria itself (Assur, Kalah, Ninive, Kār-Tukultī-Ninurta, Šibaniba, Rimāḥ) and in Syria (Dūr-Katlimmu, Ḥarbe, Tall Šabīy Abyaḍ). The Old Assyrian archives in Asia Minor have no Middle Assyrian successor. The number of texts total about 2 700, which contain ca. 220 000 words (Pedersén 1998; Streck 2011b).

Attested textual genres include administrative and judicial documents, letters, laws and harem edicts. Royal inscriptions and literary texts produced in Assyria in this period are written in Middle Babylonian but contain Assyrianisms (see Streck 2007b, 152–155 for the longest inscription of Tukultī-Ninurta I).

For a general description of Middle Assyrian grammar see Mayer 1971.

4.2. Orthography and phonology

Word initial /w/ becomes /u/: *warkī'um* > *urkī'u* “later”, *wašābum* > *ušābu* “to sit”, *waššurum* > *uššuru* “to release”. Intervocalic /w/ is written B or rarely ’, which probably is only an orthographic phenomenon: *awātum* > *abutu* “word”, *awīlum* > *a’īlu* “man”.

/št/ becomes /lt/ and /št/ becomes /lt/, a development understandable only if /š/ has a lateral pronunciation (Streck 2006, 233–251, especially 238): *iktašdam* > *iktalda* “he arrived”, *ištur* > *iltur* “he wrote”.

/qt/ becomes /qt/, i.e. /t/ acquires an “emphatic” (velarized?) pronunciation under the influence of “emphatic” /q/: *uqtanarrubū* > *uqtanarrubū* “they bring near repeatedly”.

/šb/ becomes /sb/: *uššab* “he sits” (present), but *usbū* “they sit” (stative).

Perfect and stative forms of the verb *našā'u* “to carry, to lift” show a peculiar orthography (Parpola 1974): the phoneme cluster /š'/ is written Š (which proves that the phoneme /š/ was post-glottalized [(t)s']): *inašši* (present), *išši* (preterite), *ittaši* (perfect 3. person singular), *ittaššū* (written *i-ta-šu*) < *ittaš'ū* (perfect 3. person plural), *našša* (written *na-aš-ša*) < *naš'a* (stative 3. person singular masculine + ventive), *naššat* (written *na-ša-at*) < *naš'at* (stative 3. person singular feminine).

4.3. Independent personal pronouns

Table 14.12. shows the complicated development of the independent personal pronouns from Old to Middle Assyrian, contrasting it with Old and Middle Babylonian.

In the nominative 3. person singular, Old and Middle Assyrian have forms with final /t/ in contrast to Old and Middle Babylonian. However, in the genitive/accusative 3. person singular Old Assyrian and Old Babylonian show identical forms. In Middle Assyrian final /u/, restricted to the masculine in Old Assyrian, spreads to the feminine. Middle Babylonian, after contracting both /u'ā/ of the masculine and /i'ā/ of the femi-

Table 14.12: Independent personal pronouns in Old/Middle Assyrian and Old/Middle Babylonian

	Middle Assyrian	Old Assyrian	Middle Babylonian	Old Babylonian
Nominative 3. singular masculine	<i>šūt</i>	<i>šūt</i>	<i>šū</i>	<i>šū</i>
Nominative 3. singular feminine	<i>šīt</i>	<i>šīt</i>	<i>šī</i>	<i>šī</i>
Genitive/Accusative 3. singular masculine	<i>šu'āti/u</i>	<i>šu'āti/u</i>	<i>šātu</i>	<i>šu'āti/u</i>
Genitive/Accusative 3. singular feminine	<i>šī'āti/u</i>	<i>šī'āti</i>	<i>šāti</i>	<i>šī'āti</i>
Dative 3. singular masculine	<i>šu'āšu</i>	<i>šu'āti/u</i>	<i>šāšu</i>	<i>šu'āšim</i>
Dative 3. singular feminine	<i>šū'āša</i>	<i>šī'āti</i>	<i>šāši/a</i>	<i>šī'āšim</i>
Dative 2. plural masculine	<i>kunāšunu</i>	<i>kunūti</i>	<i>kāšunu</i>	<i>kunūšim</i>
Genitive/Accusative 3. plural masculine	<i>šinātunu</i>	<i>šinūti</i>	<i>šātunu</i>	<i>šinūti</i>
Genitive/Accusative 3. plural f.	<i>šinātina</i>	<i>šināti</i>	<i>šātina</i>	<i>šināti</i>

nine to /ā/, offers a new gender distinction with final /u/ for masculine and final /i/ for feminine. The dative pronouns 3. person singular of Old Assyrian are identical with the corresponding accusative pronouns. Middle Assyrian as well as Old and Middle Babylonian have dative forms with /š/ in contrast to genitive/accusative forms with /t/. Whereas the gender distinction is marked by an internal vowel opposition /u/ : /i/ in Old Babylonian, Middle Assyrian and Middle Babylonian distinguish gender by different word final vowels. In the plural, Old Assyrian has /t/ for both dative and genitive/accusative. The three other dialects mark the dative by /š/ and the genitive/accusative by /t/. Gender distinction is marked in Old Assyrian and Old Babylonian by internal vowel oppositions only; in Middle Assyrian and Middle Babylonian gender is distinguished by a combination of internal and final vowel oppositions.

4.4. Declension

Table 14.13. shows the development in the declension from Old to Middle Assyrian. Mimimation gets lost and /i/ of the genitive singular and oblique plural suffixes shifts to /e/. For the vowel harmony cf. 3.2.

Table 14.13: Declension in Middle and Old Assyrian

	Middle Assyrian		Old Assyrian	
	Masculine	Feminine	Masculine	Feminine
Singular nominative	<i>šarru</i>	<i>šarrutu</i>	<i>šarrum</i>	<i>šarrutum</i>
Singular genitive	<i>šarre</i>	<i>šarrete</i>	<i>šarrim</i>	<i>šarritim</i>
Singular accusative	<i>šarra</i>	<i>šarrata</i>	<i>šarram</i>	<i>šarratam</i>
Plural nominative	<i>šarrū</i>	<i>šarrātu</i>	<i>šarrū</i>	<i>šarrātum</i>
Plural oblique	<i>šarrē</i>	<i>šarrāte</i>	<i>šarrē</i>	<i>šarrātim</i>

4.5. Ordinal numbers

Middle Assyrian has a new noun pattern, *PaRāSī*, for ordinal numbers. Old Assyrian has *PaRiS* and Old Babylonian *PaRuS*. Cf. table 14.14:

Table 14.14: Ordinal numbers in Middle/Old Assyrian and Old Babylonian

	Middle Assyrian	Old Assyrian	Old Babylonian
(2)	<i>šanāʾīʾu</i>	<i>šanûm, šanītum</i>	<i>šanûm/šanītum</i>
(3)	<i>šalāšīʾu</i>	<i>šalšum, šalištum</i>	<i>šalšum, šaluštum</i>
(4)	<i>rabāʾīʾu</i>	<i>rabûm, rabūtum</i>	<i>rebûm, rebūtum</i>

4.6. Lexicon

In AHw. 58 new Middle Assyrian lemmata are booked, among them: *akannī* “now” (< *akī* “as” + *annī* “this”), *ammar* “as much as” (replacing *malā*), *battubattēn* “all round” (*battu* “side”), *dariʾu* “sacrificial sheep” (< Sumerian (*máš*) *da-rí-a*), *ḥaramma* “later” (< **aḥar* “after” + *amma* “there”), *jamattu* “each” (< *ajju* “which” + ?), *karāru* “to put, to place” (replacing *šakānu*), *mā* (particle of quoted direct speech, replacing *umma*), *matāḥū* “to lift”, *mummertu* “procuress” (participle *amāru* N), *pirša-duḥḥu* (an aromatic, attested in the Middle Assyrian recipes for perfumes, a word of unknown origin), *talmu* “big” (< Hurrian).

5. Middle Babylonian

5.1. Geographical distribution, chronology and text genres

Middle Babylonian (ca. 1500–1000) is attested by ca. 12 200 texts with together ca. 660 000 words (Pedersén 1998; Streck 2011b). In Babylonia itself, most texts come from Nippur. The isolated language of the Kassites who ruled Babylonia during the Middle Babylonian period, did not leave any visible imprint on the Middle Babylonian language besides some loanwords (cf. 5.6.). For Middle Babylonian in the periphery of Mesopotamia cf. 6.

Text genres comprise administrative and legal documents (including the *kudurrus*, stelae documenting the donation of real estates), letters, treaties, omen texts and literary texts (e. g., a fragmentary version of the epic of Gilgameš).

For Middle Babylonian grammar in general see Aro 1955 and for the lexicon Aro 1957.

5.2. Orthography and phonology

/a/ sometimes undergoes partial assimilation to the /i/ of the following syllable, appearing as /e/: *liballiṭū* > *libelliṭū* “let them keep alive”, *lišalbiš* > *lišelbiš* “let him clothe”.

As in Middle Assyrian (cf. 4.2.), /št/ develops to /lt/, /šṭ/ to /lṭ/: *ištēn* > *iltēn* “one”.

/s/, which in Old Babylonian was an affricate pronounced [ʃs], written Z, becomes deaffricated [s], written S: **bīt-šu* “his house”, pronounced [bīʾs(s)u], written É-ZU > [bīs(s)u], written É-SU. This leads to the widespread use of the cuneiform signs SA, SI and SU for /sV/ whereas the signs ZA, ZI and ZU are confined to /šV/ and /zV/.

Word initial /w/ drops: *wašābum* > *ašābu* “to sit” (cf. Middle Assyrian *ušābu*). Intervocalic /w/, which was written with the PI sign in Old Babylonian, is preserved but now written with M signs: *awīlum* > (conventional transcription) *amīlu* but pronounced [awīlu] (cf. Middle Assyrian *a’īlu*, probably pronounced [awīlu] as well). From now on, M is the normal notation for /w/ in A. as can still be seen in the latest cuneiform texts, the Graeco-Babyloniaca, where cuneiform *na-ma-ri* “to shine” is rendered in Greek as ναυαϞ.

The long voiced consonants /dd/ and /gg/ are nasalized and develop into /nd/ and /ng/, respectively, and /bb/ into /mb/: *inaddin* > *inandin* “he gives”, *imaggur* > *imangur* “he agrees”, *šubbum* > *šumbu* “wheel”.

5.3. Personal pronouns

For new formations in the personal pronouns see 4.3.

5.4. Loss of mimation

As in Middle Assyrian (cf. 4.4.), mimation is regularly lost, e.g. in the declension of nouns: *šarrum* > *šarru* “king” (nominative), *šarrim* > *šarri* (genitive), *šarrātu/im* > *šar-rātu/i* “queens”

5.5. Use of the perfect

The most interesting syntactic innovation of Middle Babylonian is the extension of the functions of the perfect and the restriction of the preterite. Table 14.15. contrasts the functions of both tenses in Old and Middle Babylonian:

Table 14.15: The use of the perfect in Old and Middle Babylonian

	Old Babylonian Letters and documents	Middle Babylonian Letters	Middle Babylonian Documents
(a) Past, main declarative sentence, positive: “decided, has/had decided”	<i>iprus</i>	<i>iptaras</i>	<i>iprus</i>
(b) Past, temporal progress: “decided and then did”	<i>iprus-ma ītepuš</i>	<i>iptaras-ma ītepuš</i>	<i>iprus-ma ītepuš</i>
(c) Past, main declarative sentence, negative: “did not decide, has not decided”	<i>ul iprus</i>	<i>ul iprus</i>	<i>ul iprus</i>
(d) Past, question with interrogative: “why did he decide?”	<i>ammīnim iprus</i>	<i>ammīni iprus</i>	<i>ammīni iprus</i>
(e) Past, subordinate clause: “after he had decided”	<i>ištū iprus-u</i>	<i>ištū iprus-u</i>	<i>ištū iprus-u</i>
(f) Future, subordinate clauses: “as soon as he will have decided”	<i>ištū iptars-u (iprus-u)</i>	<i>ultū iptars-u (iprus-u)</i>	<i>ultū iptars-u (iprus-u)</i>

In Old Babylonian, the preterite *iprus* designates relative past, whereas the perfect *iptaras* combines the designation of relative non-past + posteriority: in b past relative to the present moment + posteriority relative to the previous situation, in f past relative to the situation of the main clause + posteriority relative to the present moment. In Middle Babylonian, *iptaras* replaces the preterite in positive main declarative sentences, which is the result of a semantic demarking (Streck 1995a, 203–207): *iptaras* looses the function “posteriority” and assumes the same function as *iprus*; the distribution of both tenses in main clauses follows syntactic rules (*iptaras* positive, *iprus* negative, see a and c; *iptaras* declarative and *iprus* interrogative, see a and d). Only in subordinate clauses the old distribution of *iprus* and *iptaras* still works: *iptaras* is restricted to the future whereas *iprus* is semantically unmarked and can be used for the past as well as the future. Characteristically, the new distribution of preterite and perfect is observable mainly in letters, that show a language relatively near to the spoken language; in documents, however, that normally have a more formulaic and archaic language, the old distribution of both tenses still works in Middle Babylonian.

5.6. Lexicon

New Middle Babylonian words are for example: *aḥāmiš* “each other” (< *aḥā* + *iš*, i.e. [*aḥāwiš*], cf. 5.2. for *m* = [w]), *akanna* “so” (< *ak(i)* “as” + *anna* “this”), *banû* “good” (replaces *damqum*), *dullu* “work” (Old Babylonian “trouble”, replaces *šiprum*), *gabbu* “totality” (replaces *kalûm*), *kudurru* “boundary, boundary stone”, *ma'da* “very”, *šul-mānu* “greeting gift”, *zaratu* “tent” (replaces *kuštarum*). The preposition *ana* is often replaced by the following prepositional phrases: *ana muḥḥi*, literally “to the skull of”, *ana lēt* “to the cheek of”, *ana pūt* “to the forehead of”.

The Kassites, who ruled Babylonia during the Middle Babylonian period, spoke an isolated language that is known only through some names and loanwords in A. texts (Balkan 1954). Besides loanwords, the language did not leave any visible imprint on Middle Babylonian. The loanwords belong to the following semantic fields:

- (a) Horse breeding (perhaps partly also other animals) and war chariots (see also Weszeli 2004, 470 §§ 2.1, 2.2). Most loanwords belong to this semantic field since both were introduced to Babylonia during the Middle Babylonian period (Weszeli 2004, 472 § 3.2): *akkandaš/anakandaš* “spoke”, *allak* “hub (of a wheel)”, *alzibadar* “a colour of horses”, *baziḥarzi* “a part of the yoke-team”, *išpardu* “horse-bit”, *kamusaš* “a bronze component of harness”, *lagaštakkaš* “piebald”, *massiš* “horse trappings”, *sir(i)pi* “brown”, *sumaktar* “half-bred”, *taḥarbatu/taḥabbatu* “standing platform”. Terms for horses whose exact meaning is unclear: *burzaraš*, *ḥulalam*, *kilidar*, *minzir*, *minzaḥar*, *pilurmaḥ*, *pir(zu)muḥ*, *sambiḥaruk*, *šimriš*. Parts of the chariot: *karagaldul/karimgaldu*, *kimek*.
- (b) Plants: *aralaš(?)*, *ḥašimbur*, *kabittigalzu*, *kadišeru*, *kuruš*, *piriduḥ*, *pirimaḥ*, *pirizaḥ*, *šagabigalzu*, *tarizaḥ*.
- (c) A bird: *ḥašmar* “a falcon”.
- (d) Titles: *andaš* “king” (in a lexical text equated with A. *rubû* “great one”), *bukāšu* “duke”, *sakrumaš* “a chariot officer(?)”.
- (e) Objects: *dardaraḥ* “buckle (?)”, *ganandu* “an ornament”, *sernaḥ* “a garment”.

- (f) Miscellaneous and unclear words: *epapu*, *kutkim*, *mašhu* “god” (in a lexical text equated with A. *ilu* “god”), *talgab* “part of irrigation equipment”, *tanzilam* “a connecting canal”, *zimbinal/zina*.

6. Akkadian in the periphery of Mesopotamia

6.1. Introduction

Middle Babylonian was also used outside Babylonia in the entire Ancient Near East as a lingua franca in the diplomatic communication between the states of Babylonia, Assyria, Mittani, Hatti, Syria-Palestine and Egypt (see ch. 16). Moreover, in different regions of the Ancient Near East Middle Babylonian also served as an administrative language. A. in the periphery of Mesopotamia was in part strongly influenced by the spoken local, Semitic or Non-Semitic, languages. A. in the periphery of Mesopotamia is known from ca. 5 300 texts with together ca. 340 000 words (Pedersén 1998; Streck 2011b).

In the following paragraphs, the A. of Nuzi in Hurrian milieu (cf. 6.2.) and the A. of Ugarit (cf. 6.3.) and Amarna (cf. 6.4.), both in Northwest Semitic milieu, are described in more detail. For the A. of Emar see Seminara 1998 (grammar) and Penttuc 2001 (West Semitic loan words in Emar texts). The few texts from Amurru are described by Izre'el 1991. For word order in the A. of Byblos see Gianto 1990.

6.2. Nuzi

In Nuzi, east of the Tigris near modern Kirkūk, texts dated between ca. 1500–1350 BC were found. The Middle Babylonian language of Nuzi is influenced by the local Hurrian language. For the A. of Nuzi see Wilhelm 1970.

Grammatical interference from Hurrian appears in the following points:

- (a) Voiced, voiceless and emphatic consonants are not distinguished: e.g., the sign QA is used to write /qa/, /ga/ (transliterated *ga*₅) and /ka/ (transliterated *ka*₄).
- (b) Due to the ergative structure and the missing grammatical gender of Hurrian, subject and object as well as grammatical genders are often confused in the verb: *u adī* PNf *balṭu* PN *u* PN₂... *ipallaḥṣunūti* “And as long as PNf is alive, PN and PN₂ will behave respectfully towards her”. But the A. text has “he is alive”; correct would be **balṭatu*. Moreover, the A. text reads “she will behave respectfully towards them”; correct would be *ipallaḥṣi*. 5 UDU^{meš} PN *ana jāši iddinū* “PN gave me 5 sheep”. However, the A. text has “they gave”, i.e. the verb is congruent with the object “sheep”; correct would be *iddin. anāku tuppa šanā lā išaṭṭar* “I will not write another tablet”. The A. text has “he will write”, again the verb is congruent with the object; correct would be *ašaṭṭar*.
- (c) The stative conjugation is replaced by a frozen stative 3. person singular masculine. The plural of the subject is marked by a pronominal suffix plural accusative: *nīnu apilṣunūti* “We are satisfied”. Correct would be *aplānu* (1. person plural).

Besides grammatical interferences, A. borrowed some 400–500 loanwords from Hurrian (Edzard 1995, 302 n. 1). These are mainly attested in Nuzi, but some also in Middle Assyrian (cf. 4.6., e.g. *šiluhli* “a class of dependent workers”). Noteworthy is the combination of a Hurrian infinitive and the A. word *epēšu* “to do” in the infinitive: *širumma epēšu* “to confirm” (literally “to do confirm”, *šašumma epēšu* “to loose” (literally “to do loose”). Through Hurrian transmission, about ten loanwords are also borrowed from Indo-Iranian such as terms for horses (*babrunnu* “brown”) or *magannu* “gift” (Mayrhofer 1966, 18–24; 1982, 76; Kammenhuber 1968, 181–232).

6.3. Ugarit

In Ugarit some 700–800 A. texts dated ca. 1400–1200 BC were found. For the A. of Ugarit see Huehnergard 1989 and Van Soldt 1991.

The A. texts from Ugarit show various interferences from Ugaritic (ch. 16):

- (a) Triptotic inflection of the Status constructus before genitive: *kalbu/ila* “dog” in analogy to Ugaritic *kussīu* (spelled *ksu*), *kussīi* (spelled *ksi*), *kussīa* (spelled) *ksa* “throne”. Normal A. would have *kalab* for all three cases.
- (b) The verb has a prefix *ta-* for the 3. person singular feminine: *taPaRRaS* in analogy to Ugaritic *taQTuLu*.
- (c) The verb has a prefix 1. person plural *na-*: *naPaRRaS* in analogy to Ugaritic *naQTuLu*.
- (d) Subordinate clauses do not have a subordinativ marker, unknown in Ugaritic.
- (e) *jānu* “is not” is construed with a predicate noun in the accusative: *pilka jānu* “There is no service” in analogy to Ugaritic *’ēna bêta li Ba’li* “There is no house for Ba’al”.
- (f) For Ugaritic loanwords in A. see Huehnergard 1987.

6.4. Amarna

In Amarna (Aḫetaten) in Egypt more than 380 texts dated ca. 1400–1200 BC were found. Most of the texts are letters to the Egyptian king (Moran 1992). The letters from Syria and Palestine show various Canaanite interferences (see Rainey 1996):

- (a) A. verbs are inflected according to the Canaanite verbal system: *ka-ša-at-ti-šu* “I reached him” EA 138: 80; A. verb *kašādu*, Canaanite perfect 1. person singular *QaTaLti*. *ti-iq-bu* URU^{ki} “The city said” EA 138: 90; A. verb *qabû*, Canaanite short imperfect 3. person plural *TiQTuLū*. *ti₇-pa-ṭi₄-ru-na* “They will desert” EA 362: 31; A. verb *paṭāru*, Canaanite long imperfect 3. person plural *tiQTuLūna*.
- (b) Canaanite verbs with Canaanite inflection are also interspersed in the A. text: *a-ba-da-at* “She is lost” EA 288: 52; Canaanite Verb *’BD*, Canaanite perfect 3. person singular feminine *QaTaLat*.
- (c) Sometimes A. words are accompanied by a Canaanite gloss: SAG.DU-*nu* (A.) : *ru-šu-nu* (Canaanite) EA 264: 18 = *qaqqadnu* : *rōšunu* “our head”. *ina ŠU-ti-šu* (A.) : *ba-di-ú* (Canaanite) EA 245: 35 = *ina qātišu* : *bādi-hu* < **bi-yadi-hu* “in his

hand”. For Northwest Semitic, especially Canaanite loanwords in the Amarna texts see Sivan 1987.

Besides Canaanite loanwords, also 30–40 Egyptian loanwords are found in the A. texts from Amarna, more than half of them in a single text, EA 14, in which imported objects from Egypt are mentioned; see Lambdin 1953.

7. Neo-Assyrian

7.1. Geographical distribution, chronology and text genres

Neo-Assyrian is attested from ca. 1000 until 600 BC when the Assyrian empire was destroyed and the (written) language vanished completely. The last Neo-Assyrian texts date from 603–600 BC and have been excavated in Dūr-Katlimmu at the Ḫābūr river in Syria (see *State Archives of Assyria Bulletin* 7 (1993)).

Neo-Assyrian is known from ca. 7100 texts with together 500 000 words (Streck 2011b) mainly from Assyria itself (state archives from Nineve, Kalḫu). Textual genres are mainly documents and letters. Neo-Assyrian royal inscriptions and literary texts are normally written in literary A. (cf. 8) which is basically Babylonian, sometimes with more or fewer Assyrianisms. For a few literary texts in Assyrian language see Livingstone 1989.

In the Neo-Assyrian period, the Aramaic language and script gained more and more importance at the expense of the A. language and cuneiform (cf. ch. 17). This is illustrated by the following passage from a Neo-Babylonian letter to the Assyrian king Sargon II: *k[i-i IGI LUGA]L maḥ-ru ina ŠÀ si-ip-ri [KUR?] Ár-m[a-a-a lu-u]s-pi-ir-ma a-na LUGAL [l]u-še-bi-la mi-nam-ma ina ši-pir-ti Ak-ka-da-at-tu la ta-šaṭ-ṭar-ma la tu-šeb-bé-la* SAA 17, 2: 15–19 „[I]f it is acceptable to the [kin]g, let me [wr]ite on an Arama[ic] parchment sheet and send (my message) to the king.’ Why don’t you write on an A. document and send me (your message)?” It is, however, difficult to say to which degree A. and cuneiform were replaced by the Aramaic language and script. In any case, the A. influence on written Neo-Assyrian is weak and mainly confined to loanwords (cf. 7.8.).

For Neo-Assyrian grammar in general see Hämeen-Anttila 2000 and Luukko 2004.

7.2. Phonology

/lt/ (either developed from /št/ or original) becomes /ss/: *aštapar* > *altapar* > *assapar* „I sent“. *ilteqe* > *isseqe* „He took“.

7.3. Declension

Table 14.16. illustrates the development of declension from Middle to Neo-Assyrian.

In the singular, the old accusative in *-a* is lost and replaced by the nominative. In the plural, the old nominative in *-ū* disappears and is replaced by the oblique.

Table 14.16: Declension in Middle and Neo-Assyrian

	Singular nominative	Singular genitive	Singular accusative	Plural nominative	Plural obliquus
Middle Assyrian	<i>šarru</i>	<i>šarre</i>	<i>šarra</i>	<i>šarrū</i>	<i>šarrē</i>
Neo-Assyrian	<i>šarru</i>	<i>šarre</i>	<i>šarru</i>	<i>šarrē</i>	<i>šarrē</i>

7.4. Stative

In the stative, new forms with *k*-suffixes for the 2. person singular and plural emerge in analogy to the 1. person singular. See table 14.17:

Table 14.17: The stative in Middle and Neo-Assyrian

	1. singular	2. singular masculine	2. singular feminine	1. plural	2. plural masculine	2. plural feminine
Middle Assyrian	<i>parsāku</i>	<i>parsāta</i>	<i>parsāti</i>	<i>parsāni</i>	<i>parsātunu</i>	<i>parsātina</i>
Neo-Assyrian	<i>parsāk(u)</i>	<i>parsāka</i>	<i>parsāki</i>	<i>parsāni</i>	<i>parsākunu</i>	<i>*parsākina</i>

7.5. Gt-, Gtt- and Dtt-stems

The synthetic reciprocal/reflexive Gt-stem with single *-ta*-infix had almost disappeared and was replaced by analytic paraphrases with *aḥāmiš* etc. “each other” and *ramanu* “self”: *ina muḥḥi taḥūmi ša šarre issaḥēʾiš maḥṣāni* SAA 1, 250: 7f. “We fought with each other at the king’s border” (*issaḥēʾiš* replaces older *maḥāšum* Gt). *ramanka ta-paššaš* KAR 31 r. 22 “You anoint yourself” (*ramanka* replaces older *pašāšum* Gt).

The separative Gt of *alākum* “to go” is replaced by a new Gtt-stem with the forms *ittatlak* (singular) and *ittatakkū* (plural); cf. 7.6.

The perfect Dt with double *-ta*-infix gave rise to a new Dtt-stem with two *-ta*-infixes in all forms: *ugdadammir* “he was completed” (perfect Dt) -> *ugdadammar* “he is completed” (present Dtt).

7.6. *alāku* “to go”

The verb *alāku* “to go” develops various new forms: (*a*)*likalkā* < *alīk alkā* “go!” (imperative 2. person plural without ventive); *ittatlak* “he went away” (Gtt preterite 3. person singular, cf. 7.5.); *ittatakkū*, *ittatkū* “they went away” (Gtt preterite or Gt perfect 3. person singular); *littatlak* “let him go away” (precative Gtt 3. person singular).

7.7. Personal pronouns used as a copula

Personal pronouns can be used as a copula which includes the subject: *mār PN bēl hītu šū parrišu šū* SAA 5, 210: 15–17 “The son of PN is a criminal and a traitor” (literally “The son of PN – he is criminal, he is a traitor”).

7.8. Lexicon

In AHW. 307 new Neo-Assyrian lemmata are booked. They belong to the following semantic fields:

- (a) Realia, among them 21 words for animals, e.g. *anāqātu* “she-camels” (< Arabic); 18 words for food, e.g. *hīlpu* “milk” (probably < Aramaic *halab*); 13 words for plants, e.g. *šusūnu* “a tree”.
- (b) 18 *-ūt-* (abstract nouns) or *-ān-* (concrete nouns) derivations, e.g. *šakrānū* “drunkard” (derived from *šakru* “drunk”), *šagalātu* “deportation” (derived from *galū* “to take into exile”).
- (c) 24 verbs, e.g.: *ḥarādu* “to be on guard”, *passuku* “to clear away” (a D-stem), *rammū* “to leave” (a D-stem, replaces older *ezēbu*), *sarruru* “to pray” (a D-stem), *zarāpu* “to buy” (replaces older *šāmu*).
- (d) Particles, e.g. *atā* “why”, *bis* “then”, *dāt* “behind”, *m/nuk* (introduces direct speech after 1. person), *nēmel* “because”.

Aramaic loanwords also appear in the Neo-Assyrian lexicon, e.g. *šārītu* “beam” < Aramaic *šārītā*), *ziqqu* “wineskin” (< Aramaic *ziqqā*).

8. Literary Akkadian

8.1. Name and text corpus

In all periods A. literary texts show a language different from everyday texts (documents and letters). For certain groups of these texts various terms are in use: “hymnic-epic dialect” for some literary texts of the Old Babylonian period (von Soden 1931, 1933), “Jungbabylonisch” or “Standard Babylonian” for most of the literary texts after the Old Babylonian period. In fact, these labels simplify a complicated situation: different textual genres show different degrees of literacy, literary texts of different periods and regions are influenced by the everyday language in current use, and individual texts can combine literary features in a unique way. Nevertheless it is possible to describe some common traits of literary A.

Literary texts comprise the following textual genres with tendentially rising degree of literacy: scientific literature (e.g., omen texts, medical texts); personal names; royal inscriptions; literary texts in the narrowest sense (epics, hymns, prayers, incantations, wisdom literature and some other text genres). Scientific literature and literary texts in the narrowest sense (together also labeled canonical text) form a corpus of ca.

600 000 words whereas royal inscriptions (also labeled monumental texts) represent a corpus of ca. 220 000 words (Streck 2011b).

In principal, literary features can be divided into three groups (Hess 2010): archaisms, artificial forms and foreign elements. It is, however, sometimes difficult to disentangle the different origins of literary features. The most prominent foreign element in A. literary language is the Babylonian dialect in literary texts from Assyria, e.g., in Assyrian royal inscriptions (Madvig 1967).

For monographic descriptions of the literary language of certain textual genres see von Soden 1931/1933 (on literary texts of the Old Babylonian period), Hecker 1974, Streck 1999a (both on epics), Groneberg 1987 (on hymns), Stein 2000 (on Middle and Neo Babylonian royal inscriptions) and Wasserman 2003 (on Old Babylonian literary texts). For the locative and terminative cases see Groneberg 1978/1979. For the ventive in the epics of Gilgameš and Erra see the monograph of Hirsch 2002.

8.2. Archaisms and innovations in Akkadian personal names

A. personal names offer a good opportunity to investigate the mixture of archaisms and innovations in the literary language (Streck 2002a). A. personal names of all periods show archaisms. At the same time they also adopt, sometimes with delay, innovations of the everyday language. Phonology is always innovative. Morphology and lexicon are more innovative than archaic whereas syntax is more archaic than innovative. Syntactic archaisms live longer than morphological and lexical archaisms. Table 14.18. offers examples:

Table 14.18: Archaisms and innovations in Akkadian personal names

	Archaisms	Innovations
Lexicon	<i>Andi-Suītī</i> (Neo-Babylonian) “Slave-girl of Suītītu”	<i>Ninurta-gabbi-ilāni</i> (Middle Babylonian) “Ninurta is all gods”
Syntax	<i>Iddin-DN</i> “DN has given” (Middle Babylonian)	<i>Nabû-tultabšī-līšir</i> (Neo-Babylonian) “Nabû, you have made come into existence, let him prosper”
Morphology	<i>Šu-Mama</i> (Old Babylonian) “He of Mama”	<i>Ninurta-lukīn</i> (Neo-Babylonian) “Let Ninurta make firm”
Phonology	–	<i>Alsīš-abluṭ</i> (Middle Babylonian) “Ich cried to him (and) recovered”

Andi-Suītī: the normal Neo-Babylonian word for “slave-girl” is *qallatu*; *andu* < *amtu* is an archaism. *Ninurta-gabbi-ilāni*: the word *gabbu* “everything” is a Middle Babylonian innovation. *Iddin-DN*: the normal word order, already in Old Babylonian, is subject–predicate; in personal names, however, the old Semitic word order is preserved. *Nabû-tultabšī-līšir*: the use of the perfect for single past situations in main clauses is an innovation that can be observed in certain contexts already in Old Babylonian; in Middle Babylonian this use is normal in everyday texts. *Šu-Mama*: the inflected determinative

pronoun *šu* is an archaism; normally in Old Babylonian is uninflected *ša*. *Ninurta-lukīn*: the *lu*-prefix for the precativ D 3. person singular is a Neo-Babylonian innovation; older Babylonian has *li*-prefix. *Alsīš-abluṭ*: /šs/ > /ls/ is a Middle Babylonian innovation.

8.3. Shortened pronouns

Shortened pronouns (suffixes as well as independent) are artificial forms of A. literary texts. Before shortened suffixes, case vowels are distinguished: *rigmuš(a)* “her cry” (nominative) von Soden 1931, 179. *narbīṣ(a)* “her greatness” (accusative) ib. *alak-tak(i)* “your way” (accusative) ib. *šāš(im)* “him” ib. 184.

8.4. Construct state

Apparently artificial are also the following construct states in literary texts: *bēlu* “lord” von Soden 1931, 212 (instead of *bēl*, not only used for nominative but also for other cases). *rigmašu* “his cry” ib. 214 (instead of *rigimšu*). *epšetašun* “their deed” ib. 214 (instead of *epištašunu*). *pulḫatka* “your fear” ib. 223 (instead of *puluḫtaka*).

8.5. ŠD-stem

Certainly artificial is the ŠD-stem of the type *ušPaRRaS* which combines the features of the Š-stem *ušaPRaS* and the D-stem *uPaRRaS*: *ušmallī* “he filled” von Soden 1933, 152. *lušḫalliḫ* “let me destroy” ib. 153f. *mušnammer* “who enlignens” ib. 153.

8.6. ittašab ibakki

Typical for narrative literary texts is the use of the present tense to express past situations simultaneous or posterior to another past situation designated by a preterite, perfect or stative (Streck 1995b; with in part different conclusions Mayer 2007). Thus in circumstantial clauses: *uktammisma attāšab abakki eli dūr appija illakā dīmāja* Gilg. SB XI 138f. “I fell to my knees and sat there, weeping, the tears streaming down the side of my nose”. In clauses expressing purpose: *imurma būra Gilgameš ša kašū mūša ūrid ana libbimma mē irammuk* Gilg. SB IX 303f. “Gilgameš found a pool whose water was cool, and he went down into it to bathe in the water”.

8.7. Lexicon

Literary texts often use words not found in everyday texts. E.g., instead of the normal word *nišū* for “people”, Old Babylonian literary texts use: *abrātum* (literally “the

strong ones”), *epīṣātum* (literally “the cloudy ones”?), *ba’ūlātum* (literally “subjects”), *tenēšētum* and *ammū* (a loan word from Amorite ‘*ammu* and an example of a foreign literary element).

9. Neo-Babylonian and Late Babylonian

9.1. Geographical distribution, chronology and text genres

The use of the termini Neo- and Late Babylonian in this article follows the division introduced by von Soden 1952: Neo-Babylonian designates the language of all Babylonian everyday texts beginning with ca. 1000 BC and ending with 627 BC. Late Babylonian means all later texts, starting with 626 BC when king Nabopolassar climbed the Babylonian throne until the end of the cuneiform documentation. Since the division between the two periods is very sharp, compared with the transition from Old to Middle Babylonian and from Middle to Neo-Babylonian where longer gaps in the documentation facilitate the division, the periodization has only limited linguistic reality. Therefore, some authors (among them the Chicago Assyrian Dictionary in some of its volumes) use the term “Neo-Babylonian” for the entire period and sometimes distinguish further under this title between “Early Neo-Babylonian” and “Neo-Babylonian” or similarly.

In contrast to Neo-Assyrian (7.1.), the final period of Babylonian has no clear-cut end. The cuneiform documentation disappears in different Babylonian cities from the end of the 4th century BC (Ur) until the 1st century AD (Babylon) (see Streck 2004b, 344f.). The last (astronomically) dated text was written in Babylon in 74/75 AD. The latest texts at all may be the Graeco-Babyloniaca, A. and Sumerian texts in Greek transcription, sometimes accompanied by cuneiform, on clay tablets; the latest dates suggested for these texts by paleography are 1./2. century AD (Geller 1997 and Westenholtz 2007).

Neo- and Late Babylonian are almost entirely confined to Babylonia itself. Textual genres attested are documents and letters (for an overview of the textual record see Jursa 2005) whereas royal inscriptions and literary texts are written in literary Babylonian (cf. 8.) with a greater or lesser degree of Neo-Babylonisms (see for the inscription of Nabonidus and Cyrus Schaudig 2001, 81–317 and for the Behistun inscription Malbran-Labat 1994 with the review of Streck 1996). The number of texts in total is ca. 47.500 with together ca. 3 460 000 words of text (Streck 2011b).

A grammar of the Neo-Babylonian letters written to the Assyrian court is presented by Woodington 1982. For numerals and the tense system of Neo- and Late Babylonian see Streck 1995a, for subordinate clauses Hackl 2007.

9.2. Orthography

The interpretation of cuneiform orthography is crucial for the reconstruction of Neo- and Late Babylonian morphology. Cuneiform orthography in this period was influenced by the orthography of the Aramaic alphabet (Streck 2002b; 2003b § 4) that must

have gained more and more ground at that time. Some of the features typical for Neo- and Late Babylonian orthography serve to express consonants more exactly; others are the result of the neglect to note vowels:

- (a) The combination of two signs of the type CV-CV is used to express a closed syllable /CVC/: *a-d(i)-gu-ul* OECT 12, A 135: 12 *adgul* “I looked”.
- (b) The combination of two signs of the type (C)VC-CV is used to express a closed syllable /CVC/: *taq^{qa}-ba-³* CT 22, 189: 9 *taqbâ* “You told me”.
- (c) CVC-signs and (sometimes) CV-signs are used with arbitrary vowels: *a-nam-dan* ABL 795 r. 14 for *anandin* “I shall give.” *pa-qa-ra-nu* YOS 3, 148: 23 for *pāqirān* “who vindicates”.
- (d) CVC -signs are complemented by CV-signs: ^{lu}*lil-lik* YOS 3, 69: 30 for *lullik* “Let me go”.
- (e) Vowels are sometimes not written: *uš-ri-du* CT 22, 53: 11 for *ušēridū* “They brought down”.
- (f) Morphographemic spellings (for the term see Gelb 1970): Singular + plural determinative ^{meš}: *MA-ḪIR^{meš}* TCL 12/13, 244: 12 for *mahrū* “They have received”. Stem + suffix: *A-MUR-am-ma* OECT 12, A 175: 10 for *amramma* “Look and...!” Mixed morphographemic-phonemic spellings: *I-TA-PAL-lu-³* TCL 9, 131: 10 for *ūaplū* “They answered”. Suffix rendered only partly: *KA-LAK-KU-na* Dar. 74: 10 for *kalakkān* “granaries”.
- (g) The aleph sign is used to express long or short word final vowels: *i-šak-nu-³* YOS 3, 45: 39 for *iššaknū* “They were put”. *ta-at-tu-ru-³* Behistun-inscription § 9 for *tattūru* “(who) will have returned”.

9.3. Dropping of short word final vowels

Short word final vowels are often dropped:

- (a) In the declension: *ana e-peš šá un-qu* Dar. 11: 7f. for *epēš* “for making a ring”.
- (b) With pronominal suffixes: *UGU-ḫi-in* OECT 9, 2: 5 for *muḫḫin* “on us”. Compare *UGU-ḫi-nu* ib. 6.
- (c) With verbs *tertiaefirmae*: *i-ba-āš* OECT 9, 2: 4 *ibaš* “exists”.
- (d) The subordinative *-u* is correctly written in the majority of cases (Hackl 2007, 145f.). The missing subordinative often seems to be orthographically motivated, as in the use of a CVC-sign: *šá* EN *iš-pur* YOS 3, 28: 8 for *ša bēl išpuru* “that the lord had sent”. As Hackl 2007, 146 points out, a small portion of missing subordinatives might hint at the fact that in the spoken language the subordinative had already been dropped although it was still historically written.
- (e) Perhaps with the ventive suffix *li-ik-šu-du-nu* YOS 3, 71: 18 for *likšudūn(u?)* “Let them reach”.

9.4. Declension

Table 14.19. presents the development of declension in Neo- and Late Babylonian (Streck in press):

Table 14.19: Development of declension in Neo- and Late Babylonian

		1. stage	2. stage	Final stage
Singular, short vowels	Nominative	-u	-u	-0
	Genitive	-i	-i	(?-u >) -0
	Accusative	-a	-u	-0
Singular, contracted vowels	Nominative	-û	-û	-û
	Genitive	-î	-î	?-û/-î
	Accusative	-â	-û	-û
Plural masculine	Nominativ	-û	-ê	-ê
	Oblique	-î	-ê	-ê
ān-plural	Nominative	-ānû	-ānê	-ān
	Obliquus	-ānî	-ānê	-ān
ût-plural	Nominative	-ûtu	-ûti	-ût
	Oblique	-ûti	-ûti	-ût
Feminine plural	Nominative	-ātu	-āti	-ât
	Oblique	-āti	-āti	-ât

In the singular, first the accusative merges with the nominative and later, after dropping the final vowels (cf. 9.3.), all three cases merge in one case with zero morpheme. With contracted vowels, -û dominates all three cases in the final stage, but -î might sometimes be preserved for the genitive case. In the plural, in the 2. stage the two cases merge in the original oblique case; in the final stage, the oblique case is preserved in the masculine plural only, whereas all other plurals drop the final vowel.

Table 14.20. shows the shape of the stems in the singular after dropping the final vowels:

Table 14.20: Shape of the stems in the singular after dropping the final vowels in Neo- and Late Babylonian

Stem with final single consonant	<i>ṭēmu</i>	<i>ṭēm</i>
Stem with final long consonant	<i>dullu</i>	<i>dul(l^e)</i>
Stem with final consonant + feminine suffix	<i>šipirtu</i>	<i>šipirt</i>
Stem with final two consonants	<i>baḫlu</i>	<i>baḫal</i>
	<i>širku</i>	<i>širik</i>
	<i>šulmu</i>	<i>šulum</i>

Stems with final single consonant and stems with final consonant + feminine suffix remain unchanged. Stems with originally final long consonant probably shorten this consonant (alternatively add a reduced vowel). Stems with final two consonants insert a vowel identical with the vowel in the first syllable.

9.5. Pronominal suffix genitive 1. person

The pronominal suffix genitive 1. person singular -î is replaced by -āja or -aja: EN-a ABL 281 Rs. 3, *be-la-a* SAA 10, 179: 3 for *bēlāja* “my lord”. *qal-la-ta-a-a* CT 22, 185: 5 for *qallatāja* “my slave girl”.

The pronominal suffix genitive 1. person plural *-ni* is replaced by *-āni* or *-ani*: EN-*a-ni* CT 54, 554 r. 5 for *bēlāni* “our lord”.

Instead of *abī* “my father” and *aḫī* “my brother” the forms *abūja* and *aḫūja* are used (von Soden 1952 § 65i).

9.6. Numbers

Whereas in older A. the gender of the numbers higher than two is the opposite of that of the item counted in Neo- and Late Babylonian the genders of numbers and items counted agree (Streck 1995a, 26–39): 4-*ta qa-ap-pa-tu₄* 4 *za-bi-la-nu* 4 *da-ri-ka-nu* Strassmaier, Liverpool 12: 9f. *erbēt qappāt erbe zabbilān erbe darikān* “4 palm-leaf baskets, 4 baskets, 4 containers”.

9.7. Personal prefix 3. person singular feminine

Whereas older Babylonian used the prefix *i-* for both genders of the 3. person singular Neo- and Late Babylonian have *i-* for masculine and *ta-* for feminine as in Assyrian (cf. 3.5.): ¹*Lu-ri-in-du ... ta-ad-din* L 1652 (Joannès, Ea-ilūta-bāni p. 246): 6–8 *Lurindu taddin* “Lurindu has given”. ŠU^{II}-*su ul ta-kaš-šad* UET 4, 192: 3f. *qāssu ul takaššad* “His hand will not reach”.

9.8. Precative

The precative D and Š 3. person singular has *lu-*prefix against older *li-*: *lu-bal-li-tu-ka* SAA 10, 168: 5 *luballitūka* “Let them keep you alive”. *lu-šak-šid-du* CT 54, 62 vs. 11 *lušakišidū* “Let them cause to arrive”.

9.9. Paraphrase of the genitive construction

Instead of the older construction X *mār* Y “X son of Y” Neo- and Late Babylonian have X *mārušu ša* Y, literally “X, his son, that of Y”. Since the same construction is found in Aramaic (X *brēh dī* Y) it is probably an Aramaism in A.

9.10. Tense system

The present tense has the same functions as in A. everywhere and the perfect tense the same functions as in Middle Babylonian (cf. 5.5.). In letters, the preterite tense gains a new function in positive main sentences, namely designating wishes (Streck 1995a, 127–135): *ina* UGU-*ḫi* ¹⁶GAL *ka-a-ri ina* ON *ka-la-a-ni ši-pir-tu₄* *ša* EN-*ia a-na pa-ni* PN ¹⁶GAL *ka-a-ri tal-li-kam-ma ka-a-ri lu-še-ti-qa-a[n-n]a-šú... kap-du ši-pir-tu₄* *ša* EN-*ia a-na* UGU-*ḫi tal-li-ka* YOS 3, 71: 9–14 ... 18–20 *ina muḫ rab kār ina* GN

kalân šipirt ša bēlija ana pānī PN rab kār tallikamma kār lušētiqa[nn]āš ... kapd(u) šipirt ša bēlija ana muḥ tallik(a) “We are detained by the overseer of the harbour in GN. Let a letter of my lord come to PN, the overseer of the harbour that he makes us pass on ... Therefore, let a letter of my lord come quickly.”

9.11. Lexicon

Several innovations and changes can be observed in the lexicon of Neo- and Late Babylonian. A systematic survey (Streck 2010) considers the following parameters:

- (a) Attestation: An innovation can be found in Neo- and Late Babylonian only (*eṭēru* “to pay”) or also shared by Neo-Assyrian (*unqu* “signet ring”).
- (b) Form: An innovation can be a loan from Aramaic (ch. 17), Old Persian or Greek (*lamūtānu* “slave” < Aramaic; *aspastū’a* “horse feeder” < Old Persian; *istatirru* “stater” < Greek). Rarely, a new word can be shaped by a Sumerian base (*giṭṭu* long tablet, receipt, Sumerian base *gíd* “long”). Frequently, a new word or phrase is derived from an older A. root or roots (*ana madakti alāku* “to go on a military campaign” with *madaktu* derived from *dāku* “to kill”). Some lexical innovations are restricted to new meanings imposed on older words (*qallu* “slave”, older “small”).
- (c) Semantic change: Semantic narrowing, i.e. restriction of the semantic scope or context in which the word may be used (*mukinnu* “witness”, older unrestricted participle D “who makes firm”). Semantic widening (*našpartu* “instruction”, older “written order, message”). Metonymy (*nikkassu* “property, assets”, older “account”). Metaphor (*nasāku* “to impose”, older “to throw”). Semantic degeneration (*babbanû* “good”, older * “very good” (not attested)).
- (d) Position in the lexicon of Neo- and Late Babylonian: The innovation fills a semantic gap which means that it designates something for which before there was no designation at all (*rasānu* “to perform the service connected with a prebend”). A lexical innovation replaces an older word which in turn becomes obsolete (*te’iqtu* “worry, trouble”, replaces older *niziqtu*). A lexical innovation coexists with an earlier word. In this case we are dealing with “synonyms”, i.e. with words that at least have more or less the same range of meaning (*gildu* “hide”, “synonym” of *mašku*).

10. The Lexical Heritage of Akkadian

Many languages borrowed words from A. during its long history. In general, it is often impossible to distinguish between direct and indirect loans or between loans and words inherited from Proto-Semitic or cultural words (*Wanderwörter*). In the following, some examples for direct loans into the most important contact languages are given, based on Streck 2007a, 71f.; the older study of Zimmern 1917 is largely outdated. For A. loans in Aramaic see ch. 17.

10.1. Sumerian

For A. loanwords in Sumerian in general see Falkenstein 1960, 312f., and Oberhuber 1981. The oldest loans are attested in Fāra and Tall Abū Šalābīḥ (Krebern timer 1998, 265 and 269f.): either they end in the old Status absolutus in *-a* such as *na-gada* “herdsman” (< A. *nāqidum*), or they don’t have any ending such as *pa-šeš* (< A. *pašišum*). Loans from the Sargonic and Neo-Sumerian periods are more often borrowed with the A. nominative suffix *-um* and some, e.g. *mun-du* (< A. *mundū* “emmer groats”), are probably A. plurals ending in *-ū* (Powell 1986, 15f.). Gelb 1957 noted 249 A. loanwords in Sumerian texts from the third millenium BC, above all names for professions, e.g., *ḥa-za-núm* “mayor” (< A. *ḥazannum*), and objects, e.g., *mi-rí-tum* “Musical instrument from Mera” (< A. *melirītum*).

10.2. Hurrian

See Laroche 1976–1978, 315f., and Neu 1997. According to Neu 1997, 262, remarkable semantic fields are architecture and administration including measures and names for cereals. Cf., e.g., *šarri* “king” (< A. *šarru*) and *izūzi* “emmer” (< A. *zīzum*).

10.3. Hittite

See Sommer 1947, 85 and 89–92; Kammenhuber 1972–1975 § 7. Apparently the number of direct loans is low, of loans transmitted through Hurrian somewhat higher. A direct loan is *tuppi-* “writing tablet” (< A. *tuppum*). It seems that there are also some loan translations such as *šallanu-* “to bring up” (literally “to make big”) analogous to A. *rubbûm* and calques such as *araš aran* “each other” corresponding to A. *tappûm tappâm* (Kronasser 1966, 123–125).

10.4. Elamite

For A. loans in Elamite see Stolper 1984, 21f., and Krebern timer 2006, 93f. Examples are: *li-ti-bí* “hostages” (< A. *līum*), *za-al-mu* “statue” (< A. *šalmum*), *zag-ra-tu-me* “ziqqurra” (< A. *ziqqurratum*), *tup-pi* “writing tablet” (< A. *tuppum*) and the composite noun *a-lu-me-lu* “acropolis” (< A. *ālum elūm*).

10.5. Hebrew

Mankowski 2000 presents a detailed analysis of the ca. 70 A. loans in Hebrew. Most of them belong to the semantic fields of law, administration and technical terms (ib. 175). Several loans were transmitted through Aramaic into Hebrew (ib. 168–170).

List of Abbreviations

AHw.: Von Soden, W. 1958–1981: *Akkadisches Handwörterbuch*. Wiesbaden: Harrassowitz.
 CAD: Oppenheim, A. L., E. Reiner et alii (edd.): *The Assyrian Dictionary of the Oriental Institute of the University of Chicago* (1956–). Chicago: The Oriental Institute.

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15. Akkadian and Sumerian Language Contact

1. Introduction
2. Linguistic influence of Sumerian on Akkadian
3. References

Abstract

The mutual influence of East-Semitic Akkadian and isolate Sumerian on each other is the first known and documented example of contact-induced language change. Speakers of East-Semitic and Sumerian may have been in contact for over a thousand years, and the contact resulted in similarities on the level of phonology, morphology, syntax, and lexicon. This chapter describes the linguistic traits of Akkadian that may have developed under the influence of Sumerian. Except for a considerable number of loanwords from Sumerian, this influence manifests itself in shared patterns, categories, constructions, and meanings but not in loaned forms.

1. Introduction

Sumerian was a linguistic isolate spoken in the southern part of ancient Mesopotamia; an area that roughly corresponds to today's Iraq. A generally accepted reference grammar of Sumerian has not yet been written. Recent descriptions varying in length, scope, and details are Thomsen 1984, Edzard 2003, Michalowski 2004 and Zólyomi 2007b. An introduction to the problems involved in the linguistic study of Sumerian is found in Black/Zólyomi 2007.

Contact between Sumerian and dialects of East Semitic is thought to have begun at least as early as the turn of the 4th to the 3rd millennium B.C.E. The history of the relationship between Sumerian and Akkadian can be surmised only on the basis of indirect evidence, such as the temporal and geographical distribution of personal names, texts, and text types, aided by our knowledge of the history of ancient Mesopotamia (cf. Sallaberger 2004; Woods 2006). Many of the alleged shared features are

already present in the languages when they become accessible to us through phonographic writing in the middle of the 3rd millennium B.C.E., but lacking pertinent sources we know nothing about the nature of contact preceding this period. From about the 24th century onwards Akkadian became the dominant language, resulting in asymmetrical bilingualism in which knowledge of Akkadian may have proved practical in an increasing number of social contexts. The dominance of Akkadian eventually led to the replacement of Sumerian by Akkadian. The date of vernacular Sumerian's death is controversial in Sumerology. Some scholars place it around or even before the middle of the 3rd millennium B.C.E. (see Michalowski 2006); i.e. much earlier than Sallaberger 2004 and Woods 2006 who convincingly argue that Sumerian must have still been a vernacular in most parts of south Mesopotamia at end of the 3rd millennium B.C.E. Thus Sumerian probably vanished as a vernacular during the first part of the 2nd millennium B.C.E. After this period Sumerian was taught and learnt only for the purposes of cultic, literary and scholarly traditions.

The presumably widespread bilingualism (cf. Woods 2006) resulted in similarities between the two languages on the level of phonology, morphology, syntax, and lexicon. For interferences from Akkadian on Sumerian see, for example, Zólyomi 2007a; Edzard 2003, 173–178; Black/Zólyomi 2007, 13–22. The present chapter is concerned with the linguistic traits of Akkadian that may have developed under the influence of Sumerian. Except for a considerable number of loanwords from Sumerian (cf. 2.11), this influence manifests itself in shared patterns, categories, constructions, and meanings but not in loaned forms, a fact which alone may be an indication of prolonged and stable bilingualism.

2. Linguistic influence of Sumerian on Akkadian

2.1. The gutturals and phonemic /e/

A distinctive development of Akkadian phonology is the gradual merger and loss of the five reconstructed Proto-Semitic 'guttural' consonants */p/, */h/, */ħ/, */ʕ/, and */g/ by the 2nd millennium B.C.E. (cf. GAG § 23; Huehnergard 1998, 38–40, 587; Kouwenberg 2006). As Sumerian had no such phonemes, this development has been considered a prime example of Sumerian substrate influence on Akkadian (Falkenstein 1960, 303; Edzard 2003, 175). In fact this process was only one in a series of related developments:

- (i) Three of these phonemes (*/ħ/, */ʕ/, */g/) caused colouring of an adjoining [a] to [e] (cf. Keetman 2004, 9–10). This originally allophonic [e] later became phonemic, indicated by the fact that it remained there even after the loss of the conditioning gutturals. Keetman (2004, 10–12) assumes that speakers of Sumerian, in which /e/ was a phoneme with substantial functional load (cf. Keetman 2005), must have played some role in this phonemicization. He argues further that the merger and loss of gutturals were in fact facilitated by the emergence of a phonemic /e/, as the newly emerged /e/ could substitute for the gutturals in distinguishing word forms. Hasselbach 2005, 107, thinks that only long /ē/ was phonemic in Sargonic Akkadian, and short [e] was an allophonic variation of either /a/ or /i/ (cf. also Huehnergard/Woods 2004, 232–233).

- (ii) In the Babylonian dialect of Akkadian, the presence of the newly emerged /e/ in turn caused every /a/ in the stem and the pronominal affixes of the verb to change to /e/, a development known as ‘Babylonian Vowel Harmony’ (Kouwenberg 2001, 226; see Huehnergard 1998, 46 for a list of affixes immune to Babylonian Vowel Harmony). As a similar rule causing the assimilation of different vowels within a word played an important role in Sumerian (see Keetman 2005, 11–13), Keetman suggested that Babylonian Vowel Harmony might reflect the influence of Sumerian (2004, 11). His proposal finds support in Kouwenberg’s (2001, 237) observation that this sound change originated in the south in the 2nd millennium B.C.E., and subsequently spread to the north, but never reached Assyrian Akkadian.

These developments started in about the 24th century B.C.E. and were completed by the first part of the 2nd millennium B.C.E. They therefore overlap in time with the period of assumed asymmetrical bilingualism. One is therefore tempted to assume that these phonological changes may in fact reflect the influence of a Sumerian speaking population gradually shifting to Akkadian. Hasselbach (2005, 231–233) finds that contrary to expectations the orthography indicates the loss of gutturals and the phonemicization of /e/ in texts from the north first, but not from the south. She does, however, note the possibility that the Akkadian of the southern texts ‘might have been a learned literary language that was not native to this area’ (2005, 232).

2.2. The cislocative

Both Sumerian and Akkadian possess a verbal affix expressing the category of cislocative, known as the ventive in Assyriology. In Akkadian it is expressed by a suffix (*-m/-am/-nim*, cf. von Soden 1995 § 82; Huehnergard 1998, 133–135; Kouwenberg 2002), while in Sumerian it is expressed by a prefix (*m(V)-*, cf. Attinger 1993, 270–280). In both languages, the ventive principally indicates a motion towards a deictic centre, which may be either the location of the speech event or one of the speech-act-participants: the speaker or the addressee. In both languages the ventive affix may also function as 1st ps. sg. pronoun: in Akkadian as 1st ps. sg. dative pronominal suffix (cf. Kouwenberg 2002, 235–239), while in Sumerian as the 1st ps. sg. pronoun in front of a dative or directive prefix, both of which express motion with an endpoint towards an entity. The morphological marker of the ventive in Akkadian is cognate with the marker of the Semitic energetic mood (cf. Krebernik 1993, 126–129). Its use as a cislocative marker thus developed most probably under the influence of Sumerian. One may speculate that it acquired its cislocative meaning by exaptation (Lass 1997, 316–324) after its original modal function had been taken over by other forms in Akkadian (cf. 2.4). Its regular use in front of pronominal suffixes may in turn have made the opaque morpheme susceptible to reanalysis as a cislocative marker by analogy with equivalent Sumerian verbal forms.

2.3. The pronominal system

The pronominal systems of Sargonic Akkadian and Babylonian (and also of Eblaite) are characterized by an increased number of case distinctions compared with Old-

Assyrian (cf. Table 15.1) and Proto-Semitic. This increase came about as the cumulative result of at least four developments: (i) the innovation of dative pronouns with a suffixed /m/ morpheme by analogy with the ventive used as 1st ps. sg. dative pronoun (cf. 2.2); (ii) the innovation of 1st and 2nd persons oblique forms with an infixed /t/ morpheme for the independent personal pronouns by analogy with 3rd ps. forms; (iii) the innovation of dative pronouns with an infixed /š/ morpheme; (iv) the innovation of plural accusative pronominal suffixes with infixed /t/ by analogy with independent forms (cf. Huehnergard/Woods 2003, 249–250; Huehnergard 2006, 10–12). The second two innovations did not reach Assyrian, the northernmost Akkadian dialect.

Table 15.1: A comparison of the Old-Babylonian and Old-Assyrian pronominal systems

Independent personal pronouns				
Singular and plural				
	OB		OA	
Nom.	∅		∅	
Gen .-Acc.	-t-		-t-	
Dat.	-š- (+ -m)		-t-	
Pronominal suffixes				
	Singular		Plural	
	OB	OA	OB	OA
Gen.	∅	∅	∅	∅
Acc.	∅	∅	-t-	∅
Dat.	-m	-m	-š- + -m	-t-

In Sumerian the dative case was a formally salient category, having both nominal and verbal markers. The emergence of distinct dative pronominal forms in Akkadian is probably the result of convergence between the two languages, helping to achieve a morpheme-per-morpheme intertranslatability.

2.4. The modal system

The Akkadian modal system makes extensive use of two morphemes: a particle *lū*, and a verbal prefix *IV-* (cf. von Soden 1995, 81; Edzard 1973; Huehnergard 1998, 142–147; Streck 2007, 56). Huehnergard 1983 derives these morphemes from a Proto-Semitic **lu/law* and **la-* respectively, assigning them distinct functions that do not overlap.

The distribution of the Akkadian morphemes is determined partly by functional and partly by morphophonological factors: the prefix *IV-* marks deontic (optative) modality; while the meaning of *lū* is mainly asseverative, but before forms without pronominal prefixes (such as nouns and statives) and before forms whose pronominal prefixes start with a strong consonant its function is the same as that of prefix *IV-*. It is likely that the functional overlap between *lū* and *IV-* developed due to the influence of Sumerian: the extension of *lū* to deontic contexts may have happened by analogy with the use of the Sumerian verbal prefix *hV-*, whose functions covered the functions

of both *lū* and *IV-* (cf. Edzard 2003, 116–118; Michalowski 2004, 42–43; Zólyomi 2007b, 33–34). There existed other isomorphisms: *hV-* and *lū* were both used as markers of bisyndetic emphatic disjunction, and *hV-* and *IV-* were both used in the protasis of unmarked conditional sentences (these uses may derive from the use of *hV-* expressing epistemic possibility); both *hV-* and *IV-* were used to express purpose after a clause with a deontic modal form (cf. Huehnergard 1998, 147). The existence of two distinct forms which express strong and weak negative deontic modality in both languages (Akkadian prohibitive vs. vetitive; Sumerian verbal forms with the prefixes *bara-* vs. *na-*, cf. Zólyomi 2007b, 33–34) may also be the result of convergence.

2.5. The stative

The Akkadian stative (Streck 1995, 166–189; Kouwenberg 2000) is a construction in which a (verbal) adjective or a noun forms a predicate with a pronominal copula (cf. Stassen 1997, 62–106, esp. 76–91). Several features of this construction have been connected with the influence of Sumerian that forms non-verbal predicates with a verbal copula (see Thomsen 1984, 273–278):

- (i) Edzard 2003, 176, suggests that the stative of nouns has developed under the influence of Sumerian, in which the nucleus of the copular predicate is often nominal. This proposal is based on the assumption that the stative spread secondarily from adjectives to predicative nouns. This assumption, however, may be unfounded in view of Stassen's research which finds that predicative adjectives always take over the encoding strategy of other (verbal, nominal, or locational) predicates (1997, 30–34), and considers the use of the copula an inherently nominal strategy for forming predicates.
- (ii) In the 1st and 2nd person the base of the Akkadian stative of adjectives does not show agreement in gender and number with the subject (as does the adjective), but remains unchanged. Streck 1995, 184, assumes that this phenomenon reflects a Sumerian pattern, as in this language the nucleus of the copular predicate always remains unchanged and shows no agreement.
- (iii) Finally, Streck 1995, 184, also suggests that the so-called active statives (i.e. statives with an object) in Akkadian are formed by analogy with Sumerian copular clauses in which the nucleus of the predicate may be a non-finite verbal form governing an object. Kouwenberg (2000, 58, 66–67) however, argued in connection with (ii) and (iii) that these features are natural corollaries of the stative's grammaticalization into a finite verbal form.

2.6. The Akkadian perfect

The Akkadian 'perfect' *iptarVs* developed from the preterite of the Gt-stem, a derivational stem formed with a *t*-infix (see Streck 1995, 212–234; Streck 2003, 106–110; Huehnergard 2006, 13–14). It is an Akkadian or East-Semitic innovation. The basic function of the derivational *t*-infix was detransitivization (reciprocal, reflexive, medio-passive). Its grammaticalization to become the marker of a fully-fledged tense form by

the second part of the 2nd millennium B.C.E. has been connected by a number of scholars with the influence of Sumerian (von Soden 1965; Woods 2001, 548–588; Streck 1995, 221; Huehnergard 2006, 13–14), which has a verbal prefix, the prefix *ba-*, with functions similar to those of derivational *t-* (cf. Zólyomi 2007b, 31–32). Bilingual royal inscriptions and bilingual verbal paradigms (cf. Black 1991) from the first part of the 2nd millennium B.C.E. show that a relationship of equivalence between *t*-infix Akkadian and *ba*-prefixed Sumerian verbal forms was well established. Nevertheless, as *ba*-prefixed Sumerian forms with undeniable perfect meaning are not known from before the 2nd millennium B.C.E., and the grammaticalization of forms with passive-resultative meaning into a perfect is a well attested phenomenon, the role of Sumerian in the emergence of Akkadian perfect, if it had any at all, is by no means certain. About the separative meaning of the *t*-infix, another alleged isomorphism with Sumerian *ba-*, see Streck 2003, 48–53, 103–110, and Kouwenberg 2005.

2.7. Subordinated clauses

In Akkadian the finite verb of subordinate clauses is marked with suffixes (*-u/-ni/-ūni*, cf. von Soden 1995 § 83; Krebernik 1993, 126–127; Hasselbach 2005, 208–209 for their distribution) that are cognate with the suffixes of indicative verbal forms (**yaqtulu*) in Proto-Semitic. Their use in subordinate clauses is a retention from Proto-Semitic (cf. Eilers 1968). Dependent clauses have a tendency to preserve archaic features, but in this case one may also wonder whether the structure of equivalent Sumerian structures, in which the finite verb is marked with a suffix *-(')a/*, contributed to the preservation of these forms.

2.8. Loss of internal plurals

Huehnergard 2006, 9, suggests that Sumerian, in which plurality of human nouns is marked with a suffix, might have facilitated the general loss of the use of internal plurals in Akkadian.

2.9. Tense systems

Akkadian and Sumerian tense systems show remarkable similarities. Both languages appear to have a relative tense system involving two main tenses: one of them (Sumerian present-future, Akkadian *iparrVs*) denotes actions simultaneous or posterior, while the other (Sumerian preterite, Akkadian *iprVs*) denotes actions anterior relative to a given reference point provided by the context (see Streck 1998; Zólyomi 2007b, 25–26). The direction of diffusion is uncertain in this case, as the tense systems of the languages before the contact are not known. Streck 1998, 194, thinks that other neighbouring languages (Hittite, Elamite) exhibit similar systems, which would make this feature a distinctive trait of a much larger area.

2.10. Word order

The basic clausal word order is SOV in both Akkadian and Sumerian. The Akkadian word order is probably an innovation that reflects the areal influence of Sumerian (see, however, Michalowski 2006, 164–165 for a summary of arguments against this assumption with references to previous literature), while the predominantly verb-initial word order of West Semitic is a retention from Proto-Semitic. The archaic word order was still used occasionally in Eblaite, the westernmost East-Semitic dialect, and in some Akkadian personal names (Edzard 2003, 174).

2.11. Lexicon

Sumerian loanwords in Akkadian are estimated to constitute approximately 7% of its vocabulary (Edzard 2003, 178). Lieberman 1977 catalogued 529 Sumerian loanwords in Akkadian before the middle of the 2nd millennium B.C.E., but 102 of these loans are attested only in lexical texts. These loans are almost without exception nouns. A study on the semantic classes of these words is a desideratum. In addition to loanwords, there exist a number of Sumerian and Akkadian idioms which correspond to each other word for word, e.g. *šag₄-še₃ — gid₂ = ana libbim šadādum* ‘to consider earnestly’ (lit. ‘to draw to the heart’) (cf. Edzard 2003, 175–176).

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16. Akkadian as a Diplomatic Language

1. Introduction
2. Syria and Palestine
3. Anatolia: Hattuša
4. References

Abstract

During the second millennium BCE, Akkadian, a native language of Mesopotamia, was used as a lingua franca by a number of states in the ancient Near East. In addition to its use in communication between the empires of the Late Bronze Age, Akkadian was also used by local administrations. This chapter discusses the most important sites where archives with Akkadian texts have been found.

1. Introduction

To many non-Akkadian speakers, Akkadian served as a diplomatic language. In areas bordering Assyria and Babylonia, the language and the script were borrowed from very early on. But Akkadian also served as a means of communication in countries which did not border on Mesopotamia directly. In the southeast there was Elam, whose long history was strongly influenced by its contacts with Babylonia, in the northwest lay the Old Babylonian kingdoms of Mari and Yamḥad (Aleppo), and later in the second millennium, the kingdom of Mittani in the north, in Syria important centers like Alalāḥ, Emar and Ugarit, in Canaan the vassals of the Egyptian Pharaohs, and the empires Ḫatti in Anatolia and Egypt. Cyprus, too, produced some Akkadian letters, but the scribe of the king of Arzawa in western Anatolia urged his Egyptian colleague to write only in Hittite (EA 32). In the first millennium Akkadian was used by the Urarteans in some of their royal inscriptions.

In some cases the borrowing of the cuneiform script in these areas goes back to the third millennium, like in the case of Ebla, but most areas took over the script and the language in the course of the second millennium. It is in the Middle Babylonian period that Akkadian experienced its largest expansion as a diplomatic language, at a time when those who used it also started writing their own language in cuneiform. This development increasingly limited the use of Akkadian to international letters and juridical documents, but it were the dramatic events of the 12th c. BCE that put an end to the use of the Akkadian language and cuneiform writing on such a large scale, at least in the west. In Elam Akkadian was still written in the second half of this millennium (Stolper 1984; Henkelman 2006, 56f.).

Common to almost all western peripheral texts is the use of glosses, often in the local language. At what point and for whom these glosses were written is still a matter of debate (Kühne 1974 and 1975; Huehnergard 1987, 204f.; van der Toorn 2000, 104).

In the following the article concentrates on the most important archives of the Late Bronze Age, during which Akkadian was extensively used as a diplomatic language.

2. Syria and Palestine

2.1. Alalakh

Of the two levels in which documents were found, levels VII and IV, the latter has to be dated to the beginning of the Late Bronze Age. The archives that were found here date to the 15th c. BCE (Klengel 1965, 227f.; Collon 1975, 166f.; Pedersén 1998, 33f.; van Soldt 2000; Eder 2003; von Dassow 2008, 19f.). During this period Alalakh was part of the Mittani empire; the kings mentioned in the texts are in chronological order Idrimi, Niqmepa and Ilmilimma II. Idrimi probably started his rule shortly after 1500. Level IV ended with the destruction of the city, after which Alalakh was built up again under Hittite rule. A number of archives were uncovered in level IV in the royal palace, in a room near the city gate and in a courtyard south of the palace entrance (Pedersén 1998, 35f.; von Dassow 2005). The archives contain almost 300 clay tablets and fragments, most of which are administrative in nature. All texts are written in Akkadian. Some legal documents were found in one of the courts in the palace, and what seems to be the remains of a library was retrieved from the courtyard south of the palace entrance (Pedersén 1998, 36f.). The archive near the city gate, which was administered by a *šatam šarri* ‘administrator of the king’ also contained a treaty from the time of Idrimi and some schooltexts. In contrast to the Old Babylonian period the Hurrian population had become the dominant element in the city during this time and outnumbered the West Semitic population (von Dassow 1997, 42f.). This can be seen from the large number of Hurrian names attested in the texts. Among these we find the names of important citizens like, for example, the persons belonging to the profession of *maryannu*. Moreover, of the seven names of scribes, four, perhaps five, are Hurrian, one is Indo-Aryan and one is unexplained. No scribe with a West Semitic name is attested (Márquez Rowe 1998; van Soldt 2004).

The Akkadian written in Alalakh shows a strong influence from Hurrian, the language of most of the scribes (Draffkorn 1959). This is clear from the orthography of the texts, the many Hurrian words, the word-plays and the glosses, and from the Hurrian influence on grammar, in particular on syntax (Márquez Rowe 1998). A grammar of all the Alalakh texts is Giacumakis (1970).

2.2. Emar

The ancient city of Emar was uncovered in 1971 on the Islamic site Bālis-Meskene. The site is situated on the right bank of the Euphrates and measures ca. 900×600 m. Occupation levels date to the entire Bronze Age, and they were excavated from 1972 to 1976, but when Lake Assad filled up, the excavations came to a halt. Subsequently many illicitly excavated tablets appeared on the antiquities market, nearly 400 of which have been published. In 1992 the excavations were resumed and earlier levels were discovered. Early Bronze Age levels were reached beneath the temple of Baʿal, Middle Bronze remains were found under the temple area and in the center of the town (Finkbeiner/Leisten 1999–2000; Finkbeiner e.a. 2001, 2002, 2004; for references in the Mari texts, see Durand 1990). During the Late Bronze period, at least from the time

of Muṣili II, the city was under the rule of the Hittite viceroy in Karkemiš. A prince (*dumu.lugal*) and an overseer of the land (*ugula.kalam.ma*) were put in charge of the city (Yamada 1996; Adamthwaite 2001, 49f.). Local institutions were ‘Ninurta and the Elders’ and the royal family (Adamthwaite 2001, 189f.; Cohen 2005a). Ninurta possibly has to be identified with Rašap (Durand 2005, but see Streck 2006–2008, 252), and the royal family should perhaps be divided into two dynasties (Skaist 1998; Di Filippo 2004; cf. Yamada 2007). The exact period covered by the tablets is debated, but a date to the Kassite king Meliṣipak probably puts the end towards 1185 BCE, whereas the beginning is most probably to be placed in the first half of the 14th century (Cohen and d’Alfonso 2008, 20).

Eight archives were found in the city (Dietrich 1990; Margueron 1993; Pedersén 1998, 61f.). By far the most important of these was the archive of the diviner Zuba’la and his family found in a building called temple M₁, but which probably is a private house (Cohen 2005b; 2009, 147f.). Four generations can be distinguished in this archive and the contents consist of school texts, including literary texts, cultic documents and records of daily life. Other archives were housed in the alleged palace building in the north, where a pot with 13 tablets was recovered from a niche in a wall. Small groups of texts were also found in the temples of Ba’al and Astarte, and in a number of private houses.

The levels of the Late Bronze period produced nearly 1500 tablets and fragments (including those illicitly excavated). The texts found during the excavations have been published by Arnaud (1987), the ones from the antiquities market by Arnaud and others (e.g. Arnaud 1991; Beckman 1996; Tsukimoto 1988–1994; Westenholz 2000). The texts were almost always written in Akkadian; Sumerian was used in school texts. There are some omen texts in Hittite (Salvini/Trémouille 2003) and a number of unpublished divination texts in Hurrian. Grammars of the Akkadian written in Emar are Ikeda (1995) and Seminara (1998). The language spoken by the inhabitants of Emar was West Semitic as can be seen from the personal names and the West Semitic words attested in the texts (Pentiuc 2001, Pruzsinszky 2002).

The tablets from Emar can be divided in two groups, the so-called Syrian and Syro-Hittite tablets (Beyer 1982; Wilcke 1992; Seminara 1998, 9f.; Cohen 2005a, 197f.; 2009). The tablets of the Syrian style belong to an older tradition and contain texts involving the kings of Emar and ‘Ninurta and the Elders’. They were normally written across the shorter face and their script, orthography and language are close to other Syrian centers. Their seals are usually of the Syrian or Mittanian style. The Syro-Hittite tablets belong to a younger tradition and are closer in language to the texts written in Karkemiš and to Middle Babylonian. Their seals are Hittite and bear hieroglyphic inscriptions. They were normally written over the longer face of the tablet but their style can also be found on tablets that are shaped according to the Syrian style. The Syro-Hittite style was probably introduced at Emar after the Hittite conquest. Both styles were used until Emar’s destruction, but texts in the Syrian style appear to stop slightly earlier than those in the Syro-Hittite style.

2.3. Ugarit

The city of Ugarit was located on the Syrian Mediterranean coast, ca. 10 km north of modern al-Lādiqīya (classical *Laodicea ad mare*). The city measured ca. 600×600 m

and was built on a tell situated 1 km from the shore. Its harbor was the town Ma'ḥadu, modern Mīnat al-Bayḏā', located on a bay lined with white cliffs. Excavations started in 1929 and brought documents to light in five different scripts (syllabic and alphabetic cuneiform, Egyptian and Luwian hieroglyphs, Cypriotic), and seven different languages, the most important of which were Akkadian and Ugaritic (Malbran-Labat 1999). The former was written with syllabic cuneiform, the latter with a cuneiform alphabet that was probably developed in Ugarit. The city was the capital of a small city-state that covered approximately the area of the modern province of al-Lāḏiqīya. The first settlement dates back to ca. 7500 BCE, but the period during which texts were written was the Late Bronze Age, ca. 1350–1180 BCE. Ugarit was initially part of the Egyptian territory in the Levant, but it went over to the Hittites when king Šuppiluliuma I started his conquest of Syria. The city was destroyed during the attacks of the Sea Peoples at the beginning of the 12th c. (Singer 1999; Freu 2006).

A sizable number of archives have been found at Ugarit. First there is the royal palace, a building of some repute in its time, which housed five major archives and a few smaller ones. Second, there are at least seven archives that were found in private houses spread all over the town, the contents of which will be discussed below. Several estimates have been made with regard to the number of inhabitants of the city. Although much is still uncertain these estimations run between 6000 and 8000 for the city of Ugarit and ca. 35 000 for the city-state (van Soldt 2005, 250f.).

A little over 2400 texts in different languages were found in the city (van Soldt 1991, 49f.; Pedersén 1998, 68f.), a figure that is uncertain as long as the exact contents of the Urtenu archive are not known. More than 1000 texts come from the royal palace, the other texts from private archives and miscellaneous (mostly secondary) findspots. An additional 130 documents were retrieved from the northern palace at Rās ibn-Hāni (probably ancient Ra'šu), the royal summer residence to the southwest of the capital. Almost all tablets have been published in the series *Palais Royal d'Ugarit*, *Ugaritica* and *Ras Shamra-Ougarit*.

The texts can be roughly divided into three groups, those belonging to the local administration, those which deal with the international relations, and the school texts. The first one consists of administrative texts (written in Ugaritic and Akkadian), legal texts (almost all in Akkadian) and letters (Akkadian and Ugaritic); they were found in every archive. An exception are the royal land grants (in Akkadian, a few in Ugaritic) which were stored in the central palace archive. A special wing, the southern palace archive, was used for the treaties and international legal documents (all in Akkadian). Letters to and from kings, queens and officials in other cities (mostly in Akkadian), however, were found in several palace archives and in private houses. The school texts practically all come from private houses where schooling apparently took place. The teaching material consisted of lexical texts (first phase) and literary and religious texts (second phase, van Soldt 1995). At least one foreign scribe was working in the city (van Soldt 2001 and 2002). The school texts often included an Akkadian column and sometimes Hurrian and Ugaritic columns in syllabic script.

The script used at Ugarit is similar to the younger ductus of the contemporary Hittite texts and the Syro-Hittite texts from Emar (Wilcke 1992, 120; Seminara 1998, 9f.; Cohen 2005a, 197f.). Several grammars have been written on the Akkadian of Ugarit (Swaim 1962; Huehnergard 1989; van Soldt 1991); the Akkadian dialect used in the city was basically a form of Middle Babylonian, but the texts show clear influence

from other languages and dialects. In the earlier records strong Hurrian influence can be detected, especially in the orthography. In later years the language shows more signs of influence from the local language and from the Assyrian dialect (van Soldt 2001). The latter is also obvious in documents from outside Ugarit (Malbran-Labat 1991, 38f.; Arnaud 2001, 267f.).

2.4. The Amarna archive

Tell el-ʿAmārna is the site of ancient Aḫetaten, the capital of Pharaoh Amenophis IV, also known as Aḫenaten. The site is located on the east bank of the Nile ca. 300 km south of Cairo (Moran 1992, xiii f.). It was in 1887 that natives discovered a clay tablet, and after searching the site they probably dug up close to 300 documents, the number of tablets that found their way to the antiquities market. Most of the tablets ended up in museums in London, Oxford, Berlin and Cairo. During his excavations at Aḫetaten in 1891 and 1892, Flinders Petrie found 22 more tablets, most of them school texts. These tablets were retrieved from two rubbish pits under a building called ‘The place of the letters of the Pharaoh’ now generally referred to as ‘The Records Office’ (Izre’el 1997, 4f.). More tablets were found during later excavations or were later bought from dealers, and the total number of texts is now 382 (Rainey 1996, I, 1f.; this number does not include tablets that have been found in Syria and Palestine). Editions have been published by Knudtzon (1915) and Rainey (1978), and translations by Moran (1992).

The archive at Aḫetaten was short-lived. The earliest date found on the tablets is a hieratic docket for the 36th year of Amenophis III (EA 23), but some letters may date back to this king’s 30th year. Apparently, a number of letters were written during the reign of Amenophis III and were brought to the new capital. The last tablet is dated to the early reign of Tutankhamun (EA 9). The exact dates for the archive are uncertain, because they depend on the lengths of the coregencies of the Pharaohs Amenophis III and IV, and of Amenophis IV and Smenḫkare. Approximate dates are 1355–1335 BCE. These dates also depend on the accession date of the Hittite king Šuppiluliuma I (Moran 1992, xxxviii f.).

The texts can be divided into three groups. First there are the international letters written between kings of equal rank, the so-called ‘great kings’ (sg. *šarru rabû*) of Egypt, Ḫatti, Mittani (whose place was later taken over by Assyria) and Babylonia. These letters concern such diverse topics as war, the harassment of caravans and marriage negotiations. Second are the vassal letters sent by kinglets (‘mayors’) of towns in the Egyptian province of Canaan (roughly modern Israel, Palestine, Lebanon and parts of Syria). The administration of this province was left to Egyptian governors. The vassal letters often concern pleas for help by mayors who were threatened by their neighbors. The best known examples are Ribhaddi of Byblos and ‘Abdiḫeba of Jerusalem. The third group consists of school texts such as elementary exercises and literary compositions. They belong to the curriculum that was taught to the apprentice scribes in Aḫetaten.

The language of most of the letters is Akkadian, but there are also letters in Hittite (EA 31–32) and Hurrian (EA 24). With the exception of a letter written in the Assyrian dialect (EA 15) all letters sent by the ‘great kings’ are written in a form of Babylonian (see below). The vassal letters are all in Akkadian but the influence of the local

language (West Semitic; sometimes Hurrian, cf. EA 59) is strong. Both in language and script a difference between texts from the north and from the south can be observed. The northern script was closer to the Middle Babylonian script, and it resembles the scripts used in Egypt and in Jerusalem (Rainey 1996, I, 6f.). In the grammar the verbal forms are the most striking. The Akkadian paradigm was adjusted to the vernacular by adding West Semitic pre- and suffixes to Akkadian verbal bases, like those of the present tense and the stative. The suffix conjugation was used as a West Semitic perfect; the prefix conjugations were patterned after the West Semitic indicative, jussive and energetic. In Byblos (as in Ugaritic prose) one can observe the increasing use of the suffix conjugation at the expense of the jussive to express the past (Rainey 1996, II, 365f.); outside Byblos this is much less so. The syntax is very much adapted to the local language and, unlike Akkadian, the verb tends to be placed in the middle of the sentence. However, other constituent orders are attested (see, for example, Izre'el 1991, I, 347f.).

3. Anatolia: Hattuša

The city of Hattuša was the ancient capital of the Hittite empire. It was situated on a site now called Boghazköy, east of Ankara, in the curve of the Kızılırmak, the classical Halys river. The earliest levels of around 2000 BCE were found on Büyükkale ('Great Fortress'), a natural stronghold that was used as a citadel and that served as the royal residence until the end of the Hittite empire (Bittel 1970, 63f.). The city measured ca. 1200 x 2200 m. and consisted of a lower and an upper town, both of which housed important temples and a number of houses and both of which predated the Empire period (Seeher 2006). The end of Hittite Hattuša came shortly after 1200 BCE, when the city was destroyed. However, occupation of the site lasted through the Byzantine period.

The total number of tablets and fragments discovered in the city is probably between 30 000 and 35 000. The total number of texts may be somewhere between 2 500 and 3 000, depending on how many fragments are calculated for a single tablet (cf. Košak 1995, 174f.; Pedersén 1998, 46), but estimations like these remain quite uncertain. During the early excavations (1906–1912) alone more than 10 000 tablets and fragments were unearthed, but there are no records of their findspots. Only later finds and subsequently made tablet joins can help to trace the findspots of these tablets.

The texts found at Hattuša more or less cover the entire period of its existence as a Hittite city. Most of them were written in Hittite, but there also was a sizable amount of Akkadian texts (see below). Although most texts date to the Empire period (14th–12th c. BCE) tablets from the Old and Middle Hittite periods (17th–14th c.) were also found in the archives. There were three important areas where texts came to light, the citadel Büyükkale with its palace buildings, the lower town with Temple I and the House on the Slope, and the upper town with Nişantepe and the smaller temples. Which tablets came exactly from which library or archive is often difficult to tell, partly because of the lack of records for the earlier excavations, partly because of the secondary context from which many of the texts were recovered.

There is a wide variety of genres among the texts. First of all, there are the texts that form part of the state bureaucracy, like letters, treaties and juridical documents,

and to these can be added laws and royal annals. These documents were mainly found among the texts from Palaces A, K and E, from Temple I, and from the House on the Slope. As in Ugarit, the land grants appear to have been kept in special archives, but only a minority was written on clay tablets. It has been suggested that the sealed bullae found in these archives were attached to wooden tablets of this genre, but this remains to be proven. Archives with land grants are mainly Palace D and Nişantepe, but a number were stored in Temple 8. The so-called library texts can be divided in religious, literary and lexical texts. Religious texts like hymns, rituals, incantations, oracles, omens, prayers, descriptions of festivals, etc., and literary texts like myths and epics are known from the same archives as the state bureaucracy documents, as well as from some of the smaller temples from the southern part of the city. Together they make up about two thirds of the entire textual material. Lexical texts have only been recovered from Palace A, Temple I and the House on the Slope (see Pedersén 1998, 46f.). Economic-administrative texts were mainly found in the store-rooms around Temple I.

The cuneiform texts recovered from Hattuša show a considerable linguistic variety. Apart from the Hittite language used at the capital many documents were written in Akkadian. This Mesopotamian language was used for the international correspondence and treaties, and it played a role in the school curriculum and the so-called Mesopotamian 'Traditionsliteratur' (literary and religious texts). Whether the latter was an integral part of the school curriculum still needs to be investigated. Sumerian is only attested in schooltexts. Other languages attested mostly in religious texts are Hurrian, Luwian, Palaic and Hattic. A hieroglyphic script was used for Luwian inscriptions.

The cuneiform script shows a clear development in its ductus (Rüster 1972, Neu/Rüster 1975). The ductus of the older Hittite texts shows a close resemblance to the Syrian ductus from Emar while that of the younger texts is closer to the Syro-Hittite ductus. The latter is more or less the same as the ductus of contemporary Babylonian texts and it apparently slowly replaced the older ductus (Seminara 1998, 10). Many copies made from older texts were discovered, some of which combined both the scripts of the older period and that of the more recent one.

The texts have almost all been published in the two series *Keilschrifttexte aus Boghazköi* (KBo) and *Keilschrifturkunden aus Boghazköi* (KUB).

There are two grammars of the Akkadian written at Hattusha, Labat (1932) and Durham (1976). However, the first is outdated and the second covers only part of the grammar (orthography, phonology and morphology of the noun). The most striking feature in the texts from Hattusha is the system employed for expressing Hittite morphemes while ignoring the Mesopotamian opposition voiced – voiceless – emphatic (Sturtevant 1932; Kloekhorst 2007, 34f.). This opposition is also ignored in the Akkadian texts from Hattuša. Whether Hurrian influence is responsible for this phenomenon is still a matter of debate (cf. Kimball 1999).

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17. Akkadian and Aramaic Language Contact

1. The historical situation
2. Aramaic interferences in Akkadian
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4. References

Abstract

During the first millenium BC, Aramaic (AR) gradually spread over the entire Ancient Near East and came into contact with Akkadian (AK), the native language of Mesopotamia. The article investigates the historical situation of this contact and describes the interferences of AR in AK and vice versa.

1. The historical situation

1.1. Introduction

During the first millenium BC, the AR language and script gradually spread over the entire Ancient Near East and came into contact with AK (Babylonian and Assyrian, see ch. 14) and cuneiform writing, the native language and script of Mesopotamia. Cuneiform texts provide much information on this contact between both languages and scripts. For older literature see Garelli 1987, Greenfield 1987, Tadmor 1987, Tadmor 1991.

1.2. The term “Aramaic language” in cuneiform

Cuneiform texts only rarely mention the AR language explicitly. A letter, probably dating to 710 BC, written by the Assyrian king Sargon II. to Sîn-iddina from Ur in southern Babylonia quotes the following request by the latter: “If it is acceptable to the king, let me write and send my messages to the king on Aram[aic] parchment sheets” (*ina libbi sipri Arm[āja lu]spirma*). However, the king replies: “Why would you not write and send me messages in Akkadian? (*ina šipirti Akkadattu*). Really, the messages which you write in it must be drawn up in this very manner – this is a fixed regulation” (Dietrich 2003, no. 2: 15–22; for previous literature see Streck 2001a, 90 n. 3). If restored correctly, this letter seems to confirm that around 700 BC, the political administration of the Assyrian empire still preferred cuneiform Babylonian, although a person from Babylonia deemed alphabetic AR a feasible alternative for sending messages.

A letter from the 8th century BC reports that an AR sealed document (*kanīku Armītu*) from Tyre was sent to the Assyrian king in Kalḫu; the scribe himself quotes the contents of the document by translating it into Assyrian (Saggs 2001, 154f. ND 2686: 3). A letter from the time of the Assyrian king Esarhaddon (680–669 BC) in-

forms the king that the silver quota of certain shepherds had been written “on an Assyrian document (and) on an Aramaic document” (*ina libbi nibzi Aššurāya ina libbi nibzi Armāya*) (Luukko/Van Buylaere 2002, no. 16, 63, 13f.). Another letter whose date is disputed (either the end of the 9th or the first half of the 7th century BC) refers to an “Aramaic letter” (*egirtu Armētu*) that had been delivered by an Assyrian scribe to the sender” (Luukko/Van Buylaere 2002, no. 99: 10’).

1.3. Aramaic scribes

Neo-Assyrian documents sometimes mention AR scribes (^{lu}A.BA *Armāya*, see Radner 1997, 83, with n. 434). Though the logogram ^{lu}A.BA is read *tupšarru*, literally “tablet writer”, in Neo-Assyrian it most probably originally means “*a-ba-man*”, i.e., writer of the alphabet (see for a discussion of the reading and original meaning of the logogram Radner 1997, 80–82). Neo-Babylonian documents distinguish between the scribe writing AK in cuneiform (*tupšarru*) and the scribe writing AR in alphabetic script (*sepīru*) (see for references the Chicago Assyrian Dictionary S 225f. and T 151–162; for *tupšarus* and *sepīrus* within the administration of the Šamaš temple in Sippar see Bongenaar 1997, 56–98; for the AR names of many of these *sepīrus* see Streck 2001b, 114–117).

1.4. Bi- or multilingual texts

A bilingual Assyrian–AR inscription was found in Tell Faḥarīya (Abou-Assaf/Bordreuil/Millard 1982). The Bisutūn-inscription of Darius I. was not only written in Old Persian and Elamite but also in Babylonian and Aramaic; for the question of the priority of either language see the remarks by Greenfield 1987, 475f.

1.5. Clay epigraphs

Cuneiform tablets sometimes bear AR epigraphs: see Fales 1986 and Hug 1993 for Assyrian tablets and Oelsner 2006 for Babylonian tablets.

1.6. Ownership marks

A Neo-Babylonian (Strassmaier 1890, no. 143: 8) document dating to 528 BC tells of a slave whose arm was marked “in Akkadian (and) Aramaic” (*Akkadattu Aḥlamatti*). Neo-Babylonian ownership marks on slaves and animals sometimes consist of AR letter names (Jursa/Weszel 2000; Jursa 2005).

1.7. Aramaic in cuneiform

The AR alphabet written in cuneiform on a Neo-Babylonian school tablet also testifies to the contact between AK and AR (Finkel 1998; Geller 1997–2000, 144–146; Cross/

Huehnergard 2003). The same is true of the AR incantation in cuneiform (Geller 1997–2000, 127–145).

Numerous AR names in AK cuneiform texts attest to the presence of Aramaeans in Mesopotamia during the first millennium BC (Streck 1998). However, Greenfield 1987, 471 has stressed the fact that the overwhelming majority of names is still AK.

1.8. Pictorial representations

The co-existence of both languages is also documented by Neo-Assyrian reliefs beginning with those of Tiglath-pileser III. (744–727 BC). They portray two scribes in the act of writing while on a campaign: The Assyrian scribe is holding a stylus and a clay tablet or wax-coated wooden board, the AR scribe is holding a pen and parchment or papyrus (see Streck 2001a, 79 for a photograph and *ib.*, p. 90 n. 2 for literature). Obviously, the royal chancellery kept records not only in Assyrian but also in Aramaic.

1.9. The nature of Akkadian-AR language contact

In conclusion, cuneiform texts and Assyrian reliefs present much information on the contact between AR and AK, alphabetic script and cuneiform. However, it is difficult to assess how far-reaching this contact was. The often repeated simple view that Neo-Assyrian was heavily influenced by Aramaean and Neo- and even more Late Babylonian were only written languages any more whereas Aramaean was the vernacular is neither supported by the above mentioned evidence nor by the linguistic facts themselves since Neo-Assyrian as well as Neo- and Late Babylonian show relatively few and mostly only lexical influences from AR (see for Neo- and Late-Babylonian Streck 1995, xxiii f.; Hackl 2007, 149f.).

Certainly the picture is complicated, and one has to distinguish between regions, periods and different situations of language use. In the Assyrian empire AR was spoken in the Syrian west, but in the Assyrian heartland many people, at least in the cities, still spoke Assyrian. The royal chancellery had to use both languages. Also in Babylonia, the traditional Babylonian population in the old cities still spoke Babylonian for many centuries after the arrival of the Aramaeans and used it widely for recording day-to-day activities. On the other hand, the countryside was dominated by Aramaean and “Kaldæan” tribes –the latter also most probably spoke Aramaic). Their language, however, although certainly learned by many scribes and other people in the cities as well, had little influence on the Babylonian language.

2. Aramaic interferences in Akkadian

2.1. Cuneiform orthography

The cuneiform orthography of Neo-Assyrian and Neo- and Late Babylonian is influenced by AR alphabetic writing; see Streck 2001a and ch. 14.9.2.

2.2. Lexical loans

2.2.1. Introduction

AR lexical loans into AK have been treated by von Soden 1966, 1968, 1977 and Abraham/Sokoloff in press. Whereas von Soden registered some 280 possible loans, Abraham/Sokoloff, in an overly pessimistic review of von Soden's list, want to reduce the number to slightly more than 40 certain and roughly the same number of uncertain loans. Loans not mentioned in this list are known from new texts. Most of the loans are attested less than five times.

2.2.2. Types

Different types of lexical loans can be distinguished: a) Loan words, e.g. *raqû/re'û* "to wish" Kessler 1991 no. 89: 6; Jursa 1999, 191 BM 42508+: 14'(?), < AR RQY/R'Y < *RḌY. b) loan translations, e.g., *eber nāri* "far bank (of the Euphrates, Syria)" < AR 'bar nahrā; Abraham/Sokoloff think that, on the contrary, the AR expression is a loan translation from AK. c) Loan translations, e.g., *ana* as nota accusativi corresponding to the use of AR *la*.

2.2.3. Semantic Fields

The loans belong to different semantic fields (only certain loans attested more than five times are mentioned in the following paragraph):

- a) Animals: *gadû* "male kid" < AR *gadyā*; Abraham/Sokoloff think of a cognate, but the word is attested only in Neo-Babylonian and therefore is most probably a loan. *ḥadiru* "pen" < AR 'aldrā, certainly not ḤTR as Abraham/Sokoloff think.
- b) Objects: *darīku* "(container with) pressed dates" < AR DRK, against Abraham/Sokoloff also "to press", see for Mandaic Drower/Macuch 1963, 114; cf. also Biblical and Middle Hebrew DRK "to press wine", e.g. Dalman 1938, 105; the word is attested only in Neo-Babylonian and has no AK etymon. *ḥallatu* "a kind of basket" < AR HLT; since only known from Neo-Babylonian and well attested in Aramaic, against Abraham/Sokoloff most probably a loan.
- c) Trade: *māḥāt* "1/12 shekel" < AR *mā'ā*; last treatment by Powell 1987–1990, 512.
- d) Writing: *sēpiru* (not **sepīru*) "scribe writing Aramaic" and other derivations of SPR.
- e) Designations for persons: *ḥaylu*, *ḥi'yalu* "a kind of military force" < AR *ḥayl*; against Abraham/Sokoloff a certain loan; the different spellings of the word render the diphthong, see below. *kiništu* "priesthood" < AR *k^eništā*.
- f) Remarkably, several verbs are borrowed from AR (the same is true for Amorite loans in Old Babylonian, see Streck 2000, 126 § 1.101): *radāpu* "to pursue" < AR RDP; Abraham/Sokoloff argue for a genuine Akkadian word, but since it is attested only in Neo-Assyrian and Neo-Babylonian it is most probably a loan. *sēdu* "to support" < AR S'D. *segû* "to roam, wander" < AR SGY; according to Abra-

ham/Sokoloff possibly a loan from AK into Aramaic, the AK word is, however, only attested in Neo-Babylonian and therefore most probably a loan. *šelû* “to neglect” < AR ŠLY; only attested in Neo-Babylonian and therefore, against Abraham/Sokoloff, most probably a loan. *ibinna* “give!” < AR *hib* “give!” + AK *inna* “give me!”.

- g) Deverbal nouns not mentioned above: *ḥarārā*(?) “objection” < AR ‘RR or ḤRR; see for the latter Abraham/Sokoloff. *têqtu* (thus probably instead of **te’iqtu*) “injury” < AR ‘WQ; Abraham/Sokoloff point out that, while the root is well attested in Aramaic, the noun pattern is not. However, the word is only known from Neo-Babylonian, has no AK etymology and is therefore most probably a loan.
- h) Particles: *kimā* (not **kima*?) “how much” < AR *kēmā* etc.

2.2.4. Phonology

Loans are sometimes phonologically integrated by applying Geer’s law. If this law is not applied, this is a clear indication of a loan: compare, e.g., *qettā’u*, spelled *qé-et-ta-u*, “chopper” with *qaṭṭāyu*, spelled *qá-aṭ-ṭa-a-a* Pinches 1982, no. 426: 3 or *qá-ṭa-a-[a]* Kataja/Whiting 1995, no. 69 r. 20 (cf. Jursa 1995, 189 with n. 378; Bongenaar 1997, 395), and *qāṭē*, spelled *qa-ṭe-e*. Against Abraham/Sokoloff, *QaTTāL* is attested with this root in Aramaic, see *qaṭṭā’ā* “Holzhacker” Dalman 1938, 359, “chopper, hewer” Jastrow 1996, 1346.

/ʕ/, a consonant not known in AK, is rarely treated according to AK phonological rules, i.e., disappears causing *Umlaut* from *a* to *e*: *sēdu* “to support” < AR S’D. More often, it is preserved, clearly indicating a loan, and is differently spelled in cuneiform: a) Ḥ: *māḥat* “1/12 shekel” < AR *mā’ā*. *ḥiṣarû* “tithe” Joannès 1989, 257 L 4720: 3 < ? ‘SR, see Jursa 1999, 104 n. 440. b) ’: *ak-ta-ra-a* “I bowed down” < AR KR’. c) Without indication: *qettā’u* (*qé-et-ta-u*) “chopper” < AR QT’, see above. *a-ra* “land” < AR ‘ar’ā; against Abraham/Sokoloff, it is quite normal that West-Semitic /ʕ/ is not written in cuneiform.

The diphthong /ay/ is preserved in *ḥaylu*, *ḥi’yalu* “a kind of military force” < AR *ḥayl*, written *ḥa-a-a-la*, *ḥi-ia(-a)-lu*, *ḥi-a-lu-*, *ḥi-’a-la-*.

2.2.5. Morphology

Some nouns may be borrowed in the AR status emphaticus in *-ā*, see, e.g., *ḥarārā* (always spelled *ḥa-ra-ra*, *ḥar-ra-ra*) “objection” (see 2.2.3., above) and *arā* (*a-ra*) “land” (see 2.2.4., above). The cuneiform orthography is, however, ambiguous (Streck in press), and written *a* may be purely orthographic. Other nouns are surely integrated into the AK inflectional system and show the AK case vowels such as *gadû* “kid”.

The AR plural in *-ayyā* > *-īja* is rarely used, sometimes, but not exclusively with AR loans (see Streck in press chapter 6), e.g., *ḥābīja* (*ḥa-bi-ia*) “jars” < AR ḤB’ Ólafsson/Pedersén 2001, 111 no. 21: 3.

Borrowed verbs are always fully integrated into the AK inflectional system and form the AK tenses and verbal stems, e.g., perfect *artedip* “I pursued” < AR RDP, *uṣasgû* “they let him go” < AR SGY.

2.3. Grammatical loans

On the whole, grammatical Aramaisms are rare. For the AR nominal plural *-ajjā* > *-ījā* see 2.2.5 (Morphology). In positive main clauses of letters, the Late Babylonian preterite *iprus* has the meaning “let him decide”, an inner-AK development possibly also influenced by the AR short imperfect (Streck 1995, 246 f.). The use of *ša* to introduce substantival clauses is possibly influenced by AR *dī/zī* (Hackl 2007, 59). For further possible, mainly syntactic Aramaisms see von Soden 1995, 299f. §§ 192, 193.

3. Akkadian interferences in Aramaic

3.1. Introduction

Since the textual material from early AR is relatively sparse, AK influences on the AR dialects of this period are difficult to describe. However, later dialects such as Syriac and Mandaic offer numerous examples for Akkadianisms.

3.2. Lexical loans

Kaufman 1974, 160, the most comprehensive study to date, lists 362 AK loanwords in the various AR dialects (for Mandaic see also Dietrich 1967). The following semantic fields are represented (the numbers in brackets refer to the total number of loans in these fields):

- a) Political-legal terminology (55), e.g., *ḥwblʾ* (Syriac) “interest” < AK *ḥubullu*.
- b) Professions (55), e.g., *ʾškpʾ* (Syriac etc.) “leather worker” < AK *aškāpu*.
- c) Architecture (50), e.g., *tytwrʾ* (Babylonian Talmudic) “bridge” < AK *titurru*.
- d) Religious (16), e.g., *nʾndbyʾ* “offering” < AK *nindabû*.
- e) Astronomy (6), e.g., *zyqpʾ* “a type of constellation” < AK *ziqpu*.
- f) Topographical features (31), e.g., *tpʾ* (Syriac) “canal” < AK *atappu*.
- g) Scribal terminology (13), e.g., *gyʾʾ* (Mandaic) “document” < AK *giṭtu*.
- h) Tools and utensils (33), e.g., *swmbylʾ* (Mandaic) “ladder” < AK *simmiltu*.
- i) Other items from the material culture (41), e.g., *klkʾ* (Syriac) “raft” < AK *kalakku*.
- j) General vocabulary (62), e.g., *nphr* (Behistun) “total” < AK *napḥaru*.

3.3. Grammatical loans

For possible grammatical influences see the discussion in Kaufman 1974, 116–136. For example, the AR genitive construction *brh zy/dy X* “the son of X” appears to have been influenced at least in part by the common Neo-Babylonian construction *mārūšu ša X* “the son of X”.

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V. The Semitic Languages and Dialects III: North-West Semitic

18. Northwest Semitic in General

1. General
2. The data
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Abstract

The present chapter provides an overview of the language group labelled “Northwest Semitic” in most historical-comparative frameworks or “Syro-Palestinian” in dialect geography. Since “Northwest Semitic” is commonly thought to include the Canaanite and Aramaic subgroups as well as the local idiom of the city-state of Ugarit, it constitutes the linguistic background of the Hebrew Bible. Several other textual witnesses also associated with it remain controversial concerning their classification. The presentation focuses on the direct and indirect evidence for all these languages between the second and the first millennia BC, their affiliations in genetic, geographical, and sociolinguistic terms, and an outline of a diachronic comparative grammar devoted to the most significant features. This results in an attempt to review different viable approaches to the material and to point out how elusive the concept “Northwest Semitic” actually is.

1. General

The term “Northwest Semitic” (NWS) was canonized by C. Brockelmann (1908, 6) in order to systematically account for the similarities between the “Canaanite” (above all Hebrew with Phoenician) and the “Aramaic” language groups in contradistinction to Arabic and Ethiopic in the South(-west). This refines F. Hommel’s older distinction between Akkadian (“East Semitic”) and the rest (“West Semitic”) along both genealogical and geographical lines. After their discovery, further idioms from the same region, like Ugaritic, were squeezed into that framework on the basis of isoglosses. They all are distinguished from Arabic, their closest relative, by a shift of word-initial */w/ to /y/ and the systematic use of an originally bisyllabic base */qVtal-/ in the plural of *qVtl* nouns before external plural markers. Other noteworthy features emerged but gradually in the course of time.

“NWS Philology” has become a widespread designation for the study of the Hebrew Bible in its linguistic setting. While its precise subgrouping remains controversial, NWS is, together with Arabic, often subsumed to “Central Semitic” (Huehnergard 2005). However, several scholars prefer a distinction between West (= by and large NWS), South (Arabic and Ethiopic), and East Semitic; a few also add North Semitic (Lipiński 2001, 59–74). Similarities between (N)WS and Arabic would then be areal or independent phenomena. The speakers are supposed to have come in waves from their original homelands, wherever these may have been (Fleisch 1947, 22–30), to Syria-Palestine from ca. 3000 B.C. onwards (Sekine 1973). One can group the members of NWS typologically according to clusters of linguistic features (Ginsberg 1970); within a genealogical model, they all derive from a common ancestor by means of shared innovations (Hasselbach/Huehnergard 2008). Permanent contact from Antiquity onwards in a relatively small area, however, led to borrowing or convergence throughout and, presumably, the evolution of new dialects. The interrelations between them are so complicated that it proves extremely difficult to deduce them all from preceding stages. Other scholars thus point to the diffusion of linguistic features from centre to periphery along axes of social contact as the decisive origin of a continuous dialectal map of “Syro-Palestinian” languages connecting border idioms which were mutually intelligible (Harris 1939; Rabin 1963; Garr 1985). It has even been suggested to regard NWS as the basic unity (Moscati 1956; Garbini 1960). As polar opposites of that dialect continuum, Canaanite and Aramaic, only become identifiable with the breakthrough of alphabetic writing from the beginning of the 1st millennium BC onwards. Akkadian, the *lingua franca* of the day, eclipsed much of the linguistic diversity during the 2nd millennium. It still has to be explored whether language contact can also account for the similarities between NWS and some Ancient North Arabian varieties, such as a definite article *h(n)-* and the assimilation of /n/. Very often, one has to compare the extremes of dialect diffusion instead of tracing a geographically and chronologically continuous attestation. Hence, possible examples of a wave-like spread over long periods of time have also been explained as instances of “parallel development” (e.g., Blau 1978), an Aristotelian notion of *entelecheia* according to which a basic structural affinity caused similar changes to happen independently. Comparisons between ancient and modern Semitic languages without any direct contact prove that such phenomena do occur. Their impact on the grammatical core, like the loss of inflectional case marking in Canaanite, Aramaic, the Arabic dialects, and Ethiopic, can produce typologically similar systems across sub-families. Since not all of the attested languages were necessarily used as vernaculars, taking more seriously the interaction between standard idioms and local dialects as a result of linguistic prestige, the effects of scribal traditions and imperfect learning, or the social identification of a speaker (e.g., standard and substandard), helps uncover further reasons for variation (Gianto 2008).

2. The data

From a maximalist vantage point, which includes names from the earliest cuneiform and Egyptian sources together with the spoken forms of Hebrew and Aramaic, NWS languages are attested for more than 4,000 years. They appear in different scripts as

isolated words, hybrid forms, literary idioms, and vernaculars, hence their linguistic status often remains controversial. None of these writing systems, however, can fully render all the basic phonemes present in any NWS language at the moment an utterance was recorded (Pfeiffer 1956). The earliest clearly identifiable traces of NWS are found in several thousand personal names of the so-called “*Amorites*” and keep appearing in Akkadian cuneiform texts from a wide geographical region between the end of the 3rd and the middle of the 2nd millennium BC (Streck 2000, see ch. 19). Obviously, the language reflected by these names may be much older. Non-Akkadian features include the “imperfect” preformative /ya-/ instead of /i-/. The change of word-initial */w/ to /y/ (/yaqar/ ‘is precious’) and assimilation of /n/ before another consonant (/yattin/ ‘he gave’, varying freely with /yantín/) correspond to NWS, but the case system of Amorite appears to preserve some more archaic traits. Internal variation points not only to different spelling practices, but perhaps also to different linguistic varieties; not necessarily all of them belong to NWS. B. Landsberger first classified this material as Eastern Canaanite, whereas M. Noth and others, for historical reasons, view the Amorites, who migrated from Northern Syria into Mesopotamia, as predecessors of the Aramaeans. But linguistic criteria do not establish a close association with any specific form of later NWS, so that a more comprehensive approach is advisable (Moran 1961; Greenfield 1969). Others group Amorite together with Ugaritic as “North Semitic” (Lipiński ²2001, 51–55).

Ugaritic, the language of a cultural melting-pot (modern Rās Šamra in Syria) on the Mediterranean coast opposite Cyprus and discovered in 1929, has also been classified as (“Northern”) Canaanite, but is now mostly viewed as an independent NWS language (Sivan 2001, see ch. 20). It shares some grammatical and many lexical features with Hebrew and Phoenician (e.g., two forms of the independent 1sg. pronoun, deictically neutral prepositions, suppletion involving $\sqrt{h}lk$ and $\sqrt{y}lk$ ‘to go’, reduplication of the final radical as the normal D-stem equivalent for hollow roots, and the use of the infinitive absolute like a finite verb) and seems closer to the Canaanite branch than to Aramaic. It has no known descendants, but some Northern Iron Age dialects exhibit similarities with Ugaritic (e.g., consistent monophthongization of diphthongs). The archaic causative prefix /š-/, despite the 3sg. personal pronouns in /h-/ seems idiosyncratic within West Semitic. Ugaritic is directly attested in more than a thousand mythological and ritual texts, letters, legal documents, and economic lists inscribed on clay tablets in a cuneiform alphabet during the 13th and 12th centuries BC (Bordreuil/Pardee 2009). Judging from archaisms in vocabulary and verbal morphosyntax, poetic texts reflect an older stage of the language. The unusual writing system marks the quality of a vowel following a glottal stop, but is otherwise purely consonantal. Ugaritic material also surfaces in syllabic Akkadian texts from the same place, esp. in multilingual word-lists (Huehnergard ²2008). A supraregional poetic tradition links Ugaritic mythological compositions with the earliest parts of the Hebrew Bible. Some letters sent from outside contain non-standard features; a typically Phoenician construction surfaces in a letter dispatched by the king of Tyre to Ugarit (Gzella 2010a). A few texts also exhibit unexpected sound correspondences (Blau 1978, 39).

The first tangible forms of Canaanite appear perhaps already in place names in 20th–18th c. BC Egyptian transcriptions, whereas the few “Proto-Canaanite” inscriptions in archaic linear script (ca. 15th c. BC?), because of their poor state of preservation, are hard to evaluate. Besides substrates in Akkadian cuneiform tablets from Emar

and other places in Syria-Palestine (Sivan 1984), NWS material surfaces in more than 300 Akkadian letters in cuneiform sent during the 14th c. BC by vassal rulers of cities like Byblos, Tyre, Jerusalem, Shechem, Gezer, and Ashkelon, which were drowning into political chaos, to their inactive overlords in Egypt (Rainey 1996). After their place of discovery in 1887, modern el-Amarna on the east bank of the Nile (the capital of Amenhotep IV), they are called *Amarna letters*. The many idiosyncratic features in the Akkadian of these texts, esp. verbal morphology and lexical “glosses”, closely correspond to Ugaritic. An important isogloss is the preformative /t-/ in the 3m.pl. “imperfect”. The Amarna letters are often thought to reflect the scribes’ native language as substrate; a different model views them as an “institutionalized interlanguage” which emerged from the fossilization of an imperfect knowledge of Babylonian language and scribal traditions by speakers of NWS (Gianto 2000). Since Canaanite was subsequently used in the same cities during the first half of the 1st millennium BC, the NWS material in the Amarna letters is usually associated with that branch. Some characteristic phonological features of later Canaanite like the sound shifts /t/ > /š/, */d/ > /z/, and */t/ > /s/ are not, or not systematically, indicated by syllabic cuneiform; no information for the D-stem “perfect” (*qattila/ > /qittila/) marking off 1st-millennium Canaanite is available. But there is evidence for several other traits: */ā/ > /ō/, final /-ī/ in the 1sg. independent pronoun (e.g., *a-nu-ki* /ʾanōkī/ in EA 287:66 as opposed to Akkadian *anāku*) with the concomitant shift of the 1sg. “perfect” affirmative */-tu/ > /-tī/ (*ibid.* 53), and a C-stem prefix /hi-/ (< */ha-/ in EA 256:7: *hi-iḫ-bi-e* /hiḫbi’e/ ‘he hid’; Ginsberg 1970, 104). Further, certain facets of verbal usage in 1st-millennium NWS evolve naturally from the linguistic situation in the Amarna letters (Moran 1961). Despite instances of linguistic variation, dialectal distinctions like “Western Canaanite” as the forerunner of Phoenician and “Central Canaanite” as the one of Hebrew (Blau 1978, 36 n. 28) are hard to establish in this corpus.

With the beginning of the “Dark Ages” ca. 1200 BC, the Eastern Mediterranean changed in socio-economic, cultural, and linguistic respects. Following population movements and an economic crisis due to the impact of the “Sea Peoples”, during a power vacuum after Egypt and the Hittites had withdrawn from Syria-Palestine, many old city-states along the coast and in the plain were destroyed or abandoned. At the same time, settlements in the highlands of Ephraim, Judah, and Transjordan grew steadily and led to the appearance of new territorial states with unclear boundaries. Their chancelleries promoted standardization and alphabetic writing instead of syllabic cuneiform for the local languages, supposedly as an expression of increasing “national” self-awareness. From then on, Canaanite, in the form of Hebrew, and Aramaic are directly attested until today. The gradual emergence of new languages no doubt continued processes begun in the late Bronze Age, but the evidence from this transition period is mostly restricted to a number of traditional personal names inscribed on arrowheads and difficult to classify (Hess 2007). Around 1000 BC, the structure of NWS in the whole area, esp. particular subject/object marking and the tense-aspect-mood system, was transformed following the loss of short unstressed word-final vowels which previously indicated inflectional cases and distinguished various verbal conjugations. Prior semantic bleaching may have reinforced this. The same idioms also acquired grammaticalized definite articles from different origins whose functions later converged. Eventually, a new “epigraphic habit” emerged once administration and institutions grew and gave new life even to the scribal culture long established in cities

like Byblos, Jerusalem and elsewhere. In the second half of the 9th c. BC, alphabetic royal inscriptions commemorating the deeds of local kings begin to appear in various Syro-Palestinian languages. Perhaps the native chancelleries thereby adopted the Assyrian practice of leaving stelae and rock inscriptions with prose narrations. Consequently, these languages had to create suitable stylistic resources.

Phoenician (see ch. 21) yields the earliest continuous epigraphic evidence for 1st-millennium Canaanite, but is diversified from the outset into the local dialects of several ancient city-states, never formally united, along the northern Levantine coast (Friedrich/Röllig 1999; Gzella 2009c). Some have grouped these dialects together with Ugaritic, but, despite important differences, the majority opinion places them closer to Hebrew. A few inscriptions from Byblos, now generally dated to the 10th c. BC, reflect the most archaic variety, which supposedly preserved remainders of short unstressed word-final vowels in the verb (*bny* /banaya/ 'he built', KAI 4:1), had a relative particle *z* (which has an early forerunner in the Sarepta jar inscription KTU 6.70, often assumed to reflect a Phoenician dialect) instead of later 'š, and retained the old 3sg. possessive suffix *-h* not used in other dialects. However, it still lacked a definite article. Besides later Byblian, most texts are composed in "Standard Phoenician" (marked off by, e.g., district possessive and object suffixes for the 3rd person) which was not confined to Tyre and Sidon, but used all over the Mediterranean by Phoenician colonists, travellers, and merchants; it was even adopted as a prestige language in Asia Minor. In the western colonies, an offshoot of Standard Phoenician became what is known as Punic. Punic persisted in Roman North Africa until the 5th c. AD and is characterized by the reduction of gutturals and short vowels as well as by different 3m.sg. possessive suffixes. Some later texts are written in the Latin script. Typical features of Phoenician include the shift of */ā/ to /o/ in stressed syllables, the preservation of the genitive case ending in suffixed nouns, and the causative stem prefix /yi-/ (< */hi-/ [< */ha-/]: palatalization caused by a high vowel?). The formulaic nature of most witnesses limits the amount of linguistic information.

Hebrew (Sáenz-Badillos 1993; see ch. 22), too, acts as an umbrella term for several Canaanite varieties united by a common culture with considerable regional diversity. Most studies focus on those represented by the Hebrew Bible. Even after centuries of redactional history and in the phonological and morphological garb of vocalization traditions dating from a much later stage which combine archaic features with later (esp. Aramaic) influences, many chronological, geographical, and social or genre-based variations survive in the corpus (Gianto 1996). The Tiberian vocalization system, best attested in the *Codex Leningradensis* from 1008 AD, became normative for Biblical Hebrew grammar (Morag 1962). Its antiquity and original pronunciation, never widespread and soon forgotten, are debated; no current reading tradition immediately derives from it. For historical-comparative purposes, Bauer/Leander 1922 and Beyer 1969 are mines of information, but Blau (1968) voiced important methodological caveats concerning the reconstruction of pre-Tiberian Hebrew. Verbal syntax and the lexicon mark off "Early Hebrew Poetry" (Gen 49; Ex 15; the oracles in Num 22–24; Deut 32; 33; Jdg 5; 1 Sam 2; 2 Sam 1; 22 = Ps 18; 23; Ps 68; Hab 3) as a separate entity. By and large, these texts may go back to the 11th c. BC and continue an epic tradition formerly also current at Ugarit. The corpora of literary prose in "Classical" or "Standard Biblical Hebrew", the Pentateuch and the Deuteronomistic History, by contrast, are distinctive of Hebrew. The date of their composition, or at least of their last major redaction,

oscillates in the current discussion between the exilic and the early Hellenistic periods. Yet some of the “Late Biblical Hebrew” compositions (Chr, Ezr, Neh, Esth, Dan, Qoh) in a literary idiom patterned after Classical prose have only taken shape by the mid-2nd c. BC. Much of the poetic and prophetic material defies linguistic dating. A number of inscriptions from the 8th c. BC at the latest (the so-called “Gezer calendar” may be Phoenician) reflect the same developmental stages of the language and provide a referential frame until the exilic period which anchors part of the Biblical material in time and place (Gzella 2009d). The few textual witnesses from the five Philistine cities are hard to distinguish from Hebrew, but some scholars assign them to a local Canaanite dialect featuring a relative marker *š* and the 3m.sg. suffix *-h* (Israel 1999). The 8th c. “Samaria Ostraca” are believed to reflect a Northern variety of Hebrew (“Israelite”) close to contemporary Phoenician (monophthongization of diphthongs and the preservation of the old feminine ending /-(a)t/, also in the “Philistine” texts), while most of the rest is based on the Southern dialect of Judaea. The latter is also lying at the heart of Biblical Hebrew at large; Northern and Transjordanian traces survive there as well, but are not always easy to identify. Presumably, Judaeans was a prestige dialect that eclipsed many coexisting varieties and influenced neighbouring idioms (Gianto 1996, 494–496). The rise of a formerly unattested narrative *Kunstprosa*, replacing older epic poetry, triggered the complementary distribution of a grammaticalized “consecutive imperfect” *wayyiqtol* (< */(wa-)yaqtul/; the /wa-/ was facultative in earlier times) for narrative chains and a likewise grammaticalized “consecutive perfect” *w-qāṭal* for various other usages. The literary character of the evidence renders a consistent description in functional terms difficult. Following the Babylonian Exile from 586 BC, Aramaic slowly became the pragmatically dominant language in daily life (Beyer 2004, 34–36), but Hebrew continued to be used for literary compositions, as the classicizing texts from Qumran demonstrate. Not every instance of Aramaic influence in Hebrew is necessarily late, though. Moreover, the Bar-Kosiba-letters and a few contracts show that Hebrew was briefly revived for every-day use during the two Jewish revolts against Rome in the 1st and 2nd c. AD. Some of these later varieties follow up on older Hebrew dialects for the lack of characteristic Southern innovations. They prefigure Rabbinic Hebrew, the language of a vast body of exegetical literature written during the subsequent centuries (see ch. 23). A blend of Rabbinic and Biblical Hebrew in its Tiberian garb according to a modern pronunciation became the basis of Israeli Hebrew (“Ivrit”), revived as a vernacular at the end of the 19th c. AD and now an official language of the State of Israel (see ch. 24).

Among the *Transjordanian* languages (Beyer 2009), at least *Moabite* is clearly a separate Canaanite idiom. It is best preserved in a 9th c. BC royal inscription from Dībān of 34 lines closely resembling Hebrew prose style (KAI 181) which exhibits the definite article *h-*, the object marker *ʔ*, the relative particle *ʕr*, narrative *wayyiqtol* (but only the “perfect” in ll. 21–29). Especially the latter two might once have been taken over from Hebrew due to its prestige. Some lexical items, too, align Hebrew with Moabite against Ugaritic and Phoenician. Yet the old f.sg. ending /-(a)t/, the Gt-stem and the m.pl.abs. ending /-in/ set it apart from Hebrew, although they do not necessarily move it closer to Aramaic. Some smaller texts and seals are also associated with Moabite, but display (dialectal?) differences vis-à-vis the Dībān stele, e.g., *ʕ* instead of *ʕr*. The few 9th to 6th c. *Ammonite* inscriptions (Aufrecht 1999), by contrast, brim with palaeographical difficulties. The f.sg. ending is /-(a)t/, the m.pl.abs. /-im/, the 3m.pl.

“imperfect” ending /-n/, and the relative particle š or š , but the paucity of relevant information makes it impossible to prove or disprove the majority opinion that it is Canaanite. *Edomite*, however, bears so close a resemblance to Hebrew and Moabite that it can hardly be set apart as an own dialect (Vanderhooft 1995), though the idiosyncratic use of the C-stem of $\sqrt{\text{brk}}$ ‘to bless’ may be significant. Scholars do suppose that it is attested in a few brief ostraca and some personal names in seals with the theophoric element Qaws, all roughly from the 7th–6th c. BC Transjordanian dialects also underlie the representation of the speech of foreigners in the Hebrew Bible (e.g., Jdg 12:6), yet it is difficult to extract any reliable particulars from such literary compositions. A lengthy but enigmatic plaster text from Deir ‘Allā, discovered in 1967, provides evidence for another Transjordanian variety which has been considered to be Aramaic, Canaanite, or a language apart (“Gileadite”). Phonology and morphology exhibit significant Aramaic features, whereas lexicon and style (esp. narrative *wayyiqtol*) resemble Canaanite (Gzella, *in press*). However, not all NWS languages have to be associated with either Canaanite or Aramaic (Huehnergard 1991). This unique literary text with an unknown purpose and history may not represent any spoken dialect at all.

Internal heterogeneity also characterizes the *Aramaic* language group (Beyer 1986 and 2004). Unlike Canaanite, some of whose hallmarks can be traced back to the 2nd millennium, its roots are unknown. Although but few diagnostic traits apply to all of Aramaic, it is clearly distinct from Canaanite from the outset (Huehnergard 1995) and thus seems to have taken shape some time before the 9th c. BC. Several circular developments took place during the 3,000 years of its attested history (Jastrow 2008). Already the earliest texts from the 9th c. BC (“Old Aramaic”, see ch. 27), royal inscriptions produced by the chancelleries of local city-states, reflect different varieties; however, the treaties from Sfire are relatively uniform, as opposed to the peripheral Gozan-inscription. Because of its light grammatical system, great adaptability, and use among travellers, Aramaic spread across the entire Fertile Crescent from Egypt to Lake Urmia during the 8th to the 6th c. and was used as an international means of communication under the Neo-Assyrian and the Neo-Babylonian Empires, yet still without any recognizable standard. At least Assyrian varieties were so different from Judaeen Hebrew that the two were perceived as mutually non-intelligible (2 Kgs 18:26). When the Achaemenids rose to power, they promoted what appears to be a Babylonian dialect to their chancellery language now called “Official (or Imperial) Aramaic” (cf. ch. 28) and chiefly attested by letters and legal documents found in Egypt; Biblical Aramaic is also akin to this variety. Official Aramaic provided a standardized, international prestige language that eclipsed the continuous development of local varieties. But these eventually came to the surface again after the fall of the Persian Empire; during the Hellenistic and Roman period, they partly turned into written languages in some way influenced by Achaemenid spelling (cf. ch. 30), such as Qumran Aramaic, Nabataean, Palmyrene, Old Syriac, and Eastern Mesopotamian. Aramaic thus remained the dominant language until the Islamic Conquest. From the so-called “Middle Aramaic” period on, individual features already attested before grew into an identifiable Eastern and a Western branch fully-developed in the stage often called “Late Aramaic”. The Western branch, whose dialect boundaries are much clearer, includes the Palestinian Talmud, Targumim and Midrashim (see ch. 31), inscriptions, poetry, documentary texts, Christian translations from the Greek (“Christian Palestinian”, see ch. 33), and the writings of the Samaritans (see ch. 32) before they switched to Arabic. The Eastern branch, by

contrast, comprises Classical Syriac (the literary and liturgical language of the Christian Middle East until today, surviving in an Eastern and a Western tradition, see ch. 34), the varieties of the Babylonian Talmud (see ch. 36), Mandaic (see ch. 37), and the languages of many magic bowls not easily attributed to any of the preceding. Lost vernaculars from this period seem to be the ancestors of many of the numerous “Neo-Aramaic” languages from Iran, Iraq, and northeastern Syria (“Northeastern Neo-Aramaic”, see ch. 40), from Turkey (“Turoyo”, see ch. 39), and from the Anti-Lebanon (“Western Neo-Aramaic”, see ch. 38), now spoken in diaspora communities all over the world. Also Mandaic, the language of a religious movement commonly associated with the rather vague notion of “gnosticism” has a modern counterpart (“Neo-Mandaic”, see ch. 41).

In the 8th c. BC, a local language replaced Phoenician as the representational idiom in the city-state of Sam'al (Pardee 2009), but later gave way to Aramaic proper. Like the Deir 'Allā text, with which it shares the un-Aramaic N-stem (at least in what may be a lexical borrowing), its epigraphic witnesses have either been subsumed to Aramaic or treated as an own language close to Canaanite. Some, however, have argued that Sam'alian can be better understood as a distant relative of Aramaic still unaffected by some of the latter's developments (Huehnergard 1991) or shaped by language contact with Canaanite which led to convergence again (Gianto 1995).

3. Phonology

Since early NWS has been transmitted either in syllabic cuneiform or in largely consonantal writing systems according to conventions established by generations of scribal training, it is often hard to elucidate its phonetic realities. Two characteristic sound changes are generally accepted as NWS isoglosses (Blau 1978, 35), but they are both very natural and have at least sporadic parallels in other Semitic idioms: first, due to weak labial articulation, word-initial */w/ became /y/ (e.g., * $\sqrt{\text{wrd}}$ > $\sqrt{\text{yrd}}$ ‘to come’) excluding the conjunction /wa-/ ‘and’ (where /w/ was supposedly felt as word-medial) and some other lexemes. Second, /n/ regularly assimilates to an immediately following consonant except for /h/ in several cases (such as the suffixed “energetic II” */-an-hV/ > /-annV/; on the peculiar change */-th-/ > /-tt-/ in Hebrew, see Gzella 2007a, 157 f.), and alleged instances of its preservation are secondary. It has been restored in the Hebrew “perfect” of verbs III n (excepting $\sqrt{\text{ntn}}$) by way of paradigm pressure (e.g., *zāqantā* ‘you are old’; Bauer/Leander 1922, § 151). The same might apply to certain 1sg. “perfects” from the root *ytn* in Ugaritic (e.g., *ytn* ‘I have given’). In the Old Aramaic C-stem participle *mhnḥt* (KAI 309:2) ‘he who brings down’, the pharyngeal /ḥ/ could have stopped assimilation, perhaps due to weak articulation. Under the influence of Babylonian, where geminates underwent nasalization, etymological /n/ often reappears in Official Aramaic (synchronically this is perhaps a purely graphic phenomenon) and in some later Aramaic varieties affected by Achaemenid scribal conventions. Sporadic examples in Biblical Hebrew can be explained along similar lines (Gzella 2007a). The frequent occurrence of degemination in Classical (not Modern) Mandaic, spoken in Babylonia, however, must result from Akkadian substrate pronunciation. Since /n/ sometimes assimilates elsewhere in Semitic, too, and regularly in most of Ancient North Arabian against Classical Arabic and many vernaculars, its diagnostic value as an NWS innovation remains doubtful. Dentals also tend to assimilate (esp. to the fem. /-t-/), but can be preserved in spelling.

Other changes of the 29 etymological consonants, all of which could be geminated once, vary per language. A “long” (“geminate”) consonant (Lipiński ²2001, 179 f.) is often treated differently from two consonants in Semitic: e.g., the participle of geminate verbs in Arabic tolerates a long vowel before a geminate (*rāddu*); geminates at the end of a word were simplified in Aramaic, but final consonant clusters were broken up, both at different points. In Ugaritic, */š/ and */ʃ/ completely merged to /š/ and, as in Canaanite, */ʃ/ with */s/ to /s/; */d/ often shifted to /d/, and at least in a few roots, */t/ (conventionally transcribed /z/) merged with */g/ (cp. *√nḡr* ‘to guard’ with Hebrew *√nṣr* and Aramaic *√nṭr*). The Proto-Semitic interdentals */t/, */d/, and */t/ merged with their dental counterparts /t/, /d/, and /t/ in Aramaic by the 7th c. BC, as did */š/ later with */ʃ/ to /ʃ/, whereas the shifts */t/ > /š/, */d/ > /z/, and */t/ > /s/ (merging with */š/ and */s/) had occurred in at least most of Canaanite by the time of the earliest Iron Age attestations: contrast, e.g., *√tbr* ‘to break’ in Ugaritic and 8th c. Aramaic (where /t/ is mostly written {š}) with post-8th c. Aramaic *√tbr* and Hebrew *√šbr*. They are difficult to render in syllabic cuneiform and vary in the different scribal traditions, but many scholars suppose that these changes were already underway in the 2nd millennium. Later, spirantization of the six plosive stops /b,g,d,k,p,t/ (formerly unaspirated: Kutscher 1965, 23–35) in weak articulation in Aramaic and Hebrew, and of some of them in Phoenician, produced fricative allophones (yet spirantization occurs elsewhere in Semitic, too). These were then gradually phonemicized again in later Aramaic, as minimal pairs like Syriac *garbā* ‘scabies’ and *garbā* ‘scabious’ indicate, and, to a very limited extent, in Post-Biblical Hebrew. Eventually, */g/ merged with */ʃ/ to /ʃ/ and */h/ with */ħ/ to /ħ/ in Canaanite and Aramaic during the 1st millennium BC, but they were kept apart in traditional Hebrew pronunciation until the 3rd c. BC (Steiner 2005; cf. Gzella 2009d, 68). The merger of */š/ (originally a voiceless fricative lateral) and */s/ to /s/ in Aramaic and Hebrew (where /š/ was originally written {š} and later distinguished from /š/ by a diacritical mark) is less easy to trace (Beyer 1984, 102 f.). Since the Phoenician 22-letter alphabet did not have proper graphemes for all these sounds, some served double-duty for centuries in Hebrew, Aramaic, and perhaps also in Transjordanian fringe dialects. Word-final geminates were later simplified in Aramaic and Hebrew (ca. 200–150 BC according to Beyer 1984, 120–122); laryngeals were gradually reduced in Aramaic (*ibid.*, 122, between 150 BC and 300 AD), partly in Hebrew (Kutscher 1965, 41–50; under Aramaic influence?), and in Punic (Friedrich/Röllig 1999, § 28–35). The loss of syllable-final /ʔ/ with compensatory lengthening of the preceding vowel began in 14th-c. BC Canaanite (Beyer 1984, 104–106). Moreover, /m/ and /n/ interchanged frequently in the history of NWS. The “emphatics”, which were perhaps originally glottalic pressure sounds, underwent velarization in some idioms (on Aramaic, see Beyer 2004, 45 f.), slightly lowering surrounding vowels, but their pronunciation in early NWS is unknown. Palatalization of Proto-Semitic */s/ > /š/ and subsequent deaffrication of */ʃs/ > /s/ are also difficult to pinpoint.

Reflexes of the short vowels */ā/, */ī/, */ū/, the long vowels */ā/, */ī/, */ū/, and the diphthongs */aw/ and */ay/ are found throughout NWS. Their behaviour in the individual languages has to be reconstructed on the basis of transcriptions in cuneiform, Greek, and Latin, and later Hebrew and Aramaic vocalization traditions. The latter mark quality alone, so not all linguistic stages clearly exhibit phonemic contrasts of vowel length. It is difficult to integrate all this information into a coherent picture, but some common tendencies that crystallize into fairly regular changes do emerge. From

syllabic spellings like *le-e* for the proclitic preposition */li-/ in Ugaritic it appears that at least near sonorants, /i/ was already pronounced [e] at that time, as it always was according to later Syriac vocalizations. Phoenician-Punic transcriptions (Οἰεῖραλος < */ōzir-/ < */ādīr-/ ‘helper’, Friedrich/Röllig 1999, § 81 f.) and, for stressed syllables, Tiberian Hebrew show the same phenomenon. Moreover, diphthongs seem to have been monophthongized (*aw/ > /ō/, *ay/ > /ē/) regularly in the North (Ugaritic, Phoenician, Northern Hebrew) at a very early stage, but only later in Aramaic and Southern Hebrew; Moabite evidence is conflicting. Monophthongization of triphthongs is still inconsistent in Ugaritic, but slowly became regular, with */awa,aya/ > /ā/, */iyu/ > /ī/ (> /ē/) etc. After ca. 1000 BC, word-final short vowels disappeared in Canaanite and Aramaic, which also happened, not necessarily at the same time, in other Semitic idioms. Due to drift or contact, all NWS languages also show at least some traces of a reduction of short vowels in open syllables. This occurs but sporadically in Ugaritic (cf. syllabic spellings like *ar-zi-ma* /arzīma/ ‘cedars’ as opposed to expected *ḥa-ba-li-ma* /ḥabalīma/ ‘ropes’ or alphabetic ones like *rišt* /raʾšātu/ ‘heads’ as opposed to *rašt* /raʾašātu/, Huehnergard 2008, 280–282; 304–307). Vowel reduction became regular in Aramaic and caused the complete loss of all short unaccented vowels in open syllables by the end of the 2nd c. AD at the latest (e.g., Syriac *kṭab* < */katab(a)/ ‘he wrote’; see ch. 28.1). Under Aramaic influence, it also affected Hebrew (*yiktū* < */yiktubū/ ‘they write’). The *schwa* sign in Tiberian pointing indicates the absence of a phonemic vowel; vocalic *schwa* is pronounced in reading traditions as an allophone of zero. Endangered vowels could at times be preserved by lengthening or, rarely, secondary gemination of the following consonant. Short vowels were often reduced to indistinct central vowels in later Punic, a development sometimes attributed to Berber influence. Vowel assimilation occurs in, e.g., Ugaritic (Huehnergard 2008, 269–275), Phoenician (Friedrich/Röllig 1999, § 93bis), Aramaic (Beyer 2004, 62), and Hebrew (as with *segholates*: */dalt-/ > */dalət/ > *dēlet* ‘door’), but also in other Semitic languages like Assyrian. The frequent lowering of stressed word-final */ī/ to /ē/ (Brockelmann 1908, 144) may be a hallmark of NWS, but cannot be verified in 2nd-millennium BC material. There are several instances of a dissimilation of the vowel sequence */a-a/ to /i-a/ and of two (mid-)high back vowels (Brockelmann 1908, § 94r).

Besides these general tendencies, the vowel systems of the individual NWS languages developed their own peculiarities. Normally, /ī/ and /ū/ remain stable. The “Canaanite Shift” of /ā/ > /ō/ in all environments is considered a feature singling out Canaanite from ca. the 15th c. BC onwards (Aramaic examples are late, Arabic ones controversial), but it arguably spread gradually and did in any case not affect Ugaritic (Friedrich/Röllig 1999, § 71). Exceptions in Tiberian Hebrew (*qattāl* nouns, the “perfect” of hollow roots like *qām* ‘he stood’, and verbs IIIy like *bānā* ‘he built’) could be explained as Aramaisms or analogical formations; evidence from Moabite and Ammonite names in cuneiform is conflicting. Within Canaanite, Phoenician exhibits a characteristic change (“Phoenician Shift”) */ā/ > /o/ in stressed syllables (e.g., λαβον < */laban/ ‘white’ or ναδωq < */nadar/ ‘he vowed’, Friedrich/Röllig 1999, § 78). Growing influence of Aramaic after the Babylonian Exile makes it difficult to individuate proper developments of Hebrew: anaptyxis of word-final consonant clusters (eventually leading to “segholates”), simplification of word-final geminates, vowel reduction (but spirantization of a following stop is often kept, as in construct forms like *dibrē* ‘words [of]’ [< */dabaray/] or *malkē* ‘kings [of]’ [< */malakay/], but *birkat* ‘blessing [of]’ vis-à-vis

brākā ‘blessing’), and */i/ > /ǎ/ before root-final gutturals apply to both (Beyer 2006, 169–171). Synagogal reading traditions, however, preserved a number of genuine Hebrew features, esp. lengthening of short vowels in open pre-tonic syllables where they would have disappeared in Aramaic. With nouns, stressed syllables, too, were lengthened following an extension of pausal pronunciation (but Blau 1968, 36 f. and others suggest that tonic lengthening took place much earlier). The corresponding lengthening grade of */i/ and */ū/ was /ē/ and /ō/ respectively, as */i/ was pronounced [ě] and */ū/ [ō] (this is sometimes viewed as a change of quality alone, i.e., “backing” or “lowering”, under the stress). In Tiberian Hebrew, diphthongs in closed syllables are often triphthongized when stressed: */yayn-/ > *yáyin* ‘wine’, but Ugaritic, Phoenician, and Israelite */yēn/; */mawt-/ > *mówet* ‘death’ (with vowel assimilation */a/ > /o/ before /w/ rather than ***máwēt*, see Gzella 2006b, 402 f.), but, perhaps due to inter-dialectal or Aramaic influence, */yawm-/ > *yōm* ‘day’). Shifts between */ǎ/ and */i/ in closed syllables are scattered across the evidence and their rules debated (Beyer 1984, 140 f.; Lambdin 1985). The loss of unstressed word-final long vowels around 100 BC was confined to Aramaic (Beyer 1984, 122–125).

The syllable structures *CV* and *CVC* are etymological. The loss of short word-final vowels added the pattern *CVCC* in 1st-millennium Canaanite and Aramaic. Between the 5th c. and 100 BC, word-final consonant clusters were broken up in Aramaic and Hebrew by a helping vowel (Beyer 1984, 112–115) which then turned into a full vowel. Spellings like αλφ ‘ox’ (< */alp-/) indicate that this did not happen in Phoenician until much later (Friedrich/Röllig 1999, § 96). Word-initial consonant clusters, too, tend to be resolved by anaptyxis or a prosthetic syllable (as in the Gt-stem prefix of the “perfect” and imperative). It is uncertain whether the syllable structure *CCVC* has to be excluded for NWS (except for words beginning with a glottal stop, which always takes a vowel), as has often been suggested. Leaving aside forms resulting from later vowel reduction like *ktab* ‘he wrote’ in vocalized Aramaic, word-initial *CC* is supposedly original for the imperative and in a few other words (Hoberman 1989). Since neither syllabic cuneiform nor Ugaritic alphabetic writing can render such clusters, one does not know whether they were resolved in any systematic way. In vocalized Hebrew and Aramaic texts, “overlong” syllables with a long vowel before a consonant were kept in Aramaic but shortened in Hebrew (as in Arabic). Evidence for the use of a long linking vowel before consonantal affirmatives in “hollow roots” in Ugaritic, if that vowel has indeed been inserted for phonotactic reasons, might suggest that the same rule worked there, too. As often in Semitic, two identical syllables tend to undergo dissimilation or haplology. Stress was originally perhaps not phonemic and varies in the historical languages; the Hebrew Masoretes mark a “pausal”, often lengthened, intonation for sentence-final or isolated words.

4. Morphology and morphosyntax

4.1. Pronouns

Among the *independent personal pronouns*, which mark the subject in verbless clauses and reinforce it in verbal ones, etymological */anāku/ ‘I’ has been preserved in Ugaritic

according to syllabic evidence, but turned into */anōkī/ (> 'ānōkī in Tiberian Hebrew) in the whole of Canaanite (by means of dissimilation after the shift */ā/ > /ō/ or analogy with the 1sg. suffix?); the likewise etymological variant */anā/ became the only form in Aramaic ('nky in Sam'alīan may be a Canaanism). The shorter variant also has a Hebrew reflex */anī/ (> 'anī); the vocalization of its cognate 'n in Ugaritic is unknown, but the /ī/ may be secondary in analogy with the longer variant, hence common NWS */anā/ is likely also to be the Ugaritic form. Analogy with the 1sg. has expanded the 1pl. form */naḥnu/ (< */niḥnu/?) 'we' to presumably common Canaanite */anaḥnū/ (*/anū/ > 'anū in later Hebrew, patterned after */anī/) and Aramaic */anaḥnā/ (with /ā/ as in the 1sg.), whose cognates in Ugaritic, Sam'alīan, and Deir 'Allā are unattested. In the 2sg./pl., */n/ assimilated consistently in pronunciation, hence */attā/ 'you' (m.sg., < */anta/) and */atti/ (f.sg., < */anti/), which in Classical Hebrew mostly has become 'at(t). With the 2/3pl. */attum(ū)/ 'you' (m.pl.) and */attin(na)/ (f.pl.), as well as */hum(ū)/ 'they' (m.pl.) and */hin(na)/ (f.pl.), Hebrew generalized the /i/-vowel of the fem. (2m.pl.: */attim/ (> 'attem) > 'atten, losing the final vowel in analogy with the 3m.pl.; by-form /attimmā/ patterned after the 2f.pl. in Qumran; 2f.pl.: */attin(nā)/ > 'atten(ā); 3m.pl. */him(ū)/ > hem(mā) in analogy with the 3f.pl.: */hin(nā)/ > hennā). Most of Aramaic, by contrast, gradually levelled the final /n/ of the fem. (in analogy with the "imperfect" 2/3pl.?), but preserved reflexes of the old vowel distinction (cf. the examples in Beyer 1984, 423). Ugaritic also has at least masc. dual forms *atm* (identical to the m.pl. in spelling) and, presumably, *hm*. Ugaritic, like Arabic, has a glide in the 3sg. (*hw*, pronounced /huwa/ according to syllabic spellings, and *hy*, supposedly pointing to /hiya/), whereas Canaanite and Aramaic have a glottal stop */hu'a/ 'he' > /hū(a)/ and */hi'a/ 'she' > /hī(a)/. It is disputed which one is older, as glottal stops and glides interchange in Semitic. Evidence is conflicting concerning the quantity of the final vowels in independent pronouns (e.g., 'anta in Arabic but 'attā in Hebrew), pronominal suffixes, and certain "perfect" affirmatives, hence they are often marked with the *syllaba anceps* sign in comparative grammars. This phenomenon can be explained in a traditional way by the workings of sound laws, by assuming another vowel quantity (i.e., not fully long, since alleged /ā/ in such cases did not become /ō/ in Hebrew), or by a difference between the phoneme and its realization. Aramaic also has enclitic forms of some independent pronouns. Within NWS, Ugaritic and Phoenician preserve traces of the old oblique pronouns for the 3m./f. (sg. *hwt* /huwati/ and *hyt* /hiyati/, pl. *hmt* */humūti/, in Ugaritic also the dual *hmt*, supposedly pronounced /humāti/). In Ugaritic, they express a genitive ('of him/her') or an accusative ('him/her'), whereas in Phoenician, the oblique form has replaced the nominative */hum(ū)/ in the pl.

Pronominal suffixes occur with nouns in the construct state, or prepositions, and with verbs in order to mark possession or a pronominal object. For the earliest stages of NWS, including Ugaritic, which also has created a first-person dual suffix /-nayā/ 'of the two of us' besides the inherited 2/3m/f ones (all unattested in 1st-millennium NWS), straightforward suffixed forms similar as in Classical Arabic can be reconstructed. But Canaanite and Aramaic are affected by many divergences: 1) different syllable structures of suffixed nouns and verbs; 2) the workings of analogy across paradigms; 3) the preservation of older forms protected by the suffixes. Nouns whose construct ends in a consonant generally take a linking vowel in the position of the former case vowel. Phoenician preserved vestiges of the genitive case (Gzella 2009c, 53), Hebrew largely

generalized the accusative /-a/ (the /ē/ sounds in the Tiberian pointing have a different origin), and Aramaic uses a vowel of the same quality as in the suffix. The 1sg. object suffix for verbs (/ -nī/ ‘me’) differs from the one for nouns (/ -ī/ ‘my’). Old Aramaic retains a reflex of the original 1pl. suffix ‘our’ (/ -na/), whereas Canaanite has replaced it by / -nū/ (cf. already *ru-šu-nu* ‘our head’, EA 264:18).

NWS has a *determinative-relative pronoun* */dū/ (> /dū/ in Ugaritic; Pennacchietti 1968) which inflects for case and, judging from Ugaritic *dt* as a f.sg. (/dātu/?) and m.pl. (/dūtu/?) plus comparative evidence, for number and gender. Connecting clauses and words, it can also act as a genitive marker. Except for archaisms like /zū/ in Old Byblian or Hebrew poetry (e.g., Ex 15:13.16; Hab 1:11), it has been replaced by the particle */ašar/ > ^ašer (allegedly related to the noun */ašar/ ‘place’) in Classical Hebrew; */ša/ > še in mostly later Hebrew goes back to an old Northern by-form (cf. ^š and š in Phoenician-Punic and other Canaanite idioms) which has been claimed to derive from */ašar/ (but see Holmstedt 2007). Aramaic, by contrast, has generalized the original genitive */dī/, which would not have been perceived as an oblique form anymore after the collapse of the inflectional case system, later /dī/ (> */dī/?) > /d(a)-/. These forms slowly substituted the construct state in later Hebrew and Aramaic, where they also underlie independent possessive pronouns. The *demonstrative pronouns* vary across NWS and defy reconstruction, but always contain the same “deictic” constituents /h/ , /n/, */d/ (> /d/ or /z/), /l/, and /k/. For the proximal deixis ‘this’, Ugaritic has *hnd* /hānādū/(?), possibly indeclinable, Hebrew *zē* (m.sg., < */dī/) and *zōt* (f.sg., < */da’t/), Aramaic */denā/ (m.sg.) and */dā/ (f.sg.). Hebrew can attach the definite article to a demonstrative in order to distinguish between definite noun phrases and equational clauses (cf. *hā-zē* *haz-zē* ‘this man’ as opposed to *zē hā-zē* ‘this is the man’), in all likelihood an innovation (Gzella 2006a, 14f.). These bases can be expanded by /h-/, as in many later Aramaic varieties. Hebrew *hallāzē* (m.sg.), *hallēzū* (f.sg.), *hallāz* (gender-neutral sg.), which occur in reported speech and are sometimes associated with medial deixis, may have a different etymology (Huehnergard 2005, 186; maybe a connection with Ugaritic *hnd* and the interchange between /l/ and /n/ is also possible). The corresponding pl. forms contain /l/, as in Hebrew and Aramaic *’ellē(n)* ‘they’ (< */ilī/). Their distal counterparts add /k/ to the base, like Ugaritic *hnk* /hānāka/(?) ‘that’ (m.sg.), *hnkt* /hānākatu/(?) (f.sg.?) or Aramaic *dek/* (m.sg.), *dāk/* (f.sg.), *’ellēk/* (pl.) and several by-forms. Hebrew, like Phoenician and some Aramaic varieties (e.g., Syriac), anaphorically uses the 3m./f. independent pronoun for distal deixis, Ugaritic perhaps as well (Gzella 2007b, 543–544). The *interrogatives* – besides an interrogative element */ay(y)/ – distinguish between animate (Ugaritic *my* /mīya/(?), Hebrew /mī/, Punic *mi*, Aramaic /man/ ‘who?’) and inanimate (Ugaritic *mh* /maha/(?), Hebrew /mā/ [< */mah/?], Punic *mu*, Aramaic /mā/ ‘what?’), the latter at times reinforced by a near demonstrative in NWS and elsewhere (e.g., Hebrew *mazzē*, Huehnergard 2005, 186–189). There is no common indefinite, so the word for ‘man’ (etc.) is used instead, but Ugaritic and Phoenician have *mnm* (pronunciation uncertain), Hebrew *m’ūmā* ‘whatever’.

4.2. Nouns

Nouns and adjectives, which regularly agree with nouns, inflect for masc./fem. gender and number (originally sg., dual, and pl., but the dual gradually disappeared and its

vestiges were later construed as pl.). Before ca. 1000 BC, NWS had an inflectional case system and, like Akkadian and Classical Arabic, distinguished between nominative (/u/), genitive (/i/), and accusative (/a/) in the sg. (“triptotic” declension); mimation in the sg. completely disappeared by the mid-2nd millennium BC. The pl. and dual had a “diptotic” differentiation between the nominative (m.pl. /ū-/ , fem. /ātu/; m.dual /ā-/ , fem. /at-ā-/) and an oblique case based on the genitive (m.pl. /ī-/ , fem. /āti/; m.dual /ay-/ , fem. /at-ay-/). The m.pl. case vowels are the long counterparts of the sg. ones except for the accusative; the reason might be that /a/ could not have been extended to the pl. when an older two-case system was expanded, because /ā/ was already the dual marker (Beyer 1984, 79–81). Together with Classical Arabic, Ugaritic exhibits traces of another diptotic system in the sg. consisting of the nominative (/u/) and an oblique case based on the accusative (/a/). Unlike Arabic, this is only well attested for personal names whose base ends in /-ān/ (Huehnergard 2008, 299), but because of the largely consonantal writing, its true frequency cannot be assessed. No satisfactory explanation for this phenomenon has been found so far. The nominative marked the grammatical role of the subject with transitive and stative or fientic intransitive verbs, in verbless clauses the ones subject and predicate; the genitive that of a possessive relationship with the preceding word and with all prepositions (at least some of which originate from nouns); and the accusative that of a direct object, various adverbial notions, and the predicate with certain markers (attested for /yānu/ [Ugaritic /ēna/] ‘there is not’ in Amarna). Amorite names challenge a neat reconstruction according to the standard model of Classical Arabic, since they also seem to attest an “unmarked” case unknown from later Semitic which, together with the form underlying the later accusative, appears to have a much broader, albeit seemingly inconsistent, functional range (Streck 2000, 283–290). The ending /-a/, for example, can mark an undetermined nominal predicate, as in /āba/ ‘he is (a) father’ (sometimes related to the accusative after /yānu/). Vestiges of such an older system may survive in Ugaritic, cf. instances of a zero-ending as in certain divine names (e.g., Dagan) or the expression *h napšk* /hē napšika/ ‘by your living power’, where /hē/ must derive from */hay/ (< */hayy/, Gzella 2007b, 545) without a case vowel. Supposedly, the oblique case could act as a kind of vocative, at least in the pl. After the loss of case distinctions due to the disappearance of short unstressed word-final vowels around 1000 BC, other means took over the respective functions. A notable example of structural convergence is the rise different though related direct object markers (Hebrew */ōt/ [< */āt/?] and */at/ [attenuated to ’et], as in Moabite; Phoenician ’yt; Western Aramaic yt; Sam’alian wt). Vestiges of morphological case marking survive in bound forms: Phoenician has traces of the genitive ending in suffixed sg. nouns (Friedrich/Röllig 1999, § 234; Gzella 2009c, 53), as evidenced by the spelling of the 3sg. suffix before nominative/accusative nouns (vocalic and thus not indicated) and before genitive nouns (indicated by -y for /-iyū/ , /-iyā/). Sam’alian preserved a distinction between nominative /-ū/ and oblique /-ī/ in the unbound and bound m.pl., hence different forms like *mlkw* (nom.) and *mlky* (obl.) ‘kings (of)’, whereas 1st-millennium Canaanite and Aramaic generalized the apparent dual ending */-ay/ > /ē/. The /-ā/ in some Aramaic adverbs like /barrā/ ‘outside’ has been explained as a remnant of the accusative by some (Leander 1928, § 47), but as a locative ending by others (Beyer 1984, 444).

In general, NWS languages externally mark pl. and dual. The unbound (*status absolutus*) m.pl. and dual forms preserve vestiges of mimation /-m(a)/ or nunation /-n(a)/,

cf. the Ugaritic m.pl. in /-ū-ma/ (nom.) and /-ī-ma/ (obl.) as opposed to the fem. /-ātu/ (nom.) and /-āti/ (obl.). Mimation (Ugaritic, Phoenician, Hebrew) or nunation (Aramaic, Moabite) varies across sub-families and is absent in Samʿalian, but /m/ and /n/ are prone to secondary change and nasalization. After the collapse of the case system in the sg., the oblique was generalized in the pl. by way of analogy (cf. Spanish *años* ‘years’ < Latin *annos* [m.pl.acc.]), and the short /a/ of the mimation/nunation likewise disappeared, hence Hebrew masc. /-īm/ (< */-īma/), fem. /-ōt/ (< */-āti/), or Aramaic masc. /-īn/ (< */-īna/), fem. construct /-āt/. The unbound f.pl. in Aramaic has been levelled under the influence of the masc., leading to secondary /-ān/. Fem. abstracts in /-īt/ have the pl. /-iyāt/ (> Hebrew /-iyōt/), which Hebrew extended to those in /-ūt/ (Aramaic /-uwān/, other NWS evidence is lacking). Other strategies of pl. marking reflect the complex semantic relationships between either an individual concrete being or a collective (e.g., a species) in the sg. and several concrete beings in the dual and pl. (Lipiński 2008). Only rarely in NWS do two different words form a paradigmatic relationship in which the one serves as the pl. of the other without external marking, such as Syriac *qṛīā* ‘village’ and *quryā* ‘villages’, whereas in Arabic, South Arabian, and (North) Ethiopian the same phenomenon occurs frequently (and thus constitutes, together with the L-stem, one of the two basic arguments for assuming the existence of a “South Semitic” branch, Blau 1978, 29f.). It is an unresolved problem whether such “broken plurals” in NWS reflect the incipient stage of a system that was later generalized in other Semitic languages or are fossilized remainders of an erstwhile common scheme. Other words (iconically?) expand a short sg. base by another syllable before external pl. markers, as in Ugaritic *bī* /bētū/ ‘house’, pl. *bhm* /bahatūma/, Phoenician *dl* /dal/ ‘door’, pl. *dlht* /dal(a)hōt/, Syriac *ʾahā* ‘sister’, pl. (only attested in the emphatic state) *ʾahwāā*. Seldom, the base is reduplicated, as in Aramaic */rabrabin/ ‘great ones’ (in Syriac dissimilated to *rawrbīn*) from */rabb-/ ‘great’. With the monosyllabic noun patterns *qatl*, *qīl*, and *qul*, as well as with their fem. counterparts ending in /-at/, such an expansion to a bisyllabic pl. base /qVtal-/ before the ending became regular in NWS, cf. Ugaritic *ḥa-ba-li-ma* /ḥabalīma/ ‘ropes’ (obl.; inconsistencies in Ugaritic may result from secondary and perhaps only incidental vowel reduction), Hebrew *mlākīm* ‘kings’ (< */mVlakīma/) or *mlākōt* ‘queens’ (< */malakātu/), with some exceptions, and very few instances in Aramaic, most of which have disappeared after the loss of short vowels in open syllables (with an analogous adjustment of spirantization to the new syllable structure, Nöldeke ²1898, § 93). This double marking distinguishes forms with an internal /a/-vowel from “real” broken pl.s, to which they are sometimes compared, and constitutes an innovation of NWS. The dual is generally formed according to the sg. base, hence /-ā-/ (nom.) and */-ay-/ (obl.; > /-ē-/ in, e.g., Ugaritic) plus mimation (in Ugaritic either /-ma/ or /-mi/) or nunation for the masc., the base with fem. ending /-at-ā-/ (nom.) and */-at-ay/ (obl.) for the fem. Dual forms were fully productive in Ugaritic, but became more and more confined to the number two, words which naturally come in pairs, and a few others in later Canaanite and Aramaic, where again the oblique ending has been levelled (cf. Hebrew *yādāyim* ‘a pair of hands’ with triphthongization of a stressed diphthong). Coexisting dual and pl. forms express semantic differences (Bauer/Leander 1922, 518–520).

Among those nouns treated as “feminine” in terms of concord, many are unmarked (e.g., */imm-/ ‘mother’), whereas others have an ending */-(a)t-/ in the sg. and its lengthened form /-āt-/ in the pl. To all these, the respective case vowel was once added.

Both endings */-at/ and */-t/ can be reconstructed; the preference seems to be mostly lexical and differed even in closely related idioms (e.g., Biblical Hebrew *šānā* ‘year’ < */šanat-/ , but Northern Hebrew, Phoenician, and Moabite /šat(t)/ < */šant-/). Yet in Aramaic by the time of the first textual witnesses, only /-t-/ occurs with forms which have further endings, including suffixes and affixes, otherwise /-at/ is preferred (Beyer 1984, 95 f.). The latter became /-ā/ in Southern Hebrew and Aramaic (as well as, independently, in some other Semitic languages: Blau 1980) in the absolute state except for some dialectal Hebrew forms (Bauer/Leander 1922, 510 f.) and Aramaic adverbs (see ch. 28.2). Often, however, the alleged fem. ending signals a particular thing (*pace* Brockelmann 1908, 404, it is not necessarily deteriorating) as opposed to the unmarked collective, cf. Hebrew *’oṇīyā* ‘ship’ vis-à-vis *’oṇī* ‘fleet’ (likewise in Ugaritic, Gzella 2007, 533), or, less frequently, the other way round. Some grammatical feminines end in /-ay/ (like Hebrew *gōḥay* ‘locusts’ or the by-forms *Šārā* and *Šāray* ‘Sara’).

The dimension “state”, finally, distinguishes between “unbound” (*status absolutus*) and “bound” (*status constructus*). The latter forms a prosodic unit with the following word, sometimes interrupted by a preposition or a particle, and expresses a genitive relationship. In those NWS languages which have morphological case markers, these are preserved, but the /m/ or /n/ in the m.dual and pl. drop out, as in Ugaritic /maqqaḥā/ ‘tongs (of)’ (nom.). 1st-millennium Canaanite and Aramaic (but not Sam’alian) replaced the bound, originally oblique, m.pl. ending */-ī-/ by what seems to be the dual form */-ay-/ (> /ē/), hence Hebrew *malkē* ‘kings (of)’ (Beyer 2004, 47), perhaps generalized from paired body parts. Protected by the stress unit with the following word, the fem. ending /-at/ did not change to /-ā/, cf. Hebrew *šānā* ‘year’ (abs., < */šanat-/), but *šnaṭ* ‘year of’ (cstr.). A few nouns like */ab-/ ‘father’ or */aḥ-/ ‘brother’ lengthen the case vowel in the cstr. as in Ugaritic /abū/ ‘father of’, Hebrew *’āḥikā* ‘your father’. The lengthened forms have been explained as old vocatives (Gzella 2006b, 400). In Aramaic, the postpositive definite article m.sg. */-ā’/ > /-ā/ (with long /ā/, since Aramaic */a’/ became /ē/), f.sg. /-tā/, m.pl. /-ayyā/ (in Eastern Aramaic replaced by Assyrian /-ē/), f.pl. /-ātā/, is also analyzed as a state (*status emphaticus/determinatus*). It is absent in Sam’alian and of controversial origin, but seems to have arisen together with the prepositive definite article /ha-/ with gemination of the following consonant in Canaanite (Phoenician, Hebrew, Moabite; Ancient North Arabian has a similar form *h(n)-*). The latter presumably evolved from the deictic particle */han/ which was already on its way to becoming a definite article in Ugaritic (Gzella 2007b, 543). Canaanite /ha-/ originally seems to have been a marker of subordination whose determinative function gradually increased (Gzella 2006a). Despite formal differences, the various manifestations of the definite article in NWS and Arabic began to behave similarly from a certain stage on, perhaps due to areal convergence: they are only attached to the last member of a construct chain and do not occur with suffixed nouns, most personal names, and predicative adjectives. Their particular determinative force may vary across NWS, though. Other morphemes like the terminative *he locale* in Ugaritic and Canaanite (/’aršah/ ‘to the earth’) are occasionally treated like case endings in grammars.

Cardinals except for ‘one’ and ‘two’ are nouns; those up to ‘ten’ are unmarked with fem. nouns and have the “fem.” ending, originally expressing a *nomen unitatis*, with masc. nouns. This was later, at times already in Ugaritic, replaced by straightforward agreement. ‘Twenty’ is the dual or pl. of ‘ten’; ‘thirty’ to ‘ninety’ are the plurals of ‘three’ to ‘nine’.

4.3. Verbs

All NWS verbal systems preserve traces of the same basic type. The *imperative* has been explained as the old nucleus and generally corresponds to the base of the “short imperfect”, i.e., */ktub-Ø/ (m.sg.), */ktub-ī/ (f.sg.), */ktub-ū/ (m.pl.), and */ktub-(n)ā/ (f.pl.) in the G-stem, each with the theme vowel of the verbal root between the 2nd and 3rd radical. This theme vowel is often /u/ or /i/ if the corresponding “perfect” has an /a/ but /a/ with /i/-class “perfects”; yet in many cases, it is unpredictable. Scholars who deny the possibility of word-initial consonant clusters in Semitic assume that the imperative base was originally bisyllabic (*/kutub/). But divergent forms in languages preserving short vowels in open syllables (e.g., Arabic *uqtul*, Akkadian *kušud*) point to an original base */ktub/ (Bravmann 1977, 197–199), whose unstable consonant cluster has been resolved in different ways. The imperative serves for positive injunctions (negated by /ʔal/ and the “short imperfect”), some of which became mere interjections. Its m.sg. can be expanded by the “cohortative ending” */-a/.

For the morphosyntax of the “*imperfect*” or “prefix conjugation” series, one can distinguish between an older and a younger type, each of which has a different distribution of the intersecting semantic categories of tense, aspect, and modality across the available forms. Like Classical Arabic, the older type, represented by the Canaanisms in the Amarna letters and Ugaritic (whose script discloses much relevant information), comprises three functionally, and in part also formally, distinct conjugations. They are created by adding to a base the endings of the imperative for the 2nd, in the pl. also for the 3rd pers. (in later Aramaic with */-nā/ > /-ān/ in the f.pl.), and preformatives (3m.sg./pl.: /ʔV-/; 2nd pers. and 3f.sg./pl.: /tV-/; 3f.pl. /yV-/ in Aramaic but unattested in Phoenician; 1sg.: /ʔV-/; 1pl.: /nV-/; with /y-/ > /l-/ or /n-/ in Eastern Aramaic), whose vowel originally depended on the theme vowel of the “imperfect” base: /a/ with a base in /i/ or /u/, but /i/ with a base in /a/ (“Barth-Ginsberg Law”, Huehnergard 2005, 180 f.). This instance of a more common dissimilatory tendency is regular in Amarna Canaanite and Ugaritic, but at best rarely attested in the Amorite names and only vestigial in vocalized Hebrew and Aramaic, where the prefix vowel /i/ has been generalized except for some types of weak verbs in the G-stem (evidence for earlier Aramaic is conflicting, cf. ch. 28.1). Amarna Canaanite and, at least for the most part, Ugaritic share an anomalous *t*-preformative in the 3m.pl., i.e., /taktubū(na)/, perhaps an analogy triggered by the use of the 3f.sg. */taktub-(u)/ with pl. subjects. The “short imperfect” (3m.sg. */yaktub-Ø/), often labelled “jussive” and akin to the Akkadian preterite, expresses deontic modality and punctual past (in Ugaritic, the latter is confined to poetry), but some scholars assume a difference in stress between past perfective */yáktub/ and deontic */yaktúb/ (Lipiński 2001, 344). The “long imperfect” (3m.sg. */yaktub-u/, with the long vowels of the 2f.sg. and 3/2pl. expanded by /-nV/) is used for present-future tense, durative or iterative past, circumstantial events, and various nuances of epistemic (sometimes deontic) modality; the /-u/ might be related to the Akkadian marker of subordination. The “subjunctive” (3m.sg. */yaktub-a/) acts as a volitive in main clauses and perhaps indicates subordination in some dependent clauses. Two “energetic” forms are often reconstructed on the basis of Classical Arabic as */yaktub-anna/ (/ -nna/ after vocalic endings) and */yaktub-an/, though the Amarna letters seem to point to */yaktub-unna/ (Rainey 2008; analogy with the pl.?). Their function is elusive; like pre-Classical Arabic, the Amarna letters often use them in questions and conditional

clauses, but in Ugaritic, they tend to occur in suffixed forms. Before suffixes, vestiges of the “energies” are preserved in forms without endings in Hebrew (with */-an-/ > /-ən-/ in context, Bauer/Leander 1922, § 48r), but gradually generalized in Aramaic (with */-an-/ > /-ən-/; Beyer 1984, 111 f.), replacing the suffixed “long imperfect”.

Following the loss of the unstressed word-final short vowels, most of these formal distinctions disappeared in Iron Age NWS, although the one between “short” and “long imperfect” is preserved in certain weak verbs in Hebrew and earlier Aramaic. Since the merger in the sg. made a coexistence of “short” */yaktubū/ and “long” /yaktubūna/ in the pl. obsolete, Hebrew levelled the old “short” form (e.g., Hebrew *yiktū* in the 3m.pl.; vestiges of the old ending */-ūna/ survive in the *nun paragogicum*: Gzella 2007, 161 f.). The individual NWS idioms found their own means to compensate for the resulting mergers by word order constraints allocating previously distinct conjugations to different positions or the appearance of new conjugations due to grammaticalization. Hebrew literary prose firmly linked the freestanding “short imperfect”, vestiges of which are preserved in Early Poetry, with */wa-/ ‘and’, thereby producing an innovative category *wayyiqtol* (the gemination of the preformative consonant indicates that this was felt as one single form) for chains of punctual past events in narrative; it was assigned the clause-initial position. Contrary to the normal “imperfect” *yiqtol* (< */yaqtulu/), deontic *yiqtol* (< */yaqtul-Ø/, “jussive”) also occupies the clause-initial position. In later Hebrew, the “short imperfect” disappeared. Perhaps due to contact-induced convergence, *wayyiqtol* also occurs in Moabite, yet not in Phoenician, which had its own high-status language. Phoenician lost the preterite “short imperfect”, but used the absolute infinitive as a 1st-person narrative past form. Neither does Aramaic dispose of an original narrative “short imperfect” (possible instances in, e.g., the Tel-Dan-inscription can be interpreted as borrowings from Hebrew or as “long imperfections” used as historical presents); in the course of time, it also lost the jussive. This process was accompanied by a gradual spread of the participle as a present-future form encroaching on various domains of the “long imperfect” which more and more retreated to the realm of modality (Gzella 2004). Contact with Aramaic reinforced the verbalization of the participle in post-exilic Hebrew. The subjunctive has left possible traces only in the Hebrew “cohortative” ending in /-ā/ (yet some scholars explain it as a pausal form of the “energetic” */-an/).

The “perfect” or “suffix conjugation” (3m.sg. */kataba/ for active verbs) expresses different types of past tense or completed action. Its origin from a predicative verbal adjective in a historical stage preceding NWS still appears in verbs denoting timeless qualities or mental states (e.g., */kabida/ ‘he is heavy’; another class for permanent states, like */qaṭuna/ ‘he is small’, is rare), some of which were later reanalyzed as active-transitive (e.g., √*hb* ‘to love’). Affirmatives with unknown original vowel quantities mark distinctions of person, number, and gender (1sg.: levelled from older */-ku/ to */-tu/ [> /-tī/ in Canaanite, /-t/ in Aramaic], as in Arabic; 2m.sg. */-ta/; 2f.sg. */-ti/ [later > /-t/ in Classical Hebrew]; 3m.sg. /-Ø/; 3f.sg. */-at/ [> /-ā/ in Hebrew, excepting suffixed forms]; 1pl. */-nu/ [> /-nā/ in Aramaic]; 2m.pl. */-tumu/; 2f.pl. */-tinna/; 3m.pl. */-ū/; 3f.pl. */-ā/ [merging with the masc. in Hebrew and some Aramaic varieties]). In Ugaritic poetry, as in Biblical Hebrew prose, it often marks the beginning, less frequently the end of a narrative sequence. The “perfect” also expresses various modal nuances and, in pre-Christian stages of NWS, performatives. Non-past usages, including gnomic expressions and future predictions, have also been explained as metaphorical

extensions of the past tense function. With the *w-qāṭal* or “consecutive perfect”, Hebrew prose created a counterpart to *wayyiqṭol* for deontic modality, future tense, and past iterativity. Presumably, it evolved from an older apodosis construction already attested in the Amarna letters (Moran 1961).

The active participle **kātīb-/* (for sound fientic roots) inflects like a noun, but became increasingly verbalized in Aramaic, where it has been extended to stative verbs, supposedly via fientic intransitive roots, and in Hebrew. The latter two often use “periphrastic” constructions with the participle, originally stative in meaning, of a main verb combined with either the “perfect” or the “imperfect” of the verb ‘to be’ for explicitly marking durativity or iterativity in the past resp. the future. The forms of the passive participle, by contrast, differ even between closely related idioms and have been generalized from distinct verbal adjectives: Hebrew has the *Tiefenform* **kātūb/* (**kutab/* seems secondary, cf. Bauer/Leander 1922, 287), whereas Ugaritic, Phoenician, and Aramaic have **katīb/*; both occur in Amorite names. Particularly in Aramaic, some forms take on an active meaning (e.g., Syriac *ʿīn* < **ṭaʿīn/* ‘loaded with’ = ‘carrying’). Under Iranian influence, Aramaic also developed a resultative, and later general past tense, active construction (Gzella 2004, 184–194). It radically changed alignment patterns in some Neo-Aramanic languages.

Productive *verbal nouns* in NWS follow different patterns. Ugaritic, Phoenician, and Hebrew have regular reflexes of **katāb-/* (“infinitive absolute”; Gzella 2010c). The same pattern occurs in some Aramaic varieties, but to a lesser extent. This form is often used adverbially or paronomastically (“to die a death”), creates temporal and purpose clauses with prepositions, or replaces a finite verb, mostly an imperative or a “perfect” (Gai 1982). Together with a 1sg. independent pronoun, the latter usage for past narrative is a characteristic trait of Phoenician. With prepositions and suffixes, Hebrew and Phoenician have a by-form **k(u)tub/* (“infinitive construct”) alleviating the functional load of *kātōb* < **katāb-/*. A few Old Aramaic texts and Samʿalian preserve a form without prefix (**ktub/?*) persisting until Achaemenid times in the fossilized quotative marker */lēmār/* ‘saying’. Most Aramaic languages, by contrast, employ a basic pattern **/maktab/* (> */miktab/* in later varieties; Fassberg 2007). All this indicates a somewhat loose association of verbal nouns with specific paradigms in early Semitic.

The phonetic structure of “weak” or “irregular” roots leads to divergences from sound verbs. Some phenomena are archaic retentions, others secondary modifications which differ per language; a decision is often difficult to make. Verbs *Iy*, most of which were originally *Iw*, generally drop the initial /y/ in the imperative and the “imperfect” (e.g., **ṭīb-/* and **yaṭīb-/* from *ṭīb* ‘to sit’) and, at least in Ugaritic and Canaanite, replace the infinitive by a fem. verbal *qilt*-noun based on the 2nd and 3rd radicals (**ṭibt-/*). Owing to the assimilation of /n/ in the “imperfect”, many verbs *In* form their imperative and infinitive accordingly. It is often assumed that both classes have evolved from biradical roots. NWS also exhibits assimilation of /l/ in the “imperfect” of *lqh* ‘to take’; its imperative and infinitive resemble those of verbs *In*. Some Old Aramaic texts spell out the /l/ but always have the imperative *qh* (Beyer 1984, 618); Aramaic also has **/-sl-/* > */-ss-/* in forms of the root *slq* ‘to ascend’ and **/-zl-/* > */-zz-/* in *ʾzl* ‘to go’. In verbs *IIūī* (“hollow roots”), the original vowel appears in the imperative, infinitive, and “imperfect” (**yaqūm-/*, **yašīm-/*; reduced to /u/ and /i/ in the short forms), but the “perfect” base indicates semantic distinctions: fientic verbs inflect like **qāma/*

‘he stood’ (/ā/, not */ō/, in Tiberian Hebrew suggests either Aramaic influence or secondary lengthening of a levelled allomorph with /ā/) or */mīta/ ‘he died’, stative ones like */būša/ ‘he was ashamed’. They take different vowel quantities and/or qualities in forms with consonantal affirmatives, cf. Amarna Canaanite *nu-uh-ti* ‘I have come to rest’ (EA 147:56), Hebrew *qamti* ‘I stood’, or Aramaic /qāmt/ (Huehnergard 2005, 176–178). The situation in Ugaritic and other epigraphic languages is unknown. For phonotactic reasons, Ugaritic and, in the C and N stems, Hebrew at times insert an */ā/-vowel before consonantal affirmatives, as appears from spellings like *btt* /bītātu/ ‘I spent the night’ or *h^aqīmōī* ‘I performed’ (Gzella 2010a, 63 f). The Canaanite G-stem participle of “hollow roots” corresponds to the “perfect” base, but its Aramaic equivalent inflects like a sound verb with a medial glide (*/qāyim-/ > /qāyem-/ ‘standing’, in some varieties > /qāʾem/). Verbs IIIw joined the class IIIy (Huehnergard 2005, 179 f.); forms like *atwt* /ʾatawat/ (pf.) ‘she came’ and *tity* /taʾtiyū/ (sh.impf.) ‘they came’ (< /ʔtw/y) show that this merger was already underway in Ugaritic, though vestiges lingered on in remote pockets (e.g., Moabite *yʾnw* ‘he oppressed’ [KAI 181:5]). Contraction turned verbs IIIy into IIIī (in Aramaic later merging with most verbs IIIʾ), a process beginning in Ugaritic, but (historical?) spelling causes inconsistencies; Old Byblian reflects an intermediate stage with preservation of forms IIIy in the “perfect” (Gzella 2009a). The base vowel /i/ has been largely generalized in the “perfect” in Hebrew. Ugaritic and Canaanite lack a reflex of the third radical in the “short imperfect” (*/yabniy/ > */yabn(i)/ > Hebrew *yīben* [with anaptyxis], but */yabniyu/ > */yabni/ > Hebrew *yībnē*), but Old Aramaic distinguishes between “short” *thwy* ‘may she be’ (KAI 222A:25) and “long” *thwh* ‘he will be’ (KAI 223A:4). Hebrew and Phoenician mostly have inf.cstr. forms IIIy ending in /-ōt/. Verbs *mediae geminatae* (II = III) show many inconsistencies: some forms behave like sound roots with a vowel between the second and third radicals, as in Amarna Canaanite 3m.sg. “imperfect” (+suffix 1sg.) *yi-ih-na-nu-ni* (EA 137:81, < /ḥnn ‘to show favour’; cf. Am 5:15) or Hebrew 3m.sg. “perfect” *sābab* (< /sbb ‘to turn’); others, like Ugaritic 3m.sg. “imperfect” *ysb* /ya-sub(b)/ and “perfect” *sb* /sabba/, Hebrew 1sg. *sabbōī*, Phoenician 3m.sg. *qb* /qabb/ (< /qbb ‘to curse’; also stative verbs in Hebrew like /tmm), or Aramaic 3m.sg. /ʾall/ > /ʾal/ (< /ʾll ‘to enter’), have a long second radical. Both types can be reconstructed for NWS (Huehnergard 2005, 171–176).

Derivational *verbal stems* as opposed to the unmarked G(round)-stem express modifications of *Aktionsart* and voice (Gzella 2009b). The D(oubling)-stem (3m.sg. “perfect” */kattib-/ [> /kittib/ in Canaanite], “imperfect” */yakattib-/ , participle */mukattib-/), characterized by a lengthened middle root consonant, conveys plurality (high transitivity verbs) or factitivity (low transitivity verbs). The C(ausative)-stem, which denotes causativity or an accomplishment, originally had a sibilant formative only preserved in Ugaritic (*/šaktib-/ , */yVšaktib-/ , */mušaktib-/); it shifted to /h-/ in Canaanite (with */haktib-/ > /hiktib-/ in the “perfect”; in Phoenician further to /yiktib/) and Aramaic, in Aramaic later to /ʾ-/ (Bravmann 1977, 200–205). Intervocalic /h/ was soon syncope in the “imperfect” (*/yVhaktib-/ > */yaktib/). The detransitivizing N-stem has a medio-passive meaning whose nuance differs per verb and is prefixed by /n-/ (*/naktab-/ , */yinkatib/ > */yikkatib/ , */naktab-/ , */na-/ shifted to /ni-/ in Hebrew); Aramaic lost the N-stem altogether. By means of a pre- or infixal /t/ (differing per language), the G, D, and C stems acquired reflexive-reciprocal and, in the case of the C and D stems, also medio-passive counterparts. The Ct was presumably already moribund in

Ugaritic (most examples are instances of the root $\sqrt{hwy}$). Infixation after a word-initial first radical led to anaptyxis with /i-/; as often happens, infixes turned into prefixes except for some archaic remainders. Aramaic */it-/ may be original or have developed from */hit-/, which, as in Hebrew, would have been borrowed from the C-stem (the few examples of a prefix */hit-/ in pre-Biblical Aramaic could also be hypercorrect spellings). A metathesis of the prefixed /t/ and a root-initial sibilant with partial assimilation is very common in NWS, although there are some exceptions. Ugaritic and Aramaic have a stable *t*-series, but Aramaic replaced the old Ct */ištaktab-/ by */it'aktab-/ > /ittaktab/. Gt and Ct dropped out in Hebrew except for some archaic place names and vestiges (esp. of $\sqrt{pqd}$ 'to muster': Jdg 20:15.17; 21:9); the Gt is attested in Moabite and Old Byblian, but not in later Phoenician. Unproductive forms were preserved or reintroduced as lexicalized borrowings. The infinitives vary in the individual languages. A state preceding NWS introduced "internal" passives to the G, D, and C stems with vocalic apophony (e.g., /kutiba/ vis-à-vis /kataba/ for the G-stem). Their low degree of markedness made them vulnerable: except for the passive participle, Aramaic lost them by the end of the first millennium, Hebrew lost at least the G-passive excluding some very common forms; there are no certain Phoenician examples. Many hollow roots and II = III replace their D-stem by allomorph patterns (3m.sg. /qōlel/ in Hebrew, partly /qawlel/ in Aramaic; the vocalization of their counterparts in Ugaritic and Phoenician is unknown). The few similar forms with sound roots in Hebrew are often viewed as remainders of a common L-stem and compared to the "third stem" in Arabic or I/4 in Ethiopic (a South Semitic isogloss according to others), but the Hebrew examples seem to act as instantaneous by-forms without a common meaning (Gzella 2010b). Several verbs migrated from G to a derived stem in the individual languages, sometimes excepting the participle.

5. Syntax

The statistically most frequent, though not necessarily unmarked, word order in many older NWS languages is VSO, possessor-possessed, and noun-adjective; fronting occurs for pragmatic reasons (Gianto 1990, 1–7). Clause structure in Aramaic became more flexible due to Akkadian and Persian influence, both of which often have SOV; this may have promoted the characteristic use of proleptic suffixes. Gender and number agreement, with attributive adjectives also definiteness, of Subject and Predicate can be overridden (e.g., sg. verbs, at times invariably in the 3m., often precede compound subjects; certain pl. subjects sporadically take f.sg. predicates: Levi 1987). Relative clauses are very often introduced by a marker, esp. with a definite antecedent, but always behave like main clauses. Circumstantial and consecutive clauses can be paratactic. Various constructions can express conditional statements (Gzella 2004, 281–286). Nominal clauses often follow the order Subject-Predicate and are equational ('A is B'), locative (with prepositions), or existential ('there is [not]'); the 3sg./pl. independent personal pronoun increasingly serves as a copula, but only inflects in Neo-Aramaic (Khan 2006).

6. Lexicon

The lexicon is easily affected by borrowing and cannot serve as a criterion for classification on its own, as numerous non-Semitic influences in the history of NWS demonstrate. But several common lexemes regularly used in one language are marginal or absent in another. Shared semantic shifts, too, bear on subgrouping, because individual words may survive in one particular language simply by chance. Register-specific distinctions also have to be taken into account, no less than the poetic tradition that links Ugaritic with Hebrew, and perhaps with other Canaanite languages. Comparative frameworks have often been applied for elucidating little-known functions of prepositions and particles in Hebrew poetry (Althann 1997, 5–24). Noteworthy differences remain: Ugaritic has no /min/ ‘from’; in prose and direct speech in poetry, the standard verbal root for ‘to say’ is $\sqrt{rgm}$ (rare or with a different meaning in other languages, cf. Akkadian *ragāmu* ‘to cry’, Arabic *raġama* ‘to curse, to conjecture’, and supposedly also Aramaic $\sqrt{trgm}$ ‘to translate’, on which cf. Lipiński 2001, 226); some basic lexemes are shared with Hebrew as opposed to other Semitic languages (e.g., *gg* ‘roof’; *tlhn* ‘table’; *hln* ‘window’; *yšn* ‘old’; *dqn* < **dqn* ‘old age’, cognates of the same word meaning ‘beard’ elsewhere in Semitic; *grš* ‘to expel’, also in Moabite; Ginsberg 1970, 103), others with Phoenician (e.g., $\sqrt{ytn}$ ‘to give’ against Hebrew $\sqrt{ntn}$; *hrš* ‘gold’, poetic in Hebrew; *bd* < *byd* ‘in the hand of’). Phoenician lacks the negative particle **lā* and normally uses /bal/ (rare/poetic in Ugaritic and in Hebrew; perhaps related to the optative particle in later Aramaic varieties), but has /mlk/ ‘king’ against Aramaic and vocalized Hebrew /malk/; as in Ugaritic, ‘ox’ means /alp/ (Aramaic /ṭawr/), only found in a few passages in Hebrew. The Semitic root $\sqrt{kwn}$ serves as the verb ‘to be’ in Ugaritic and Phoenician, but means ‘to be firm’ in Hebrew and Aramaic, as it does in Akkadian, whereas Hebrew has $\sqrt{hyy}$ and Aramaic the by-form $\sqrt{hwy}$. Aramaic peculiarities are **ḥad* ‘one’; $\sqrt{ll}$ ‘to enter’ (= Arabic $\sqrt{gll}$, rare and poetic in Ugaritic and in Hebrew); $\sqrt{mlk}$ ‘to advise’ (as in Akkadian; elsewhere: ‘to be king’); $\sqrt{ty}$ ‘to come’ (poetic in Ugaritic and, seldom, in Hebrew); and the *nisbe* /-āy/ (Canaanite **-iy/* > /-ī/). Other, spontaneous, divergences can be explained phonetically: Ugaritic **šamš-/* > /šapš-/ ‘sun’; Old Aramaic **napš-/* > /nabš/ ‘vital power’; common Aramaic **n/* > /r/ in **bVr/* ‘son’ and **tarēn/* ‘two’. Aramaic later developed a non-reconstructible noun pattern *qātōl* serving as a substantive to the participle.

7. Conclusion

It is hard to define NWS in genetic or geographic terms, since significant features are too few, too ambiguous, and too unevenly spread across the data in order to allow for a completely consistent subclassification or a dialectal map. The difficulties involved in tracing the change of the linguistic situation between the Late Bronze and Early Iron Ages and hence the exact background of the 1st-millennium languages are part and parcel of the problem. One neither knows when NWS begins nor when it stops. Yet the value of this slippery concept does not only lie in spotting weak isoglosses, despite the fact that there is some unity in the linguistic diversity. “NWS Philology” will continue to contribute to a more nuanced description of Hebrew by explaining

instances of variation, such as the conventions of Early Hebrew Poetry and its underlying *Dichtersprache*, or the use of dialectal by-forms. The same applies to idioms that have to be reconstructed from epigraphic fragments. NWS languages also share important structural similarities with Arabic and can thus contribute to long-term diachronic-typological perspectives on the development of constituent parts of the grammar, such as changes in the verbal system, their causes, and the reactions they trigger. From such a point of view, the emergence of the nominal and verbal systems in Phoenician, Hebrew, and Aramaic constitute different responses to similar basic conditions caused by the collapse of an older stage of development. Analogous processes can be observed in later phases, esp. in Neo-Aramaic or in Arabic vernaculars, even though they did not lead to identical results. Finally, it would be worthwhile to investigate the possibilities of a more dynamic stance and study Syria-Palestine as a linguistic area, not necessarily a dialect continuum only, with extensive contact despite fragmented topography and intersecting scribal traditions that promoted convergence. Hence, the material in question could also contribute to the recent debate about the value of positing areal phenomena as opposed to individuating individual instances of borrowing. The evolution of literary traditions, their historical circumstances, and the impact of social factors could rationalize for the spread of innovations. And so the hunt for the real NWS goes on.

8. References

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19. Amorite

1. Introduction
2. Phonology
3. Morphology
4. References

Abstract

Amorite is the oldest Northwest Semitic language known, attested in thousands of names and loanwords in cuneiform texts from about 2500 BCE to 1200 BCE. The central areas where Amorite was spoken are the Middle Euphrates valley and the Syrian steppe. The linguistic fragments allow a limited reconstruction of the phonology and morphology of the language.

1. Introduction

1.1. History of the Amorites

Amorites occur in Mesopotamian cuneiform texts from the mid-3rd millennium BCE onwards under the names *Mardu* in Sumerian or *Amurrû* in Akkadian. Already in the texts from Ebla they are associated with the area of the Middle Euphrates and the Syrian steppe. At the end of the 3rd millennium BCE they infiltrated Babylonia and founded ruling dynasties in numerous city states. During the first half of the 2nd millennium BCE, the Amorites of Babylonia were absorbed by the Mesopotamian population and eventually disappeared from the cuneiform sources. By contrast, at the same time, the Amorites of Syria are amply attested in the cuneiform archives from Mari and other cities. These archives especially show that the Amorites had tribal structures and were often sheep-grazing semi-nomads, at least in the Middle Euphrates region and the Syrian steppe. In Syria, Amorites are attested until about 1200 BCE. Shortly afterwards, we meet the first Aramaeans in roughly the same region. For summaries of the history and culture of the Amorites see Kupper (1957), Luke (1965), Buccellati (1966), Matthews (1978), Edzard (1987), Anbar (1991), Whiting (1995), Streck (2000, 24–76, 2001, 2002a, 2004a, 2004b).

1.2. What is the “Amorite” language?

This question can be answered with a modern and an ancient definition.

In the modern definition adopted here, the term “Amorite” designates the language of all names and loan words in Akkadian and Sumerian cuneiform texts from the mid-3rd millennium BCE until about 1200 BCE that are Semitic but not Akkadian. To the degree that these linguistic fragments allow a more precise analysis, all of them belong

to the Northwest Semitic branch; no other Semitic branches are clearly attested. The question whether “Amorite” in this broad definition consists of different Northwest Semitic languages or dialects is almost irrelevant for several reasons: a) The possibility of recognizing different languages or even dialects is severely limited on the basis of names and loan words alone; b) In the 2nd millenium BCE Northwest Semitic might rather have consisted of a dialect cluster than of different languages which developed only later. In this connection it must be stressed that Amorite does not show traits which would support an unequivocal classification as Canaanite or Aramaean. c) The area where Amorite is attested is not larger than the area occupied by Akkadian and smaller than the area later occupied by Aramaean: the relatively well-defined core area encompasses the Middle Euphrates valley and the Syrian steppe, whereas Babylonia and Northwest Syria already constitute the periphery of the Amorite language area. For attempts to classify Amorite see Streck (2000, 80–82, 131–134, with previous literature) and Knudsen (2004). For the area occupied by Amorite see Streck (2004a), based on an ethno-linguistic analysis of about 17800 names; the criticism of Charpin/Ziegler (2007, 72 n. 37), based on the single name Yašma‘-hadda, is unfounded; see the methodological remarks in Streck (2004a, 318–320, esp. 319) on the irrelevance of single names.

The term “Amorite language” is also attested in Akkadian cuneiform texts and, from a Babylonian point of view, defines a language in contrast to languages called “Sumerian”, “Akkadian”, “Subarian” (probably Hurrian) and “Elamite” – languages which are all well defined. We do not know whether the ancient definition of Amorite and our modern one are completely congruent. However, since in the Mari texts Amorite is mentioned side by side with Akkadian and Subarian, each corresponding to the three main languages known from personal names, i.e., Northwest Semitic, Akkadian and Hurrian, it is probable that what the Babylonians called “Amorite” and our modern definition of the language at least overlap to a greater extent. For attestations of “Amorite language” in cuneiform texts see Streck (2000, 76–80) and Charpin/Ziegler (2007).

1.3. Sources

Amorite in the modern sense defined above is attested by roughly 90 certain loan words and about 7000 different names (mostly personal, rarely geographical names) which roughly correspond to 11600 words of text. Not a single Amorite text is known. For loanwords see Streck (2000, 82–128) and Knudsen (2004). The largest collection of names is still Gelb (1980); names from this collection are quoted below by the running number of the index. Names of women are marked by “(F)”. For an analysis of Amorite names see Streck (2000) with a review of the previous literature ib. 131–134; Mugnaioni (2000) is outdated. Knudsen (2004) offers a “comparative statement” on the Amorite vocabulary. For the size of the material compared to other ancient text corpora see Streck 2011.

2. Phonology

Vowel phonemes are /a/, /i/, /u/, /ā/, /ī/, /ū/, with [e] as an allophone of /a/ and /i/ (contra Mugnaioni (2000, 59) no proof of /ō/). Consonantal phonemes are /b/, /p/, /m/, /w/, /d/,

/š/ (= “/t/”, pronounced [t̪]; Mugnaioni ib. 60 confuses traditional transcription and phoneme), /d/, /t/, /t̪/ (pronounced [tʰ]?), /n/, /r/, /l/, /s/ (merger of Proto-Semitic */š/, */s/, pronounced [s]?, contra Mugnaioni ib. 60 no trace of two independent phonemes), /z/ (pronounced [dz]), /s/ (pronounced [ts]), /ʃ/ (perhaps merger of Proto-Semitic */z/, */š/ and */d/, pronounced [tsʰ]?, or still distinct phonemes not distinguishable in cuneiform, see Streck (2000, 229 f.), but with incorrect etymology of YŠʔ, and Knudsen (2004, 319 f.), /y/, /g/, /k/, /q/ (pronounced [kʰ]?), /ḡ/?, /ḥ/, /ʕ/, /h/, /ḥ/, /ʕ/. The diphthongs /ay/ and /aw/ are preserved in the majority of cases. See Streck (2000, 151–256) for Amorite phonology as exhibited by names and ib. 128 for Amorite phonological traits in loan words.

3. Morphology

3.1. Pronouns

Personal pronouns: Suffix gen. 1. sg. /ī/: *ʿAmmī-šaduq* 1903 “My paternal uncle is just”; after vowel /ya/: *Liya-[s]itru* 4361 “The protection is for me”. 2. sg. m. /ka/: *Laka-ʿel* 4274 “(The) god is for you”. 1. pl. /na/: *Lana-Hadda* 4305 “Hadda is for us”. A gen./acc. suffix 3. sg. m. /hu/, f. /ha/ most probably does not exist (Golinet 2010). Independent nom. 3. sg. m. /šū/: *Šū-mālīka* 5586 “He is counsellor”. F. /šū/: *Šī-rāma* 5521 “She is lofty”.

Determinative pronoun /dū/: *Dū-ʿadnim* 6630 “He of pleasure”.

3.2. Nouns

Case: Nom. sg. /u/ and gen. sg. /i/ in the status rectus. Many nouns in names do not have any case vowel (0-case = status absolutus). The vowel /a/ is never attested for the acc. object, but: a) Often after a long consonant: *Hadda* “(name of the weather god)”. b) Often with the element *ʿila* “god”. c) Rarely with other name elements, e.g. *dītāna* “aurochs(?)”. For references for the case vowels (including /o/) see Streck (2000, 264–280). The distribution of the /a/-vowel proves that it is most probably a variant of the status absolutus which is otherwise vowelless; for other, unlikely earlier interpretations see Streck (2000, 283–290). Mugnaioni (2000, 62) repeats an alleged predicative function of /a/, although it is clear that /a/ has different functions. According to Knudsen (2002, 151) /a/ would be “a particular marker of name final position”, although he admits (p. 150) that /a/ also occurs – as a predicative – in word initial position and the ending /o/ basically has the same distribution; this makes it more probable that the choice between /o/ and /a/ is at least partly phonologically conditioned. Historically, this /a/ might be a remnant of an old absolutus-marked nominative system and identical with the /a/ of the acc. (Streck 2000, 288–290 with previous literature; note that Streck twice incorrectly uses “absolutive” instead of “absolutus”). However, as was shown by Waltisberg (2002), this can not be adduced as evidence for an old ergative system of Semitic. This suggestion is not based on the absence of an object construction in the Amorite onomasticon, as suspected by Knudsen (2002, 151), but on the predicative

function of the acc.-ending in Classical Arabic in certain syntactic positions and traces of the same function in Cushitic and Berber as well as on the quotative function of /a/ in Eblaite, Old Akkadian and Ancient Egyptian (see the literature in Streck 2000, 288–290).

State: Besides the status rectus and the status absolutus, the status constructus is frequently attested in personal names. It mostly preserves the case vowels: ‘*Abdu-‘anat* 1844 “Slave of ‘Anat”. /u/ of the nominative often becomes /i/ before /y/ (pace Tropper 2001, 743): ‘*Abdi-yaraḥ* 613 “Slave of Yaraḥ”. After a short open syllable /u/ may be deleted: *Mut(u)-bišir* 4846, 4810 “Man from Bišir”. See Streck (2000, 291–306).

Gender: The fem. noun has the endings /(a)t/, in pausa also /a/, see Streck (2000, 312–317).

Number: For the dual perhaps see the geographical name *Dumtālēn* (Streck 2000, 306) “Two towers”. The pl. is not attested in names (Streck 2000, 306–308; Knudsen 2002, 152 is still “undecided”). Loanwords, however, prove a broken plural of QaTL-nouns (Streck 2000, 127, and Knudsen 2004, 325 f.): *šamarātu* (a type of sheep), *raba-bātu* “ten thousand”.

Noun patterns: see Streck (2000, 319–356). Note that the noun patterns *maQTiL* and *meQTiL* are not participles of an H-stem (ib. 336–339, contra Mugnaioni 2000, 63).

3.3. Verbs

3.3.1. Inflection and derivation

Tab. 19.1: Derivation and inflection of the Amorite verb

Paradigm:	G-stem	Gt-stem	D-stem	S-stem(?)
Preterite				
3. sg. m.	yaQTvL	yaQtaTaL	yaQaTTiL	–
3. sg. f.	taQTvL	taQtaTaL	–	–
1. sg. c.	’aQTvL	’aQtaTaL	–	–
Precative				
3. sg. m.	laQTvL	–	laQaTTiL	–
Imperative				
2. sg. m.	QiTaL	QitTaL	–	–
Participle, active	QāTiLum	–	muQaTTiLum	–
Participle, passive	QaTūLum	–	–	–
Stative				
3. sg. m.	QaTvL	–	–	–
3. sg. f.	QaTLa	–	–	–
Verbal adjective				
sg. m.	QaT(v)Lum	QataLTum	Qa/uTTuLum	saQTaLum(?)
sg. f.	QaT(v)Latum	QataLTatum	–	saQTaLatum(?)

Personal affixes: 3. sg. m.: *Yantin-yiraḥ* 2988 “Yi/araḥ has given”. 3. sg. f.: *’Annu-tašma’* 837 (F) “’Annu has heard”. 1. sg. c.: *’Ašūb-la-’el* 535 “I have turned to the god”.

Preterite: Dynamic-transitive verb: *Yašma’-Hadda* 3110 “Hadda has heard”. Dynamic-intransitive verb: *Yabruq-’el* 2813 “The god has shone”. Stative verb: *Yašduq-’el* 3087 “The god has proved to be just”.

Precative: *Lamlik-’el* 4228 “Let the god counsel”. Imperative: *Šūb-’ila* 5956 “Turn to face, o god!”.

Participle: Active: *’Ammu-rāpi* 1911 “The paternal uncle is a healing one”. Passive: *Natūnum* 5014 “Given”.

Stative: 3. sg. m.: *’Abī-yatar* 96 “My father is excellent”. 3. sg. f.: *’Annu-yatra* (F) 816 “’Annu is excellent”. For an analysis of these and other forms as stative similar to the Akkadian stative (i.e., predicative 0-case of the adjective) see Streck (2000, 282 and 309) (which escaped the notice of Knudsen 2002, 149 and 151).

Verbal adjective: Sg. m.: *’Aminum* 421 “True”. Sg. f.: *Kabida* (F) “Heavy”.

Gt-stem: Preterite: 3. sg. m.: *Yantaqim* 2980 “He has been avenged”. 3. sg. f.: *Ta’tamar* 5970 “She has been seen”. 1. sg.: *’Ammīštamar* 1895 < **’Ammī-’aštamar* “I have praised my paternal uncle”. Imperative: *Hitlal-’akka* 2265 “Praise Akka!”. Verbal adjective: Sg. m.: *Bataḥrum* 1148 “Chosen”. Sg. f.: *Batahra* (F) “Chosen”.

D-stem: Preterite: 3. sg. m.: *Yakīn-hadda* 3284 “Hadda has made firm”(?) (cf. Akkadian *ukīn*); but note the name *Yakīn-/Yakūn-ū-ru-ba-(am)* (unexplained) Florilegium Marianum 2 p. 93 no. 52: 4; 53: 3; p. 94 no. 54: 3; ARM 23 p. 626, which rather points to dialectal variants. *’Ibaššir* 2397 < **Yabaššir* (cf. Akk. *bussurum*, Hebr. *biššar* etc.) “He has brought the good”. The prefix /ya/ for D-stem 3. sg. m. is probably also attested in Ugaritic, see Streck (2002b, 190). Precative: *Lakīn-haddu* 4278 “Let Haddu make firm”(?). For the verbal adjective see Streck (2000, 332 f.).

S-stem: Verbal adjective: Sg. m.: *Šaḥbaru*(?) ARM 16/1, 175 “Ally”. Sg. f.: *Šaḥbaratum* (F) (?) T.210 “Ally” (hardly a quadriliteral animal name, as proposed by Durand 1998, 499 f.). *Saklalu* ARM 22 p. 592 “Perfect(ly made)(?)”; cf. *Yaklal-nār* ARM 22 p. 601 “Nār has proved to be perfect”.

Note that a H-causative, in view of Ugaritic, is neither expected nor clearly attested in Amorite (see Streck 2000, 336 f., contra much of the previous literature including Gelb 1980, but also the recent contributions of Mugnaioni 2000, 63; Knudsen 2004, 321 on the loanword *naḥālum*): names with stem-vowel /i/ are often to be analyzed as G- or D-stem. Cf. *Ia-te-ir-e-da* 3549, which stands for G preterite *Yaytir-yidda* “Hadda has proved to be excellent” compared with *Yatar-hadda* 3542 “Hadda is excellent” with a G stative of the same root, and *Ia-ki-in-^dIŠKUR* 3284, which seems to be analyzed as D preterite *Yakīn-hadda* “Hadda has made firm” compared with *Yakūn-hadda* 3335 “Hadda has proved to be firm” with a G preterite of the same root.

A present tense of Akk. type (*yaQaTTvL*), assumed by von Soden (1985), is not clearly attested. For some of the names alternative interpretations are possible: *’Ibaššir* is a D-stem. *Ia-ḥa-at-ti-DINGIR* 3242 does not contain any verb, but a noun: *Yahattī-’el* < **Yahadtī-* “The god is my uniqueness”. The other names quoted by von Soden are still unclear; in no case has the root of the name elements in question been determined.

The existence of a perfect of the West Semitic type (*QaTaL*) has often been assumed (see again recently Mugnaioni 2000, 63). However, many of the name elements in question must be analyzed differently: as a stative G, e.g., *’Abī-yatar* 96 “My father is excellent”; as a participle G of a verb mediae W/Y, e.g.: *Šāb-el* 5779 “The god is a

turning one”; as a participle G of a verb III-², e.g., *Šumi-rāpā* 5601 < *-*rāpīʾa* “Offspring of the healing one”; as a noun, e.g., *Malak-ʾilī* 4474 “My god is king” (cf. *Malaku-ʾil* 4475, which clearly proves a noun *malaku*), or *Yašartī-ʾel* 3446 “The god is my justice”. Given that *QaTaL* penetrates the West Semitic onomastica on a larger scale only in the first mill. BC (Streck 1998, 132), it cannot be expected frequently in Amorite, if at all.

3.3.2. Strong and weak verbs

Strong verb: For *yašmaʿ* and *šimaʿ* see 3.3.1, above. *ʿAmmī-šaduq* 1903 “My paternal uncle is just”.

Tab. 19.2: Paradigm of strong and weak verbs

Paradigm:	Preterite	Imperative	Participle	Stative
Strong	yašmaʿ	šimaʿ	ʿādir	šaduq
I- ²	yaʾūš	—	—	—
II- ²	yarʾib	—	—	—
III- ²	yarpaʾ	—	rāpīʾ	—
I-n	yantin	—	nāqim	—
I-y	ʾiṣī	—	—	—
	yaytir	—	—	yatar
II-w/y	yašūb	šūb	šāb	kīn
III-y/w	yabnī	—	bānī	—
II-geminatae	yaḥun(n)	ḥun(n)	—	ḥanna

I-², II-², III-²: *Yaʾūš-ʾel* 3578 “The god has given as a present”. *Yarʾib-ʾel* 3060 “The god has repayed”. *Yarpaʾ-hadda* 3071 “Hadda has healed”. The spelling *Ḥa-am-mu-ra-bi-iḥ* for *ʿAmmu-rāpīʾ* “The paternal uncle is a healing one” makes it probable that syllable closing /ʾ/ is often preserved (Streck 2000, 235; Knudsen 2004, 319 seems to distinguish between pre-consonantal /ʾ/ and word-final /ʾ/, for which I see no base).

I-n: *Yantin-yiraḥ* 3129 “Yaraḥ has given”, also with assimilation of /n/ to the following consonant: *Yattin-yiraḥ* 2988. *Nāqimū* 4991 (NQM “to avenge”, hypocoristic name).

I-y: In Amorite, word initial */w/ becomes /y/. This proves that Amorite belongs to Northwest Semitic. Reconstruction of the preterite is difficult; perhaps we must distinguish two types, as in Akkadian (cf. dynamic *uṣī* as against stative/adjectival *ūtir*): *ʾIṣī-šalim* 2610 “The friendly one has appeared” and *Yaytir-yidda* 3549 “Hadda has proved to be excellent”.

II-w/y: *Yašūb-līm* 3513 “The tribe has turned to face”. *Šūb-ʾila* 5956 “Turn to face, o god!”. Participles have the typical Northwest Semitic (Streck 2000, 127; Knudsen 2004, 326) form QāL: *Šāb-el* 5779 “The god is one who turns to face”. *Kīna-ʾilī* 4075 “My god is firm”.

III-y/w: *Yabnī-dagan* 2810 “Dagan has created”. *Bānī-mēl* < *-*ma-ʾel* 1129 “The god is the creating one”.

II-geminate: *Yaḥun(n)-ʾel* 3267 “The god has proved to be gracious”. *Ḥun(n)-šulgi* 2344 “Be gracious, o Šulgi!”. *Ḥanna-hadda* 1935 “Gracious is Hadda”.

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20. Ugaritic

1. Introduction
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Abstract

Ugaritic is the oldest language of the Northwest-Semitic group for which a sizeable corpus of texts is preserved covering a wide range of literary types. For this reason, it is important both for the linguistic history of the Semitic languages and for the study of all aspects of the culture of a city-state in Syria of the Late Bronze Age.

1. Introduction

Ugaritic provides the oldest sizeable corpus of texts in a Northwest Semitic language, approximately 2000 texts, though many are fragmentary, representing a broad spectrum of literary genres (mythological, ritual, divinatory, epistolary, legal, economic, pedagogical). Virtually all of these texts have been discovered in the ruins of the ancient city of Ugarit (modern Ras Shamra), capital of a kingdom that went by the same name, also attached to the language by its discoverers. This kingdom covered approximately 2000 sq km and was located on the Mediterranean coast with its center a few kilometers north of the modern city of Lattakia and the mouth of the most important river of the area, the Nahr el-Kebir, ancient *Raḥbānu*. The city was destroyed in *ca.* 1185 B.C., and the Ugaritic texts date for the most part to the last half-century of its existence. Ugaritic was the native language of the area and it was used primarily for expressing various aspects of the local culture. Akkadian was also used extensively at Ugarit, primarily for international communication and for legal matters. Many fewer texts reflect the important Hurrian element of the population (inscribed in both syllabic and alphabetic systems) and even fewer are known in Egyptian and Cypro-Minoan. The Ugaritic language entered the purview of scholarship relatively recently, having been discovered only in 1929 and deciphered over the following two years (see Day 2002 for the details of the decipherment; Bordreuil and Pardee 1989 for a catalogue of inscribed objects from Ras Shamra and the neighboring site of Ras Ibn Hani through 1988).

The linguistic classification of Ugaritic has been the object of much debate, isoglosses with Amorite, Arabic, Aramaic, or Canaanite being stressed by one scholar or

another. More recently, Tropper (1994) has demonstrated a series of important isoglosses with Canaanite that led him to identify the language as Northern Canaanite. Ugaritic showed, however, a series of archaisms with respect to contemporary Canaanite, and, rather than identifying it as a form of Canaanite, it might be better to see it as a representative of the older linguistic entity from which Canaanite as we know it developed, i.e., from one of the Amorite languages. According to this view, Ugaritic and Canaanite would have been linguistic cousins rather than sisters (Pardee forthcoming a).

As attested, Ugaritic is essentially a one-period language (see 2. on the date of the invention of the Ugaritic script) and few data are attested on dialectal differences. The clearest dichotomy is between texts in poetry and in prose, for the former show morpho-syntactic and lexical features distinct from the latter. A few letters found at Ugarit show distinctive orthography/phonology and morphology and may reflect the use of Ugaritic outside the metropolis or even outside the kingdom. At present, there is no explicit evidence extant for the setting down of the local language in writing before the invention of the cuneiform alphabetic system, and one must assume, until such evidence should appear, that written communication was expressed in Akkadian before this time.

2. Script

The Ugaritic texts are set down in a script that is peculiar to Ugarit and was almost certainly invented there. The texts are inscribed on clay tablets in a cuneiform alphabetic system that appears to be an imitation of the linear alphabetic writing systems attested in the corpora known today as Proto-Sinaitic and Proto-Canaanite. The graphic inventory consists of thirty signs, of which twenty-seven may be identified as corresponding to the basic consonantal inventory while the other three were added at some point, probably to facilitate the writing of other languages, in particular Hurrian and Akkadian, in this script. These signs were arranged in a conventional order, as is illustrated by an important number of abecedaries. This order corresponds to that attested later for the Canaanite languages and Aramaic, with the additional graphemes distributed according to unknown criteria (e.g., {h} after {g}), indicative of the archaic Northwest-Semitic order in use before various consonantal fusions led to simplifications of the writing systems. Indications of disparity between the graphic system and phonology may be taken as evidence that the cuneiform adaptation was applied either to a linear system that had already been in use at Ugarit for some time or to one that was borrowed from users of a closely related but phonetically distinct language.

A very small number of texts from Ugarit and from neighboring sites show fusions of signs, e.g., {t} for /t/ and /s/. To date, however, no abecedarly is attested for this form of writing, and it is uncertain whether it represents a single system of reduced consonantal phonemes or two or more; equally uncertain is whether the language of any given text is Ugaritic or another Northwest Semitic language, perhaps corresponding to an early form of what came to be known as Phoenician.

Finally, an abecedarly discovered in 1988 that is arranged in the {h, l, ḥ, m} order and shows several formal dissimilarities with the standard writing system illustrates the

knowledge at Ugarit of a varying alphabetic cuneiform tradition, one otherwise known only from a similar abecedarly discovered at Beth-Semesh in Palestine in the 1930's. Because no texts are yet attested inscribed in this system, the principal language which it was devised to represent remains unknown.

It was long thought that the Ugaritic writing system had been invented in the second half of the fourteenth century, but the absence of hard data for so early an origin has recently led to the hypothesis that a date *ca.* 1250 is more plausible, that is, shortly before or during the reign of Ammistamru II. (For bibliography and overviews on the three alphabetic writing systems and the date of invention of the cuneiform alphabet, see Pardee 2007 and forthcoming a.)

3. Phonology

With its twenty-seven consonantal phonemes represented by the writing system, Ugaritic phonology is the most archaic attested to date for any of the Northwest Semitic languages (it lacks the {ḏ} of Arabic as well as the {ś = s₂} of Old South Arabian). A comparison of the Ugaritic consonantal inventory with that of the first-millennium Canaanite languages shows the following correspondences:

Ugaritic

ā b g ḥ d h w z ḥ ṭ y k š l m ḏ n ṣ s' p ṣ q r ṭ ḡ t i ū š

First-millennium Canaanite

ʾ b g d h w z ḥ ṭ y k l m n s' p ṣ q r š t

The writing is basically consonantal, but two of the extra signs mentioned in section 20.2. allow for a reconstruction of the vocalic system for they are variants of the first sign, *alif*, and all three signs are used frequently as syllabograms representing /ʾ/ + vowel. Thus the first sign, {ā}, may represent /ʾa/ or /ʾā/, the twenty-eighth, {i}, may represent /ʾi/, /ʾī/, or /ʾê/, and the twenty-ninth, {ū}, may represent /ʾu/, /ʾū/, or /ʾô/. In addition, a certain number of Ugaritic words are attested in the Sumero-Akkadian syllabic script, either in a special column added to traditional vocabulary lists in which Ugaritic equivalents are indicated or in texts otherwise written in Akkadian.

On the basis of these indicators, an archaic vocalic phonology has been reconstructed: /a,i,u/ and /ā,ī,ū/ would have been the primary vowels, with /ê/ and /ô/ having arisen by simplification of the diphthongs /ay/ and /aw/. Evidence for vowel reduction or syncope is sparse and inconclusive. The diphthongs consisting of a short vowel followed by /y/ or /w/ had reduced in an earlier stage of the language and are not represented in the writing (an isogloss with Phoenician, against Hebrew and Aramaic). Triphthong reduction is a much more complicated matter, with many apparently contradictory data (see Tropper 2000, 194–200 and Pardee 2003–2004). The so-called 'Canaanite shift', /ā/ > /ō/, well attested in fourteenth-century Canaanite as well as in the first-millennium Canaanite dialects (principally Phoenician and Hebrew), had not occurred in Ugaritic.

As is the case across the Semitic languages, consonantal and vocalic phonology is affected by the presence of one or more of the so-called 'weak' consonants, which may disappear bringing about modifications of vowel quality and/or quantity (particularly

the semi-consonants /w/ and /y/) or simply modify vowel quality (in the case of /ʾ, ʿ, h, ḥ/, particularly in verbal forms). Thus ‘weak-root’ outcomes in all parts of speech are a necessary category of Ugaritic grammar, but one rendered problematic, as in the case of many of the ancient epigraphically attested languages, by the consonantal writing system. This problem is alleviated in part for Ugaritic by the use of the three /ʾ/-signs as quasi-syllabograms (e.g., we know that {šil}, ‘he asked’, was pronounced /šaʾila/ because of the presence of {i}).

4. Morphology

A description according to the categories of substantive, verb, and particle, is adopted here. It is based on the observation that substantives are marked for gender, number, and case, but not for person, while verbs are marked for aspect/tense (as well as for voice and mood in certain forms), person, gender, and number, but particles generally show a single form. Such a definition requires, however, the recognition that these principal categories overlap in important yet relatively easily definable ways, e.g., pronouns include a category dedicated to expressing person, verbs show productive nominal and adjectival categories, respectively the infinitive and the participle, and many particles have evolved from substantives.

4.1. Nouns

Nouns and adjectives are marked for gender, number, and case; these markings on pronouns, though present, are much less regular.

The gender, number, and case markers on nouns and adjectives are affirmatives often with overlapping functions (e.g., in masculine nouns /-u/ marks masculine gender, singular number, and nominative case, while in feminine nouns it marks singular number and nominative case); the system is triptotic in the singular, diptotic in the dual and plural.

Tab. 20.1: Nominal inflection

Sg.m.Nom.	/malku/	Du.m.Nom.	/malkāma/	Pl.m.Nom.	/malakūma/
Sg.m.Gen.	/malki/	Du.m.Obl.	/malkêma/	Pl.m.Obl.	/malakîma/
Sg.m.Acc.	/malka/				
Sg.f. Nom.	/malkatu/	Du.f.Nom.	/malkatāma/	Pl.f.Nom.	/malakātu/
Sg.f.Gen.	/malkati/	Du.f.Obl.	/malkatêma/	Pl.f.Obl.	/malakāti/
Sg.f.Acc.	/malkata/				

In morpho-syntactic terms, each noun and adjective is also marked for definiteness and for state. There is not a quasi-lexical marker of definiteness, but one may assume that, as in the later Northwest Semitic languages, proper nouns and nouns bearing pronominal suffixes were considered definite. Also, the categories of absolute, construct, and pronominal state are useful syntactically though not fully marked morpho-

logically. The first noun of a genitival phrase is said to be in the construct state (e.g., /malku qarîti/, ‘the/a king of the/a city’) while a noun bearing a pronominal suffix is said to be in the pronominal state (e.g., /malkuhu/, ‘his king’). A noun in construct or with an affixed pronoun retains the case vowel; dual and plural nouns do, however, drop the {-m} in these two states; there may also be some cases of vowel syncope in construct forms.

Nominal forms may consist of:

- ROOT + internal vowel(s) (e.g., /MaLK-/ ‘king’, /DaKaR-/ ‘male’)
- nominal prefix + ROOT + internal vowel(s) (e.g., /maL’aK-/ ‘messenger’)
- ROOT + internal vowel(s) + nominal suffix (e.g., /’uLMān-/ ‘widowhood’)
- combinations of the last two (e.g., /’aL’iYān-/ ‘mighty’)
- reduplication (e.g., *qdqd* ‘top of head’ [complete], *ysmsm* ‘beauteous’ [partial, YSM])
- quadriconsonantal forms (e.g. /’aQRaB-/ ‘scorpion’).

4.2. Pronouns

Personal pronouns are lexically marked for person, as well as for gender (except in the first person), number and, to a much lesser extent, for case. These appear in five principal forms: as (1) fully independent forms, as productive enclitic particles attached (2) to nouns (genitival function) and (3) to verbs (accusativ function), and as frozen person markers in the verbal system, (4) prefixed in one conjugation, (5) affixed in the other (nominative function in both cases). Case is only marked in the third person independent pronouns (e.g., {hw} Nom., {hwt} Obl.). The consonantal patterns are those typical of Northwest Semitic, with the second-person marker being /t/ in the independent pronouns (e.g., {ât} /’atta/ < /*’an + ta/ 2 m.s.) and in the verbal system (e.g., /qatalta/, ‘you killed’, /taqtulu/, ‘you kill’) but /k/ in the accusativ and genitival paradigms (e.g., /yaqtuluka/, ‘he kills you’, /malkuka/, ‘your king’). An adjectival function is attested for the third-person pronouns (e.g., {bnš hw}, ‘that servant’ Nom., {mlk hwt}, ‘that king’ Obl.).

The relative pronoun is furnished by the particle {d} (< /d/) which has lost most of its gender, number, and case markings. One hypothesis for the distribution of forms gives the following paradigm, where only the masculine singular is marked for case and forms with and without enclitic /-ti/ characterize the feminine singular and the plurals of both genders:

Masculine singular	Feminine singular	Plural
/dū/, /dā/, /dī/	/dā(ti)/	/dū(ti)/

Demonstrative pronouns, which may also function adjectivally, were formed through particle accretion: {hnd} < /*’han + na + dū/, ‘this’, and {hnk} < /*’han + na + ka/, ‘that’. Both are also attested with final {-t}, which appears not to mark feminine gender but to be enclitic.

The interrogative pronouns are {my}, ‘who?’ and {mh}, ‘what?’, perhaps to be vocalized /mīya/ and /mah(a)/.

The basic indefinite pronoun is {mn}, probably differentiated for personal and impersonal primarily by the principal vowel: /mīna/, ‘whoever’, and /manna/ < /*mah + na/, ‘whatever’. Each is expandable by other enclitic particles, so both /mīnama/, ‘whoever’, and /mannama/, ‘whatever’, are attested.

4.3. Numerals

Cardinals numbers are nouns, ordinals adjectives. The one principal exception to this rule is the number ‘1’, for which the most commonly attested term is {āhd}, formally an adjective; {šty} the old Semitic cardinal number ‘1’ is attested rarely alone, commonly in the number ‘11’. The Semitic system known as ‘chiastic concord’, according to which the cardinal numbers from ‘3’ to ‘10’ show a feminine form when modifying a masculine noun and vice versa, is well attested in Ugaritic but not as regularly as in the other ancient Semitic languages (Tropper 2000, 392–96). The cardinal numbers did not have a common base pattern (e.g., /talāt-/ ‘3’, /ʔarbaʕ-/ ‘4’) but the ordinal numbers certainly did, though it is presently impossible to say what that was (plausibly either /qatīl/ as in Hebrew and Aramaic or /qātil/ as in Arabic). The number ‘10’ shows a form with affixed {-h} in teen numbers only (as in Hebrew/Aramaic), though the origin/vocalization of this morpheme is uncertain – nor is its distribution as regular as in the later languages just named (Tropper 2000, 349–354).

4.4. Verbs

Ugaritic shows an archaic form of the verbal system common to Central Semitic (including Arabic and Old South Arabian), a base stem showing a variety of forms and semantics (G-stem), a stem expressing intensification of the base stem meaning (D-stem, for ‘doubled stem’, reflecting the doubling of the second radical characteristic of the stem), and another expressing causation of the base stem meaning (Š-stem in Ugaritic); each of these three stems shows a passive and a reflexive variant (expressed by ablaut and, in the second, by /-t-/); in addition, there is a stem expressive primarily of the middle (known as the N-stem because marked by a prefixed /n-/) as well as a small number of other stems that appear primarily in roots that are not triconsonantal in form (e.g., the L-stem, which is primarily intensive for geminate roots but factitive/causative for hollow roots). Such a system may be described as archaic because of the retention of the N-stem alongside the internal passive and the infix -t reflexive for the other three principal stems—various simplifications have occurred in the other Northwest-Semitic languages.

Each verbal stem shows two conjugations defined by the form of person marking and two productive substantival forms, the infinitive and the participle.

In the suffix conjugation (SC), the person marking occurs after the root element, whereas in the prefix conjugation (PC), that marking occurs at the head. Mood is expressed by affirmatives to the PC or, in the case of the imperative, by dropping the preformative in the PC; voice is marked by vowel variation (e.g., /kataba/, ‘he wrote’, /kutaba/ or /kutiba/, ‘it was written’). A typical paradigm will look something like this:

Tab. 20.2: Conjugation of the G-stem

	SC	PC indicative	PC jussive	imperative
Sg. 3m.	/QaTaLa/	/yaQTuLu/	/yaQTuL/	
3f.	/QaTaLat/	/taQTuLu/	/taQTuL/	
2m.	/QaTaLta/	/taQTuLu/	/taQTuL/	/QuTuL(a)/
2f.	/QaTaLti/	/taQTuLīna/	/taQTuLī/	/QuTuLī/
1c.	/QaTaLtu/	/ʔaQTuLu/	/ʔaQTuL/	
Du. 3m.	/QaTaLā/?	/yaQTuLā(na)/ or /taQTuLā(na)/	/yaQTuLā/ or /taQTuLā/	
3f.	/QaTaLtā/?	/taQTuLā(na)/	/taQTuLā/	
2m.	/QaTaLtumā/	/taQTuLā(na)/	/taQTuLā/	/QuTuLā/
2f.	Ø	Ø	Ø	Ø
1c.	/QaTaLnāyā/?	/naQTuLā/?	/naQTuLā/?	
Pl. 3m.	/QaTaLū/	/taQTuLūna/ or /yaQTuLūna/	/taQTuLū/ or /yaQTuLū/	
3f.	/QaTaLā/	/taQTuLna/?	/taQTuLna/?	
2m.	/QaTaLtum(u)/	/taQTuLū(na)/	/taQTuLū/	/QuTuLū/
2f.	/QaTaLtin(n)a/	/taQTuLna/?	/taQTuLna/??	/QuTuLā/?
1c.	/QaTaLnū/	/naQTuLu/	/naQTuL/	

The system is thus essentially binary, SC vs. PC, with moods expressed as variants of the latter. This would appear to be an opposition of the *realis* vs. *irrealis* type and hence to constitute a system expressing primarily aspect, the latter being primarily of the complete vs. incomplete type, with punctivity vs. durativity a secondary categorization (fientivity vs. stativity is expressed otherwise – see below). Such a view accounts well for texts in prose (as well as does a similar view of Standard Biblical Hebrew prose), but accounting for the morphological diversity visible in the poetic texts by aspect theory is an entirely other matter, and it appears necessary to see in these a heightened use of the imperfective (see Greenstein 2006 and Pardee forthcoming b).

In addition to the principal moods indicated here for which a relatively complete paradigm may be hypothesized, there were certainly at least two others, a volitive marked by /-a/ and an energetic marked by /-n(n)-/. Serious questions surround these forms, however. In the case of /-a/, the questions are: (1) most basically, whether it was an independent mood or only an expanded jussive, and (2) its extent of usage in Ugaritic (in Hebrew, the corresponding form appears only in the first person). As for the energetic forms, the questions are (1) again, most basically, whether the forms functioned as independent moods or as expansions of the indicative and the jussive (for the present, only a system like the Arabic one, with the forms /-an/ and /-anna/, is clearly attested); (2) whether the forms /-na/ and /-nna/ were simply alloforms or were semantically distinct; and (3) what these forms expressed.

The G-stem, as the base stem, shows formal variations that one may expect to have corresponded to the semantics and the phonetics of verbal expression. Thus there were three forms of the SC, /qatal-/, /qatil-/, and /qatul-/, the first fientive, the last stative, with the exact distribution of the second uncertain in Ugaritic (one would expect the /qatil-/ form also to have been stative, but certain transitive verbs are known to have had that form, e.g., {lik} /laʔika/, ‘he sent’, and {šil} /šaʔila/, ‘he asked’). To these corresponded three PC forms, /yaqtul-/, /yiqtal-/, and /yaqtīl-/, also distributed at least par-

tially according to semantics, with the first fientive, the second stative, and the third of uncertain distribution. The paradigm in Table 20.2 provides the /yaqtul-/ forms. The presence of one of the ‘guttural’ consonants in second or third root position produced a /yiqtal-/ form irrespective of the semantics (e.g., /ida‘u/, ‘I know’, as opposed to /aṭibu/, ‘I sit’). The verbal adjectives reflect this morpho-semantic variety: there is an active participle /qātil-/ as well as a stative adjective corresponding to each of the SC forms (/qatil-/ , /qatul-/ , and, probably more rarely, /qatal-/); in addition, there was a passive participle, probably of the /qatūl/ pattern, that would have been part of the G-passive conjugation. There certainly existed at least two verbal nouns: /qatāl-/ is encountered in texts and /qitl-/ is the only citation form in the polyglot vocabularies. Beyond these superficially obvious distributions, however, the criteria of usage of the two forms are unknown (but they certainly do not correspond to the so-called ‘infinitive absolute’ vs. ‘infinitive construct’ system of Biblical Hebrew, for /qatāl-/ clearly functions as a true infinitive in Ugaritic). It is equally uncertain whether other nominal forms were in usage alongside these two.

The definition of the D-stem has been the subject of much debate, owing in no small part to the fact that the meaning of the Piel of stative verbs is often indistinguishable from that of the Hiphil in Biblical Hebrew (/qiddēš/, ‘make holy’, ≈ /hiqdīš/ ‘cause to be holy’). That problem does not arise with any frequency in Ugaritic, however, and one may define the Ugaritic D-stem as intensifying the corresponding G-stem form: if this is fientive, the D-stem will reflect a heightening of the basic notion (‘break’ > ‘shatter’, ‘walk’ > ‘hike’), whereas a stative will be transitivized with a factitive function (‘be important’ > ‘make/treat as important’ ≈ ‘honor’). There is at least one clear case where the intensification involves a re-orientation: LHM, ‘to eat’ in the G-stem, is attested in the D-stem meaning ‘to provide someone else with food’ and in the Š-stem meaning ‘to cause someone else to eat’. (Compare LMD in Biblical Hebrew, ‘to acquire knowledge’ in the Qal, ‘to impart knowledge’ in the Piel.) As with all the derived stems, there is only one form for each of the four principal parts, here SC /qattal-/ , PC /yaqattil-/ , part. /muqattil-/ , and inf. /quttal-/ .

The causative marker exhibits the most variation across the Semitic languages. Ugaritic falls squarely in the Š-causative camp and thus constitutes an anomaly because of the Ugaritic third-person pronouns in {h-} (cross-Semitically, these two categories tend to line up, either both {š-}, as in Akkadian and some Old South Arabian languages, or both with {h-}, as elsewhere in West Semitic). The presence of remnants of the Š-stem in other West-Semitic languages (Aramaic lexical *šaphels* and *hishtaphels*, Hebrew /hištaḥ^awā^h/, the Arabic productive IXth form /istafa‘ala/, Sabaic S₁tF^(L)) leaves no doubt that it was present in Proto-West Semitic, but only in Ugaritic of the Northwest-Semitic languages has it been retained as the one and only causative stem. Here it is the standard form by which verbs of movement are transitivized (HLK ‘to go’, ŠHLK ‘to cause to go’) and there are clear cases of causativization of verbs that are stative in the G-stem (e.g., *ibr ... nšqdš*, ‘a bull we shall sanctify [as an offering]’); but there are fewer clear examples of the ‘double-accusative’ construction (G-stem transitive, Š-stem ‘cause X to execute Y-act on Z-entity’) in Ugaritic than one might expect.

Each of these three forms shows an internal passive, i.e. one marked by vowels different from those of the active/transitive forms – virtually all such forms would have contained a /u/ vowel, though the precise configuration may not have been identical to

the situation in Hebrew (where the D-passive and the causative-passive are retained) or in Arabic (where all three are retained). As is the case across the ancient Semitic languages, the internal passives constitute a transformation of a surface-level transitive formulation in which the agent of the transitive act is not expressed.

A form with an additional {t} is attested in the three principal stems treated to this point: the morpheme is commonly known as ‘infixed *-t-*’ though, as in Arabic, the {t} is infixed after the first radical in the G-stem (hence ‘Gt’), prefixed in the D-stem (hence ‘tD’), and situated between the {š} and the root in the Š-stem (hence ‘Št’). The last of these three forms is rare and the semantics not often easy to fix (e.g., the etymology of *ŠTQL, ‘to arrive’, and of *ŠTHWY, ‘to fall prostrate’, is debated). The primary function of the *t*-forms is to express reflexive/reciprocal acts; such forms may retain transitivity, in which case the heightening of agent self-reference comes to the fore (e.g., *l ištbn tnn*, ‘have I not muzzled the dragon?’). All three of these stems are best attested in poetry and in the PC, where the prefixed pronominal elements are identical to those of the other stems. There is more variety, however, in the SC: the Gt shows a preformative syllable the function of which was to break up the theoretical initial consonantal cluster (/ʔQtaTil-/ > /ʔiQtaTil-/), the tD form is identical to the Arabic Vth form (/taQaTTaL-/), while there is no certain attestation of the Št (plausibly /ʔiŠtaQTaL-/).

The N-stem, as is the case throughout the West-Semitic languages, functions as a de-agentifying stem. It is unique in having no derived forms, neither an internal passive (as is to be expected of a stem that does not express agency) nor a *t*-marked reflexive. As with the other derived stems, there was a single N-participle (probably /naqtal-/) and a single N-infinitive (perhaps /naqtāl-/). In Ugaritic, because of the fully operative internal passives and *t*-stems, the N-stem has not taken on the expression of passivity or reflexivity to the extent visible in Hebrew, and its function may be described as primarily middle, i.e., as expressing the act without reference to the agent yet without explicit marking as passive or reflexive. Examples: middle *nkly*, ‘become depleted’ (middle, apparently the rough equivalent of G-stem *kly*, ‘deplete’), NPLG, ‘divide up’ (intransitive), *nplḫ*, ‘be safe’, *nsb*, ‘turn into’; reflexive N'DM, ‘make oneself red’; passive *nḫtu*, ‘they have been smitten’; what might be termed a ‘metaphorical’ reflexive/passive *nškh*, ‘they were’ (< ‘they found themselves/were found’). The clearest examples of the passive and reflexive usages being in prose, it may be inferred that one or more of the marked passive or reflexive stems was falling out of use.

The other stems most commonly encountered are those characterized by (1) lengthening of the first vowel in geminate roots and (2) reduplication of the final radical in hollow roots, both showing the basic forms /qālal-/ and /yaqālil-/; hence the common descriptive term L-stem (‘lengthened’), but through different processes. The possibility of parallel D-stem forms existed only for geminate roots, for Ugaritic shows virtually no trace of triconsonantal hollow roots (i.e., there is no D-stem QWM, ‘to set up’, derived from QM, ‘to stand’). In some of these roots, there is a clear semantic distinction between the D-stem and the L-stem, e.g., the D-stem of ‘Z(Z), ‘to be strong’, is factitive, ‘to strengthen’, whereas the L-stem is intensive ‘to be very strong, stronger than’. The semantics of the L-stem of hollow roots is, on the other hand, as in Hebrew, factitive/causative: KNN (< KN ‘to be’) means ‘to bring about’, RMM (< RM, ‘be high’) means ‘to raise’.

The precise verbal morphology of the so-called ‘weak’ roots is usually uncertain owing to the consonantal writing. The III-y roots (to which III-w has assimilated)

are particularly problematic because of variant forms (or inconsistent orthographic conventions), for what should be /yaqtulu/-forms of such roots are written with and without the final {-y}. As noted in the previous section, hollow roots (*tertia infirmae*) show virtually no trace of a middle radical (unless the root be doubly weak, as in the case of HWY, 'to live', where the D-stem PC is *yḥwy*). It is as yet uncertain whether the /qatal-/ form of geminate roots was /qalal-/ or /qall-/. The PC of I-y (< I-w) was apparently based on a biconsonantal form (e.g., *ʾaṭibu*, 'I will sit', with no trace of either /y/ or /w/ in the first syllable).

5. Particles

As defined in 4., particles are not marked for person, gender, number, or case, except to the extent that substantives have passed over to the particle category with a characteristic marking. Viewed thus, there will be three principal types of particles: (1) primitive particles, (2) particles derived from nouns, (3) and particles formed by accretion of one or more enclitic particle(s) to a word belonging to one of these first two categories. Particle accretion is particularly common in Ugaritic, e.g., *hn*, *hnn*, *hnnny*, 'behold', alongside *hl*, *hln*, *hlny*, 'here, behold', and *tm*, *tmn*, *tmny*, 'there', just to cite three sets of three built from a basic particle by the addition of similar or identical enclitic particles.

The basic deictic particle was *h-* as is seen in two of the series just cited, to which may be added *ht*, rhetorical 'now'. This basic *h-* may in all these cases have already been expanded by *-n-*, for that consonant would have assimilated to {l} and to {t}, thus /halliniya/ and /hatti/.

Because adverbialization of nouns could be expressed by placing the noun in the accusative case, the overlap between two principal grammatical categories is clearest in the adverbs, for historical substantival forms such as '*nt*, 'now', and '*ln*, 'above', are well attested alongside primitive adverbs such as *l*, 'not', or *an*, 'where?' There is also an adverbial affirmative, locative/directive *-h*.

In addition to the common Northwest-Semitic conjunctions *w* and *k*, Ugaritic also attests *p*, cognate with Old-Aramaic *p* and Arabic *fa*. The conditional particle is attested as both *hm* and *im*.

The prepositional repertoire is typical of Northwest Semitic, with the exception of the absence of a preposition explicitly expressing the ablative (such as later *min*), which has led to the conclusion that the system as a whole marks position rather than direction.

Ugaritic is characterized by the number of enclitic particles (*d*, *h*, *y*, *k*, *m*, *n*, *t*), by possible crossovers in the function of these particles (*d*, for example functions independently as the relative pronoun, with prefixed *hn* as the demonstrative pronoun/adjective, and with affixed *k* as an adverb meaning 'thereupon'), and by the proclivity for attachment to all parts of speech, including other particles. Observing this last characteristic allows for the elimination of a particularly dubious orthographic category: the presence of {-y} at the end of words, particularly when the word ends in an /i/-vowel, has led to the identification of these examples of {-y} as a *mater lectionis*. Since the Ugaritic scribes did not so use other consonants, however, it is more plausible to identify these {y}s as the enclitic morpheme and hence as truly consonantal (e.g., {b⁴ly} in the nominative case would be /ba⁴liya/, not /ba⁴li³/).

6. Syntax and morpho-syntax

Word order appears to have been essentially free in verbal and nominal sentences, with fronting for topicalization. The primary exception is subordinate clauses where a verb of which the subject is known appears in first position. There is no evidence in Ugaritic for anything like the so-called ‘*wāw*-consecutive’ system of Biblical Hebrew, where the principal flow of discourse, whether perfective or imperfective, must be verb-initial because this flow is defined as being expressed by ‘*wāw*-consecutive’ + verb.

One of the perennially most debated topics of Ugaritic grammar is that of verbal morpho-syntax in poetry. The most thorough-going attempt at explaining poetic usage in terms of aspect was by Tropper (2000), but it leaves too many data unaccounted for, and something more along the lines of Greenstein’s appeal to the poetic/historical present appears necessary.

7. Lexicon

Though one may find in Ugaritic cognates with all the other Semitic languages, including some striking singularities (e.g., *grdš*, ‘to destroy’, said in the passive of a household, cognate with the same verb in Syriac, meaning ‘to gnaw’), the basic picture is that of an archaic Northwest-Semitic language. Thus, though there are significant formal isoglosses with Arabic (e.g., *tbʿ*, ‘to depart’ in Ugaritic, ‘to follow’ in Arabic), the overall system of verbs of movement, just to cite one semantic category, is closer to Hebrew/Phoenician than to any other Semitic language, including Aramaic.

8. The texts

The contribution of Ugaritic to all aspects of Semitic research resides in its comparatively large corpus of texts and the relatively broad spectrum of literary genres attested therein – both unique for a West-Semitic language in the Late Bronze Age. The mythological texts attest to an archaic or archaizing form of Ugaritic, to a particular form of expression (one not bounded by linguistic aspect or real-world time), and provide evidence for literary and religious traditions that go back centuries if not millennia. The prose ritual texts provide a window onto actual religious practice in Syria at the end of the Late Bronze Age. The letters contain the direct speech of persons from several strata of society addressing a variety of topics. The legal texts furnish us with the local equivalents of the much better attested Akkadian corpus. The particularly numerous economic/administrative texts (roughly half the corpus in terms of numbers of tablets) allow for a reconstruction, however hypothetical, of the Ugaritic economy and society. Though the school texts are far less numerous than those attesting to the process of learning to write Akkadian, this very fact is itself important, for it may indicate that most of the writers of Ugaritic texts had first been trained in Akkadian (Hawley 2008). Finally, this symbiosis with the cuneiform culture shows how a culture where the usage of Akkadian had been known for over half a millennium, at the least,

had maintained its own traditions and, when a system was devised for writing the local language, the two writing systems were put to use effectively according to the criteria of present relevance and the preservation of tradition.

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Considerations of space preclude any attempt to provide a complete or even a representative bibliography of Ugaritic studies. It is assumed that the interested reader will work back in time from the recent publications cited here. For general introductions to Ugarit, see Yon 2006 (archaeology) and Pardee forthcoming a (linguistic and literary perspectives). The most thorough reference grammar of Ugaritic is Tropper 2000. For a more complete presentation of the views proffered here above, see Pardee 2004; for alternative views to those of Tropper's grammar presented in the order of that grammar, see Pardee 2003–2004. The history of the edition of a representative sample of Ugaritic texts may be followed back from the references in Bordreuil/Pardee 2004, 2009.

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21. Phoenician and Punic

1. History and attestation
2. Affinities and specific phenomena
3. Morphology
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Abstract

Phoenician belongs to the West-Semitic or Canaanite branch of Semitic and is closely related to Biblical Hebrew, Moabite and Ammonite, as well as Amorite and Ugaritic. Punic is a variety of Phoenician in North Africa, influenced by the indigenous languages of the region and survived there alongside Latin following the destruction of Carthage in 146 B.C. until the Vandal invasion in the 5th century A.D.

1. History and attestation

1.1. Overview of Phoenician

The inhabitants of the Lebanese shore of the Mediterranean from Arvad in the North to Dor and Jaffa in the South were called Phoenicians by the Greek authors – and consequently their language is today known as Phoenician. This language was a branch

of the Canaanite language spoken in the southern and western Levant and existed in close contact with Biblical Hebrew, Ammonite, Moabite and Edomite (Garr 1985). The source material for the reconstruction of the Phoenician language consists only of epigraphic texts, namely inscriptions on stone, metal, ceramics and papyrus. It lacks such literary categories as epics and myths, prayers and hymns, chronicles, and historical reports. Attested from ca. 1000 B.C. until the end of the 1st century B.C., Phoenician has been found not only in the Phoenician cities of Byblos, Tyre and Sidon, but also in eastern Turkey (Karatepe, Cebelireis Dağı, Incirli, etc.), Cyprus, Greece and Italy. The Phoenician city-states occupied separate geographical territories and minor dialectal varieties occasionally developed.

1.2. Overview of Punic

The expansion of the Phoenician city-states into the border-regions of the Mediterranean placed Phoenician as the dominant language in the newly founded ‘colonies’. In these Mediterranean colonies Phoenician was slowly transformed into Punic, especially so in North Africa (Carthage). Although closely related to Phoenician, Punic developed under the influence of the indigenous languages of North Africa. After the conquest of the Carthaginian territory by the Romans and the destruction of Carthage in 146 B.C., Punic survived as ‘Neo-Punic’ and spread as far afield as Libya and Morocco. Like Phoenician, Punic is known mostly from epigraphic sources, including thousands of formulaic votive inscriptions, but also from certain passages in the comedy ‘Poenu-lus’, written by the Roman poet Plautus (ca. 250–184 B.C.) and from some inscriptions written in Greek and Latin characters. These texts convey some information about the pronunciation of Punic in its last centuries, i.e. following the Roman domination of North Africa, but extreme caution is advised in using these data to infer other stages in the development of the language (Jongeling 1984; 2008; Jongeling/Kerr 2005).

1.3. Script

It is well known that the alphabetic script developed in Syria-Palestine during the 2nd half of the 2nd millennium B.C. was taken over by the Phoenicians ca. 1100 B.C. From the earliest inscriptions onwards, the Phoenician alphabetic script was used for centuries without significant modifications. This is also true for Phoenician orthography, which appears to be very regular in material from the beginning to the end of its use. In contrast to the slightly later practice of the Aramaeans (and Hebrews), Phoenician writing is strictly defective, meaning that no reference to vowels (*matres lectionis*) is to be found in the inscriptions. This tradition changes somewhat in Late Punic. Here not only occasionally – but lacking a fixed system – consonantal signs are used as vowels. At the same time a lack of stability may be observed in the reproduction of sibilants, dentals and laryngeals: ‘ can be interchanged with ‘ and *h*, and *d* with *t* or *ṭ*. Besides this, the ductus of Late Punic inscriptions is extremely cursive and readings are often difficult and in doubt (Peckham 1968, Sass 2005).

1.4. Evidence for the written and spoken language

As Phoenician is an extinct or 'dead' language, information must be taken from written sources alone. The source material for Phoenician is inscriptions, often incised in stone or metal, and seldom written in ink on sherds of broken pots (*ostraca*) or on papyrus. This material can only be dated by palaeographical or archaeological evidence, very seldom by dates such as regnal years of kings or other rulers from Phoenicia, Egypt or Assyria, but due to the scarcity of the text material a full picture of the development of the language is not available. As most texts are formulated in a highly official style, normally in the 3rd person, the grammatical features of the language are only partially known. In addition, it appears that from Hellenistic times onwards Phoenician gradually ceased to be used as a spoken language, and was replaced by Aramaic and Greek (or Latin). Consequently, reconstruction of grammar, thesaurus and style of this idiom relies solely on written evidence.

Although the pronunciation of words and phrases is largely unknown, it is likely that the Biblical Hebrew of neighbouring Israel bore a close resemblance to the language spoken in Tyre. Proof for this assumption can be found in the rendering of Phoenician geographical and personal names in Assyrian royal inscriptions and in the rare mention of Phoenician words in the books of Greek and Latin writers (Philo of Byblos, Dioscurides, Eusebios of Caesarea, the Byzantine encyclopaedia Suda etc.). These sources show that the well-known change of the stressed long vowel $\bar{a} > \bar{o}$, typical of Canaanite among the Semitic languages, went further in Phoenician-Punic from $\bar{o} > \bar{u}$, cf., Hebrew *maqōm* 'place' is cognate with Punic *macum* in 'Poenulus'; Semitic. *šanāt* 'years' > Hebrew *šanot* is cognate with Punic *sanuth* in 'Poenulus', etc.

Some, if minor, differences existed between the dialects of specific places, especially Byblos (e.g. Byblos *hū'atu* 3.sg.m. personal pronoun and standard-Phoenician *hū'(a)*; Byblos *-hā* 3.sg.f. pronominal suffix and standard-Phoenician without marking; Byblos *-humu* 3.pl.m. pronominal suffix and standard-Phoenician **-om*; particular demonstrative pronouns sg.m. *zn*, sg.f. *z'* deictic 'this one') and Cyprus. Because the text corpus is relatively small and spread over many centuries, it is impossible to observe dialect differences in the use of specific words. However, the specific use of certain words constitutes a definite difference between Phoenician and Hebrew, cf. Phoenician *p'l* 'to make' but Hebrew *ʾasah*; Phoenician *kn* 'to be', Hebrew *hayah*; Phoenician *hrš* 'gold', Hebrew *zehab*, etc. Unknown in Phoenician-Punic is the negation *l*. Normally *bl*, *'y* or *'ybl* 'no(t)' are used, as is prohibitive *'l* connected with jussive of the following verb.

A different situation obtains in Late Punic. For this language – or rather for this late stage of Phoenician – there exist some indicators to reconstruct pronunciation. Caution is, however, advised, first because the language was used over a considerable time span, ranging from ca. 146 B.C. until the 4th century A.D., secondly because the area of its usage extends from Morocco in the west to Libya in the east, and thirdly because the character of the textual material is extremely varied. It consists of inscriptions on stone, often gravestones, in the extremely difficult Neo-Punic script which often leaves severe doubts as to the correct reading. Furthermore, there are less common examples of texts in Greek characters but in the Punic language, and the so-called Latino-Punic inscriptions which use Latin characters for reproducing an often non-orthographic Punic text. Besides these 'original' Late Punic texts there exist the famous sections from the comedy 'Poenulus' by the Roman poet Plautus, written ca. 200 B.C.

In this comedy an actor speaks in Punic – and it may be assumed that at the time of the Second Punic War, the Roman audience understood this speech, which is, nevertheless, also translated into Latin. This would be an excellent source for colloquial Punic if the text had seen a better transmission. ‘*Poenulus*’ has been repeatedly copied by medieval scribes, who did not understand the content of the speech. Therefore the text is corrupt and must be used with extreme care for a reconstruction of spoken Punic of the 2nd century B.C.

2. Affinities and specific phenomena

2.1. Linguistic affinities of Phoenician and Punic

Generally speaking, Phoenician belongs to the West Semitic or Canaanite branch of the of Semitic language family. It is closely related to Biblical Hebrew, Moabite and Ammonite, and has more distant affinities with Amorite and Ugaritic. It is presently understood that Phoenician coalesced in the course of the second half of the 2nd millennium B.C., and became distinguished from Aramaic, which at the same time penetrated the northern part of Syria all the way to Assyria and Babylonia. The Phoenician language seems first to have been concentrated in the city-states on the Lebanese shore: Arwad, Byblos, Sidon, Tyre, Sarepta and Akko, then to have expanded over the Mediterranean with merchants and settlers to the colonies in Sicily and Sardinia, Italy and Spain, and, in particular, North Africa (according to tradition, founding Utica in 1101, and Carthage in 814/3 B.C.). Here the Phoenician language came into contact with indigenous languages, including the different branches of Numidian/Berber, and developed certain characteristics as a result of this contact. With reference to the inscriptions, classical Phoenician may be characterized as follows: The consonants correspond without exception to the 24 letters available in the alphabetic script. This is not surprising as the alphabetic script was developed based on this form of West Semitic. In comparison to earlier Canaanite dialects, known from Ugaritic or from the glosses in the Amarna letters, a certain reduction of the consonantal system had taken place. In the case of the sibilants, *ḏ*, *ṭ*, *ḏ* and *ṣ* are lacking and only *s*, *š*, *z* and *š* survive. The laryngeals *ʾ*, *ʿ*, *h* and *ḥ* are in use, but the velars *g* and *ḡ* do not exist. Late Punic orthography points to a progressive loss of specific Semitic sounds in North Africa. It is probable that both the Numidian substratum and the Latin (Roman) superstratum are responsible for these developments. It should also be noted that the school tradition, the continued training of scribes, came to an end along with the political autonomy of Carthage, as did the traditional art of writing. Nevertheless, the irregularities provide some indications of the spoken language in contrast to the normalized, formulaic tradition of official declarations and memorial inscriptions.

2.2. Foreign words

Following the political integration of North Africa into the Roman empire, a kind of bilingualism was established. Not only personal names from Greek and Latin came

into use but many administrative terms were also incorporated into the language, especially at places such as Leptis Magna with its large Punic population. Here a certain development can be observed. Initially the scribes tried to translate the titles and terms, for example *myṅkd* (Numidian ‘leader’) corresponds to *imperator*, *zḃḥ* ‘sacrificer’ corresponds to *flamen*, *mysql ʾrṣ* corresponds to ‘ornator patriae’ etc. In later periods the Latin title was transcribed, for example *ʿydl* ‘aedilis’, *qwʾtrbr* ‘quattuorvir’.

2.3. Other specific phenomena characterizing Phoenician and Punic

As demonstrated, a reconstruction of the exact articulation of Phoenician-Punic throughout the centuries and in different regions is problematic. Occasionally, variations in the spelling of a word hint at different pronunciations, e.g. *nbš* ‘soul’ in Zircirli in contrast to *npš*, a confusion of tenuis and medial also in Punic, e.g. *bn* for *pn* ‘face’, *šdrb* for *šdrp*, the name of the god Šadraba. Thus it seems possible that at a specific stage of Punic an occasional spirantization – comparable to Hebrew under the influence of Aramaic – took place, cf. *šbʿ* in place of *šmʿ* ‘to hear’, but more often this is a matter of orthography with a confusion of tenuous and emphatica, cf. *kdš* in place of *qdš* ‘sanctuary’, etc. However, as these phenomena are rare they point rather to an unskilled scribe than to a real phonetic change.

3. Morphology

3.1. Nouns and pronouns

In comparison with other North-West Semitic languages, such as Biblical Hebrew, Phoenician and Punic have few nominal peculiarities. The noun has lost the inflection with vowel-endings. The masculine in the plural is characterized by the ending *-(i)m*. The feminine has kept the final *-(a)t* in the singular – in contrast to Biblical Hebrew – *āh* –, *-ot* in the plural, in Late Punic *-ō* only. An internal masc. pl. as in Arabic is unknown. The dualis masc. *-ēm*, fem. possibly **-atēm*, existed probably until the middle of the 1st millennium B.C., and later the dualis is restricted to parts of the human body that come in pairs. The independent personal pronoun corresponds in general to the forms in Biblical Hebrew, but one example in early Byblian has the 3.m.sg. preserved in the longer form **hūʾatu* besides **hūʾa*, and the pronoun of the 3.m. and f. pl. is regularly **humatu* and **himatu* (without casus restriction). In general the suffixed personal pronouns correspond also to the forms of Biblical Hebrew, but during the long history of Phoenician-Punic they show certain developments. The 3.m.sg. **-hū* is only preserved as *-h* in the inscription on Aḥīrōm’s coffin in Byblos, dating to around 1000 B.C. A little later, the 3.m.sg. developed fourfold: 1. connected with **-a* to **-a-hū* > *au* > *ō* (not represented in Phoenician script, in Punic as *-ʾ*); 2. connected with **-i*, in Byblos **-i-hū* and **-ī/ē-hū* > **-iu* and **-ī/ēu*, written *-w*; 3. in Phoenician and Punic **-i-hū* or long vowel + *-hū* > **-iyū* or long vowel + *yū* written *-y* (as glide **i*) or *yʾ*; 4. in Late Punic only the suffix is occasionally written *-m*, which may represent a change from **-i/ē-hū* > **-iū/ēū* > **-iw/-ēw* with representation of the final **-w* through

-m (< *u*), pronounced **-im*, for example *binim* ‘his son’. Noteworthy is also the suffix of the 3.pl. masc. and fem., that is **-humu*, written *-hm*, in Byblos only, but later on **-a-hum* > **-ōm* (written *-m*) except after **-ī* or long vowel > *-nōm* (written *-nm*) and fem. **-a-him* > *-ēm* (written *-m*) except after **-ī* or long vowel > *nēm* (written *-nm*). – The relative pronoun is regularly *ʾš* or *š* respectively – the Biblical Hebrew *ʾsr* does not exist.

3.2. Verb

Comparable with Biblical Hebrew, the verbal system of Phoenician and Punic consists of four stems: The simple stem (Qal) with – usually – three radicals, the stem with doubled second radical (Pi^{cc}el) with a factitive or intensive aspect, the stem with prefixed *n-* (Nif^{al}) with a passive or reflexive meaning and a stem corresponding to the Hiph^{il} in Hebrew which rendered the causative aspect of the verb. This last-mentioned verbal stem, which corresponds to the š-stem in Akkadian and Ugaritic, has in Phoenician a prefix *yi-*, Late Punic *ʾ(y)-* or, as a result of the confusion of laryngals, *h(y)-*. The causative stem in Phoenician is therefore the Yiph^{il} stem. It is not known if a corresponding passive stem Yuph^{al} existed: the orthography is ambiguous. The same holds true for the Pi^{cc}el, where a Pu^{cc}al stem may have existed. There exists a Yitpa^{el} corresponding to Hitpa^{el} in Biblical Hebrew, eventually also a Yitpolel with a reflexive, reciprocal or passive meaning. Very seldom and known only from the Old-Byblian Aḥīrōm inscription, is a Qal with a *t*-infix after the first consonant of the stem and a passive meaning. According to this schema of verbal stems it appears that much more variety in verbal expression existed in the spoken language than is transmitted by the normally unvocalised orthography of formulaic inscriptions. Consequently, modal variations of the verb are scarcely proven.

In West Semitic, modal differentiation is limited to the imperfect, with the short form of the praeteritum/jussive on one hand, and the long form of the imperfect on the other, i.e. *yaqtul* – *yaqtulū* (jussive) and *yaqtulu* – *yaqtulūna* (imperfect). This differentiation probably also existed in Phoenician. Due to the extremely defective writing of Phoenician this can only be proven for the 2.m.pl. and 3.m.pl, and the 2.f.sg. by the presence of *-n* in the imperfect and its absence in the jussive.

3.3. Numerals

Numerals are mostly formed in accordance with the Semitic system, but here too the evidence based on numerals written in full is scarce. The ordinals are especially uncommon, but the few examples show a formation in similar to Biblical Hebrew, i.e. (after first¹) the cardinal numerals are complemented by the ending *-īy(u)*, written *-y*. The cardinal numerals from 11 until 19 follow a schema with the numerals 19 following the number 10 connected with ‘and’, i.e. *ʾsr w-ʾrbʿ* ‘14’ in contrast to Biblical Hebrew *ʾrbʿ ʾsr*. The same method of formation is usually found for the cardinal numerals 21–99, but occasionally the *w(a)-* ‘and’ is lacking, for example *ʾrbʿt ʾrbʿm* ‘44’.

4. Syntax

As most Phoenician and Punic inscriptions are extremely short and formulaic, current knowledge of the syntactic rules is marginal and incomplete. As far as is known, the use of verbal tenses is in accordance with Biblical Hebrew with one remarkable exception: the so-called *waw consecutivum*, the short imperfect used for the narration of bygone facts, also known from Moabite and Old-Aramaic, appears to be absent. The perfect with *waw* following an imperfect with future or jussive meaning appears only in conditional sentences. Another feature of Phoenician syntax is the use of the infinitive together with the personal pronoun – recorded is the 1.sg. only – instead of a finite verbal form, which sometimes follows shortly after, for example *w-trq 'nk kl h-r'* ‘and eradicate (did) I all the evil’ (KAI N° 26 A I 9).

The article as a determining factor is absent in early Canaanite but comes into use at the latest during the 8th century B.C. It has the same function as the article in Biblical Hebrew. Another irregularity in this respect is its use with a vocative. A further contrast to Biblical Hebrew is the attributive demonstrative pronoun following a substantive with the article: the majority of the Phoenician examples have no article, i.e. Hebrew *h-dbr h-zh* ‘this matter’ but Phoenician *h-spr z* ‘this inscription’.

The normal construction of the *status constructus* – the shortened form of the noun followed by the second noun in the genitive – is in Phoenician, but especially so in Punic, often replaced by the insertion of the determinative pronoun (')š, i.e. instead of **mṣṣbt btb'l* ‘stele of B.’ rather *mṣṣbt š-btb'l*. Already testified in Phoenician is the periphrastic genitive formed with the relative pronoun (')š and the preposition *l-*, for example *b'l šmd 'š l-gbr* ‘the (god) Ba'al-šmd of (the dynasty) of Gabar’ (KAI N° 24: 15).

The imitation of Greek or Latin syntax is occasionally observed in Phoenician in the 1st century B.C. (KAI N° 60), and for Punic in Imperial Roman times.

5. Further avenues for research

First of all, a systematic collation of the available text material of Phoenician and Punic must be executed. Although the first systematic collection of the then-known text material in the *Corpus Inscriptionum Semiticarum* Vol. I began in the 19th century, publication ceased in the first half of the 20th century. Consequently, newly found texts are scattered in various publications (journals, books, etc.) and exact documentation with reliable photographs and drawings is often lacking. A standardized presentation of every known text is sorely needed.

Based on such a collation, an accurate palaeography could be constructed, taking into account regional and temporal differences. Following from this it should be possible to establish a reliable chronology for the texts.

Finally, a comprehensive thesaurus of Phoenician and Punic is needed, consisting of the stock of words used in the inscriptions and an analysis of the elements of personal names, once again taking into account the temporal and regional particularities of a language which was in use for nearly one and a half millennia.

Abbreviations

KAI: Donner, H. and Röllig, W. 1968–2002.

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22. Biblical Hebrew

1. Introduction: the historical setting
2. Writing system and phonology
3. Morphology and morpho-syntax
4. Syntax
5. Tense and aspect semantics
6. Lexicon
7. References

Abstract

Biblical Hebrew belongs to the Canaanite branch of North-West Semitic, together with Phoenician, Moabite, Ammonite, and the language of the Canaanite glosses in the El-Amarna letters. This entry focuses on the language in the thirty-nine books that constitute the Tanakh in the Jewish tradition and the Old Testament in the Christian tradition. One can roughly distinguish three stages of Biblical Hebrew: (1) Archaic Biblical Hebrew (ca. 1100–1000 BC), (2) Standard Biblical Hebrew (ca. 1000–550 BC), and (3) late Biblical Hebrew (ca. 550–200 BC). After an outline of the transmission of Biblical Hebrew, this entry presents a summary of the essentials of the Biblical Hebrew writing system, as well as its phonology, morphology, morpho-syntax, and sentence syntax, with due attention to the verbal system, including the notorious problem of the consecutive tenses. Finally, this entry provides a brief synopsis of the Biblical Hebrew lexicon and its sources. While diachronic developments, or rather derivations from abstract or reconstructed deep structures are given, this entry attempts to cast Biblical Hebrew in a strictly synchronic description. Deviations from standard forms, due either to the considerable diachronic time span of Biblical Hebrew or to dialectal variation, are mentioned as well.

1. Introduction: the historical setting

1.1. Stages and varieties of Biblical Hebrew

Biblical Hebrew, the language of ancient Israelite tribes who settled in the land known as Canaan, belongs to the Canaanite branch of North-West Semitic (see ch. 19), together with Phoenician, Moabite, Ammonite, and the language of the Canaanite glosses in the El-Amarna letters. The latter variety also counts as evidence for ‘Proto-Hebrew’ (cf., e.g., Steiner 1997, 145 f.). While a sizable number of inscriptions ranging from ca. 1200 BC to the Bar Kokhba letters from 132–135 AD, the scrolls from the Dead Sea (Qumran), the Samaritan Pentateuch, as well as the early Rabbinical (or ‘Tannaitic’) literature also make part of the body of ‘ancient’ Hebrew, this entry focuses on the language in the thirty-nine books (cf. the abbreviations) that constitute what is known as the *Tanakh* in the Jewish tradition and the Old Testament in the Christian tradition. *Tanakh* serves as an acronym for the three main parts of the Hebrew Bible,

tōrā(h) ‘erudition (the Pentateuch)’, *nəḇīʾīm* ‘prophets’, and *kəṭūḇīm* ‘scriptures’. The language of the book Ben Sira, which is not part of the official canon, can also be characterized as Biblical Hebrew.

Diachronically, one can roughly distinguish three stages of Biblical Hebrew: (1) Archaic Biblical Hebrew (ca. 1100–1000 BC), (2) Standard Biblical Hebrew (ca. 1000–550 BC), and (3) late Biblical Hebrew (ca. 550–200 BC). Synchronically, one can distinguish between the variety of ‘Judahite’ Hebrew, referring to Judah and its capital Jerusalem, and the ‘Israelian’ variety (or rather cluster of varieties), referring to settlements in Samaria, Galilee, and Transjordan. Nearly 80% percent of the Hebrew Bible is generally thought to represent the ‘Judahite’ variety, the morpho-phonological differences to ‘Israelian’ Hebrew not being dramatic. Individual lexical items may illustrate the different diachronic levels. While the interrogative pronoun ‘how’ is *ʾēkā(h)* in archaic poetry, e.g. the song of Dəḇōrā(h) and Bārāq in the Book of Judges 5, it turns to *ʾēk* in Standard Biblical Hebrew, and to *hēk* in Late Biblical Hebrew (cf., e.g., Steiner 1997, 146). On the other hand, Late Biblical Hebrew features thought of as innovative, e.g. the relative marker *šē* and the Aramaic-influenced masculine plural ending *-īn* already occur in the oldest extant texts like the mentioned song of Dəḇōrā(h) and Bārāq.

1.2. Transmission of Biblical Hebrew

Among the first witnesses of pre-Biblical Hebrew are the El-Amarna glosses in cuneiform syllabic script (cf., e.g., Blau et al. 1971, col. 1560–1568). These glosses give many hints regarding the underlying representations of Biblical Hebrew noun patterns (cf. section 3.3.2.). To give two examples, Biblical Hebrew *nəḥōšēl* ‘copper’ is rendered as <nu-ḥu-uš-tum> and *zərōaʿ* ‘arm’ as <zu-ru-uḥ>, illustrating the sound changes **/CuCC/ > CōCēC* (‘segholation’) and **/CúC/ > CōC*, respectively.

While the text of the Hebrew Bible is also partially preserved in the Babylonian vocalisation tradition (cf. notably Yeivin 1985) and the Palestinian vocalisation tradition, the text of the Hebrew Bible is only preserved completely in the Tiberian tradition (Yeivin 1980; Malone 1993 Churchyard 1999). Between the 7th and 9th centuries AD, the scholars known as ‘Masoretes’ (from *māsōrēl* ‘transmission’, Dotan 1971) in Tiberias recorded the Biblical Hebrew text with the known inventory of vowelings, punctuation, and cantillation signs. Thereby, they had to rely on an oral tradition, which most likely had reflected sound changes across time. Other witnesses, such as the Greek transcription of Hebrew names in the Septuaginta, are therefore indispensable for the reconstruction of pre-Tiberian Hebrew phonology. For the pronunciation behind the Tiberian Masoretic system cf. Khan 1997, resting on such sources as the *Hidāyat al-qārīʿ* (‘Guide for the reader’ (Eldar 1980–1981), a medieval pronunciation manual.

Of interest in this context are gutturals in Greek transcriptions, notably the *Secunda* of Origenes. Basing his arguments on such transcriptions, Kahle (1902, 164–171), for instance, claimed that the gutturals by and large had vanished already in the pre-Masoretic pronunciation of Hebrew and that the Tiberian tradition artificially had reconstituted these gutturals. Ginsberg (1929–1930, 131–133) adduced sound arguments against this proposal, showing that it would lead to numerous internal contradictions. Also Brønno (1970) rejected this view, basing his argumentation on the pronunciation of the Hebrew gutturals according to the testimony of Jerome.

Noteworthy is the *kəṭīb-qərē(ʾ)* phenomenon in the Hebrew Bible, referring to the circumstance that individual lexical items, notably the name of God (the *tetragrammaton* <YHWH>), were read (Aramaic participle passive: *qərē(ʾ)*) and voweled in a different way than they were written (Aramaic participle passive: *kəṭīb*).

As the Hebrew Bible is only attested completely in the tradition of the Tiberian Masora, our focus will rest entirely on this tradition. But as Blau (1993, 9) correctly observes, the Tiberian version *a priori* has no more ‘authenticity’ than any of the other versions. The Tiberian Hebrew text itself is subject to text-critical discussion at many passages (cf. McCarter 1996 and Tov 2001). The following examples are all oriented at the diplomatic edition of the St. Petersburg manuscript B19^A (L) (‘Codex Leningradensis’), as used in the *Biblia Hebraica Stuttgartensia*.

2. Writing system and phonology

2.1. Consonant inventory

The consonant inventory of Biblical Hebrew as reflected in the Tiberian tradition (including the semivowels or glides /w/ and /y/) can be represented as follows in table 22.1. (cf. also Goerwitz 1996, 490; Khan 1997, 86–90; McCarter 2008, 39, 42; and Rendsburg 1997, 69–76):

Tab. 22.1: Hebrew consonants and their phonetic value (Tiberian)

sign	name	Phonemic transcription	Phonetic value (Tiberian)	phonetic value (reconstructed)
א	<i>ʾāleṗ</i>	/ʾ/	[ʔ]	[ʔ]
ב	<i>bēṭ</i>	/b, b̥/	[b, v]	[b]
ג	<i>gīmel</i>	/g, g̃/	[g, ɣ or ɣ̃]	[g]
ד	<i>dāleṭ</i>	/d, d̥/	[d, ð]	[d]
ה	<i>hē(ʾ)</i>	/h/	[h]	[h]
ו	<i>w āw</i>	/w/	[w]	[w]
ז	<i>zāyin</i>	/z/	[z]	[z]
ח	<i>hēṭ</i>	/ħ/	[ħ]	[ħ, x]
ט	<i>ṭēṭ</i>	/t̥/	[t̥]	[t̥, t]
י	<i>yōḏ</i>	/y/	[j]	[j]
כ	<i>kaṗ</i>	/k, k̥/	[k, x or χ]	[k]
ל	<i>lāmēḏ</i>	/l/	[l]	[l]
מ	<i>mēm</i>	/m/	[m]	[m]
נ	<i>nūn</i>	/n/	[n]	[n]
ס	<i>sāmēṣ</i>	/s/	[s]	[s]
ע	<i>ʿāyin</i>	/ʿ/	[ʕ]	[ʕ, ɣ]
פ	<i>pē(h)</i>	/p, p̥/	[p, p̥, f]	[p]
צ	<i>ṣāḏē(h)</i>	/ṣ/	[s]	[s̥, s]
ק	<i>qōṭ</i>	/q/	[q]	[k̥, q]
ר	<i>rēš</i>	/r/	[r or ʀ, ʀ̥]	[r]
ש	<i>śīn</i>	/ś/	[s]	[ʃ]
ת	<i>šīn</i>	/š/	[ʃ]	[ʃ]
ת	<i>tāw</i>	/t, t̥/	[t, θ]	[t]

Comments:

- (1) The Tiberian Hebrew phonemes /h/ and /ʕ/ each represent two phonemes in the earlier history of North-West Semitic, namely /h/ and /x/, and /ʕ/ and /ħ/, respectively. One assumes the phonetic merger to have taken place approximately 200 BC. The main evidence rests in the transcriptions in the Septuaginta. Transcriptions of Hebrew proper names in the Septuaginta from around 250 BC show that the distinction between /h/ and /x/ must still have been audible at the time when the two phonemes had already graphically collapsed: *grosso modo*, /h/ was ignored in the transcription and /h/ was rendered as <χ>; Ἑὠνχ, for instance, reflected *ḥănōḵ* (חֲנוּךְ), while Χεβρων reflected *ḥebrōn* (חֶבְרוֹן). Comparable pairs for /ʕ/ and /ħ/ are Ἀμαλέκ, which represented *ʾamālēq* (עֲמֹלֶק) and where /ʕ/ was ignored in the transcription, and Γομόρρα, which represented *ʾāmōrā(h)* (עֲמֹרָה) and where /ʕ/ was represented by <γ>.
- (2) When borrowed from the Phoenicians, the grapheme <ש> in Hebrew served ‘double duty’ for a sibilant derived from Semitic /θ/ and a lateral fricative derived from Semitic /ʃ/. Biblical Hebrew /š/ also reflects Old Semitic /š/. The ancient lateral quality of /š/, or at least of one of its allophones, is well-established, one example being Hebrew *kašdīm* (כַּשְׁדִּים) ‘Chaldeans’, represented in Greek as χαλδαίοι (cf. also Steiner 1977). The introduction of diacritical dots (<ש> vs. <שׁ>) was due to the Masoretes, who recorded an oral tradition but also restituted a difference in pronunciation based on sound correspondences between Aramaic and Hebrew (cf. Diem 1974, 243 ff.), but also to distinguish between minimal pairs such as שָׁכֹר *šākūr* ‘intoxicated’ vs. שָׂכֹר *šākūr* ‘hired’ (cf. Steiner 1997, 148). The notorious *šibbōlēṭ* episode recounted in Judg 12:6 bears testimony that the Ephraimites who wanted to cross the Jordan river belonged to an old dialect group in which the phoneme /θ/ was no longer present – hence the pronunciation of <שְׂבֹלֶט> with an initial [s] – the grapheme <ש> representing here the older phoneme /θ/ (for this account, cf. Speiser 1942). The Tiberian pronunciation also reflects the circumstance that the older phonemes /š/ and /s/ collapsed in [s], as witnessed by orthographical doublets in the post-exilic period (after 586 BC). Earlier, there existed minimal pairs, such as *sar* (סַר) ‘stubborn’ vs. *šar* (שַׁר) ‘rule, captain’ (cf. Khan 1997, 89).
- (3) A time estimate for the emergence of the postvocally spirantized allophones of /b, g, d, k, p, t/ under Aramaic influence is ca. 400 BC (cf. Rendsburg 1997, McCarter 2008, 47). In certain environments, originally spirantized allophones were re-phonematized, e.g. *lā-qāḥat* ‘to take’ vs. *lāqāḥat* ‘she took’ (cf. Blau 1993, 213); *ʾalpē* ‘thousands’ vs. (unattested) *ʾalpē* ‘two thousand’ (cf. Harris 1941, 143–167 and Bergsträsser 1983, 51 f.). Therefore, the marking of post-vocalic (and post-*šəwā* medium / *šəwā mərəḥēp*) spirantization is warranted also in a phonemic transcription. For intricacies regarding /b, g, d, k, p, t/ spirantization cf. section 2.3.

The *dāḡēš* sign in consonants indicates structural gemination. In the case of the /b, g, d, k, p, t/ consonants, it can just indicate occlusive as opposed to spirantized pronunciation (cf. also section 2.5.).

2.2. Vowel inventory

The vowel inventory of Biblical Hebrew as reflected in the Tiberian tradition can be represented as follows (cf. also Goerwitz 1996, 491; Khan 1997, 91 ff.; McCarter 2008,

40 f., 43; and Rendsburg 1997, 77). The alternatives in the sign column of table 22.2. concern orthography with word-medial and word-final *mater lectionis*:

Tab. 22.2: Vowels and their phonetic value (Tiberian)

sign	name	Phonemic transcription	Phonetic value
וְ/וּ	<i>hīrīq</i> (<i>hīreq</i>)	/i, ī/	[i(:)]
וְ/וּ/וְהוּ	<i>šērē</i> (<i>šēre</i>)	/ē, ē(h)/	[e(:)]
וְ/וּ/וְהוּ	<i>səḡōl/seḡōl</i>	/ε, ε(h)/	[ε(:)]
וְ/וּ/וְהוּ	<i>ḥāṭāp</i> (<i>ḥāṭēp</i>) <i>səḡōl</i>	/ē/	[ε]
וְ/וּ/וְהוּ	<i>pattāḥ</i> (<i>pāṭah</i>)	/a/	[a(:)]
וְ/וּ/וְהוּ	<i>ḥāṭāp</i> <i>pattāḥ</i>	/ā/	[a]
וְ/וּ/וְהוּ	<i>qāmāš</i> <i>gādōl</i>	/ā, ā(h)/	[ɔ(:)]
וְ/וּ/וְהוּ	<i>qāmāš/qāmēš</i> <i>qāṭān</i>	/ā/	[ɔ]
וְ/וּ/וְהוּ	<i>ḥāṭāp</i> <i>qāmāš</i>	/ā/	[ɔ]
וְ/וּ/וְהוּ/וְהוּ	<i>ḥōlām</i> (<i>ḥōlem</i>)	/ō, ō(h), ō(°)/	[o(:)]
וְ/וּ/וְהוּ	<i>qibbūs/šūrūq</i>	/u, ū/	[u(:)]
וְ/וּ/וְהוּ	<i>šəwā</i>	/ə, Ø/	[a, Ø]

Comments:

- (1) The dictionaries (notably Even-Shoshan 2003) list some alternatives of the Tiberian vowel names. The vowel names are transcribed here somewhat pedantically in order to illustrate the transcription system.
- (2) There continues to be disagreement on whether the Biblical Hebrew vowels were distinctive in both quantity and quality (cf., e.g., Morag 1962) or just in quality (cf., e.g., Khan 1987, Steiner 1997). Bergsträsser (1983), Rendsburg (2007) and McCarter (2008), among others, opt for a phonemic transcription that marks the difference between *pattāḥ* and *qāmāš* and between *səḡōl* and *šērē* only in terms of length (/a/ vs. /ā/ and /ε/ vs. /ē/, respectively). Khan (1987, 1997) argues that vowel quantity in the Tiberian system was generally not phonemic, with few possible exceptions such as דָּמִי *dāmī* [dɔ'mi:] ‘silence’ vs. דָּמִי *dām-ī* [dɔ'mi:] ‘my blood’ or אָכַלָּה *ʾāklā(h)* [ʾɔx'lɔ:] ‘food’ vs. אָכַלָּה (marked with *ga'yā/meteg* next to the *ḥāṭāp*) *ʾāk(ə)lā(h)* [ʾɔ:xlɔ:] ‘she ate’. The pair וַיִּרְאוּ *way-yir'ū* ‘and they saw’ (Num 17:24) vs. וַיִּירְאוּ *way-yir(ə)'ū* ‘and they feared’ (Gen 20:8) – this form being marked with *ga'yā/meteg* next to the *hīrīq*, however, is another case in point (cf. Yeivin 1980, 251 and Khan 1987, 39). However, Khan (1997, 91f.) observes that vowel length in the Tiberian system is usually predictable from syllable structure and placement of stress. Moreover, the status of the mentioned minimal pairs depends on the (non-)notation of *šəwā*.
- (3) Some authors (cf., e.g., Goerwitz 1996, Fox 2003, xvii) note *scriptio plena* with a circumflex on top of the transcribed vowel. This is not done here.
- (4) In view of the aforementioned observations, we shall adopt a compromise system here, as applied also in the forthcoming *Encyclopedia of Hebrew Language and Linguistics*: vowel quantity, as assumed for the period of Biblical Hebrew (but as being strictly speaking redundant for Tiberian Hebrew), will be noted in conjunction with the vowel qualities noted by the Tiberian Masora in accordance with the chart above. Syllable- and word-final <א> as well as word final <ו> will be noted in parentheses, e.g., לֹא *lō(°)* ‘not’ or זֶה *ze(h)* ‘this’ (m.).

- (5) For a model of the synchronically underlying representations of the Tiberian vowels (which may also reflect an older phonological system) cf. Dolgopolsky 1999.
- (6) Richter (1983) has elaborated an extremely precise and morpho-phonologically informative transcription system that abstracts from the Masoretic representation of Biblical Hebrew (notably vowel lengthening and segholation), without claiming, however, to reconstruct a phonetically realistic picture of the classical language.

The Hebrew Bible is accompanied by an extremely elaborate system of conjunctive and disjunctive accents or cantillation marks *ṭəʿāmīm* (for a synopsis cf. Goerwitz 1996, 493). While the hierarchy of the accents relates to a certain extent to the degree of syntactic boundness or separation, their potential musical implications are to date not fully understood (cf. Yeivin 1980). It is uncontroversial that stress was phonemic in Tiberian Hebrew. Examples are **בָּנֵנוּ** *bā-nū* ‘in us’ vs. **בָּנִינוּ** *bānū* ‘they built’ as well as **קָמָה** *qāmā(h)* ‘she stood up’ vs. **קָמָהּ** *qāmā(h)* ‘getting up’ (f. sg.) (cf. Blau 1993, 19) or **שָׁבוּ** *šābū* ‘they returned’ vs. **שָׁבוּ** *šābū* ‘they captured’ in 1 K 8:48 (cf. Steiner 1997, 149). Also, the first and second person singular forms of the consecutive non-past /wə-CāCvC/-conjugation receive final stress, as opposed to otherwise morpho-phonologically overlapping past forms with columnar stress, e.g., *kātābtī* ‘I wrote’ as opposed to *wə-kātābtī* ‘and I (will) write’ (cf. section 3.5.1.).

2.3. Derivation of surface vowels from underlying representations

In terms of a derivation from synchronically, but not necessarily diachronically, underlying representations (marked here with “*”), the Biblical Hebrew surface vowels in their Tiberian form (in the following printed bold) can be derived as follows. Thereby, the relevant morpho-phonemic environment or the relevant *Lautgesetz* is indicated in the case of vowel change. While underlyingly long vowels stay long, underlyingly short vowels can either be lengthened, retain their quantity, or be reduced. (For vowel change in contact with gutturals cf. section 2.4.). Table 22.3. provides an overview.

Tab. 22.3: Derivation of surface vowels

*/ā/	>	/ō/,	e.g. <i>māqōm</i> ‘place’ (general Canaanite sound shift)
*/ī/	>	/i/,	e.g. <i>šīr</i> ‘song’
*/ū/	>	/ū/,	e.g. <i>gəbūl</i> ‘border’
*/a/	>	/ā/,	e.g. <i>lēbāb</i> ‘heart’ (tonic syllable)
*/a/	>	/a/,	e.g. <i>ʾāmartī</i> ‘I said’
*/i/	>	/i/,	e.g. <i>yilmad</i> ‘he learns’ (dissimilation of prefix-vowel: Barth-Ginsberg Law)
*/a/	>	/e/,	e.g. <i>mēlek</i> ‘king’ (‘segholation’ of */malk/)
*/a/	>	/ə/,	e.g. <i>dəbārīm</i> ‘words’; <i>yikbədū</i> ‘they are heavy’ (vowel reduction in pro-pretonic open syllables in nouns and pretonic open syllables in certain verb forms in the prefix conjugation)
*/i/	>	/ē/,	e.g. <i>lēb</i> ‘heart’ (compensatory lengthening: < */libb/)
*/i/	>	/i/,	e.g. <i>libb-ī</i> ‘my heart’
*/i/	>	/a/,	e.g. <i>bat</i> ‘daughter’ (< */bint/); <i>zāqantī</i> (< */zaqintī/) ‘I am old’ (vowel lowering in originally closed accented syllables: Philippi’s Law)
*/i/	>	/e/,	e.g. <i>šēdeq</i> (< */šidq/) ‘what is right’
*/i/	>	/ə/,	e.g. <i>šōmārīm</i> ‘guards’
*/u/	>	/ō/,	e.g. <i>dōb</i> (< */dubb/) ‘bear’
*/u/	>	/u/,	e.g. <i>dubb-ī</i> ‘my bear’
*/u/	>	/ā/,	e.g. <i>ḥādš-ā(h)</i> ‘her new moon’
*/u/	>	/ə/,	e.g. <i>yišmarū</i> (< */yišmurū/) ‘they guard’

Monophthongizations */aw/ > /ō/ and */ay/ > /ē/ occur primarily in the context of nouns *mediae infirmae* (II-weak) in their construct form, e.g. *mōt* ‘death:of’ or *bēt* ‘house:of’.

The rendition of the Hebrew symbol *šəwā* (literally: ‘nothing(ness)’ in Aramaic), which can stand for vowellessness on the one hand and the unspecified short vowel on the other hand is an especially intricate problem. One distinguishes between the *šəwā quiescens* (*nāḥ*), the *šəwā mobile* (*nāḥ*), and the *šəwā medium* (*mərahēp*). The first (*šəwā quiescens*) marks the coda of underlyingly closed syllables; a following /b, g, d, k, p, t/ consonant is always occlusive. The second (*šəwā mobile*) marks the onset of an underlyingly open syllable; a following /b, g, d, k, p, t/ consonant is always spirantized. Whether or not *šəwā mobile* is perceptible or not depends on the sonority relationship of the consonants before and after it. The third (*šəwā medium*) marks the coda of a closed syllable, which is the surface of two underlyingly open syllables; a following /b, g, d, k, p, t/ consonant is always spirantized. Here is an illustration (the relevant consonant being *l*).

Tab. 22.4: The different kinds of *šəwā*

<i>šəwā quiescens</i>	מֶלֶךְ	<i>malk-ī</i>	(< */malk/ + /ī/) ‘my king’
<i>šəwā mobile</i>	מֶלְכֻ	<i>mālākū</i>	(< */malakū/) ‘they ruled’
<i>šəwā medium</i>	מֶלְכֵי	<i>malkē</i>	(< */malakay/) ‘kings:of’

Some authors, notably Bergsträsser (1983), do not distinguish in their phonemic transcription between the different kinds of *šəwā*, and in such a transcription the validity of the above-mentioned minimal pair *ʾāklā(h)* ‘food’ (with *šəwā quiescens*) vs. *ʾāklā(h)* ‘she ate’ (with *šəwā mobile*) becomes especially obvious.

Without engaging in normative discourse, one can maintain that the Masoretic vowelizing and punctuation is not always consistent. Regarding the bound infinitive, for instance, one finds a number of contradictory pairs (visible when the second root consonant is a /b, g, d, k, p, t/ consonant, which complicates a synchronic description of the *šəwā*, e.g. *li-qbōr* ‘to bury’ (Gen 50:14) vs. *li-šḥō(ʿ)* ‘to wage war’ (Num 4:23).

2.4. Impact of gutturals

Semitic gutturals have attracted considerable attention in the more recent phonological literature (McCarthy 1985, 67–71; 1991). Benua (2000, 120–131) specifically addresses phenomena in Tiberian Hebrew revolving around epenthetic vowels in the vicinity of gutturals. Several phenomena are noteworthy:

- (1) Intervocalic deletion of /ʔ/ and /h/ is already attested in the consonantal text of Biblical Hebrew. Thus one finds pairs such as *šəʾērīt* ‘rest of’ (2 Chr 34:9) vs. *šērīt* (1 Chr 12:39).
- (2) Gutturals block the reduction of the subsequent vowel, when the main stress shifts rightward (as in *gādōl* (sg.) > *gədōlīm* (pl.) ‘big’), e.g. *ʾāšīr* (sg.) > *ʾāsīrīm* (pl.) ‘rich’.

- (3) A short vowel (*ḥāṭaṭ* *pattāḥ*, *səḡōl*, or *qāmāṣ*) may under certain circumstances be inserted after an unstressed closed syllable whose coda is a guttural. Both the non-past and the (bound) infinitive forms of verbs *primae gutturalis* in Tiberian Hebrew may involve the epenthesis of such a copied vowel, accompanied by the lowering of the prefix-vowel, e.g. *yē'ēhōb* (< */yi'hōb/) 'he loves' and *le-ʿēhōb* (< */li-'hōb/) 'to love' (for an analysis of conflicting cases, cf. Alvestad/Edzard 2009).
- (4) In Tiberian Hebrew, assimilative vowel epenthesis takes place before a word-final guttural, marked with a *pattāḥ furtivum* under the respective guttural, e.g. יָדוּעַ *yādūa* 'known', גָּבוֹהַ *gāḇōah* 'high', שָׁלִיחַ *šālīaḥ* 'messenger'.
- (5) Tiberian Hebrew does not allow for the gemination of gutturals (and in general not either for the gemination of *r*). Degemination of a guttural in C₂-position tends to entail 'compensatory lengthening' of the preceding vowel, e.g. *'ēhēr* (< */ihhēr) 'he was late'.

2.5. Phonotactics, syllable structure, and stress

Tiberian Hebrew syllable structure does not allow for complex syllable onsets, except in the feminine form for 'two', שְׁתַּיִם *štáyim* (cf. Hoberman 1989). By the same token, complex syllable codas tend to be avoided. This is the main reason behind the emergence of 'segholates', i.e. C_vC_eC-structures (< */CvCC/), e.g. *séṭer* (< */sipr/) 'book', or C_aC_aC-structures in case of a medial guttural, e.g. *šāḥar* (< */šahr/) 'dawn'. Nouns *mediae infirmae* (II-weak) are 'triphthongized' for the same reason, e.g. *māwēt* (< */mawt/) 'death' and *báyit* (< */bayt/) 'house'. Nevertheless, complex syllable codas can occur as long as there is a strong decrease in sonority in the slope of the syllable coda, e.g. *way-yišb* 'and he took captive' (Num 21:1). Thus, leaving aside extremely rare cases of CC_v- and C_vCC-/C_vCC-syllables, one winds up with the following inventory of syllable types (in the following list, syllable boundaries are marked with the symbol '\$'; 'v' marks a short or reduced vowel, 'v̄' a long vowel):

Tab. 22.5: Inventory of syllable types

Cv	e.g. <i>šā\$ḥar</i> 'dawn'; <i>də\$bā\$śrīm</i> 'words'
Cv̄	e.g. <i>bō\$ḡer</i> 'morning'; <i>bā\$-nū</i> 'in us'
CvC	e.g. <i>yīš\$ma</i> 'he hears'; <i>dīb\$re</i> 'words:of'
CvC	e.g. <i>qōl</i> 'voice'; <i>mā\$qōm</i> 'place'

In principle, Tiberian Hebrew does not allow for two consecutive open syllables, not counting the ultima. In general, such sequences only occur when C_{v̄}-syllables (with *v̄* being *šəwā* or a *ḥāṭaṭ* vowel) are involved, e.g. in a derived environment like *šāḥā-ráyim* (< */šuhraym/) 'noon'. Thus one always arrives at surface forms such as *dəḇārīm* (< */dabarīm/) 'words' or *kātābū* (< */katābū/) 'they wrote'. It is noteworthy that the Masoretic tradition did not count C_{v̄}-syllables as independent syllables (cf. Khan 1997, 93 ff., for the concept of 'principal' and 'dependent' syllables).

By default, stress falls on the last syllable, with the following exceptions:

- (1) The already mentioned segholates always receive penultimate stress;
- (2) In the verbal paradigm of the suffix conjugation (cf. 3.5.1.), there is to a certain degree ‘columnar’ accent, allowing for penultima stress in the case of light (Cv̄) suffixes, but not in the case of heavy suffixes (CvC), e.g. *qāṣm* ‘he stood up’, *qāmā(h)* ‘she stood up’; *kātāb* ‘he wrote’, *kātābtā* ‘you (m. sg.) wrote’, but *kātābtēm* ‘you (m. pl.) wrote’.
- (3) A number of pronominal suffixes on nouns, verbs, and prepositions, e.g. *bā-nū* ‘in us’, as well as the locative suffix *-ā(h)* (*hē(ʔ)* *locale*), e.g. *ʾārš-ā(h)* ‘to the earth’ do not take ultimate stress.

There exist also prosodic rhythm rules governing accentuation in the Tiberian system. A noteworthy example is the rule *nāsōg ʾāḥōr* or *nāsīgʾā(h)* (cf. McCarthy 1985, 145 ff. and Revell 1987), which accounts for stress retraction in order to avoid the clash of two consecutive stressed syllables across word boundaries. For instance, the Tiberian accentuation of Gen 1:5 is *wā-lā-hōšēk qārā(ʔ) lāylā(h)*, instead of expected *wā-lā-hōšēk qārā(ʔ) lāylā(h)* ‘and the darkness he called night’.

There is also a variety of pausal forms in both the nominal and verbal realm, e.g. *yaḥšəbū* ‘they think’ (context) vs. *yaḥšəbū* (pause), but such alternations are not always noted in the following.

3. Morphology and morpho-syntax

3.1. Root structure

As in other Semitic languages, nominal and verbal roots are essentially based on three radicals or morphologically aligned with the triradical pattern. Biblical Hebrew comprises 1,057 nominal and verbal roots, i.e. ca. 8.7% of the 12,167 combinatorically possible roots ($23 \times 23 \times 23$). As already Joseph Greenberg (1950) had pointed out, co-occurrence restrictions disfavor roots containing several homorganic radicals in Semitic, disregarding reduplicated quadriliteral roots and onomatopoetic root formations. In formal phonology, the so-called Obligatory Contour Principle (OCP) has often been invoked as a technical rationale for such co-occurrence restrictions, which disallow homorganic adjacent elements within a given structure. Well known examples include ‘Grassmann’s Law’ for Indo-European, which prohibits two aspirated stops within one stem, and ‘Geers’ Law’ for Akkadian, which forbids two ‘emphatic’ consonants within one root.

Without engaging in the debate about the diachronic precedence of biradicalism or triradicalism, one can observe that the core semantics of a root often appears to be associated with just two radicals. A well known example is the radical pair $\{p, r\}$, associated with ‘cutting, dividing,’ which surfaces in the roots $p-r-d$ (e.g. *nīprədū* ‘they split up’), $p-r-z$ (e.g. *pārāzōn* ‘open land’), $p-r-k$ (e.g. *pārōkēi* ‘(dividing) curtain’), $p-r-m$ (e.g. *yīprōm* ‘he tears’), $p-r-s$ (e.g. *yīprāsū* ‘they break’), $p-r-š$ (e.g. *pāraš* ‘he tore’), and $p-r-q$ (e.g. *pōrēq* ‘tearing off’ (m.s.g.)).

Synchronically speaking, weak roots are (by definition) either of the type I-*n*, of the types I-*y*, II-*w/y*, or III-*y*, or of the type II=III (*mediae geminatae*). Table 22.6. gives an overview (cf. also Steiner 1997, 156):

Tab. 22.6: Morphophonemics of weak verbs

root	type	Suffix conjugation	Prefix conjugation	Infinitive (bound)	gloss
n-p-l	I- <i>n</i>	<i>nāṣal</i>	<i>yippōl</i>	<i>li-npōl</i>	‘fall’
y-š-b	I- <i>y</i>	<i>yāšab</i>	<i>yēšeb</i>	<i>lā-šebēt</i>	‘sit’
š-w-b	II- <i>w</i>	<i>šāb</i>	<i>yāšūb</i>	<i>lā-šūb</i>	‘return’
š-y-r	II- <i>y</i>	<i>šār</i>	<i>yāšīr</i>	<i>lā-šīr</i>	‘sing’
g-l-h	III- <i>y</i>	<i>gālā(h)</i>	<i>yīgle(h)</i>	<i>li-ḡlōt</i>	‘uncover’
s-b-b	II=III	<i>sāḇab</i>	<i>yāsōb/yissōb</i>	<i>lā-sōb</i>	‘go around’

The verb ‘to take’, which has the suffix conjugation form *lāqah*, takes the prefix conjugation form *yīqqah* and the infinitive *lā-qahat* in likely (semantic) analogy to the verb ‘to give’, which has the forms *nātan*, *yittēn*, and *lā-tēt*, respectively. Another exceptional case is the high-frequency verb *hālak* ‘he went’ with the prefix conjugation form *yēlēk* and the infinitive *lā-lēket*.

Often, one and the same weak verb occurs in several of the mentioned types. The verb *li-hyōt* ‘to live’, for instance, can surface in the basic binyān pā‘al (here: 3rd m. sg. suffix conjugation) either as *hay* (e.g. Gen 3:22, just as the adjective *hay* ‘alive’ – type II = III) or as *hāyā(h)* (e.g. Qoh 6:6 – type III-*y*) (cf., e.g. Gesenius 1910, 218 = §76i). Different types of weak verbs can also stand in a suppletive relationship. The verb ‘to be good’, for instance, takes the suffix conjugation form *tōb* (type II-*w*) and the prefix conjugation form *yītab* (type I-*y*) (cf., e.g., Gesenius 1910, 220 = § 78b).

3.2. Parts of speech

Not surprisingly, all of the traditional parts of speech, namely verbs, nouns, pronouns (independent, suffixed dependent, demonstrative, relative, interrogative, and indefinite), adjectives, adverbs, prepositions, conjunctions, as well as interjections and presentatives are also found in Biblical Hebrew (for precise statistics cf. Andersen/Forbes 1989, 23 ff.). The prefixed definite article developed also from a pronominal-demonstrative element, possibly */han/ (cf. Blau 1993, 43). There is no indefinite article. Adjectives cannot always be clearly distinguished from nouns, notably in the case of participles, except that they do not take the dual ending (cf. section 4.2.). Some prepositions can be considered grammaticalized nouns in the construct state.

3.3. Morphology and function of nouns

3.3.1. Gender, number, case, and state

As in other Semitic languages, Biblical Hebrew nouns are either masculine, feminine, or ancepts. This distribution may, but need not reflect natural gender (sex). In the case

of elementary kinship terms and animals, gender can be expressed by lexical suppletion, e.g. *ʾāb* ‘father’ vs. *ʾēm* ‘mother’ or *ḥāmōr* ‘he-donkey’ vs. *ʾātōn* ‘she-donkey’. Otherwise, the suffixes *-ā(h)* (with final stress; *lāyā(h)* ‘night’ is masculine) and *-t* serve to mark feminine gender in the singular. While the ending *-ā(h)* by default follows a stem ending in a consonant, e.g. *yēlēd* ‘boy’ (or gender-neutral: ‘child’) vs. *yaldā(h)* ‘girl’, the ending *-t* follows a word-final *-ī*, e.g. *ʾibrī* ‘Hebrew’ (m. sg.) vs. *ʾibrīt* ‘Hebrew’ (f. sg.), and (mostly) participles, e.g. *yōšēb* (< */yāšib/) ‘sitting’ (m. sg.) vs. the segholate form *yōšēbet* (< */yāšibt/) ‘sitting’ (f. sg.). Besides the already mentioned ‘suppletive’ terms (*ʾēm* ‘mother’; *ʾātōn* ‘she-donkey’), a number of lexical items are feminine, without being morphologically marked:

- (1) terms denoting areas for inhabitants, such as *ʾāreṣ* ‘land’, *ʾir* ‘city’, and country names, e.g. *miṣrāyim* ‘Egypt’ (properly a dual form, but construed *ad sensum* feminine);
- (2) a group of terms (some of them reminiscent of the Bantu noun class ‘women, fire, and dangerous things’) such as *rūaḥ* ‘wind’, *ʾēš* ‘fire’, *šēmeš* ‘sun’, *ʾēben* ‘stone’, *ḥereḥ* ‘sword’, but also *gēḇen* ‘vine’;
- (3) pairwise occurring external body parts, notably *yād* ‘hand’, *rēgel* ‘foot’, *bérék* ‘knee’, *ʾayin* ‘eye’, and *ʾōzen* ‘ear’.

Some nouns, e.g. *dereḥ* ‘way’ or *ʾāb* ‘cloud’ can take both masculine and feminine gender (*anceps*).

Biblical Hebrew nouns appear in the singular, the dual, and the plural. The dual, which only applies to nouns, is mainly restricted to time units, measures, and items found in pairs. In the case of /CvC/ or /CvCC/ nouns, the suffix *-áyim* is attached to the stem (with possible internal phonological alternations or intraflexion), e.g. *raḡláyim* ‘(two) feet’, and in the case of (overtly) feminine nouns to the construct form of the stem, e.g. *šāpātáyim* ‘(two) lips’ (sg. *šāpā(h)*). Comparable to the ‘pseudo-dual’ in Arabic dialects, a dual form can also denote more than two (pairs), e.g. *bə-kappē-ḥem* ‘in their hands’ (cf. Blau 1993, 66). *Dualia tantum* such as *máyim* ‘water’, *šāmáyim* ‘heaven’, and *šāḥāráyim* ‘noon’ exist as well.

By default, masculine nouns in the plural take the ending *-īm* and feminine nouns the ending *-ōt*, again often with internal phonological alternations or intraflexion, e.g. *mālāḡīm* ‘kings’ and *malkōt* ‘queens’. The reverse situation is attested as well. The term *ʾāb* ‘father’ has the plural form *ʾābōt*, the masculine term *māqōm* ‘place’ has the plural form *maqōmōt*, while the feminine nouns *ʾir* ‘city’ and *šānā(h)* ‘year’ have the plural forms *ʾārīm* and *šānīm*, respectively. Nouns that can take both genders sometimes also (but not automatically) can take both plural markers, e.g. *ʾāḇīm* (standard, e.g. 2 S 23:4) and *ʾābōt* (1 K 18:44) ‘clouds’. *Pluralia tantum* include *raḥāmīm* ‘pity’, *ḥayyim* ‘life’, and *pānīm* ‘face’. Exceptionally, one also finds the masculine plural marker *-in* (which later became standardized in Rabbinical Hebrew), e.g. *yāmīn* ‘days’ in Dan 12:13 (late Biblical Hebrew) or *middīn* ‘carpets’ in Judg 5:10 (earliest attested Biblical Hebrew) (cf. McCarter 2008, 54). The *plurale tantum* *ʾēlōhīm* ‘God’ is always construed in the singular.

The only likely residue of morphologically marked case is the locative suffix *-ā(h)* (*hē(ʿ)* *locale*), e.g. *ʾarṣ-ā(h)* ‘to the earth’ (cf. Brockelmann 1956, 79), comparable to the Ugaritic suffix *-h* and the Akkadian suffix *-iṣ*. It has also been suggested that some compound proper nouns, e.g. *māūšāʾēl* (Gen 4:18) as well as some poetic forms, e.g.

bənō bəʿōr ‘son of Beor’ (Num 24:3) reflect earlier case endings (here: the nominative). The definite object is usually preceded by the *nota accusativi* ʾēṭʾet. Syntactically, one can argue that pronominal suffixes on nouns and prepositions underlyingly stand in the genitive and pronominal suffixes on verbs in the accusative.

Hebrew nouns can surface in three states, either the *status absolutus* (definite or indefinite), the *status constructus*, or the *status pronominalis*. The first refers to the noun’s independent form, the second to its form as first member in an annexation (construct chain; *səmīkūt* in Hebrew grammatical terminology), and the third to its form in front of a pronominal (possessive) suffix. Depending on the noun pattern (cf. section 3.2.2.), nouns in the *status constructus* and *pronominalis* undergo various phonological changes, notably shift of the main stress to the second member in the annexation and vowel shortening. In the feminine singular, the *-ā(h)*-ending turns to *-at* (or *-et* in some segholate forms). Here are some relevant examples (*status pronominalis* with the ‘light’ suffix pronoun of the 2nd ps. sg. m., *-kā* and the ‘heavy’ suffix pronoun of the 2nd ps. pl. m., *-kem*), featuring the words *mélek* ‘king’, *malkā(h)* ‘queen’, *dāḇār* ‘word’, *śāde(h)* ‘field’, and *śəḏāqā(h)* ‘justice’:

Tab. 22.7: The different status in Biblical Hebrew

status absolutus		status constructus		status pronominalis	
sg.	pl.	sg.	pl.	sg.	pl.
<i>mélek</i>	<i>məḷāḳīm</i>	<i>mélek</i>	<i>malkē</i>	<i>malk-kā</i>	<i>məḷāḳē-kā</i>
				<i>malk-kem</i>	<i>malkē-kem</i>
<i>malkā(h)</i>	<i>məḷāḳōṭ</i>	<i>malkat</i>	<i>malkōṭ</i>	<i>malkāt-kā</i>	<i>malkōṭē-kā</i>
				<i>malkat-kem</i>	<i>malkōṭē-kem</i>
<i>dāḇār</i>	<i>dəḇārīm</i>	<i>dəḇar</i>	<i>dīḇrē</i>	<i>dəḇār-kā</i>	<i>dəḇārē-kā</i>
				<i>dəḇar-kem</i>	<i>dīḇrē-kem</i>
<i>śāde(h)</i>	<i>śāḏōṭ</i>	<i>śāde(h)</i>	<i>śāḏōṭ</i>	<i>śāḏ-kā</i>	<i>śāḏōṭē-kā</i>
				—	<i>śāḏōṭē-kem</i>
<i>śəḏāqā(h)</i>	<i>śəḏāqōṭ</i>	<i>śidqat</i>	<i>śidqōṭ</i>	<i>śidqāt-kā</i>	<i>śidqōṭē-kā</i>
				<i>śidqat-kem</i>	<i>śidqōṭē-kem</i>

As Retsö (2006, 26) points out, the *-ē*-ending in the masculine plural can in rare circumstances also occur in a non-construct environment, e.g. *hārē bə-ḡilbōā* ‘o ye mountains of Gilboa!’ (2 S 1:21) or *kāl-ḥōsē b-ō* ‘all those who seek refuge with him’ (Ps 2:12).

3.3.2. Noun patterns

Nouns can either be ‘primitive’ or derivative. Derivative nouns in turn can be derived from other noun patterns (denominative) or from verbs (deverbative). What follows is a list of the main synchronically underlying noun patterns accompanied by examples of surface forms in both genders (where available) and remarks on the involved morpho-phonemics or semantics (where relevant) (cf. Aartun 1975, Blau 1993, 69–74, Fox 2003 and Joüon/Muraoka 2006, § 88 = 219–243); stress lies on the ultima, unless marked otherwise (consonants with the same index are the same):

Tab. 22.8: Noun patterns in Biblical Hebrew

pattern	example (masc.)	example (fem.)
Uniradical forms:		
*/Cv/:	'ī 'island'	_____
Biradical forms:		
*/CaC/:	yād 'hand'	šāpā(h) 'lip'
*/CiC/:	'ēl 'god'	mē'ā(h) 'one hundred'
*/CuC/:	tōr 'turtle-dove'	_____
Forms <i>mediae infirmae</i> (II-weak):		
*/CāC/:	tōb 'good'	tōbā(h) 'good'
*/CīC/:	mīn 'kind'	bīnā(h) 'understanding'
*/CūC/:	šūr 'wall'	šūrā(h) 'row'
Forms <i>mediae geminatae</i> (C ₂ = C ₃):		
*/CaC _i C _i /:	rab 'great, much'	rabbā(h) 'great, much'
*/CiC _i C _i /:	'lēb 'heart'	pinnā(h) 'angle'
*/CuC _i C _i /:	kōl 'all'	sukkā(h) 'booth'
Triradical forms:		
*/CaCC/:	mēlek 'king'	malkā(h) 'queen'
*/CCaC/:	dabaš 'honey'	hādassā(h) 'myrtle'
(Aramaic pattern; note the C ₃ -gemination in the feminine form)		
*/CiCC/:	sēper 'book'	biq'ā(h) 'valley'
	bēṭen 'belly'	'ēglā(h) 'heifer'
*/CCiC/:	bā'ēr 'well'	qāhillā(h) 'community'
(note the C ₃ -gemination in the feminine form)		
*/CuCC/:	'ōzen 'ear'	hākma(h) 'wisdom'
*/CCuC/:	bā'ōš 'stench'	sāgullā(h) 'property'
(pattern of bound/construct infinitive (G))		
(note the C ₃ -gemination in the feminine form)		
*/CaCaC/:	'ādām 'man'	šadāqā(h) 'justice'
*/CaCiC/:	kābēd 'heavy'	bārēkā(h) 'pool'
*/CaCuC/:	'ādōm 'red'	'ādummā(h) 'red'
(adjectives of color and space; note again the C ₃ -gemination in the feminine and plural forms)		
*/CiCaC/:	'enāb 'grape'	_____
*/CaCāC/:	šālōm 'peace'	_____
(pattern of absolute infinitive (G))		
*/CaCīC/:	šā'ir 'small'	sālīhā(h) 'forgiveness'
(adjective, often with passive meaning; fem.: <i>nomen actionis</i>)		
*/CaCūC/:	'āšūm 'mighty'	qābūrā(h) 'burial'
(passive participle (G))		
*/CiCāC/:	zərōa' 'arm'	'ābōdā(h) 'work'
*/CuCāC/:	rāhōb 'broad place'	nā'ōrē 'tow'
	qārāb 'fight'	_____
(Aramaic pattern)		
*/CāCaC/:	'ōlām 'world'	_____
*/CāCiC/:	'ōyēb 'enemy'	hōmā(h) 'wall'
(active participle; <i>nomen agentis</i>)		
*/CūCaC/:	šōšan 'lily'	_____
*/CaC _i C _i aC/:	dayyān 'judge'	yabbāšā(h) 'dryness'

Tab. 22.8: Noun patterns in Biblical Hebrew – *Continued*

pattern	example (masc.)	example (fem.)
<i>(nomen agentis)</i>		
*/CaC _i C _i aCt/:		‘ <i>awwérēṭ</i> ‘blindness’
(the feminine form is a pattern denoting sicknesses/physical defects)		
*/CaC _i C _i iC/:	‘ <i>iwwēr</i> ‘blind’	_____
*/CaC _i C _i iC/:	‘ <i>lā-dabbēr</i> ‘to speak’	
<i>(infinitivus constructus (D))</i>		
*/CuC _i C _i aC/:	‘ <i>sullām</i> ‘ladder’	‘ <i>qubbā’at</i> ‘chalice’
*/CaC _i C _i āC/:	‘ <i>qannō(?)</i> ‘jealous’	
/CaC _i C _i īC/:	‘ <i>attīq</i> ‘old’	
/CaC _i C _i ūC/:	‘ <i>hannūn</i> ‘gracious’	‘ <i>ḥabbūrā(h)</i> ‘bruise’
Examples of forms with one or two reduplicated (as opposed to geminated) radicals:		
*/CaCC _i aC _i /:	‘ <i>ra’ānān</i> ‘green’	
*/CaCC _i iC _i /:	‘ <i>sagrīr</i> ‘rain’	
*/CaCC _i ūC _i /:	‘ <i>ša’ārūr</i> ‘horrible’	
*/CaC _i aC _i C _i aC _j /:	‘ <i>ādāmdām</i> ‘reddish’ (color adjectives)	
*/CaC _i aC _i C _i uC _j /:	_____	‘ <i>šəḥarḥōrēṭ</i> ‘blackish’
*/CaC _i aC _i C _i ūC _j /:	‘ <i>āsāpsūp</i> ‘mixed multitude’	
*/C _i aC _i C _i aC _j /:	‘ <i>galgal</i> ‘wheel’	
*/C _i uC _j C _i uC _j /:	‘ <i>qādqōḏ</i> ‘top of the head’	‘ <i>gulḡōlēṭ</i> ‘skull’
*/C _i aC _i C _i ūC _j /:	‘ <i>baqbūq</i> ‘jug’	
Examples of quadriradical forms:		
*/CaCCaC/:	‘ <i>aqrāḥ</i> ‘scorpion’	
*/CaCCuC/:	‘ <i>karkōḥ</i> ‘margin’	
*/CaCCīC/:	‘ <i>šarbīṭ</i> ‘scepter’	
*/CaCCūC/:	‘ <i>galmūd</i> ‘barren’	
An example of a quinqueradical form: <i>šəpardēā</i> ‘frog’.		

It is a complicated matter to project the existing noun pattern with affixes systematically onto underlying representations: therefore, they are presented here in groups (cf. also Lipiński 2001, 221–234 and Joüon/Muraoka 2006, 235–243). Roughly, one can discern the following types:

- (1) forms with an *ʔ*-prefix, e.g. *ʔəšba* ‘finger’ or *ʔakzār* ‘cruel’, the latter form reminding of Arabic *ʔafal*-forms;
- (2) extremely rare forms with an *h*-prefix of the type *haCCāCā(h)*, the Aramaic causative verbal noun, e.g. *hakkārā(h)* (root n–k–r) ‘recognizing’ (Is 3:9);
- (3) nominalized verb forms (3. m. sg., prefix conjugation) as *Satznamen*, e.g. *yīṣḥāq* ‘he laughs’ or *ya’āqōḥ* ‘he trips’, not to mention the tetragrammaton <yhwh>, which can be understood as a *Satzname* in either the G-stem or the H-stem (but which always carries the vowel signs for *ʔdōn-āy* ‘my Lord’ or *ʔlōhīm* ‘God’);
- (4) frequent forms with an *m*-prefix, semantically comprising mostly abstract terms, nouns of place (*nomina loci*), and nouns of instrument (*nomina instrumenti*), e.g. *mišpāṭ* ‘judgment’, *māqōm* ‘place’, or *maṭīṭeah* ‘key’;
- (5) forms with a *t*-prefix, often verbal nouns or nouns of action (*nomina actionis*), e.g. *təhillā(h)* ‘beginning’, *tiqwā(h)* ‘hope’, and also words of Aramaic origin, e.g. *talmūd* ‘pupil’;

- (6) nouns and adjectives with an *-ōn*-suffix, e.g. *zikkārōn* ‘remembrance’ or *ri(ʿ)šōn* ‘first’; rarely diminutives, e.g. *ʾišōn* ‘little man’;
- (7) nouns with an *-ān*-suffix, e.g. *qārḇān* ‘offering’;
- (8) nouns with an *-ūt*-suffix, typically denoting abstract terms, e.g. *gālūt* ‘exile’ or *ʾalmānūt* ‘widowhood’;
- (9) adjectives with an *-ī*-suffix (*nisba*), denoting ordinals, patronymics, and tribal names, e.g. *šālīšī* ‘third’ or *ʾibrī* ‘Hebrew’;
- (10) the dual ending *-áyim* can be synchronically re-analyzed as a suffix in *dualia tantum* such as *máyim* ‘water’ or *šāmáyim* ‘heaven’.

3.3.3. Pronouns

3.3.3.1. Personal pronouns

Biblical Hebrew personal pronouns are found in either an independent (subject) or an oblique dependent form, the latter on the morphological base of nouns (expressing the genitive in various functions) or on verbs (expressing the object). Table 22.9 gives an overview of the attested forms (the second person feminine plural on verbs is not attested):

Tab. 22.9: Personal pronouns in Biblical Hebrew

ps.	independent	on nouns (sg.)	on nouns (pl.)	on verbs (suffix conj.)	on verbs (prefix conj.)
1cs	<i>ʾānōkī</i> , <i>ʾānī</i>	<i>-ī</i>	<i>-ay</i>	<i>-(á)nī</i>	<i>-énī</i> , <i>-énnī</i>
2ms	<i>ʾattā(h)</i>	<i>-əkā</i>	<i>-ékkā</i>	<i>-əkā</i> , <i>-ékkā</i>	<i>-əkā</i> , <i>-ékkā</i>
2fs	<i>ʾatt</i>	<i>-ēk</i> , <i>-ékī</i>	<i>-áyik</i>	<i>-ēk</i>	<i>-ēk</i>
3ms	<i>hū(ʿ)</i>	<i>-ō</i> , <i>-éhū</i>	<i>-ā(y)w</i>	<i>-ō</i> , <i>-āhū</i>	<i>-éhū</i> , <i>-énnū</i>
3fs	<i>hī(ʿ)</i>	<i>-āh</i> , <i>-éhā</i>	<i>-éhā</i>	<i>-āh</i>	<i>-éhā</i> , <i>-énnā</i>
1cpl	<i>(ʾā)nāhnū</i> , <i>ʾānū</i>	<i>-énū</i>	<i>-énū</i>	<i>-ānū</i>	<i>-énū</i> , <i>-énnū</i>
2mp	<i>ʾattēm</i>	<i>-əkēm</i>	<i>-ékkēm</i>	<i>-əkēm</i>	<i>-əkēm</i>
2fp	<i>ʾattēn</i> , <i>ʾattēnā(h)</i>	<i>-əkēn</i>	<i>-ékkēn</i>	—	—
3mp	<i>hēm</i> , <i>hēmmā(h)</i>	<i>-ām</i>	<i>-éhēm</i>	<i>-ām</i>	<i>-ēm</i>
3fp	<i>hēnnā(h)</i>	<i>-ān</i>	<i>-éhēn</i>	<i>-ān</i>	<i>-ēn</i>

For slight deviations in pause, cf. Blau 1993, 118f. In archaic and/or poetic texts one also finds by-forms of the 3. m. pl., *-āmō* on singular nouns and *-émō* on plural nouns, e.g. *mōsərot-émō* ‘their bonds’ and *āḇot-émō* ‘their ropes’ (Ps 2:3). The by-forms with *-n(n)-* on verbs in the prefix conjugation have been interpreted as being related to the energetic mood in other Semitic languages (cf., e.g., Zewi 1999).

3.3.3.2. Demonstrative pronouns

The Biblical Hebrew demonstrative pronouns appear in paradigms of near and remote (distal) deixis (rare by-forms are cited in parentheses):

Tab. 22.10: Demonstrative pronouns in Biblical Hebrew

	near sg.	pl.	remote sg.	pl.
m.	ze(h) (<i>hallāz/hallāze(h)</i>)	ʾēlle(h)	hū(ʿ)	hēm
f.	zō(ʿ)ṯ (<i>zō/zō(h)/hallēzū</i>)	ʾēlle(h)	hī(ʿ)	hēnnā(ʿh)

The remote demonstrative pronouns overlap with the independent personal pronouns. Syntactically, the demonstrative pronouns function both as pronouns and as adjectives (cf. section 4.2.1.). It is noteworthy that the feminine remote demonstrative pronoun *hī(ʿ)* is constantly spelled as <hwʿ> in the Pentateuch, but voweled consistently as *hī(ʿ)* by the Masoretes, a typical *kaṯib-qarē(ʿ)* phenomenon.

3.3.3.3. Relative pronouns (markers)

Biblical Hebrew features two relative markers (conventionally subsumed here under ‘pronouns’, but not properly so – cf. Steiner 1997, 171), *ʾāšer* and a proclitic element *šē* (also *ša* and *šə*). The first is etymologically derived from a locative lemma **ʾaθar/* ‘trace’, not unlike the neo-Greek relative marker *pou* and the Bavarian relative marker *wo* (cf. Rubin 2005, 49f.). The latter, which also prevails in later stages of Hebrew, represents a reduced form of the former (cf. Huehnergard 2006). The consonant following *šē* is geminated, wherever possible, e.g. in the nominalized relative phrase *miš-šēl-lā-nū* ‘from [those] who belong to us’ (2 K 6:11).

3.3.3.4. Interrogative and indefinite pronouns

The Biblical Hebrew interrogative pronouns are *mī* ‘who’ and *mā(h)* ‘what’. The latter also surfaces as the allomorph *ma-* before geminable consonants, e.g. *ma(h)l-lā-kā* ‘what do you have?’ (Gen 21:17) or as the allomorph *mē-*, in front of the open syllables *hā, hā*, (unstressed) *ā*, and *hā*, e.g. *mē-ʾāšūā* ‘what have you done?’ (Gen 4:10), comparable to the allomorphs of the definite article. Both interrogative pronouns can also be used in the indefinite sense ‘whoever’ and ‘whatever’, respectively.

The common Semitic element **ʾayy/* is found in the interrogative adverb *ʾēk* ‘how’ as well as in the interrogative pronoun *ʾē-ze(h)* ‘which, what’ (Qoh 2:3).

3.3.3.5. Definite article

The Biblical Hebrew definite article (for a historical discussion, cf., e.g., Tropper 2001), tentatively derived from **han/*, surfaces as *ha-* in front of geminable consonants, e.g. *hay-yōm* ‘the day’/‘today’, but confluations in the syllable structure can take place, as in *ha-yʾōr* (< *hay-yəʾōr*) ‘the river’ (Gen 41:1). Preceding the gutturals ʾ and (usually) ʿ, as

well as *r*, the article has the allomorph *hā[̄]*, e.g. *hā[̄]-ʾōr* ‘the light’; in front of the open syllables *hā[̄]*, *hā[̄]*, (unstressed) *ʾā[̄]*, and *hā[̄]*, it has the allomorph *hε[̄]*, e.g. *hε[̄]-hā[̄]kām* ‘the sage’ or *hε[̄]-ʾārīm* ‘the cities’ (cf., e.g., Blau 1993, 43).

3.3.4. Numerals and quantifiers

As in other Semitic languages, the cardinal numbers ‘one’ and ‘two’ modify the counted item in gender agreement, whereas the cardinal numbers ‘three’ to ‘nineteen’ stand in a ‘gender-polarity’ relationship with the counted item. The cardinal numbers occur in an absolute and a construct form, modifying the counted item in an apposition-like and in an annexation-like manner. Here is an overview of the absolute and construct cardinal as well as the ordinal numbers from one to ten:

Tab. 22.11: Numerals in Biblical Hebrew

#	on masc. nouns		on fem. nouns		ordinal number m. (f.)
	abs.	cs.	abs.	cs.	
1	ʾeḥaḍ	ʾahaḍ	ʾaḥaṭ	ʾaḥaṭ	rī(ʿ)šōn-ā(h)
2	šəṇáyim	šəṇē	šəṭáyim	ʾaḥaṭ	šēni-ṭ
3	šəlōšā(h)	šəlōšet	šəlōš	šəlōš	šəliši-ṭ
4	ʾarbāʾā(h)	ʾarbāʾaṭ	ʾarbaʿ	ʾarbaʿ	rəbīʿi-ṭ
5	ḥāmiššā(h)	ḥāmēšet	ḥāmēš	ḥāmēš	ḥāmīši-ṭ
6	šiššā(h)	šēšet	šēš	šēš	šišši-ṭ
7	šibʿā(h)	šibʿaṭ	šēbaʿ	šēbaʿ	šəbīʿi-ṭ
8	šəṁōnā(h)	šəṁōnaṭ	šəṁōne(h)	šəṁōne(h)	šəṁīni-ṭ
9	tišʿā(h)	tišʿaṭ	tēšaʿ	təšaʿ	təšiʿi-ṭ
10	ʾāsārā(h)	ʾāsəreṭ	ʾéser	ʾéser	ʾāsīri-ṭ

The ten-units from *ʾéšrīm* ‘twenty’ to *tišʿīm* ‘ninty’, as well as the numbers *mēʾā(h)* ‘100’, *māʾ(ʿ)ṭáyim* ‘200’, *šəlōš mēʾōṭ* ‘300’, *ʾelep* ‘1,000’, and *ribbō(ʿ)/rəbāʾbā(h)* ‘10,000’ are constant and do not exhibit such gender polarity.

Biblical Hebrew quantifiers belong to different categories. There is both a positive existence marker, *yēš*, which can also take pronominal suffixes, e.g. *yēš-kā* ‘you are there’, and a negative existence marker *ʾáyin*, construct *ʾēn*, which also takes pronominal suffixes, e.g. *ʾēn-kā* ‘you are not there’ (cf. section 4.3.5.). Besides the definite article and (possibly) the cardinal number ‘one’ in the sense of an indefinite article, Hebrew quantifiers include (alphabetically) *kōl* ‘every, all’, *məʿaṭ* ‘few, little’, and *raḅ/harbē(h)/rōḅ* ‘many, much’. Thereby, *məʿaṭ* and *raḅ/harbē(h)* typically stand in post-specifying apposition (*məʿaṭ* also pre-specifying), whereas *kōl* and *rōḅ* typically stand in pre-specifying construct state, also with a pronominal suffix, e.g. *kull-ām* ‘all of them’, *rubb-ām* ‘most of them’. In the case of *kōl*, the status of the quantified noun (definite or not) is important: *kāl-ʾām* (e.g. Est 3:8) signifies ‘every people’, whereas *kāl-hā-ʾām* (e.g. Gen 19:4) signifies ‘all the people’.

3.4. Prepositions

Biblical Hebrew prepositions comprise uni-consonantal examples like *lā-* ‘for’, *bā-* ‘in’, or *kā-* ‘like’, bi-consonantal examples like *min-* ‘from’, *im-* ‘with’, and *ʾel-* ‘to’, as well

as tri-consonantal examples like *ʾaḥārē* ‘after’ and *tāḥaṭ* ‘under, instead of’. Prepositions themselves can recursively consist of a preposition plus a grammaticalized noun, e.g. *li-ḥnē* ‘in front of, before’, consisting of the preposition *lā-* ‘for’ plus the grammaticalized construct form of *ḥnām* ‘face’, *ḥnē*.

Prepositions can govern both nouns and suffix pronouns, whereby uni-consonantal prepositions are graphically prefixed also to nouns. *Grosso modo*, prepositions ending in a consonant take exactly the same suffix pronouns as singular nouns, e.g. *ʾimm-ī* ‘with me’ (but *ʾimm-āk* ‘with you (f. sg.)’ and *ʾimm-ānū* ‘with us’). In contrast, prepositions overtly ending (e.g. *ʾaḥārē*, *li-ḥnē*) or underlyingly ending (e.g. *ʾel-* – cf. Arabic *ʾilā* – or *ʾal-* ‘upon’ – cf. Arabic *ʾalā*) in a vowel take the same suffix pronouns as plural nouns, e.g. *ʾal-ay* ‘upon me’.

3.5. Morphology and functional basics of verb forms

3.5.1. Tense/aspect and mood

The Biblical Hebrew finite verb basically comes in two types of conjugation, a suffix conjugation designating mainly past with the base /CāCvC/, which also underlies the consecutive non-past /wə-CāCvC/ (3. sg. m.) – the latter with final stress in the first and second person singular – and a prefix conjugation designating mainly non-past with the base /CCvC/, which also underlies the jussive and the imperative moods, as well as the consecutive past /way-yiCCvC/ (3. sg. m.) – the latter with penultimate stress, if the penult is open. The jussive overlaps morpho-phonologically with the consecutive past (minus the *wəC*-prefix). Disregarding differences in stress, both the jussive and the consecutive past are only distinguishable from the (indicative) prefix-conjugation in the case of weak verbs and the H-binyān (hipʿil). Table 22.12. provides the basic paradigms of the verb ‘to write’ (in the Semiticists’ tradition beginning with the third person):

Tab. 22.12: The basic conjugations in Biblical Hebrew

ps.	suffix conjugation (past)	prefix conjugation (non-past)
3ms	<i>kāṭab</i>	<i>yiktōb</i>
3fs	<i>kāṭabā(h)</i>	<i>tiktōb</i>
2ms	<i>kāṭabtā</i>	<i>tiktōb</i>
2fs	<i>kāṭabtī</i>	<i>tiktōbī</i>
1cs	<i>kāṭabtī</i>	<i>ʾektōb</i>
3mp	<i>kāṭabū</i>	<i>yiktōbū</i>
3fp	<i>kāṭabū</i>	<i>tiktōbnā(h)</i>
2mp	<i>kāṭabtēm</i>	<i>tiktōbū</i>
2fp	<i>kāṭabtēn</i>	<i>tiktōbnā(h)</i>
1cp	<i>kāṭabnū</i>	<i>niktōb</i>

An archaic by-form of the second person feminine singular is *kāṭabtī*, e.g. in *ʾad šaq-qamtī* ‘until you rose up’ (Judg 5:7). For weak verbs in general, cf. section 3.1.

Examples of phonological differences between plain forms on the one hand and consecutive and jussive forms on the other hand are the following (cf., e.g., Blau 1993, 47): *kāṭabtī* ‘I wrote’ vs. *wə-kāṭabtī* ‘and I (will) write’; *yəḥārēk* ‘he blesses/will bless’ vs.

wa-ybāreḵ (< */way-yəbāreḵ/) ‘and he blessed’; *yāqôm* ‘he rises/will rise’ vs. *way-yāqām* ‘and he rose’; *yahdîl* ‘he divides/will divide’ vs. *yahdêl* ‘let him divide’ (jussive) and *way-yahdêl* ‘and he divided’.

Besides the jussive mode (third and second person), Biblical Hebrew also features the imperative (second person) and the cohortative (first person), the latter marked by an *h*-suffix (*hê*([?]) *cohortativum*). Here is an overview of the relevant forms.

Tab. 22.13: The imperative and the cohortative in Biblical Hebrew

	imperative	cohortative
2ms	<i>kaṭōḇ</i>	_____
2fs	<i>kiṭbî</i>	_____
1cs	_____	^ʾ <i>ektəb-ā(h)</i>
2mp	<i>kiṭbū</i>	_____
2fp	<i>kaṭōbnā(h)</i>	_____
1cp	_____	<i>niḵtəb-ā(h)</i>

The morphological combination of imperative and cohortative occurs exceptionally, e.g. in *haqšîḇ-ā(h)* ‘listen!’ (Dan 9:19). The *h*-suffix of the cohortative is usually considered a residue of a volitional subjunctive in Semitic (cf., e.g. Waltke/O’Connor 1990, 568). The cohortative can be followed by an *-n(n)*-morpheme in front of a pronominal suffix, the so-called *nūn energeticum*, which is reminiscent of the Arabic energetic mood (e.g. *yaqtulanna* ‘let him kill’). An example is found in the second verb in the self-addressing command chain ^ʾ*elək-ā(h)* *wə-ʾerʿe-nn-ū* ‘I will go and see him’ (Gen 45:28). A further residue of the energetic mood may be the suffix *-nā*([?]), as used in polite speech, e.g. in *təḏabber-nā*([?]) *šiphāṭə-kā* ‘let your maidservant speak’ (2 S 14:12).

A negative command in the third or second person can be either expressed by the negator ^ʾ*al* (or very rarely the negator *lō*([?])) followed by the jussive, or by the negator *lō*([?]) followed by the (indicative) prefix conjugation (cf. section 4.3.5.).

The default pattern of the bound or construct infinitive in the G-stem is */CCuC/, surfacing as C(ə)CōC, e.g. *kaṭōḇ*, *li-ḵtōḇ* ‘to write’. The functions of this type of infinitive correspond more or less to the English infinitive. The other type of infinitive, the absolute infinitive, which may better be characterized as a verbal noun, has the pattern */CaCāC/, surfacing as CāCōC, e.g. *kāṭōḇ* (on its function, cf. section 4.3.2.).

The participle, which also serves as agent noun, straddles the nominal and the verbal realm. It functions as noun as a member of the construct chain (cf. section 4.2.3), e.g. in *nōṭənē laḥm-î ū-mēm-ay* ‘who give (me) my bread and water’ (Hos 2:7), but it can also govern direct objects (including pronominal object suffixes), thereby functioning as a verb, e.g. in ^ʾ*en rōʾā-nî* ‘there is none seeing me’ (Is 47:10). Its canonical active and passive patterns in the G-stem, CōCēC/CāCūC (with the example *kōṭēḇ* ‘writing’/ *kāṭūḇ* ‘written’), is in Tab. 22.14.

On the semantics of the different conjugations, cf. section 5.

Tab. 22.14: The participle in Biblical Hebrew

	active singular	plural	passive singular	plural
m.	<i>kōṭēḇ</i>	<i>kōṭəḇîm</i>	<i>kāṭūḇ</i>	<i>kāṭūḇîm</i>
f.	<i>kōṭəḇā(h)/kōṭēḇeṭ</i>	<i>kōṭəḇōṭ</i>	<i>kāṭūḇā(h)</i>	<i>kāṭūḇōṭ</i>

3.5.2. Vowel classes

Biblical Hebrew verbs come in several vowel or *ablaut* classes, which can to a certain degree be semantically ordered (cf. notably Waltke / O'Connor 1990, 367 ff.; McCarter 2008, 68 presents a brief summary). Table 22.15 presents a synchronic synopsis:

Tab. 22.15: Vowel classes in the Biblical Hebrew verb

ablaut	suffix conjugation	prefix conjugation	gloss
(1) a > ō	<i>kāṭab</i> <i>nāṣal</i>	<i>yiktōb</i> <i>yippōl</i>	'write' 'fall'
(2) a > ē	<i>nāṭan</i> <i>yālōdā(h)</i>	<i>yittēn</i> <i>tēlēd</i>	'give' 'give birth'
(3) a > a	<i>lāmad</i> <i>hākam</i>	<i>yilmad</i> <i>yēḥkam</i>	'learn' 'be wise'
(4) ē > ō	<i>hāṣēs</i> <i>nāḇēl</i>	<i>yihpōš</i> <i>yibbōl</i>	'delight in' 'droop'
(5) ē > a	<i>zāqēn</i> <i>mālē(ʿ)</i>	<i>yizqan</i> <i>yimlaʿ</i>	'be old' 'be filled'
(6) ō > a	<i>qāṭōn</i> <i>šākōl</i>	<i>yiqtan</i> <i>yiškal</i>	'be small' 'be bereaved'

Semantically, classes (1)–(5) can be associated with the following *Aktionsarten* and phonological traits: (1) mainly fientive, active-transitive verbs; (2) fientive verbs *primae nūn* or *yōd*; (3) fientive and stative verbs, many of which are of the type *mediae* or *tertia gutturalis*, as well as some semantically unmarked verbs; (4) a mixed pattern, most of them containing a labial or a velar in second or third position; (5) stative verbs, mostly intransitive; (6) permanent stative verbs.

3.5.3. Verbal diatheses/*binyānīm*

Biblical Hebrew has seven basic verbal diatheses – *binyānīm* in Hebrew terminology – or more traditionally ‘stems’, which are traditionally represented by the root p–ʿ–l. Before they will be presented in their opposition system, here is a synopsis (disregarding alternative pāʿal patterns), again with the root k–t–b:

Tab. 22.16: Diatheses in Biblical Hebrew

diathesis	suffix conj.	prefix conj.	imp.	inf. abs.	inf. constr.	participle
pāʿal	<i>kāṭab</i>	<i>yiktōb</i>	<i>kātōb</i>	<i>kāṭōb</i>	<i>kātōb</i>	<i>kōṭēb</i>
nipʿal	<i>niḵtab</i>	<i>yikkāṭēb</i>	<i>hikkāṭēb</i>	<i>niḵtōb</i>	<i>hikkāṭēb</i>	<i>niḵtāb</i>
piʿēl	<i>kittēb</i>	<i>yəḵattēb</i>	<i>kattēb</i>	<i>kuttōb</i>	<i>kattēb</i>	<i>məḵattēb</i>
puʿal	<i>kuttāb</i>	<i>yəḵuttāb</i>	————	<i>kattōb</i>	————	<i>məḵuttāb</i>
hiṭpaʿēl	<i>hiṭkattēb</i>	<i>yitkattēb</i>	<i>hiṭkattēb</i>	<i>hiṭkattēb</i>	<i>hiṭkattēb</i>	<i>miṭkattēb</i>
hipʿil	<i>hiḵtīb</i>	<i>yaktīb</i>	<i>haktīb</i>	<i>haktīb</i>	<i>haktīb</i>	<i>maḵtīb</i>
hāpʿal	<i>hāḵtab</i>	<i>yāḵtab</i>	————	<i>hāḵtēb</i>	————	<i>māḵtāb</i>

An exceptional pāʿal infinitive is *šəḵab* ‘to lie’. Some verbs take a feminine verbal noun as a suppletive infinitive, e.g. *yirʾā(h)* ‘fear’ (y–r–ʾ) and *ʾahāḇā(h)* ‘love’ (ʿ–h–b).

The nip'al infinitive absolute *niḳtōḅ* is used with finite suffix conjugation forms, otherwise the forms *hikkāṭēḅ* and *hikkāṭōḅ* are used. Besides the standard pi'el form *kittēḅ*, one occasionally finds forms such as *dibber* 'he spoke' and *giddal* 'he raised'. Besides the standard hitpa'el forms *hiḱkattēḅ* and *yiḱkattēḅ*, forms such as *way-yiṯyaṣṣab* 'and he stood fast' and in pause *yiḱhallāk* 'he will go around' are also attested.

In the case of verbs *mediae infirmae* (II-w/y), the second radical does not undergo gemination in pi'el, pu'al, and hitpa'el. Instead, the patterns CōC_iēC_i, CōC_iaC_i, and hiṭCōC_iēC_i prevail (the index _i indicating the last root consonant), e.g. *qōmēm* 'he raised', *qōmam* 'he was raised', and *hiṭqōmēm* 'he raised himself', all from the root q-w-m.

Verbs *mediae infirmae* (II-w/y) and *mediae geminatae* (II = III) may give rise to reduplicated verbs of the type C_iiC_jC_iēC_j and corresponding passive and reflexive forms, e.g. *gilgēl* 'he rolled' from a root g-l-l and *kilkēl* 'he maintained' from a root k-w-l. In a few verbs, the third radical is reduplicated, yielding a CaCC_iaC_i pattern, e.g. *ša'ānan* 'he was at ease' (cf. McCarter 2008, 72).

Individual forms exhibit a lengthening of the vowel after the first root consonant (comparable to the Arabic form III, fā'ala), e.g. *yitgō'āšū māyīm* 'waters surge' (Jer 48:6) (cf. McCarter 2008, 72) or the participle form *māšōpāṭ-i* 'my adversary' (Job 9:15) (cf. Huehnergard/Hasselbach 2008, 418). The verb *hištaḥāwā(h)* 'he prostrated himself' is nowadays usually explained as a residue of a reflexive causative (comparable to the Arabic form X, istaf'ala) from a root ḥ-w-w.

The seven main diatheses can be best explained in an opposition system (cf. D. Edzard 1965 for the involved methodology). In this context, a comparative Semitist nomenclature is practical, i.e. 'G' for pā'al, 'N' for nip'al, 'D' for pi'el, 'Dpass' for pu'al, 'Dt' for hitpa'el, 'H' for hip'il, and 'Hpass' for hāp'al.

G : N

N usually stands in a reflexive or passive relationship to G, e.g. *niḅqā'ū* (N) *kāl-ma'yānōṭ tēhōm rabbā(h)* 'all the springs of the great abyss burst open' (Gen 7:11) vs. *way-yiḅqa'* (G) *'ēlōhīm 'et-ham-maktēš* 'and God split open the hollow' (Judg 15:9).

G : D

D usually stands in a factitive, delocutive-estimative, denominative, or frequentative relationship to G, e.g. *'āšer-ḥillā(h)* (D) *YHWH b-āh* 'with which YHWH made [the land] sick' (Dt 29:21) vs. *kī ḥāṭī* (G) 'because I became sick' (1 S 30:13). A delocutive use is found in the example *gaddalū* (D) *la-YHWH 'itt-i* 'declare with me that YHWH is great!' (Ps 34:4).

D : Dpass

Dpass expresses the passive of D, e.g. *gam-'attā(h) ḥullīṭā(h)* (Dpass) *kāmō-nū* 'you too have been made sick as we are' (Is 14:10) vs. *'āšer-ḥillā(h)* (D) *YHWH b-āh* 'with which YHWH made [the land] sick' (Dt 29:21).

D : Dt

Dt usually expresses the reflexive-reciprocal of D, e.g. *lō(?) tiṇnaqqēm* (Dt) *napš-i* 'should not my soul avenge itself' (Jer 5:9) vs. *wə-niqqamī* (D) *dāmē 'āḅād-ay han-nāḅ'īm* 'and I will avenge the blood of my servants, the prophets' (2 K 9:7).

G : H

H usually expresses the causative of G, e.g. *ha'ārīkī* (H) *mēlār-áyik* 'prolong your ropes!' (Is 54:2) vs. *kī 'ārākū* (G) *l-ō šām hay-yāmīm* 'that the days were long for him there', but it can also express an elative notion (cf. the comparable morphology of the Arabic fourth stem and the elative), e.g. *lā-má'an ya'ārīkūn* (H) *yāmē-kā* 'so that your days will be very long' (Ex 20:12).

D : H

The contrast between the factitive (D) and the causative (H) notion can be illustrated by the following pair of examples, *wə-ha'āḇadī* (H) *'et-han-népeš ha-hī'* 'and I [YHWH] will cause that soul to perish' (Lev 23:30) vs. *wat-tə'abbēd* (D) *'ēt kâl-zéra' ham-mamlākā(h)* 'and she destroyed the whole royal seed' (2 Chr 22:10).

H : Hpass

Hpass expresses the passive of H, e.g. *wa-yhī b-ay-yōm haš-šālīši yōm hullēdēt* (Hpass) *'et-par'ō(h)* 'and it was on Pharaoh's birthday ('on the day of Pharaoh's having been caused to be born')' (Gen 40:20) vs. *way-yōlēd* (H) *bānīm ū-bānōt* 'and he begat ('caused to be born') sons and daughters' (Gen 5:4).

For a more technical account in terms of valence theory (adding and subtracting arguments to/of the verb) cf. Steiner 1997, 160.

3.6. Adverbs

Adverbs are a restricted class in Biblical Hebrew and cannot be formed productively. Important temporal and local adverbs include *pō* (or *pō(h)*) 'here', *šām* 'there', *attā(h)* 'now', *'āz* 'then', *kəḇar* 'already', and *'ōd* 'still'. An *vm*-suffix sometimes serves to form manner adverbs and other types, e.g. *'āmn-ām* 'really', *ḥinn-ām* 'in vain', *yōm-ām* 'by day', *pit'-ōm* 'suddenly', and *šilš-ōm* 'the day before yesterday'. The terminative *h*-suffix (*hē'*) *locale*, e.g. in *'arš-ā(h)* 'to the earth', can also be considered an adverbial element (cf. also Rendsburg 2007, 102). Finally, scalar adverbs also belong to this group, e.g. *mə'ōd* and *harbē(h)* (properly an infinitive absolute) 'very' and *mə'aṭ* 'a little'.

3.7. Conjunctions

The main Biblical Hebrew coordinating conjunction is the proclitic *wə*-, which also has three allomorphs: (i) *ū*- before a labial, e.g. *ū-bə-kāl-hā-'āreš* 'on the whole earth', and before a consonant (except *y*) marked with *šəwā*, e.g. *ū-ḡəḇūl* 'and (the) border'; (ii) *wā*- in certain other environments (usually before stressed syllables with a strong accent), e.g. *tōhū wā-bōhū* (Gen 1:2) (cf. also Joüon/Muraoka 2006, 319 ff.), and (iii) *waC*-, with *C* being the first prefix consonant (except *'*) in the consecutive past conjugation, e.g. *way-yō' mer* 'and he said'. The conjunction *wə*- and its allomorphs coordinate both nominal phrases and verbal phrases. Other coordinating conjunctions are *'ap* and *gam* 'also', as well as *'ō* 'or'.

Subordinating conjunctions include the relative particles *'āšer* and *šē* in the sense of 'that', as well as *kī* 'because, that', *pen* 'in case, lest', *'im* 'if' (real), *lū* 'if' (irreal), and

lūlē (or *lulē(?)*) ‘if not’. Compound conjunctions are likewise attested, e.g. *ka-’āšer* ‘as, when’. Some items can double-duty as prepositions and conjunctions, e.g. *lā-ma’an* ‘for the sake of, in order that’ and *lērem* ‘before’.

3.8. Interjections and presentatives

Biblical Hebrew interjections include such particles as the exclamation of joy *hē’ā(h)* and the sound for demanding silence *has* (or *hās*). Widely attested presentative adverbs are *hēn*, *hinnē(h)*, and *hā-lō’* ‘behold!, look!’ A few imperative forms show a similar function, e.g. *rā’ē(h)* ‘see!’ and *lāk-ā(h)* ‘go!’ (the latter with *hē’* *cohortativum*). The particle *’ahālay* (or *’ahālē*) ‘if only, would that!’ expresses a wish.

4. Syntax

4.1. Biblical Hebrew word order in a typological perspective

Just as Classical Arabic, Biblical Hebrew by and large exhibits the typical syntactic features of a V(erb-)S(ubject-)O(object)-language (see ch. 11). Exceptions to this tendency include topicalization as well as the word order in circumstantial and concessive clauses, where SVO obtains. In nominal sentences, the unmarked word order is subject–predicate. In terms of the implicational word order universals established by Greenberg, Hawkins, and Vennemann, VSO-languages entail the following features:

- (1) existence of prepositions (as opposed to postpositions);
- (2) existence of a pre-specifying definite article;
- (3) adjectives, genitives, and relative sentences follow their head noun;
- (4) auxiliaries precede the main verb;
- (5) the standard of comparison follows the adjective.

All of these implications hold for Biblical Hebrew; here are examples illustrating points (3) to (5) – points (1) and (2) have already been established:

ad (3): *hā-’ir hag-gəḏōlā(h)* ‘the big city’ (Jon 1:2);

ad (3): *’ēšet ’āhī-w* ‘the wife of his brother’ (Gen 38:9);

ad (3): *’anī yōsēp ’āhī-ķem ’āšer-məkartem ’ōt-ī mišrāyām-ā(h)* ‘I am Joseph, your brother, whom you sold [me] into Egypt’ (Gen 45:4);

ad (4): *way-yāḥel hā-’ām li-znōt* ‘and the people started to be promiscuous’ (Num 25:1);

ad (5) *gāḇōah mik-kāl-hā-’ām* ‘higher than any of the people’ (1 S 9:2).

4.2. Syntax of noun phrases

4.2.1. Attribute

The adjective in attributive position follows its head noun and agrees with it in number, gender, and determination, as in the mentioned example *hā-’ir hag-gəḏōlā(h)* ‘the big

city'. In the case of a head noun in the dual, the adjective follows in the plural, e.g. *yāḏáyim rāḫōt* 'weak hands' (Job 4:3). In the case of a complex head (A + B) of different gender, the adjective follows in the masculine plural, e.g. *huqqim ū-mišwōt tōḥim* 'good laws and commandments' (Neh 9:13). In general, agreement also holds for the demonstrative pronoun, e.g. *ha-ḥālōm haz-ze(h)* 'this dream'. Exceptionally, the definite article can be missing on a numbered head noun, e.g. *šēba' pāroṭ haṭ-ṭōḇōt* 'the seven good cows' (Gen 41:26). One also finds opposition pairs such as *haš-šá'ar had-dārōm* 'the south gate' (Ez 40:28) vs. *šá'ar hā-elyōn* 'the upper gate' (Ez 9:2), where the distinction between attribution and annexation seems to be blurred (cf. Steiner 1997, 162).

4.2.2. Apposition

Biblical Hebrew appositions mainly comprise substantives used as attributes to proper names. Again, one or more attributes usually follow the head of the construction, e.g. *pōṭīpar sārīs par'ō(h) šar haṭ-ṭabbāḥīm 'iś mišrī* 'Potiphar, the eunuch of Pharaoh, the captain of the guard, an Egyptian' (Gen 39:1). Some variation occurs, e.g. *binyāmīn 'āḥī-w* 'his brother Benjamin' (unmarked word order) (Gen 45:14) vs. *'āḥī-binyāmīn* 'my brother Benjamin' (marked word order) (Gen 42:3) (cf. Blau 1993, 95).

4.2.3. Annexation

Just as in other Semitic languages, the annexation (*samīkūt*) of a *nomen rectum* to the head of the noun phrase, the *nomen regens*, which stands in the construct state (cf. section 3.3.1.), is the standard way to express a genitival or subjoining relation. The *nomen rectum* in general determines the *nomen regens*, e.g. *ḥolēm ḥālōm* 'dreamer of a dream' (Dt 13:2) vs. *ḥolēm ha-ḥālōm* 'the dreamer of the dream' (Dt 13:4). The annexation can also be iterated (A of B of C etc.), e.g. *bā-éres māgūrē 'āḥī-w* 'in the land of the sojourning of his father' (Gen 37:1), or even *ū-šā'ār mispar-qēšet gibbōrē ḥanē-qēḏār* 'the rest of the number of arches of the heroes of the sons of Qēḏār' (Is 21:17), but such iterations are rare (cf. also L. Edzard 2009). Constructions of the type (A + B) of C only occur exceptionally, e.g. *šēfer ū-lāšōn kašdīm* 'the literature and the language of the Chaldeans' (Dan 1:4); usually they are circumscribed, e.g. *way-yiqra' 'et-kāl-ḥartummē mišrāyim wə-'et-kāl-ḥākāme-hā* 'he called for all the magicians and wise men of Egypt' ('for all the magicians of Egypt and its wise men') (Gen 41:8). Besides the prevalent function to express possession, the genitive can also express quality, e.g. *kaṭōneṭ passīm* 'a tunic made of variegated pieces' (Gen 37:3). When the *nomen regens* is a verbal noun, it is not always clear whether the genitive reflects the subject or the object, e.g. in *'ahābat nāšīm* 'love of women' (2 S 1:26).

Next to the synthetical genitive one also finds the analytical genitive, e.g. *haš-šō(')n 'āšer lə-'āḥī-hā* 'the flock of ('which belongs/belonged to') her father' (Gen 29:9) as opposed to *šō(')n 'āḥī-hem* 'their father's flock' (Gen 37:12). Cataphoric possessive pronouns, which are common in later stages of Hebrew, are rare in (later) Biblical Hebrew, e.g. *miṭṭāt-ō šel-li-šlōmō* 'Shlomo's bed' ('his bed that to Shlomo') (Ct 3:7) and *bə-ḥō'-ām hak-kōhānīm* 'upon the ('their') entering of the priests' (Ez 42:14).

4.3. Syntax of verb phrases

4.3.1. Transitivity and intransitivity

The different diatheses (*binyānīm*) usually correspond to valence types. The following diatheses tend to be transitive: pā'al (not in the case of stative verbs), pi'el, and hip'il – the latter sometimes being intransitive as in *he'ērīk* 'he made long; he was very long' or in denominative verbs as *hišrīš* 'he became rooted' (from *šōreš* 'root'). The diatheses nip'al, pu'al, and hitpa'el, and hāp'al are always intransitive. Intransitive verbs can, however, also govern an inner object (cf. section 4.3.2.).

Whereas indefinite direct objects stand by themselves, e.g. *way-yahālōm yōsēp hālōm* 'and Joseph dreamt a dream' (Gen 37:5), definite direct objects tend to be introduced by the accusative marker 'et/et, e.g. *wə-'ābī-w šāmar 'et-had-dābār* 'and his father remembered the matter' (Gen 37:11). Two direct objects occur as well, e.g. *way-yapšīū 'et-yōsēp 'et-kuttānt-ō* 'and they stripped Joseph of his tunic' (Gen 37:23). The second direct object (as well as any indirect object) can also be introduced by *l-*, e.g. *way-yahšābē-hā l-zōnā(h)* 'and he thought of her as a whore' (Gen 38:15).

4.3.2. Infinitive constructions

The absolute infinitive serves mainly as verbal noun in paronomastic constructions (*figura etymologica*; cf. the Arabic *maf'ul muṭlaq*), in which a finite verb is further emphasized, e.g. *hā-mālōk timlōk 'ālē-nū 'im māšōl timšōl bā-nū* 'will you indeed reign over us or will you indeed have dominion over us?' (Gen 37:8) and *way-yir'ū hā-'ā-nāšīm yir'ā(h) gādōlā(h)* 'and the men were exceedingly afraid' ('they feared great fear') (Jon 1:10).

4.3.3. Agreement between subject and predicate

In general, both the verbal and the nominal predicate agree with its subject in number and gender, e.g. *way-yērādū 'āhē-yōsēp* 'and Joseph's brothers went down' (Gen 42:3) or *'ānahñū mə'allēmīm 'ālumīm* 'we are/were binding sheaves' (Gen 37:7). In the case of a complex subject, a preceding verb often agrees only with the first element thereof, e.g. *wat-tāšar dābōrā(h) ū-bārāq* 'and Deborah and Baraq sang' (Judg 5:1). Verbs after a complex subject appear in the plural, though. Impersonal passive constructions always take the verb in the 3. m. s., e.g. *ū-l-yōsēp yullad šanē bānīm* 'and to Joseph were born two sons' (Gen 41:50).

In the case of collective nouns, one often encounters *constructio ad sensum* (i.e. plural agreement), e.g. *wə-kāl-hā-'āreš bā'ū* 'and the whole earth came' (Gen 41:57) or *hā-'ām hōlākīm* 'the people who walk' (Is 9:1).

4.3.4. Interrogation

Yes-no questions can be introduced by the particle *hā-* (with allomorphs) or simply be unmarked. Steiner (1997, 167) juxtaposes the examples *hā-šālōm bō'ε-kā* (1 K 2:13) and

šālōm bōʿe-kā (1 S 16:4), both meaning ‘do you come in peace?’. Rhetorical (negative) questions may be introduced by *hā-lōʿ* (e.g. *hā-lōʿ* *ʾāmartī ʾālē-kem* ‘didn’t I tell you?’ (Gen 42:22)). Alternative questions are formed with *hā- ... ʾim ...*, e.g. *hakkēr-nāʿ* *hak-kāṭōnēt bin-kā hīʿ* *ʾim-lōʿ* ‘see whether it is your son’s tunic or not!’ (Gen 37:22). Further interrogative particles include *ʾēk* ‘how’, *ʾēpō(h)* ‘where’, *kam-mā(h)* ‘how much/many’, *lā-mā(h)* ‘why’, *mā(h)* ‘what’, and *māṭay* ‘when’.

4.3.5. Affirmation and negation

As there exists no direct term for ‘yes’ in Biblical Hebrew, the idiomatic affirmation consists of the repetition of the beginning of the question (in the case of a verb in the first person). As an example consider the question and answer embedded in Gen 29:5: *way-yōʿ* *mēr lā-hem ha-ydaʿtem ʾet-lāḇān ben-nāḥōr way-yōʿ* *mārū yāḏānū* ‘and he said: do you you know Laban son of Nahor?; and they said: we know’ (the verb *yādaʿ* ‘know’ occurs twice in the suffix conjugation in resultative function).

The term for ‘no’ is *lōʿ*, and this negation functions in various scope, i.e. it can negate individual terms like *ʾēlōhīm* ‘God’, e.g. *bā-lōʿ* *ʾēlōhīm* ‘by who is not God’ (Jer 5:7) or whole clauses, e.g. *kī lōʿ* *himṭir YHWH ʾēlōhīm bā-ʾāreš* ‘because God had not (yet) made it rain upon earth’ (Gen 2:5). In negative volitive clauses, the negator *ʾal* is used, e.g. *ʾal yēraʿ bā-ʿene-kā* ‘let it not be evil in your eyes’ (Gen 21:12). General commandments (notably the ten commandments), however, resort to the use of *lōʿ* as well, e.g. *lōʿ* *yihye lā-kā ʾēlōhīm ʾāḥērīm lā-pān-āy* ‘do not have any other gods before me’ (Ex 20:3). Other negators are *ʾayinʾēn* for verbless clauses (cf. section 3.3.4.) and *biltī* for adjectives and infinitives, e.g. *biltī ṭāḥōr* ‘unclean’ (1 S 20:26), *lā-biltī ʾāḡāl-mim-menn-ū* ‘not to eat from it’ (Gen 3:11), and *ṭērem* ‘not yet’ (usually with the prefix conjugation), e.g. *wā-kōl šiaḥ haš-šāde(h) ṭērem yihye bā-ʾāreš* ‘and all the shrubs were not yet upon the earth’ (Gen 2:5).

4.4. Syntax of sentences

4.4.1. Typology of clauses

A first basic distinction can be made between minor and major clauses. The first category comprises vocatives, e.g. *ʾēl-ī* ‘my God!’ in *ʾēl-ī ʾēl-ī lā-mā(h) ʾāzabtā-nī* ‘my God, my God, why have you left me?’ (Ps 22:2) and exclamations such as *ḥālīlā(h) l-ī* ‘far be it from me’ (Gen 44:17). The second category comprises nominal and verbal clauses.

In nominal clauses, subject and predicate can be juxtaposed, or else a copula can be intervening, e.g. in *wā-yōsēp hūʿ* *haš-šallūt* ‘and Joseph – he is the governor’ (Gen 42:6). Exceptionally, the predicate can also precede the subject, e.g. *kī ʾāpār ʾatā(h)* ‘because you are dust’ (Gen 3:19). For the types of verbal clauses, cf. section 4.3.1.

Depending on their relationship to each other, verbal clauses can be further categorized as either paratactic or hypotactic clauses.

4.4.2. Paratactic clauses

Especially in narrative passages, the indicative consecutive verb forms (cf. section 5.) are used for the expression of sequential events, but a conjunction can also link modal volitional forms, e.g. *’ālē(h) ’ēkōl ū-šālē(h)* ‘go, eat and drink!’ (1 K 18:41) (for chains of imperatives, cf. Fassberg 2006). Generally speaking, Biblical Hebrew features many paratactic constructions in cases where one might expect a hypotactic construction from a non-Semitic perspective. Waltke/O’Connor (1990, 650 ff.) distinguish several functions of the conjunction *wā-* besides the purely conjunctive function: (i) a ‘conjunctive-sequential’ *wā-*, e.g. *’ēlak-ā(h) wā-’akke(h) ’et-yišmā’ēl* ‘let me go so that I can kill Ishmael’ (Jer 40:15); (ii) a disjunctive *wā-*, e.g. *wa-yhī rā’āb bā-kāl-’ārāšōt ū-bā-kāl-’ereš mišrāyim hāyā(h) lāhem* ‘there was famine in all the (other) lands, but throughout Egypt there was food’ (Gen 41:54); and (iii) an ‘epexegetical’ *wā-*, e.g. *’ēn-qāḏōš ka-YHWH ... wā-’ēn-šūr k-ē(’)lōhē-nū* ‘there is no one holy like YHWH ..., i.e. there is no rock like our God’ (1 S 2:2). A disjunctive function of *wā-* can be maintained in cases like *way-yihyū šanē-hem ’ārūmmīm ... wā-lō(’) yitbōšāšū* ‘and the two of them were naked ... but they were not ashamed’ (Gen 2:25).

Circumstantial clauses (comparable to Arabic *ḥāl*-clauses) can be considered to be on the borderline between paratactic and hypotactic clauses. Typically, they exhibit a SVO-order, e.g. *kī-lō(’) nūkal li-r’ōt pānē hā-’iš wā-’āhī-nū haq-qāṭan ’ēn-ēnn-ū ’ittā-nū* ‘for we cannot see the man’s face, while our youngest brother is not with us’ (Gen 44:26).

4.4.3. Hypotactic clauses

4.4.3.1. Relative clauses

Biblical Hebrew relative clauses, whether with definite or indefinite antecedent, are typically introduced by the relative marker *’āšer* (not: ‘relative pronoun’, as Steiner (1997, 171) remarks correctly). A typical feature of Semitic relative clauses, namely the resumptive or anaphoric pronoun in the relative clause, which points back to its antecedent, is also found in Biblical Hebrew. Consider the following example: *ḥastā ’al-haq-qiqqāyōn ’āšer lō(’)-’āmalā b-ō wā-lō(’) giddalt-ō* ‘you had pity on the ricinus, for which you have not laboured (‘it’) and which you have not made grow (‘it’)’ (Jon 4:10). In the case of an indefinite antecedent, the relative marker can also be absent, especially in poetry. Consider the following pair of examples: *gōy ’āšer lō(’)-tīšma’ lāšōn-ō* ‘a nation whose language you do not hear (i.e. understand)’ (Dt 28:49) vs. *gōy lō(’)-tēda’ lāšōn-ō* ‘a nation whose language you do not know’ (Jer 5:15). A relative clause can also stand in the position of the *nomen rectum* in an annexation, e.g. *kāl-yāmē hiḥhallaknū ’itt-ām* ‘all the days (that) we went about with them’ (1 S 25:15).

4.4.3.2. Adverbial clauses

Adverbial clauses comprise causal, consecutive, and temporal clauses, i.e. clauses that have a distribution comparable to adverbs. The conjunction *kī* serves to introduce all

three types, e.g. *kī ra'āṭā(h)* 'because she saw' (Gen 38:14), *kī-sāmū 'ōt-ī b-ab-bōr* 'so that they should have placed me in the dungeon' (Gen 40:15), and *kī-bānū 'el-ham-mālōn* 'when we came to the inn' (Gen 43:21) (cf. Blau 1993, 111). Other causal conjunctions are compounds with *'āšer*, to wit *mē'āšer*, *ba-'āšer*, *'eqeḇ 'āšer*, and others. Another important temporal conjunction is *ka-'āšer* 'when', e.g. *ka-'āšer bā(?) yōsēp* 'when Joseph came' (Gen 37:23). Further consecutive conjunctions include *lā-ma'an* and *ba-'ābūr* 'so that', e.g. *lā-ma'an haddīhī 'et-kem* 'so that I will banish you' (Jer 27:15) and *ba-'ābūr yišmərū huqq-ā(y)-w* 'so that they might keep his precepts' (Ps 105:45).

4.4.3.3. Conditional clauses

The protases of real conditional sentences are usually introduced by the particle *'im*, e.g. *wə-'im yāšabnū pō(h) wā-mātnū* 'if we stay here, we shall die' (2 K 7:4). Asyndetic constructions without any conditional particle occur as well, e.g. *tittēn lā-hem yilqōṭūn* 'if (or: when) you give it to them, they gather it up' (Ps 104:28). The protases of irreal conditional sentences are introduced by the particle *lū* (negative: *lū-lē* or *lū-lē(?)*), e.g. *lū yeš-ḥereḇ bə-yāq-d-ī kī 'attā(h) ḥāragī-k* 'if there were a sword in my hand, I would surely now kill you' (Num 22:29). Exceptive clauses are introduced by *biltī 'im* or *kī 'im* 'unless', e.g. *lō(?) 'āšallēḥā-kā kī 'im bēraḳtā-nī* 'I won't release you unless you bless me' (Gen 32:27).

The particle *lū* may also serve to introduce optative clauses, the apodosis of which is not spelled out, e.g. *wə-lū hō'alnū wan-nēšēḇ bə-'ēber hay-yardēn* 'would that/if only we had been content to dwell on the other side of the Jordan!' (Jos 7:7).

4.4.3.4. Complement clauses

Complement clauses (or constituent noun clauses) have the distribution usually occupied by nouns, either as subjects of equational sentences or as objects of verbs and prepositions. Often, complement clauses consist of an infinitive construct governed by various prepositions. Such an example in subject position is the following: *kī mē-'et YHWH ḥāyāṭā(h) lə-ḥazzēq 'et-libb-ām* 'from YHWH was the hardening (of) their heart' (Jos 11:20). Infinitives in complement clause position can also govern the accusative, e.g. *wa-yhī b-ay-yōm ḥaš-šālīši yōm hullédeṭ 'et-par'ō(h)* 'and it was on Pharaoh's birthday' (Gen 40:20). In object position, different types of complement clauses are found. An example of a nominal complement clause in object position is the following: *wa-yar(?) YHWH kī rabbā(h) rā'at ḥā-'āqām* 'and YHWH saw that human wickedness was great' (Gen 6:5).

5. Tense and aspect semantics

5.1. Tense and/or aspect

While there has been intense discussion about whether the Biblical Hebrew verbal system can be captured better in terms of tense *or* aspect, it is safe to state that both

tense and aspect play a role. Many verbs in the suffix conjugation are punctual in aspect and denote actions completed in the past, whereas many verbs in the prefix conjugation are durative in aspect and denote incomplete action in either present or future (non-past). On the other hand, verbs in the prefix conjugation can refer to actions in the past, notably in poetic context, and verbs in the suffix conjugation can have durative aspect, e.g. in the case of the ‘gnomic’ perfect (cf. section 5.2.). The following discussion is limited to the indicative finite forms (for the modal forms and the infinitive cf. section 4.3.).

5.2. The plain conjugations

Let us first consider the suffix conjugation. In principle, every verb can be used in a durative or an inchoative manner (cf. Blau 1993, 85), usually determined by the context.

The following pair of examples illustrates the difference:

durative: *wə-hay-yāmūm* ‘āšer *mālāk dāwīd* ‘*al yiśrā’ēl* ‘*arbā’īm šānā(h)* ‘and the timespan (‘days’) that David reigned over Israel was 40 years’ (1 K 2:11) vs.

inchoative: *bi-šnaṭ štēm-’ēsrē(h)* *šānā(h)* ... *mālāk* ‘āhazyāhū ... ‘in the twelfth year ... Ahaziah became king ...’ (2 K 8:25).

The “gnomic” perfect is found in the following example:

gam-ḥāsīdā(h) *ba-š-šāmāyim yāqō’ā(h)* *mō’ād-ḥā(h)* *wə-tōr* ... *wə-’āgūr šāmārū* ‘*ēṭ-’ēṭ bō’ānā(h)* ‘also the stork in heaven knows its time and the dove ... and the bulbul observe the time of their migration’ (Jer 8:7).

Performative verbs in the suffix conjugation expressing coincidence have likewise to be translated with the (English) present tense, for example:

higgadū hay-yōm ... ‘I declare today ...’ (Dt 26:3), *hištaḥāwēṭi* ‘I humbly bow’ (2 S 16:4) or *kī qānīti* ‘I acquire (here and now)’ (Ruth 4:9).

The regular non-past function of the prefix conjugation can be observed in the following example (incidentally with two performative verbs in the suffix conjugation):

ha-hū(?) ‘āmar *wə-lō(?)* *ya’āšē(h)* *wə-dibber wə-lō(?)* *yəqīm-ēnn-ā(h)* ‘does he (God) promise and not act, and does he speak and not fulfill it?’ (Num 23:19).

The marked case of a verb in the prefix conjugation denoting a past event may be seen in the following example:

təhōmōṭi yəḡassū-mū yārādū bi-mšōlōṭ kə-mō ‘āḇen ‘the deep waters began to cover them; they sank to the depths like a stone’ (Ex 15:5).

5.3. The consecutive conjugations

As stated in section 3.5.1., the consecutive past is expressed by the /way-yiCCvC/ conjugation and the consecutive non-past by the /wə-CāCvC/ conjugation. As clearly evidenced by the weak forms (cf. section 3.5.1.), the consecutive past reflects the shortened prefix conjugation as present in the Akkadian preterite and the Arabic apocopate (not ‘jussive’) in the negative past (*lam* + *yafal*). It has also been suggested that the Biblical Hebrew consecutive past is in some way related to the Egyptian *iw sdm-n-f*

forms (cf. Loprieno 1980 and Rendsburg 2007, 99). The consecutive non-past, in turn, reflects the non-past use of the suffix conjugation in the Akkadian stative or in the Arabic gnomic perfect, e.g. ‘*azza wa-jalla* ‘he (God) is mighty and lofty’ (or: ‘may God be ...’). One might also think of a sort of reversed analogy (cf. McCarter 2008, 65).

A typical example of the consecutive past is the following:

way-yiqrāʾ(ʿ) ‘*ēlōhīm lā-ʾor yōm* ‘and God called the light day’ (Gen 1:5).

In rare cases, the *hēʿ(ʿ)* *cohortativum* can follow a consecutive past form, e.g. *wan-naḥalm-ā(h)* ‘and we dreamt’ (Gen 41:11).

In poetic context, a /way-yiCCVC/ form can also have non-past reference, e.g. *way-yeḥšōp yāʾārōt* ‘and [the voice of God] strips the forests bare’ (Ps 29:9).

A typical example of the consecutive non-past is the following:

wə-hāyā(h) kə-qārāb-kem ʾel-ham-milḥāmā(h) wə-niggaš hak-kōhēn wə-dibber ʾel-hā-ām ‘and it will be when you are about to go into battle, the priest will come forward and will speak to the army’ (Dt 20:2).

Consecutive forms *without* the noted morphological inversion occur in rare instances, e.g. *wə-ʾāsā(h) l-ō* ‘and he made for him’ (Gen 37:3) or *taʾtūr ʾel-ā(y)w wə-yišmāʿε-kā* ‘you will pray to him and he will hear you’ (Job 22:27).

6. Lexicon

There is a considerable common stock of North-West Semitic vocabulary in Biblical Hebrew, but isoglosses between Canaanite and Aramaic exist nevertheless. Among important terms in this context are the Canaanite root ‘-l-y ‘to ascend’ vs. the Aramaic root s-l-q, Canaanite b-w-ʾ ‘to enter’ vs. Aramaic ‘-l-l, Canaanite d-b-r ‘to speak’ vs. Aramaic m-l-l, etc. (cf. McCarter 2008, 78).

The most important group of loan words, ca. 80 lemmata, is of Akkadian origin, some of which are direct loans and some of which entered Biblical Hebrew via Aramaic. In turn, some of the Akkadian loan words are of Sumerian or other (e.g. Hurrian) origin (cf. Mankowski 2000, 167–170 for a concise overview). Examples of the latter category include *hēkāl* ‘temple, palace’ (*passim*), derived from Akkadian *ekallu*, which in turn goes back to Sumerian *é.gal* ‘big house’, and *ṭāpšār* ‘military officer’ (Jer 51:27; Nah 3:17), derived from Akkadian *ṭupšarru* ‘scribe’, which in turn goes back to Sumerian *dub.sar* ‘scribe’. Another prominent example, which entered Biblical Hebrew via Aramaic, is *ʾiggérēt* ‘letter’ (Neh 2:8, 6:5; Est 9:29), derived from Akkadian *egirtu*. A further example of direct borrowing from Akkadian is *miskēn* ‘pauper’ (Qoh 4:13, 9:15, 16), derived from Akkadian *muškēnu*.

Individual terms are possibly of Egyptian origin, e.g. *šēš* ‘linen’ (*passim*) from Egyptian *šš* ‘linen’ and *ṭabbāʿat* ‘sealing ring’ (*passim*) from Egyptian *ḏbʿwt* (cf. McCarter 2008, 79).

Abbreviations

Gen	Genesis	Nah	Nahum
Ex	Exodus	Hab	Habakkuk
Lev	Leviticus	Zeph	Zephaniah
Num	Numbers	Hag	Haggai
Dt	Deuteronomy	Zech	Zechariah
Jos	Joshua	Mal	Malachi
Judg	Judges	Ps	Psalms
1 S	1st Samuel	Prov	Proverbs
2 S	2nd Samuel	Job	Job
1 K	1st Kings	Ct	Song of Songs
2 K	2nd Kings	Ruth	Ruth
Is	Isaiah	Lam	Lamentations
Jer	Jeremiah	Qoh	Ecclesiastes
Ez	Ezekiel	Est	Esther
Hos	Hosea	Dan	Daniel
Joel	Joel	Ezra	Ezra
Amos	Amos	Neh	Nehemiah
Ob	Obadiah	1 Chr	1st Chronicles
Jon	Jonah	2 Chr	2nd Chronicles
Mic	Micah		

7. References

Rem.: Besides the literature cited in the body of this article, the following reference list contains a number of standard grammars, dictionaries, concordances, and other indispensable standard reference works for the study of Biblical Hebrew. Compendious bibliographies are contained in the works by Sáenz-Badillos (1983), Waltke/O'Connor (1990), Waldman (1989), Hackett (2002), and Joüon/Muraoka 2006, among others.

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23. Mishnaic Hebrew

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Abstract

This chapter considers the history and salient features of Hebrew from the early post-Biblical period, i.e. Mishnaic Hebrew. Questions of continuity and change are addressed as well as those of internal variation and language contact.

1. The literature written in Mishnaic Hebrew

Mishnaic Hebrew is the language in which the whole of the Tannaitic literature was written (i.e. Mishna, Tosefta, Halachic Midrashim and *Séder ‘Ōlām Rabbā*) and the Hebrew parts of the Amoraic literature (i.e. Palestinian Talmud and Aggadic Midrashim, such as *Bəréshiṭ Rabbā* and *Wayyiqra Rabbā*, and the Babylonian Talmud). It is customary to divide Mishnaic Hebrew into two main strata: Tannaitic Hebrew (or Mishnaic Hebrew *a*) and Amoraic Hebrew (or Mishnaic Hebrew *b*). The Tannaitic literature largely dates to the end of the 2nd century C.E. through to the beginning of the 3rd; but there is good reason to assume that it contains material written in the period close to the destruction of the Second Temple (70 C.E.), e.g. tractates *Šeqālīm*, *Tāmīd*, *Middōt*, and parts of other tractates, such as Chapter 3 of *Bikkūrīm*, parts of *Yōmā*, *Sukkā* and so on. Most of these describe ceremonies which were current in the days of the (Second) Temple. The Amoraic literature belongs mainly to the 3rd through to the 5th centuries.

Tannaitic Hebrew reflects a living spoken Hebrew, whereas Amoraic Hebrew was a written language with an Aramaic substrate: Jewish Palestinian Aramaic (also called Galilean Aramaic) in Ereṣ Yisrā’él [= the Land of Israel] and Babylonian Aramaic in Babylonia. It is reasonable to assume that Hebrew was still a spoken language in some areas of Ereṣ Yisrā’él at the end of the 2nd century C.E.

2. Emergence

Although Mishnaic Hebrew only emerged as a literary language close to the destruction of the Temple, it is widely acknowledged that it was a vernacular language in different areas of Eres Yisra'el throughout the Second Temple period. Some scholars place its origin even earlier, derived from a Hebrew dialect of the First Temple period. The Biblical books belonging to the end of the First Temple and to the Second Temple periods contain linguistic traits prevalent in Mishnaic Hebrew. For instance, the pattern פְּעוּל – *pā'ol*, which designates an occupation or a permanent engagement, such as מְחַן – *tāhōn* – ‘miller’, לָקוּחַ – *lāqōah* – ‘buyer’, and is used in Mishnaic Hebrew, and has counterparts already in the Book of Jeremiah: בָּחֹן – *bāhōn* – ‘tester’ (6, 27), עֹשֶׂק – *āšōq* – ‘oppressor’ (22, 3), צָרוּף – *šārōp* – ‘goldsmith’ (6, 29). In Mishnaic Hebrew the consonant represented by ש [š] coalesced with ס [s]. This phenomenon is mainly reflected in old manuscripts of rabbinic literature: סְאוֹר (= שְׁאוֹר) – pronounced *sə'ōr* – ‘leaven’, סְעוּרָה (= שְׁעוּרָה) – pronounced *sə'ōrā* – ‘barley’; but it is already documented in the Book of Ezra (4, 5): ‘וּסְכָרִים עָלֵיהֶם יוֹעֲצִים’ – ‘they hired counselors to work against them’ – סְכָרִים – *sōkārīm* – instead of שְׁכָרִים – *šōkārīm*.

3. Mishnaic Hebrew and Biblical Hebrew

It is evident that Biblical and Mishnaic Hebrew differ in many characteristics. Although some scholars emphasize the homogeneity of their morphology, and seek precedents in Biblical Hebrew for any form found in Mishnaic Hebrew, others, however, note numerous dissimilarities in all spheres of the language. For instance, the clear Biblical distinction between the two consonants [w] and [b]: the pronunciations of שָׁוְא – *shāw* – ‘vanity’ and שָׁב – *shāb* – ‘returned’ are distinct in the Bible. In Mishnaic Hebrew these consonants probably coalesced, as spellings such as יְוֹנָה (= יְבֹנָה) – *Yabne-* (a place name), מוּבָל (= מוּבָל) – *mūbāl* – ‘being carried’ testify. Cohortative forms (‘long imperfect’) like אֲשִׁירָה – *āshūrā* – ‘I will sing’, נִשְׁמָחָה – *niśmahā* – ‘Let us rejoice’, which prevail in the Bible, did not survive in Mishnaic Hebrew. The pattern פְּעֻלָּן – *po'lan* – of Biblical Hebrew has a parallel form in Mishnaic Hebrew. It designates in the Bible mainly general nouns, e.g. אֲבֵדָן – *’obdān* – ‘loss’, קֶרְבָּן – *qorbān* – ‘sacrifice’, while in Mishnaic Hebrew it acquired the sense of *nomen agentis*, expressing a habitual engagement or an occupation, e.g. גּוֹזְלָן – *gozlān* – ‘robber’, עֹסְקָן – *os-qān* – ‘experimenter’ (usually spelt *plene*: עוֹסְקָן, גּוֹזְלָן; and, as is known, some reading traditions have גּוֹזְלָן, בִּישָׁן, as in Israeli Hebrew).

Differences in lexical meaning between the two language strata are particularly apparent. The word צִבּוּר – *šibbūr* – in the Bible ‘heap, pile’, e.g. שִׁמּוּ אֹתָם שְׁנֵי צִבּוּרִים בְּפֶתַח הַשַּׁעַר – ‘Put them in two piles at the entrance of the city gate’ (2 Kings 10:8) also preserves this sense in Mishnaic Hebrew: שְׁנֵי צִבּוּרֵי זֵיתִים וְחֲרוּבִים – ‘two heaps of olives or carobs’ (*Pē’ā* 6, 5), but the primary meaning of the word in the Mishna is ‘congregation, community’, as in: אַל תִּפְרוּשׁ מִן הַצִּיבּוּר – ‘Keep not aloof from the congregation’ (*Ābhōt* 2, 4), הַעוֹסֵק בְּצוּרְכֵי צִיבּוּר כְּעוֹסֵק בְּדַבְרֵי תוֹרָה – ‘He who occupies himself with the need of the community, it is as though he had studied Tora’ (Yerushalmi, *Bērākōt* 5, 1; 8,4). מְזוּזָה – *məzūzā* – in the Bible ‘each of the two

doorposts on which the lintel is placed', e.g. ונתנו על שתי המזוזות ועל המשקוף (Exodus 12,7) and put it on the two doorposts and the lintel' (Exodus 12,7), ואחר הדלת והמזוזה שמת, (Isaiah 57, 8) denotes in Mishnaic Hebrew a small parchment scroll containing the Biblical sections *šema* and *wəhāyā 'im Šāmōa*, placed on the right-hand doorpost of Jewish houses, e.g. אין בין ספרים לתפילין ומזוזות אלא שהספרים נכתבין בכל לשון ותפילין ומזוזות אינן – 'The books [of Scripture] differ from phylacteries and *mazūzās* only in that the books may be written in any language, while phylacteries and *mazūzās* may be written in the Assyrian writing only' (*Megillā* 1, 8). Differences in syntax and style are particularly conspicuous; one example of many will suffice here: והוא כחתן יצא מחדרתו – 'It [the sun] comes out like a bridegroom leaving his chamber' (Psalms 19, 6). This utterance is rather differently worded in *Mekillā d-Rābbi Yišmā'el*: כחתן זה שהוא – '(literally:) like this bridegroom who is going out towards the bride'.

4. Internal variation

It is important to note that Mishnaic Hebrew itself is not a uniform language. Differences exist between the language of the *Tannaim* and that of the *Amoraim*, and the latter is divided, as mentioned, into the language of the Palestinian and Babylonian Amoraim. For instance, the form of first person singular of the imperfect is in Tannaic Hebrew אפעל – *'efal* (with the prefix א, as in the Bible): אכתב – *'ektob* – 'I will write', אלבש – *'elbāš* – 'I will wear', and is the same in Babylonian Amoraic Hebrew; but there is clear evidence that in Palestinian Amoraic Hebrew the form was נפעל – *nip'al*, with the prefix נ, under the influence of Galilean Aramaic:

מעשה בחסיד אחד שיצא לכרמו וראה עוללה אחת ובירך עליה, אמר: כריי העוללה – 'A story is told about a pious man who went into his vineyard, saw a young grape and recited a blessing on it, saying: this young grape deserves that I should recite a blessing on it' (*Bərəšit Rabbā* 29, 2; this is the reading of the reliable manuscripts, but some manuscripts were corrected to read: שאברך – *še'ābārək*).

כל אותו היום היה אברהם יושב ותמה בלבו ואומר: לא יזו מהם נבור – *[nābōr -]*, – 'All day long Abraham was sitting and wondering in his heart, saying: which shall I choose, Hell or [oppression by the] Kingdoms, one is more harmful than the other' (*Pesiqṭā d-Raḥ Kāhānā, Haḥōdeš* 2, ed. Mandelbaum 1962, 80). The expression כל שהוא – *kōl šehū* – in Mishnaic Hebrew 'even a little, even a small amount', e.g. חגב חי כל שהוא – 'a live locust, however small' (*Šabbāt* 9,7), probably has the same meaning in Palestinian Amoraic Hebrew: נתן לתוכו מים כל שהוא – 'If he put in any water at all' (*Yerushalmi Bərāḳōṭ* 3, 5; 6,4), but in Babylonian Amoraic Hebrew the word משהו – *maššehū* – replaces it, e.g. שתי שעות משהו – 'a little earlier than the second hour' (*Babli Pəsāḥūm* 12, 1).

5. Dialects

While still a living language in the time of the *Tannaim*, Mishnaic Hebrew was not uniform and shows some dialectal features. It is natural for different dialects to arise

in different places, but there is scant evidence for this in Mishnaic Hebrew. Nevertheless, even seldom-occurring linguistic crumbs of information should be considered, such as the distinction between the word של – *šel* – ‘of’ (the genitive particle) attached to the following noun, as found in most of the rabbinic literature manuscripts: שֶׁלִּבַּיִת – *šellabbayit* – ‘of the house’, שֶׁלִּבְעַל – *šellaba‘al* – ‘of a husband’, and של written as a separate word, known from Bar-Koséba’s letters: שֶׁל הַנּוֹאִין (= הַנּוֹיִן) – *šel haggo’in* (= *haggoyin*; Letter B) – ‘of the nations’; or בְּבֵית – *bəbēt* – ‘in the house of’, which is prevalent in most rabbinic literature manuscripts, against אֲבֵית – *‘abbēt* (ibid. Letter 5). Indeed J. N. Epstein (1957, 235–236) proposed that many of the syntonyms within rabbinic literature, sometimes even in one single *hālākā*, represent differences of speech among different schools, e.g. כּבִּשָּׁן טַמֵּא. וְשֶׁל עוֹשֵׂי זִכּוּכִית ... טַמֵּא. כּבִּשָּׁן – ‘If an earth-oven has some place whereon to set a pot, it is susceptible to uncleanness; also that of glass makers ... is susceptible to uncleanness. The furnace of lime-burners, of glaziers or of potters is not susceptible’ (Kélim 8, 9). In the first part the glaziers are called עוֹשֵׂי זִכּוּכִית – *‘ōšē zəkōkūt* (literally: makers of glass), but subsequently they are called זַגְגָּיִן – *zaggāgīn*. Another example: הָיוּ בָּהּ [בַּפֶּרֶה הָאֲדוּמָה] שְׁתֵּי שַׁעֲרוֹת שְׁחוּרוֹת אוֹ לְבָנוֹת בְּתוֹךְ גּוֹמָה אֶחָת פְּסוּלָה. רַבִּי – ‘[In the red heifer] two black or white hairs in the middle of a single hollow. Rabbi – ‘If it [the red heifer] had two black or white hairs [growing] from within a single hole it is invalid. Rabbi Yehūdā says: Or even from within a single hollow’ (Pārā 2, 5). The Talmud Yerushalmi testifies explicitly: הֵן כּוֹסוֹת הֵן גּוֹמָת – *kōsōt* and *gummōt* are the same thing (Āḥōdā Zārā 2, 9; 42, 1). It is plausible that different dialects from different regions in Ereṣ Yisrā’el are represented in these differences.

6. Variation within the corpus of the Mishna

Even the language of the Mishna itself is not entirely uniform. Although for the most part the Mishna reflects a unitary language, in some parts a greater affinity to Biblical Hebrew may be discerned. For instance, in the earlier tractates (i.e. those compiled close to the destruction of the Temple) one can trace such an affinity: לָקַח – *lāqah* – in the Mishna in general means ‘bought, acquired’, and the verb נָטַל – *nāṭal* – designates the action of taking in the hand, and means ‘took’. The differences between the language used in the Biblical verse וּלְקַחְתֶּם לָכֶם בְּיוֹם הָרִאשׁוֹן פְּרִי עֵץ הָדָר כַּפֹּת – ‘On the first day you are to take [ulqahṭem] choice fruit from the trees, and palm fronds, leafy branches and poplars’ (Leviticus 23, 40) – and the benediction worded in Mishnaic Hebrew – עַל נְטִילַת לֻלָּב – ‘about taking [nəṭilat] the *lūlāb*’ have already been noted. Nevertheless in one early Mishnaic *hālākā* ואם צודה להם לוקחין בידם מקלות, ואם היחה דרך – ‘And if any lie in wait for them they may take staves in their hands, and if it was a far journey they may take food in their hands’ (*Rōš Haššānā* 1, 9). As a rule, the parts of the Mishna that deal with religious service in the Temple have language more similar to Biblical Hebrew. In the entire Mishna the stem נִתְפַּעַל – *niṭpa‘al* – is used with the prefix בִּ: נִתְקַדַּשׁ – *niṭqaddaš* – ‘was sanctified’, נִתְכַּוֵּן – *niṭkawwan* – ‘intended’ – etc. However verbs denoting actions related to the Temple worship have the form הִתְפַּעַל – *hiṭpa‘al* – with the prefix הֵ, as in Biblical Hebrew,

e.g. השתחוה – *hištaḥāwā* – ‘bowed down’ (*Bikkūrīm* 3, 6). Also, the phrase האולם בין ולמזבח – ‘between the porch and the altar’ (*Kēlīm* 1, 9) is borrowed unchanged from the Bible (Joel 2, 17). כשרין מיום שלשים והלאה ... כשרין מיום שמיני והלאה – ‘They are valid from the time that they are thirty days old and upwards’ (*Pārā* 1, 4) – The word הָלָאָה – *hālāʾ* – ‘upwards’ – is only used here, following the Biblical verse והלאה – ‘from the eighth day upwards’ (Leviticus 22, 27), whereas the regular word in the Mishna is ואילך – *wəʔelāk*, and we would expect it to read: מיום שלשים ואילך ... מיום השמיני ואילך.

The Mishnaic passages which imitate Biblical poetry also bear an affinity with Biblical Hebrew. The best example is tractate *Āḇōṭ*, which contains Biblical constructions that did not survive in Mishnaic Hebrew, e.g. jussive forms (short imperfect): אל – תַּעַשׂ עֲצֶמְךָ כַּעֲרֹכֵי הַדִּיּוּנִין ‘Make [*taʿas*] not thyself like them that would influence the judges’ (*Āḇōṭ* 1, 8); ואל – תִּאֱמֵן בַּעֲצֶמְךָ עַד יוֹם מוֹתְךָ – ‘And trust [*taʾāmen*] not in thyself until the day of thy death’ (ibid. 2, 4).

7. Variation in manuscripts and printings

Rabbinic literature, and particularly the Mishna, was transmitted orally over many generations by the *tannaʿīm* (reciters of the Mishna from memory), and was not written down in the form of manuscripts until close to the Geonic period (apparently prior to this only isolated copies were held by a few individuals.) Most of the manuscripts preserved to the present day date to the last millennium; they were written in Europe, mainly in Italy, Byzantium, and in the Orient. We possess few complete manuscripts and some fragments that date prior to 1000 C.E. These earlier manuscripts, especially the reliable ones (and they too are not identical in all their details), contain language at variance with the printed editions. For instance, the manuscripts preserve verb forms of the *nitpaʿal* stem – in the transitive (followed by a direct object): נתפעל – גזל ועריות שנפשו של אדם מתאווה להן ומתחמדותן – ‘robbery and incest, which a man’s soul longs after and covets’ (*Makkōṭ* 3, 15); מתחמדותן – *miḥammadtān* – ‘covets them’, whereas the printed texts have ומחמדותן – *məḥammadtān* – in the *piʿel* stem. The phrase ידיים מוסאבות – *yādayim məsōʾāḇōṭ* – ‘unwashed hands’ – is prevalent in the printed editions of the Mishna (*Ḥallā* 2, 2, *Ḥāgīgā* 3, 3 etc.), where the verb סאב is in the *puʿal* stem, but many manuscripts have the reading ידיים מוסאבות – *yādayim musʾāḇōṭ*, the verb being in the *hupʿal* stem. Many assume that the language reflected in the printed texts is the result of intentional and unintentional alterations by copyists, but there are grounds to assume that a certain part of the forms found in the printed editions reflect an ancient and independent language tradition.

8. Different traditions in vocalization

Examination of the totality of the Tannaitic literature manuscripts, especially those of the Mishna (which has many more textual witnesses than any other rabbinic compilation, some of which are vocalized), reveals several language traditions which may also

reflect different dialects. It has long been demonstrated that all traditions contain a large component which originates in the Tannaitic period of living Hebrew, but all traditions have been affected – to a greater or lesser extent – by change during transmission. Some of the differences between the traditions are discussed here. One tradition frequently geminates the consonant ר – [r] – as any other consonant: עֵרֵב – ‘*irréb*’ – ‘mixed’, סִרְרָק – *sirréq* – ‘combed’, מְעֵרֵב – *mā’urrāb* – ‘mixed (adjective)’, מְסֵרֵס – *masurrās* – ‘castrated’, גִּרְרָע – *garrā’* – ‘barber’. Many of the traditions differ merely in the variant reading of the same word, such as in the examples just mentioned, and the difference between the reading הָאָרִיג – *he’ārīg* – ‘the web’ (like הַהָרִים – *hehārīm* – ‘the mountains’, הַהָדָשׁ – *hehādāš* – ‘the new’, הָעָשִׁיר – *he’āšīr* – ‘the rich’) and הָאָרִיג – *hā’ārīg* (as is the rule in the Tiberian tradition of Biblical Hebrew). But some traditions differ from each other and have in the text different words altogether. For example, one tradition reads הָאִשָּׁה שֶׁנִּתְאַלְמְנָה – *hā’iššā šenni’almənā* – ‘the woman who became a widow’ (Kəṭubbōt 2, 1), while the other reads הָאִשָּׁה שֶׁנִּתְאַרְמְלָה – *hā’iššā šenni’armalā*. One tradition reads מִמֶּנּוּ – *mimmennū* – ‘from him’, מִמֶּנָּה – *mimmennā* – ‘from her’, while the other reads הִמֶּנּוּ – *hémennū*, הִמֶּנָּה – *hémennā*, and both are ancient traditions from Ereš Yisrā’él. Nevertheless it should be emphasized that not all of these variations are transmitted consistently.

9. Oral traditions

Elements of Mishnaic Hebrew were not preserved solely in ancient manuscripts. Henoch Yalon (1964), the originator and founder of the modern study of Mishnaic Hebrew, showed that the oral traditions extant among Jewish communities in the Diaspora are ancient, and in certain cases tremendously so. The Yemenite Jews’ tradition, which survived almost intact from the Geonic period, has a unique status. In their tradition the conjugation of the participle יָכֹל – *yākōl* – ‘can’ – has the vowel [ū] in its second open syllable: יְכֹלֹת, יְכֹלִין, יְכֹלָה, *yəḵlōt, yəḵulīn, yəḵālōt*, as has been preserved in old manuscripts. In addition, they read תְּחִיַּת הַמֵּתִים – *təḥāyat hammētīm* – ‘resurrection of the dead’ (and not תְּחִיַּת הַמֵּתִים – *təḥiyyat hammētīm*); תְּרַנְנֹל – *turnəgōl* – ‘cock’ (and not תְּרַנְנֹל – *tarnəgōl*) – identical to the tradition of ancient manuscripts of the Mishna. Other traditions too preserve ancient linguistic traces of Mishnaic Hebrew. Most Sefardi Jews, as well as those originating in the Orient and in the Maghreb, read in the Mishna: בֵּיתְךָ – *bētāk* – ‘your (masculine) house’, סִפְרְךָ – *siprāk* – ‘your book’, רַגְלְךָ – *raglāk* – ‘your leg’ – with a *qāmēs* before the כ of the second person masculine suffixed possessive pronoun (the Ashkenazi Jews had the same reading), and the forms of the הִתְפַּעֵל – *hitpa’al* – stem in past tense have in their tradition the prefix נ instead of ה: נִתְבַּקֵּשׁ – *niṭbaqqaš* – ‘was sought’, נִתְמַעַט – *niṭma’at* – ‘was diminished’, נִתְעָרַב – *niṭ’arab* – ‘was mixed’. In these two phenomena their reading is congruent with the well-established tradition of the manuscripts. Traces of gemination of ר in the Mishna reading are also found in the Ashkenazi tradition: the forms מְעוּרָבִין – *mə’ūrābīn* – with *shuruq* in the *waw* (and not מְעוּרָבִין with *holam*) ‘mixed’, מְצֻטְרָפִין – *miṣṭārpīn* – with *patah* in the *teth* (and not מְצֻטְרָפִין with *qamats*) ‘are joined’ have been convincingly shown to testify to the pronunciations מְעוּרָבִין – *mə’ur-rābīn*, מְצֻטְרָפִין – *miṣṭarrapīn* – preserved in reliable manuscripts, and prevalent in the reading of Sefardi and Yemenite Jews.

10. Contact with Aramaic

Throughout the Tannaitic period (and even more so during the Amoraic period) Mishnaic Hebrew was in contact with other languages. It is well known that Aramaic speech was prevalent in Ereṣ Yisrā'el during the Second Temple and the Tannaitic periods. Some scholars infer that all speakers of Mishnaic Hebrew were bilingual, speaking Hebrew as well as Aramaic, while others have proposed that in certain areas only one language was spoken, with the speakers also having some exposure to the other language. Contact between these two languages can be recognized in Mishnaic Hebrew in its written form, and while some scholars overestimate the influence of Aramaic on Mishnaic Hebrew, others perceive the influence as more restricted. For instance, some researchers view the second person pronoun אַתָּה – 'at – for the masculine as a loan from Aramaic, while others hold it to be an original Hebrew form, found sporadically in the Biblical text, and only widely used in the period of Mishnaic Hebrew. Even those who restrict the Aramaic influence concede that Mishnaic Hebrew absorbed from Aramaic elements of grammar, vocabulary and new meanings for existing words. For instance, the נִתְּפַעַל – *nittap'al* – stem of verbs I-y: נִתְּוֹסַף – *nittōsap* – 'was added' (in Tannaitic literature), נִתְּוָרַת – *nittōtar* – 'was left over', נִתְּוָקַד – *nittōqad* – 'was burnt' (in later Rabbinic literature), is a Hebrew transformation of the Aramaic הִתְּפַעַל – *hittap'al* – stem. The same applies to Aramaic words: the phrase הַצֵּר הַקֶּבֶד – *ḥsār hakkabéd* – 'lobe of the liver' (*Tamīd* 4, 3), and in another place the phrase אֶצְבַּע הַקֶּבֶד – *'ešba' hakkabéd* – (literally:) 'finger of the liver' (*Yōma* 8, 6; *Hullin* 2, 7) have the same lexical meaning for הַצֵּר and אֶצְבַּע, but the former is borrowed from Aramaic: הַיִּתְרַת עַל הַקֶּבֶד – *hayyōteret 'al hakkabéd* – 'the lobe of the liver' (Exodus 29, 13) in Onqelos' version: הַצֵּרָא דְעַל קַבְדָּא – *ḥasrā d'al kabdā*. Sometimes the Aramaic influence is to be recognized only in the meaning of the Hebrew word, as the meaning of the Aramaic word was transferred to its Hebrew parallel. For example, לָמָּה נִקְרָא שְׁמוֹ אֲחִי, שְׁאֲחִי בְּתִי כְּנִסְיֹת וּבְתִי מִדְּרָשׁוֹת – 'Why was his name called 'āhāz? Because he closed down synagogues and houses of study' (*Wayyiqra Rabbā* 11, 7); אֲחָז – *'ahaz* – here means 'closed', under the influence of its Aramaic counterpart אֲחָד – *'ahad*, which means 'closed'.

11. Contact with Greek and Latin

Greek and Latin also left their imprint on Mishnaic Hebrew in vocabulary items, as have other languages, mainly via Aramaic. Many words used in Hebrew today are Greek or Latin loans: אִזְמֵל – *'izmél* (σιμήλη) – 'surgeon's knife', פּוֹלְמוֹס – *pōlmōs* (πόλεμος) – 'war', פִּנְקָס – *pinqās* (πίναξ) – 'writing-tablet', קַתְּדֵרָא – *qātedrā* (καθέδρα) – 'chair (with back)', לַבְלָר – *lablār* (libellarius) – 'scribe', סַפְסֵל (in manuscripts vocalized סַפְסֵל – *sapsél*, preserving the original [e] vowel) – *sapsal* (subsellium) – 'bench' – these are but a few of the words Hebrew inherited from these two languages. Moreover, words which could integrate in the Hebrew grammatical system as three (or four) radical roots were deeply absorbed, and some even generated words congruent with Hebrew morphology. For instance, σπόγγος became סִפּוֹנְג – *sapōḡ* – 'sponge', and from it were derived סִפְגָּנִין/סִפְגָּנִין – *supgānīn/sipgānīn* – 'cakes (made

of spongy dough)', סָפָג – *sapāg* – 'drying, wiping' (מִטְפָּחוֹת הַסָּפָג – *mitpəḥōt hassapāg* – 'drying towels' [*Kil'ayim* 9, 3]), סִפּוּג – *sippug* – 'absorption, drying', and the verbs סָפַג – *sāpag* – 'swallowed, absorbed', סִפְּגָה – *sippég* – 'dried, soaked with a sponge', נִסְתַּפַּג – *nistappag* – 'dried himself'. Also קִטְנוֹר – *qātégōr* (κατήγορος) – 'accuser, prosecutor', from which קִטְרָה – *qitrég* – 'denounced, brought charges' was derived by metathesis, and καλός – 'good', from which קִלָּס – *qillés* – 'praised' was derived.

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24. Modern Hebrew

1. Introduction
2. Orthography and phonology
3. Morphology
4. Syntax
5. Lexicon
6. Semantics
7. Conclusion
8. References

Abstract

Although Modern Hebrew has existed as a spoken all-purpose language from the end of the 19th century, its real beginnings date from the mid 18th century when individuals started to write correspondence and secular literature in the language. Modern Hebrew is similar to biblical and rabbinical Hebrew in many respects, but it has undergone many changes due to the nature of its revival. This description will focus on the following areas: phonology, morphology, syntax, lexicon and semantics. Modern Hebrew has less consonants and vowels than biblical Hebrew, but a few consonants have been added as a result of foreign influence, thus changing the phonemic structure of the language. The stress patterns are the same as biblical Hebrew except for non integrated words. Morphology is based on that of the classical periods, but there is a strong tendency towards linear and analytical word formation and inflection. Phrasal structure follows that of biblical Hebrew, but sentence structure follows rabbinical Hebrew with some foreign influence. The frequently used lexicon is similar to that used in earlier classical periods but many innovations and borrowings were also introduced into the language. Semantic changes are also noticeable. The changes can be attributed to either internal natural processes or external foreign influences. Despite these many changes, Hebrew has kept the same linguistic structure, and thus remains a Semitic language.

1. Introduction

1.1. Background

Contemporary Hebrew as an all-purpose spoken living language has existed for about a hundred years. However, after the *Haskala* (the ‘Jewish Enlightenment’ of the 18th century), Modern Hebrew began to be revived for secular use with the publication of secular literature and Hebrew periodicals in Central and Eastern Europe. By the turn of the 19th century, Hebrew in Israel had started to become the unifying spoken language for immigrants arriving from all over the Jewish Diaspora.

1.2. The Current Political and Sociolinguistic State of Modern Hebrew

Hebrew is one of two official languages in the State of Israel, the other being Arabic. It is used by the majority of the population, mainly Jewish, as their first language of communication and by the others as a second language. Modern Hebrew is also the native language of many thousands of former Israelis who now live abroad. It is taught as a second language all over the world at various academic levels: Hebrew day schools, Sunday schools, and universities.

There are no Hebrew dialects, but there are sociolects, ethnolects, and idiolects. Pronunciation, intonation and vocabulary can reveal the origin of the speaker. Nonnative speakers are easily recognized by their country of origin. There are two primary types of native Hebrew speakers: (1) those whose parents came from Arab-speaking countries who retain pharyngeals [ʕ] and [ħ] next to [ʔ] and [x] in their speech and their <r> is mainly alveolar (Arabicized or Oriental Hebrew); (2) those whose parents came from European or other countries who pronounce *Aleph* and *Ayin* as [ʔ], *Het* and *Kaf Rafa* as [x] and their <r> is uvular (General-Ashkenazi; Blanc 1964; Morag 1969). The dominant variety is the General-Ashkenazi type.

As in any other living language, there are many varieties of Modern Hebrew depending on the mode (written, oral) and field of communication, the formality of the discourse, the speakers' education and religious level, profession, etc. These varieties are differentiated by grammatical structures, vocabulary and phraseology.

1.3. Linguistic Studies on Modern Hebrew

The linguistic study of Modern Hebrew started around 1950. Rosén (1957; 1967) and Blanc (1957; 1968) were the first to claim that Modern Hebrew can and should be analyzed as an autonomous entity, independent of classical Hebrew. It was Rosén who coined the term Israeli Hebrew, which is distinct from Modern Hebrew (that includes the language written prior to its oral revival in Israel). The following general books were published later with a synchronic analysis of Modern Hebrew: Rosén (1977), Berman (1978), Kutscher (1982, 183–299), Glinert (1989), Schwarzwald (1994; 2001), Shlezinger (1994). In addition, several books and hundreds of articles describe specific grammatical areas of Modern Hebrew: phonology, morphology, syntax, semantics, and stylistics (see the list in Schwarzwald 2001, 4, 81–86). A special attitude towards Modern Hebrew is presented by Wexler (1990), and Zuckermann (2008), and their view will be discussed in section 7.

The discussion below is based mainly on these sources. Most of the description refers to the formal standardized variety of Hebrew, but examples are given from colloquial Hebrew as well.

2. Orthography and phonology

2.1. Orthography

Modern Hebrew orthography and vocalization systems conservatively follow the biblical conventions. The graphemes include consonant letters and vowel signs, as well as

special diacritics. The vowel signs and diacritics are used only in liturgical texts, children's literature, poetry, and texts for beginner readers. Instead of vowel signs, the letters *Aleph*, *He*, *Vav* and *Yod* (*matres lectionis*) serve as vowels in addition to their consonantal value. An apostrophe is added to three letters to indicate new phonemes: to *Gimel* for the sound [dʒ]; to *Záyin* for [ʒ]; and to *Tzadi* for [tʃ]. Five letters have two phonetic values: *Pe* – [p], [f]; *Bet* – [b], [v]; *Kaf* – [k], [x]; *Shin* – [ʃ], [s]; *Vav* – [v], [w]. The letter *Pe* (one of the five letters that have a final and non-final form) is written in its non-final form at the end of a word to indicate [p] in loan words.

Thus the traditional biblical system in which a one-to-one correspondence existed between the graphemes and the phonemes has given way to one that is more ambiguous.

2.2. Phonology

The consonant and vowel system, the syllabic structure and the stress patterns are unique to Modern Hebrew. The constant contact between Hebrew and foreign languages, and the language substratum of the language revivers, together with their traditional readings of Hebrew have caused deletion of phonemes, addition of others and a basic change in the syllable structure and the stress patterns of words.

2.2.1. Consonants

Table 24.1 presents the consonantal phonemes in Modern Hebrew according to their place and manner of articulation. The upper script notes are explained below:

Tab. 24.1: Modern Hebrew consonants

	Bi-labial	Labio-dental	Alveolar	Palato-alveolar	Palatal	Velar	Uvular	Pharyngeal	Glottal
Plosive	p b		t d			k g			ʔ
Fricative		f v	s z r ¹	ʃ ʒ ²			X R ¹	ħ ³ ʕ ³	h ⁴
Affricate			ts	tʃ ² dʒ ²					
Nasal	m		n						
Lateral			l						
Approximate	w ²		r ¹		y		R ¹		

¹ The consonant /r/ is realized in a variety of ways by native Israeli Hebrew speakers.

² The fricative ʒ, the affricates tʃ and dʒ, and the approximate w occur in loan words, e.g., *žakét* 'jacket', *tšips* '(potato) chips', *džiráfa* 'giraffe' and *wiski* 'whisky' (pronounced by some speakers as *viski*).

³ The pharyngeal consonants ħ and ʕ are rare and occur primarily in the speech of either native speakers whose parents came from Arab speaking countries or Israeli Arabs. (Underlined x and ʕ will indicate the orthographic *Het* and *Ayin*, respectively).

⁴ The glottal fricative h is absent in the speech of many Israelis.

Many homonyms occur in Modern Hebrew due to the disappearance of some biblical consonants, as in (1) (angled brackets indicate spelling):

- (1) *kol* ‘sound’ (<*qôl*>), ‘all’ (<*kâl*>); *tamir* ‘mysterious’ (<*ṭāmîr*>), ‘tall’ (<*tāmîr*>); *mevater* ‘gives up’ (<*məwatter*>), ‘cuts’ (< *məbatter*>); ‘*éres* ‘cradle’ (<‘*eres*>), ‘poison’ (<‘*eres*>); ‘*or* ‘skin’ (<‘*ôr*>), ‘light’ (<‘*ôr*>); *maxtim* ‘gets someone to sign’ (<*maḥtîm*>), ‘makes stain’ (<*maḥtîm*>)

The biblical Hebrew allophones *p-f*, *b-v* and *k-x* are independent phonemes in Modern Hebrew (2a); however, they show some morphophonemic alternations (2b).

- (2) (a) *sapa* – *safa* ‘sofa-language’, *hitxaber* – *hitxaver* ‘joined – became friend’,
sika – *sixa* ‘pin – anointing’
 (b) *patax* – *yiftax* ‘opened-will open/3sg’, *baxa* – *yivke* ‘cried-will cry/3sg’, ‘*ip-aron* – ‘*efronot* ‘pencil-s’, *tsahov* – *tsehuba* ‘yellow/m-f’, *rax* – *rakim* ‘soft/sg-pl’

There are no emphatic consonants (*t* > *t*; *q* > *k*; *ṣ* > *ts* > *s*). Consonant gemination as a phonemic feature does not exist, although there is sporadic phonetic gemination when two similar consonants co-occur, e.g., *lamátî* ‘I learned’ (alternating with *lamá-detî* or *lamátî*). Consonantal ‘, ‘ and *h* are often deleted in speech (see 2.2.2).

2.2.2. Vowels

Modern Hebrew has five vowels: *i*, *e*, *a*, *o* and *u*. Phonetic long vowels are created due to ‘, ‘ or *h* deletion, as in *māpexa* (for *mah(a)pexa*) ‘revolution’. Diphthongs, as presented in (3) are a result of either Ashkenazi (east European) tradition of pronouncing the orthographic vowel *Tsere* or spelling pronunciation because of the letter *Yod*.

- (3) (a) *pe* ‘mouth’ – *pey* ‘the letter *Pe*’, *tey* ‘tea’
 (b) *ben* ‘son’ – *beyn* ‘between’, *more derex* ‘guide’ – *morey derex* ‘guides’

Other phonetic diphthongs have been created in colloquial Hebrew due to ‘, ‘ and *h* deletion as in *igîu* (for *higî‘u*) ‘(they) arrived’.

The Modern Hebrew vowel system is extremely complicated because it still relates to the biblical vocalization system that had seven vowels: *i*, *e*, *ε*, *a*, *ā*, *o*, *u* in addition to Schwa (ə). There are many morphophonemic alternations that are attributed to the traditional vowel system, as in (4).

- (4) (a) ‘*et* – ‘*etîm* ‘pen/sg-pl’, ‘*šen* – ‘*šináyim* ‘tooth-teeth’, ‘*šilém* – ‘*šilmú* ‘paid/3sg-pl’,
pirsém – *pirsemú* ‘published/3sg-pl’, *hitlabéš* – *hitlabášti* ‘got dressed/3m.sg-1sg’
 (b) ‘*šir* – ‘*širim* ‘song-s’, *hitxíl* – *hitxálti* ‘began/3m.sg-1sg’
 (c) ‘*šalít* – ‘*šalítim* ‘sovereign/m.sg-pl’, ‘*pakíd* – ‘*pkidím* ‘clerk/m.sg-pl’, *bat* – *bítí*
 ‘daughter-my daughter’, *nigmár* – *nigmerá* ‘finished/m-f’
 (d) ‘*kol* – ‘*kolót* ‘voice/sg-pl’, ‘*dov* – ‘*dubím* ‘bear/sg-pl’, ‘*sus* – ‘*susím* ‘horse/sg-pl’

Each of the vowels is retained in some cases and either deleted or alternated with other vowels in others. Most of the alternations are attributed today to morphological conditions rather than phonological. The complicated distribution is opaque for native speak-

ers and there are many deviations from the normative requirements, e.g., *masók* – **mes-okím* ‘helicopter-s’ like *matós* – *metosím* ‘airplane-s’, rather than *masokím* (<*massoqím*>); *xof* – **xupím* ‘beach-s’ like *tof* – *tupím* ‘drum-s’, rather than *xofím*.

2.2.3. Stress

The stress is ultimate or penultimate in Hebrew words and inflections following the biblical patterns. However, the massive number of loan words and affixes combined with the traditions of the various Jewish communities show special stress in nonintegrated words and their inflections, as in (5) (Schwarzwald 1998).

- (5) (a) Proper names, e.g., *Yáfa* vs. *yafá* ‘beautiful/f’, *Dvóra* vs. *dvorá* ‘bee’
- (b) Game words, e.g., *ríšon*, *šéni*, ... *xámiši* ‘1st, 2nd, ... 5th’ (but *ríšón*, *šení*, ... *xamiší* not in games), *džúlot~džúlim* or *gúlot* ‘marble balls’
- (c) Slang and loan words, e.g., *témbel* – *témbelim* ‘idiot-s’, ‘álgebra, *télefon-telefónim*, *pas* – *pásim* ‘(military) pass-s’ (but *pas* – *pasím* stripe-s’), *šef-šéfim* ‘chef-s’
- (d) Acronyms, e.g., *xákim* ‘parliament members’ (from *xavér-knéset* + *-im*)

2.3. Summary

The description above has provided a brief overview of Modern Hebrew orthography and phonology and has also shown some of the language’s unique features (for more details see Schwarzwald 2001, 5–18). The foreign substratum of the language revivers, their various Hebrew language traditions, and massive borrowings, have all had their impact on Modern Hebrew. There are no emphatic consonants or gemination, and the pharyngeals, as well as the glottals, are in the process of disappearing. The Spirantization Rule (*Beged Kefet*) hardly applies. The new affricates, borrowed (*dž*, *tš*) or adapted (*ts*), have changed the phonemic structure of Hebrew, and enabled the creation of clusters that have never previously existed (Schwarzwald 2005). Because the classical orthography is retained and because the language revivers set biblical Hebrew norms for Modern Hebrew, many of the language phenomena are related to orthography, thus normative Modern Hebrew has become quite remote from its colloquial variety. As this is a dynamic process, it may take many more generations before some of the ongoing alternations are crystallized.

3. Morphology

Modern Hebrew morphology is primarily based on the Bible.

3.1. Derivation

Except for acronyms, new words follow the traditional word formation: (1) root and pattern combination, e.g., *migdár* ‘gender’ (root *g-d-r*, pattern *miCCaC*); (2) stem and

suffixes or prefixes combination, e.g., *ʾiši* ‘personal’ (*ʾiš* ‘man’ + *-i*), *laʾórex* ‘lengthwise’ (*la-* ‘to’ + *ʾórex* ‘length’); (3) base formation, e.g., *bul* ‘stamp’, *rádyo* ‘radio’; (4) word compounding, e.g., *ʾover vašav* ‘current account’ (*ʾover* ‘passes’ + *va-* ‘and’ + *šav* ‘returns’); (5) blending, e.g., *midrexóv* ‘promenade’ (*midraxá* ‘sidewalk’ + *rexóv* ‘street’).

Acronyms began to be used in the rabbinical period and they are commonplace, e.g., *sakúm* ‘cutlery’ (*sakiním* ‘knives’ + *kapót* ‘spoons’ + *u-mazlegót* ‘and-forks’) (cf. (5 d)).

A few features are remarkable in Modern Hebrew word formation: (1) the number of base words have increased due to massive borrowings; (2) linear formation by stem and suffixes is more dominant than root and pattern (Boložky 1999); (3) stem and prefix derivations form nouns, adjectives, and adverbs whereas in classical Hebrew this formed prepositions, conjuncts, and adverbs; (4) linear formation has started affecting verbs, e.g., *hišprits* ‘splashed’ from *šprits* ‘splash’, *lešnorér* ‘to ask for donation’ from Yiddish *šnorér* ‘beggar’ (Schwarzwald 2009); (5) the type of suffixes determines the word register: loan suffixes from Yiddish or Ladino form low register words, e.g., *kat-antšik* ‘very tiny’ (*katan* ‘small’ + *-tšik* Yiddish-Slavic ending); (6) each of the derivations can occur with original Hebrew or foreign elements alike; (7) word formation occurs recursively, e.g., *mamlaxtiyút* ‘national feature’ < *mamlaxti* ‘national’, < *mamlaxa* ‘kingdom’ (root *m-l-k* pattern *maCCaCa*).

3.2. Inflection

Inflections also follow biblical patterns, although these tend to have become more regularized and simplified.

3.2.1. Verb inflection

a. Verbs are conjugated in seven patterns (*binyaním*):

paʿal, e.g., *katav* ‘(he) wrote’

nifʿal, e.g., *nixnas* ‘entered’

piʿel, e.g., *šilem* ‘paid’

puʿal, e.g., *sukam* ‘was concluded’

hitpaʿel, e.g., *hitlabeš* ‘got dressed’

hifʿil, e.g., *hifkid* ‘deposited’

hufʿal, e.g., *hufkad* ‘was deposited’

The most commonly used pattern is *paʿal* because the basic verbs were formed in it, but *piʿel*, *hitpaʿel* and *hifʿil* are the patterns chosen for newly formed verbs. *Puʿal* and *hufʿal* are used exclusively for passive verbs.

b. Each verb is conjugated for past, present and future tense and for imperative (except for the passive patterns). The past tense occurs with person suffixes, e.g., *katávti*, *katávta*, *katavti*, *katav*, *katvá*, *katávnu*, *katávtem*, *katávten* (normative: *ktavtém*, *ktavtén*), *katvú* ‘wrote 1sg, 2m.sg, 2f.sg, 3m.sg, 3f.sg, 1pl, 2m.pl, 2f.pl, 3pl’. These endings are attached to all verb patterns to indicate the person in the past tense.

The present tense is marked by the prefix *m-* in all the patterns except *pa'al* and *nif'al*, and by the suffix *-et* (in *hif'il*) for f.sg, *-im* for m.pl, and *-ot* for f.pl in all the verb patterns. For instance, *kotév* – *kotévet*– *kotvím* – *kotvót* ‘write m.sg-f.sg-m.pl-f.sg’ (in *pa'al*), *mešalém* – *mešalémet* – *mešalmím* – *mešalmót* ‘pay’ (in *pi'el*).

The future tense is marked by the prefixes *'-* ‘1sg’, *t-* ‘2, 3f’, *n-* ‘1pl, y- ‘3m’, and by the suffixes *-i* ‘2f.sg’, *-u* ‘2pl, 3pl’ (and in normative style *-na* ‘2f.pl, 3f.pl’), e.g. *'ašalém*, *tešalém*, *tešalmí*, *yešalém*, *tešalém*, *nešalém*, *tešalmú* (*tešalémna*), *yešalmú* (*tešalémna*) ‘will pay 1sg, 2m.sg, 2f.sg, 3m.sg, 3f.sg, 1pl, 2pl (2f.pl), 3pl (3f.pl)’. Gender distinction is neutralized in the future plural and imperative forms as in rabbinical Hebrew.

c. The inflected accusative is used analytically; the synthetic use appears only in literary contexts, e.g., *pirsámnú* ‘otám’ ‘we advertised them’ rather than *pirsamnúm*.

d. Biblical imperative forms occur in a few frequently used verbs, e.g., *kum* ‘get up!’, *lex* ‘go!’, *ten* ‘give!’. Speakers prefer the future second person forms for a more moderate command, e.g., *tišlāx* ‘send!’ (also: ‘you will send’). Nevertheless, new imperative forms are directly derived from the future tense by omitting the person-tense prefix, e.g., *kanés-kansí* ‘enter!/sg.m-f’ from *tikanés-tikansí* (rather than *hikanés-hikansí*), *ftāx-ftexí* ‘open!/sf.m-f’ from *tiftāx-tiftexí* (rather than *ptax-pitxí*).

3.2.2. Noun inflection

(a) The ending *-it* for the feminine is gaining precedence over *-á* or *-et* in animate noun inflection (Schwarzwald 2002, unit 11). All loan words and many noun patterns and suffixes now use this ending, e.g., *šef* – *šéfít* ‘chef/m-f’, *sapár* – *saparít* ‘hairdresser/m-f’, *psantrán* – *psantranít* ‘piano player/m-f’.

(b) The plural endings *-im* and *-ot* appear more regularly with new masculine and feminine nouns, e.g., *ramzór-ramzorím* ‘traffic light-s’, *'ozniyá-'ozniyót* ‘earphone-s’ (cf. old *'or-'orot* ‘wall-s/m’, *levená-levením* ‘brick-s/f’; Schwarzwald 2002, unit 12).

(c) The construct state is still very productive in Modern Hebrew, especially relating to new lexical items, e.g., *xadár hamorím* ‘the teachers’ lounge’, *mexonát kvísá* ‘washing machine’. In colloquial Hebrew the use of analytical *šél* ‘of’ is spreading, e.g., *habáyit šél Ya'él* ‘Yael’s house’. The forms may alternate depending on register, e.g., *haxlatát hašofét* (high register) ~ *hahaxlatá šél hašofét* (low register) ‘the judge’s decision’. A third option of expressing this same relation is the possessive inflection of the first noun, the use of *šél* and another noun, e.g., *haxlatató šél hašofét* (decision-his of the judge). This is typical of a literary and formal style in Modern Hebrew (Ravid/Shlezinger 1995).

d. Possessive inflection can be replaced by inflected *šél* ‘of’, e.g. *maxlaktí* ~ *hamaxlaká šelí* ‘my department’. Syntactic and semantic restrictions determine the choice of the synthetic or the analytical method. Body parts and human features tend to keep the synthetic inflection (e.g., *'etsbe'otav* ‘his fingers’, *re(y)xa(h)* ‘her smell’), and so do nouns indicating family and friendship relations (*'amitáv* ‘his colleagues’), nouns defining judgement (*haxlatatam* ‘their decision’), or abstract nouns indicating verbal or ad-

jectival content (*bakašatxa* ‘your request’). They are mostly used in the third person inflection. Also, the higher the register, the more the synthetic forms appear, e.g., *mekomxá – hamakóm šelxá* ‘your place – the place of yours’ (Avioz 2004).

3.2.3 Numbers

a. The classical distinction between masculine and feminine cardinal numbers is in the process of being lost as the shorter feminine numbers are used for both masculine and feminine, e.g., *šaloš sfarim* ‘three books’ (for *šloša sfarim*) (Ravid 1995; Meir 2005).

b. Rhythm and analogy play a role in the pronunciation of the numbers 8, 18, and 800: *šmōne, šmoná ’esré* and *šmoná me’ót* (for *šmoné, šmoné ’esré* and *šmoné me’ót*). They are placed between *ševa* ‘7’ and *téša* ‘9’ or *šva ’esré/me’ót* ‘17/700’ *tša ’esré/me’ót* ‘19/900’ and their stress and vowels influence these numbers.

3.2.4. Prefixed particles

Because of the simplified phonological system, the prefixed particles *ve-* ‘and’, *ke-* ‘as’, *le-* ‘to’, *be-* ‘in’, and *ha-* ‘the’, tend to show no morphophonemic alternations, as in (6).

(6) *ve’anaším* ‘and people’, *vebáyit* ‘and a house’, *ke’avodá* ‘as work’, *bebatím* ‘in houses’, *leyladím* ‘to children’ (<*va’ānāším, uváyit ka’avodā, bevātím, lilādím*>)

The particle *mi-* ‘from’, is realized as *mi-* or *me-* without any conditioning, e.g., *mekevan ~ mikevan* ‘because of’, *me’áz ~ mi’áz* ‘from then’ (<*mikeván, me’az*>)

3.3. Summary

Simplification and leveling are two trends conspicuous in the formation of Modern Hebrew morphology. Most of the devices chosen for inflection and derivation are not new, but are based on methods that have existed in Hebrew since classical times. The addition of *šel*, for instance, is rooted in the Mishnaic period, but was strengthened later on as influenced by European analytical systems. The change in the number system is widespread in other modern Semitic languages as a natural process.

4. Syntax

4.1. Phrase structure

The phrase structure of Modern Hebrew is very similar to that of biblical Hebrew: (1) the order of the components in a nominal phrase is Noun-Adjective-Demonstrative, e.g., *hatélefon halaván hazé* ‘this white telephone’; (2) the components of the nominal phrase must agree with the noun in definiteness, gender and number, e.g., *hakanarím*

hame'ulím ha'éle – *kanariyót me'ulót 'éle* ‘these excellent violinists/def-indef.m-f’; (3) the definite direct object requires the use of the accusative marker *'et*, e.g., *pírsámnú 'et šmo* ‘we advertised his name’; (4) The analytical use of construct state and possessive inflection as well as the accusative inflection (cf. 3.2.1 c and 3.2.2 e) is a development that started in rabbinical Hebrew and has been strengthened by European influence.

In colloquial Modern Hebrew the definite article *ha-* is frequently added to the first noun in the construct state, e.g., *hamxonát kvisá* ‘the washing machine’ (for *mexonát hakvisá*), *habét hahnéset* ‘the synagogue’ (for *bet hahnéset*).

Modern Hebrew phraseology reflects Yiddish influence in colloquial and non-formal written varieties, e.g., *xasér lo bóreg* ‘insane’ (literally: he misses a screw).

4.2. Sentence structure

The overall sentence structure of Modern Hebrew is different from that used in the Bible; however, nominal sentences are very commonly used as in the past (e.g., *hakisé bamitbáx* ‘the chair is in the kitchen’).

a. Modern Hebrew is an SVO language (Subject-Verb-Object) with an alternating VSO word order, whereas classical Hebrew used the VSO prevalent word order, alongside SVO which was used less frequently. This change began in medieval Hebrew and can be attributed to European influence. The location of adverbials and direct and indirect objects in the sentence is quite free.

b. There is a consistent agreement in gender and number between the subject and the verb of the sentence.

c. The tense distribution is more similar to Mishnaic Hebrew than to biblical Hebrew. There are three tenses, past, present, and future, and the imperative modal form (cf. 3.2.1). The present tense forms are unmarked and indicate all times. Past tense forms indicate past events or perfective aspect. Future tense forms express mainly modality. Some examples:

- (7) (a) *'etmól haláxti barxóv vepit'óm* (normative: *ufit'óm*) *mofia móshe ve'omér li* ‘I walked on the street yesterday and suddenly Moshe appeared and said to me’
 (b) *bití mitxaténet be'ód švu'áyim; matáy titxatní 'at?* ‘My daughter is getting married in two weeks; when will you/sg.f get married?’
 (c) *ma da'atxém šeneléx ha'erev leséret? maskimím? tov, 'az haláxnú?* ‘What do you/pl think about going to a movie tonight? Agreed (do you/pl agree)? Well then, are we gone?’

The verbs *haláxti* (7 a) and *haláxnú* (7 c) are in the past tense. The first one indicates the past tense of a story, the other perfective aspect (as if we were already gone). The verbs *mofia*, *'omer* in (7 a), *mitxaténet* in (7 b) and *maskimím* in (7 c) are used in the present tense. In (7 a) they indicate consecutive events in the past, in (7 b) the present tense verb refers to the future and only in (7 c) does the verb refer to the present tense. Both future tense forms, *titxatní* (7 b) and *neléx* (7 c), indicate modality, making a wish.

d. Hebrew has nominal sentences without any copula, e.g. *hatalmid šamen/ po/ bakita/ 'al yadi* 'the student (is) fat/ here/ in class/ near me'. The verb *lihyot* 'to be' is inserted to such sentences to indicate other tenses, e.g. *hatalmíd hayá šamén* 'the student was fat', *hatalmidá tihyé bakitá* 'the student(f) will be in class'. The pronouns *hu, hi, hem,* and *hen* 'he, she, they(m), they(f)' are inserted in equation nominal sentences, as in *Rut hi hatalmidá hametsuyénet* 'Ruth is the excellent student'. The demonstrative *ze* 'this' is often used as copula in such sentences in addition to the third person pronoun, e.g., *rofé hu-ze miktsóa mexubád* 'doctor is a respectable profession'.

e. Negation of nominal sentences is achieved by using *lo* 'no', rather than *'en*, which is only used in literary style, e.g., *hem lo yošvím* rather than *hem 'enám yošvím* 'they do not sit'.

f. Sentence compounding is very common, next to sentence coordination, as opposed to the biblical structure where coordination was dominant.

4.3. Summary

A distinction must be made between phrase and sentence level. While at phrase level Modern Hebrew basically continues the same structure as classical Hebrew, Modern Hebrew sentence level is a continuation of rabbinical Hebrew with some innovations and influences from foreign languages. The study of Modern Hebrew syntax is expanding within various theoretical frameworks (see list of references in 1.4).

5. Lexicon

The lexicon of Modern Hebrew is composed of original Hebrew words from all language periods, newly formed words, and loan words.

The most stable vocabulary of Hebrew is the biblical language found in frequently used words, e.g., *'iš* 'man', *ben* 'son', *bat* 'daughter', *báyit* 'house', *hayá* 'was', *natán* 'gave', *lakáx* 'took', *'etmól* 'yesterday', *kan* 'here', *tov* 'good', *gadól* 'big', *'adóm* 'red', etc.

Words of similar meanings from later periods of Hebrew have been absorbed into Modern Hebrew but they have either become more specified in meaning or are used in different registers, e.g., *yéled-tinók* 'boy-baby', *béten-kéres* 'belly-potbelly'; *šémeš*, *'ets*, *taxšít*, and *'ex* 'sun, tree, jewel, how' are used in all registers, whereas their synonyms *xama*, *'ilan*, *'adi*, and *ke(y)tsad* are only used in a literary style.

The largest number of words in Modern Hebrew is either invented or borrowed (over 40% of the total). Some examples of Modern Hebrew innovations:

- (8) *'iton* 'newspaper', *milón* 'dictionary', *ša'ón* 'watch, clock', *'agvaniyá* 'tomato', *'ip-arón* 'pencil', *katár* 'steam engine', *mis'adá* 'restaurant', *mitbáx* 'kitchen', *kviš* 'paved road', *midraxá* 'sidewalk', *bubá* 'doll', *parpár* 'butterfly' (Sivan 1980, 30ff.).

The newly coined Hebrew words are based on word formation devices, as described in 3.1. The Hebrew Language Academy is the main source of new words, but many words have been coined by individuals, e.g., *mahpax* ‘dramatic change’.

Many new words have been borrowed from foreign languages. Not all borrowings are of equal status in Modern Hebrew. New borrowings from the general European vocabulary pool are found in all registers, e.g., *banána*, *’ámbulans*, *televízya*. Other words such as *nórma*, *’obyektívi* ‘objective’ *tsentrefúga* ‘centrifuge’ are widespread in writing and in formal or professional registers. Until the 1950’s, most general European loan words entered Modern Hebrew from Slavic languages via Yiddish (Moskovitz 1980). Later borrowings from the general European inventory were adopted in the same way, but later many American-English words were added. Words borrowed from Jewish languages, or other languages not held in high esteem by speakers are common in the low colloquial register, e.g., Yiddish *xrop* ‘snooze’, *balabúste* ‘homemaker’, Judeo-Spanish *postéma* ‘idiot’, *spóndža* ‘mop’, Judeo-Arabic *fréxa* ‘bimbo’, *šlox* ‘slob’, *Palestinian Arabic tšízbat* ‘tall tale’, *madžnun* ‘crazy’ (Schwarzwald 1995, 82–83).

Lexical changes are common in all languages; however, after not being used as an all purpose living language for hundreds of years, the vocabulary structure of Modern Hebrew is a natural result of the language’s revival. Technological developments, changes in lifestyles and lack of words from previous language periods have combined to necessitate the choice of new lexemes.

6. Semantics

During the long history of the Hebrew language, words have changed meaning and undergone semantic shifts. We have already shown above the differences in meanings of synonyms from various Hebrew periods. More examples are given here: biblical Hebrew *’asár* ‘tied’ meant ‘forbade’ in Mishnaic Hebrew; in Modern Hebrew it carries both meanings, but it also means ‘imprisoned’. *Melaxa* meant ‘labor’ in biblical Hebrew and *’avoda* referred to ‘worship (of God)’. In Modern Hebrew both words refer to work: *melaxa* is ‘craft, labor, something done physically’, whereas *’avoda* is ‘any kind of work’.

A considerable number of changes in the language are due to loan translations or loan shifts. Although speakers use Hebrew words, the structure and meaning of these words have become influenced by foreign languages. *Gan yeladím* (lit: garden of children) is a loan translation of kindergarten, and *yérax dvaš* (lit: month (also moon)/cns honey) is a loan translation of honeymoon. The word *tnu’a* ‘vowel, movement’ has taken on the meaning of an ‘ideological group’ and ‘traffic’ from the meaning attached to the word movement in foreign languages. The adjective *’emca’i* ‘middle’ was derived from the noun *’emca(’)* ‘middle, mean’. The meaning of ‘device’ is borrowed from the very shift in meaning that the word ‘mean’ or ‘medium’ underwent in European languages. *Koxav* ‘star’ is not solely a heavenly body, but also a leading actor in a play or film (Nir 1993, 38–42).

As a living language, semantic shifts and loan translations are very common. The most frequently used basic words keep the original meaning, but as they occur in a variety of collocations, new meanings are added, e.g., *met* ‘die’, *met le-* ‘wish for’, *met ’al* ‘love very much’. *Xaval ’al hazman* used to mean ‘it’s a waste of time, unworthy’, but more recently has come to mean ‘great, superb’, and can therefore be very confusing to the listener!

7. Conclusion

Languages are not static but change constantly over time. Their vocabulary and grammar change due to various internal and external processes. The internal processes are caused by phonetic changes, analogy and simplification in grammar, addition of new words, deletion of others and semantic shifts. External processes include borrowings, loan translations and loan shifts as well as all other kinds of syntactic influences that occur when languages come into contact with one another.

Modern Hebrew is unique because it lacks the normal continuity that other living languages have undergone. A language used for centuries for limited purposes (liturgy, study, and written correspondence) was transformed into a living, all-purpose language. This transformation was brought on by a combination of factors: the demographic unification of Jews in Israel carrying along with them a wide range of native languages, varied knowledge of classical Hebrew literature among the first Modern Hebrew speakers, and constant contact with the western world. These external forces together with the inner development that occurred in Hebrew during its history gradually created a new kind of language (Izre'el 2003).

Hebrew has always been considered a Semitic language, closely related to languages such as Arabic, Aramaic and Akkadian. Because of the massive number of loan words (section 5), loan translations and loan shifts (section 6), and because of the linear derivation of words (section 3.1) as well as some of the phonetic and syntactic changes in Modern Hebrew as compared with biblical Hebrew (sections 2 and 4.2), some researchers question its 'Semitism' (Wexler 1990; Zuckermann 2003, 2008). Although it continues to be influenced by non-Semitic languages, Modern Hebrew strongly retains its Semitic character in many of its features as can be seen in the grammar, morphology and syntax of the language, as described by Ullendorf (1958), and as shown by Bolozky (1994, 1996), and Goldenberg (1996) among others.

Language is not merely a collection of words, but rather a structured system governed by rules. As long as the rules are not violated, foreign influence is minimal. If foreign influence leads to a weakening of the existing grammatical rules in directions which were not previously acceptable, then such influence endangers the very Semitic nature of Hebrew. Throughout its existence, Hebrew has been exposed to foreign languages and has been influenced by them. Despite this influence, Hebrew has maintained its uniformity and Semitic nature because of its grammatical structure.

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25. Hebrew as the Language of Judaism

1. Hebrew, the language of Judaism
2. Archaic and Classical Hebrew
3. Rabbinic Hebrew
4. Hebrew during the Middle Ages
5. Hebrew in modern times
6. Hebrew revitalized in Israel
7. References

Abstract

This survey takes a panoramic view of the development of Hebrew, in particular its role in literary production and the history of the Jewish people, covering five major periods and 3,000 years: Archaic and Classical Hebrew, Rabbinic Hebrew, Medieval Hebrew, Hebrew in modern times, and its revitalization in Israel.

1. Hebrew: the language of Judaism

For more than 3000 years, Hebrew has been a language entwined with the history and culture of the Jewish people. Philologists and sociolinguists today recognize many 'Jewish languages', but only Hebrew can be considered *the* language of Judaism. Despite the many developments that Hebrew has experienced over the centuries, a basic unity remains that allows us to speak of Hebrew as one language from pre-biblical times to the modern day.

2. Archaic and Classical Hebrew

2.1. The origins

The origins of the Jewish people are obscure, shrouded in legends that have raised questions over the nature and origin of the Hebrew language from its very beginnings. Traditions link the origin of the Israelite tribes with Mesopotamia. The tongues of Abraham and the Patriarchs, believed to be Akkadian or Aramaic, have led some scholars to maintain Hebrew was a mixed language, with close relationships to these languages (Bauer 1910, 23ff.). The solely linguistic facts that must be taken into consideration place Hebrew squarely in Canaan. Hebrew's earliest documents, some inscriptions from the end of the second millennium B.C.E, are found in Canaan, with grammatical and lexical characters that link them to other epigraphic documents of the region, leaving no doubt about the Canaanite character of these texts (Garr 1985, 229ff.).

2.2. Dialectal bundles in Biblical Hebrew and the standardization of Classical Hebrew

Although precise data are scarce, there is evidence for the existence of dialectal differences in the language spoken in Canaan. From the Lebanon border to the desert of Sinai and between the Mediterranean Sea and the Jordan River, the semi-nomadic tribes of Israel established themselves, often in competition with other Canaanite populations and 'Sea peoples'. A natural tendency to group themselves into federations of Northern and Southern tribes probably helped to homogenize the speech of both tribal federations, effectively creating a Northern and a Southern dialect of Hebrew, with differences between the spoken and written language (Rendsburg 1990). The earliest literary compositions were probably produced circa 1200 BCE, in the form of poems, reflecting the life of the tribes (in particular, the Northern group) and their disputes with other Canaanites. A few of these compositions are preserved in the Bible (Cross/Freedman 1997). Some short epigraphic texts (Davies 1991, Renz/Röllig 1995) should also be considered as representative of an 'archaic Hebrew'.

As Ch. Rabin (1979) demonstrated, the institution of a unified monarchy in the times of David and Solomon (10th century BCE) had a strong influence on the language. In the royal Chancellery of the new capital, Jerusalem, and further developed in circles of priests and prophets, a literary prose was created and circulated. Drawing from sources in the speech of all the tribes, this literary prose also attempted to unify the different linguistic features of the North and South, making a national language understandable to all. The Hebrew compositions written in this literary prose connected the past with the present, and enshrined the relationship between the descendants of Jacob and the God of Israel. This was very likely the origin of Biblical or Classical Hebrew, a literary language with deep roots in the everyday tongue of the different tribes that reflected, at the same time, the political agenda of the monarchy. From the 10th to the beginning of the 6th century, much of the prose of the Pentateuch (Torah) and historical books of the Bible were written in this language as well as some new poetic and prophetic texts. Including other biblical texts that were written during or after the exile in Babylon, there is a total of 450,934 Hebrew (and some Aramaic) words, with 9,981 vocables (about 330 of them appearing only once).

Over the same period, epigraphic documents and letters of an administrative or military nature were also written in a very similar language on pieces of clay (*ostraca*) with a morphology, syntax and vocabulary that was in essence the same as the Biblical language. All together, there are approximately 675 inscriptions including 5,564 words (1,184 vocables). Other texts, occasionally mentioned in sources, have not survived, and we can only presume that this literary language was considerably richer than the sum of its surviving parts. In daily life and in many non-religious and unofficial contexts, the colloquial forms of the local tongues were maintained.

The division of the Northern and Southern kingdoms after the death of Solomon would have had a strong impact on the language, with the North preferring features more representative of its own vernacular dialect. The Northern kingdom's relatively short-lived independence (subjugated by the Assyrians in 722 BCE), and the establishment of a new population by the conquerors, were influential in the replacement of Hebrew by an Aramaic dialect.

2.3. The Babylonian exile and the language: postexilic Hebrew

Most texts in classical Hebrew represent the perspective and the language of the Southern kingdom. The Babylonian conquest by Nebuchadnezzar (586 BCE) also had profound repercussions on the language. Members of the Jewish elite were brought to Babylon where they lived in an Aramaic linguistic milieu, while others sought refuge in Egypt. In rural areas Hebrew survived as a colloquial language. The literary texts composed during the exile (such as Ezekiel) or after the return of the exiles were no longer written in a 'living' literary language, connected to the language of daily life. These compositions could be described as linguistic imitations of the old classical style, although there were significant differences, especially in the syntax, influenced by Aramaic dialects or colloquial usages. As the language did not follow a 'natural' or 'logical' pattern of development, it may be termed an 'artificial revival'. New writings, such as the books of Chronicles, included elaborations on pre-exilic textual compositions, and the linguistic differences are particularly apparent when such texts are compared (Polzin 1976).

Besides the books of Chronicles, Ezra and Nehemiah which allude to the return of the exiles, much of the 'Writings' of the Hebrew Bible (including many Psalms, the book of Proverbs, Job, the 'Scrolls', some minor Prophets, and the late books of Qohelet and Daniel) were written in this period under Babylonian, Persian and even Hellenistic hegemony, in a language that may be termed 'late Biblical Hebrew' or 'postexilic Hebrew'. With a certain flexibility in style characteristic of artificial language and with different texts to serve as linguistic models, some chronologically later books (such as Esther) contain more archaic traits than earlier books (like Chronicles), and the Song of Songs shares some linguistic features with the most archaic poetry.

During these centuries, 'Imperial' Aramaic was used as a kind of *lingua franca* over the entire Near East, and this literary substrate has left a tangible impression in late Biblical Hebrew. In the postexilic period, the old Canaanite script was replaced by the Aramaic script in both epigraphic documents and in literary compositions.

2.4. The Hellenistic and Roman periods: the Dead Sea Scrolls

The conquest by Alexander (332–323 BCE), the Hellenization of the Orient, and the Roman occupation (from 63 BCE) had profound and distinct consequences for Hebrew and its speakers. Following these events, the number of Jews living in the Mediterranean Diaspora increased in proportions comparable to the Babylonian exile. New Jewish communities were created in some Hellenistic cities, but as these communities turned to local tongues, the role of Hebrew was reduced to the liturgical sphere.

The linguistic status of Palestine during these centuries was rather complex: Aramaic dialects were used in Galilee and Samaria. Greek, and later, Latin were the languages of administration. Colloquial Hebrew was probably used only in rural areas of Judah, in the South of the region. Although readings in synagogues were translated into Aramaic (*Targum*) to enhance comprehension, the translations supplemented but did not replace the reading of biblical books in Hebrew, and thus Hebrew remained the language of liturgy and prayer. Hebrew epigraphic documents from this period exist but are not numerous.

The pressures of life under Hellenistic and Roman authorities contributed toward the rise of apocalyptic circles and dissident sects, and confrontations between different religious groups were not uncommon. One of these sects, related to the Essenes, established itself in Qumran. In a barren landscape at the edge of the Dead Sea this sect expressed its religious beliefs and expectations in a particular form of late postexilic Hebrew. In addition to Aramaic and Greek texts, many biblical and non-biblical Hebrew documents dating from the 2nd century BCE to the 2nd century CE were found amongst more than 800 Dead Sea manuscripts. Many of these Hebrew documents share a particular orthography and some peculiar phonological, morphological, syntactic and lexical traits that cannot just be considered as natural developments of late Hebrew. It is likely that the historical, sociological, and ideological conditions of the sect influenced the language used in its most representative documents (Qimron 1986).

Among the Hebrew texts from this period are letters in colloquial Hebrew and Aramaic from the time of Bar Kokhba's revolt against Rome (circa 130 CE) as well as Hebrew inscriptions on coins minted at this time.

In the North, the Samaritan community preserved its own tradition of reading the Bible, and composed various prayers and some liturgical poems in its own dialect (Ben-Hayyim 2000).

3. Rabbinic Hebrew

Following the expulsion of the Jews from Jerusalem at the time of Hadrian (135 CE), the most important Jewish communities were found in the two centers of Palestine and Babylon, and in other cities around the Mediterranean Sea. Although most Diaspora Jews spoke the local languages (Aramaic, Greek, Latin, etc.) and only used Hebrew in liturgical settings, there is evidence to suggest that in some Palestinian cities colloquial Hebrew was still employed until the end of the 2nd century CE in the teaching activity of the first rabbis. The *Mishnah*, a collection of statements on juridical questions taught by the rabbinical authorities, was written in a colloquial technical language now known as Rabbinic Hebrew. With a linguistic system that clearly differs from that of classical Hebrew, rabbinic Hebrew does not however appear to be the 'artificial' or 'aramaized' Hebrew identified by some 19th century scholars. The roots of this colloquial language are to be found in deep antiquity, prior to the Hellenization of Palestine. The earliest commentaries on the Bible (*midrashim*) were written by this time, in the same form of the language. The tradition is not uniform, and the manuscripts reflect at least two different branches, a Palestinian tradition and a Babylonian tradition, with internal subdivisions (Bar-Asher 1998).

Although similar writings were produced from the 3rd to the 10th century, the Hebrew of these documents and, in particular of the late *midrashim*, was more an imitation of the old commentaries than a living language.

New Hebrew prayers that entered the liturgy in this period are linked with a particular development. Poetic compositions, known by the Greek term *piyyuṭim*, were created to replace certain fixed parts of the prayers. The first authors of these poems, the *payṭanim*, lived in Palestine in probably the 4th century CE. By the 6th century, they had introduced rhymes into these poetic compositions. The language used in these

poems is a continuation of the spoken language of Palestine which had its roots in classical Hebrew, with the addition of a significant amount of colloquial features and new analogical innovations that corresponded to popular, albeit perhaps less cultivated, speakers. These innovations were not held in high esteem by later linguists. In the centuries after the Islamic conquest, similar liturgical poems were written in Babylon and in other important centers of Jewish settlement.

A few compositions written in Hebrew in the first half of the first millennium feature a language close to that of the *midrashim*. The *Sefer yesirah* is one such text; a work of esoteric writing influenced by philosophical and mystical sources.

4. Hebrew during the Middle Ages

4.1. The revival the the East and West of Hebrew poetry and prose under Islam

After the Islamic expansion in the 7th century, with the exception of some European centers, the most influential Jewish communities spoke and wrote in Arabic. By this period Hebrew was used in late midrashic and rabbinic literature, in liturgy (reading of the Bible) and prayer, in late *piyyut*, in the *masorah*, in some Karaite writings, in some philological texts, in polemical writings, in non-liturgical poetry, in letters and *responsa*. The Hebrew of these compositions was not, however, employed in a systematic way. Under Islam, and due to a fortuitous conjunction of circumstances, Hebrew enjoyed a strong revival during the Middle Ages. The interest of Arabic scholars in the language of the Qurʾān served as an example and stimulus.

The Karaites, a sect that based its faith in the text of the Torah, were driven to understand all of the details of the text and its grammar. The Masoretes, dedicated to preserving the biblical text, deployed linguistic tools in the preservation and transmission of the text. At the beginning of the 10th century, a few distinguished Jewish scholars from Iraq and North Africa began the systematic study (in Arabic) of the morphology and vocabulary of the language of the Bible, comparing the biblical language with the more familiar Arabic and Aramaic. These early grammarians played an important and founding role in the study of comparative Semitics.

Interest in the grammatical and lexical study of Hebrew reached its peak at the western reaches of the Islamic empire, in al-Andalus. In the middle of the 10th century under the Cordova Caliphate, Jewish scholars produced serious discussions in Hebrew on aspects of the biblical language, and thereby revived the use of literary Hebrew in poetry and prose. At the end of this century and the beginning of the 11th century, grammatical studies blossomed and matured. A particularly high level was reached in Hebrew poetry – a true golden age – thanks to an elite group of very high quality court poets. The period of the party kingdoms, during the 11th century, was particularly favorable for the development of Hebrew language and culture. Seeking the highest ideal of the ‘pure language’, poetry drew on classical morphological and lexical elements, and avoided all kinds of ‘new’ analogical formations (avoiding even the colloquial Hebrew of the rabbinic period). The influence of Arabic in calques and technical terms was however very clear (Goldenberg 1971).

In the 12th century the Almoravids and Almohads weakened the Jewish communities of al-Andalus, and many Jews fled to the Christian kingdoms at the north of the Iberian Peninsula. Until the expulsion of 1492, a form of revived classical Hebrew was used in poetry and artistic prose, as well as in many other literary genres: philosophy, cabala, sermons, letters, grammar, and even in commercial documents. Some Jewish legal texts and codes, like the *Mishneh Torah* of Maimonides, were written in rabbinic Hebrew. Although Hebrew was not the daily language of communication, it was considered the national Jewish language, and enabled communication between Jewish travelers and local communities.

Many scientific, philosophical, linguistic and medical works were translated from Arabic into Hebrew, and these translation activities increased in the 12th century. The best-known translators were the Ibn Tibbon family, Andalusian Jews who worked in the south of France. The Ibn Tibbon family developed an arabicized prose which incorporated Arabic technical terms and syntax which followed the original language (Sáenz-Badillos 1993, 219ff.).

4.2. Hebrew in Italy and Ashkenaz in the late Middle Ages

The Jewish communities of Italy, France, Germany and England developed different cultural traditions without direct links to the Arab world. In Italy, the first liturgical poets were strongly influenced by Palestinian traditions. Local literary practices were also integrated and characteristic forms of Italian poetry, like the sonnet, were imitated using biblical language. Following the emigration of Jews from the Iberian Peninsula (biblical Sepharad) aspects of Andalusian culture reached Italian Jewish communities and left a marked trace. Immanuel of Rome wrote secular poetry in the 13th century and during the Renaissance Italian Jews produced poetry, poetics, rhetoric, history, and grammatical treatises in Hebrew. In the 16th century the first dramatic works appeared in Hebrew.

The Jewish communities of the Rhine valley began to use Yiddish, a variant of *Mittelhochdeutsch* (Middle High German) with a Hebrew substrate, in their daily communications. Hebrew was preserved in the liturgy and in some legal, educational and religious literature by the Jews of Ashkenaz. Commentaries to the Bible and Talmud were composed in Hebrew, as were mystical writings (the *hekhhalot* literature), and liturgical poems.

5. Hebrew in modern times

5.1. The effect of the 1492 expulsion on Hebrew

The effects of the expulsion of the Sephardi Jews from the Iberian Peninsula at the end of the 15th century rippled throughout the Mediterranean, and many Jewish communities experienced an influx of refugees. Bringing Portuguese and Spanish dialects, and their own Hebrew literary traditions, local communities were enriched by the Sephardi newcomers. Although Judezmo and other vernacular languages were used in

everyday speech, Hebrew continued to be used in biblical commentaries (Abravanel), in poetry (Najara), in chronicles, sermons, philosophical and philological treatises, biblical commentaries, legal manuals, *responsa*, and particularly in kabalistic literature, especially in the Palestinian center of Safed. In this period the first Hebrew works were printed. Although devastating to the Jewish communities of the Iberian Peninsula, the expulsion led directly to an extensive and more intense knowledge of Hebrew culture and literature in other Jewish communities.

5.2. Hebrew in modern Sephardi communities

The Sephardi Jews of Amsterdam, Hamburg and England in the 17th century provide a particularly interesting chapter in the history of the Hebrew language. These important economic centers housed distinguished Sephardi communities and were enriched by the return of some former *conversos* to Judaism: 'la Nación española y portuguesa'. Hebrew language and culture was of great interest to these communities, and numerous works in Hebrew on grammar, lexicography, poetry and drama, mysticism, and the principles of Judaism were produced by former *conversos*.

5.3. Hebrew in the modern Ashkenazi communities

Although Yiddish was used as a spoken and written language by Ashkenazi communities, a Hebrew peppered with rabbinical terms was used to produce religious, legal and philosophic works. During the 18th century, Hebrew continued to be used as a written language, and with the first periodical publications, such as *Me'assef*, edited by the Society of Friends of the Hebrew Language, Hebrew became a language of modern life. Primarily due to the efforts of distinguished scholarly representatives of the *Haskalah*, Hebrew was promoted over other vernacular languages, at the expense of Yiddish. Combating a perceived deterioration in previous centuries, it was deemed necessary to purify the language. The Hebrew language was viewed as a tool to modernize communities and promote an engagement with secular education. It was in this movement that the foundations of Modern Hebrew were laid (Pelli 1979).

Members of the cultural movement *Wissenschaft des Judenthums* led a particular revival of interest in Hebrew language and culture in the 19th century. Hebrew grammar and grammarians became subjects of great interest, leading to the appearance of many classical works of Jewish writers in print for the first time. The first Hebrew journals and modern novels and dramas were also produced and distributed.

In some Zionist circles in Eastern Europe, a plan developed to completely revive Hebrew as a spoken and everyday language. The first steps towards adapting Hebrew to the requirements of everyday life were taken at the end of the 19th century, including developing appropriate language for technical and academic purposes (Glinert 1993).

6. Hebrew revitalized in Israel

Jews came from Eastern Europe to Palestine and brought with them a singular ideal: to live in the land of Israel and speak the language of Israel. As is well known, this

became the passion of Eliezer Ben-Yehuda, and in a Hebrew article in 1879 ('A Burning Question') Ben-Yehuda set down plans to bring about a national reconstruction that had been circulating in European Jewish circles. The proposal argued that Jews could not continue as a nation in the Diaspora and had to return to their historical homeland. Hebrew was an essential part of this plan, enabling communication and the revitalization of a Jewish nation, and Israel would appear again as an independent nation, with its own language, in its ancestral land. It must be possible, he argued, not only to write in Hebrew but also to speak in the language. In 1881, Ben-Yehuda left Europe and settled in Jerusalem. Hebrew had been partially used for written and even some oral communication by Jews in Jerusalem for at least twenty years. There, beginning with his own family and friends, Ben-Yehuda began to implement his plan to turn Hebrew into a language suited for daily life, a language for the schools of Palestine. From the moment of their births, his children would hear only Hebrew, and Ben-Yehuda campaigned to extend this approach to every Jewish child in the country. In order to spread his ideas, Ben-Yehuda produced his own Hebrew newspapers (Fellman 1973).

With the enthusiastic backing of other supporters of the nationalist cause, Ben-Yehuda started to collect the language in a thesaurus. He created words and adapted the language to the needs of daily life with the help of scientific and technical terminology created by medieval translators. Arabic terms were formally adapted to Hebrew patterns. From the rabbinic writings, Ben-Yehuda took not only Hebrew terms, but also useful Aramaic, Greek and Latin words, adapting them to Hebrew. He attempted to identify the exact meanings of unclear words which appear only once in the biblical text, and extrapolated previously unattested forms and new meanings by applying traditional patterns to classical roots. Some European languages, in particular Russian, German, French, English and Spanish, have also contributed to today's Hebrew vocabulary.

The revitalization of Hebrew in the last hundred years is a unique phenomenon, and is the result of both personal and institutional efforts. In 1890 the "Committee of the Language" was founded. It would form the core of the future Academy of Hebrew Language (which replaced the Committee in 1953) and contributed decisively to the expansion of Hebrew in different areas. Due to the work of these institutions, and the schools and *'ulpanim* for new immigrants, a revitalized language gained unity, coherence and universal diffusion. Despite numerous discussions and vigorous opinions, the expansive vision of idealists, teachers, writers, and scholars provided the language with a certain amount of adaptation and flexibility in the face of reality. It has become an instrument for expressing the complex reality of the modern world with necessary technical terms, and fulfills all the needs of an active cultural and academic life (Morag 1993). No other known language has come close to experiencing a similar process of revitalization. The number of Hebrew speakers in Israel and in the Diaspora today is estimated at close to 10 million.

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26. The Re-Emergence of Hebrew as a National Language

1. Introduction
2. The emergence of written Modern Hebrew
3. The emergence of speech
4. Linguistic study and principal debates
5. References

Abstract

The re-emergence of Hebrew as a national language involved a social process – the rise of a speech community, and a linguistic process – the formation of a new linguistic system, structurally different from previous linguistic layers. Developments in writing and speech did not necessarily overlap, but followed two distinct paths, differing chronologically and centered in two geographic locations, Europe and Palestine. The social dimensions of the process have been extensively explored, whereas the study of its linguistic dimensions has been more limited. This article discusses the main phases of the process, explanations for its success, and principal controversies regarding it.

1. Introduction

The transformation of Hebrew into a modern national tongue is considered unique: no other language no longer spoken is known to have turned into a native tongue (Blau 1981, 2, 23; Kutscher 1982, 294; Rabin 1985, 280; Rabin 1999, 362). Early accounts viewed the process in somewhat simplistic terms: Hebrew, a dead language since the 2nd century C.E., underwent a revival led by Eliezer Ben-Yehuda (1858–1922), the ‘Reviver of the Language’. Contemporary research, conversely, tends to view the process as part of the language revivals that accompanied modernization, and to underline its complexity. It had both social and linguistic dimensions, and involved different development courses in speech and writing (Harshav 1993; Rabin 1999). The term ‘revival’, used since the 1880s, is therefore no longer considered appropriate (Rabin 1985, 279–280; Morag 1993, 208). Most studies have focused on the sociolinguistic dimensions of the dissemination of Hebrew among speakers (cf. 3). The linguistic dimensions of the process are still under debate (cf. 4).

2. The emergence of written Modern Hebrew

The rise of Hebrew speech in Palestine from the 1880s on was preceded and crucially supported by comprehensive change processes in the written language, which accompanied the modernization of traditional Jewish communities in Europe (Harshav 1993,

120 ff.; Rabin 1999, 370–371). The *Haskala* movement promoted modern ideas since the mid-18th century through classicist language use, while the literary revival of the 1880s onwards reshuffled the linguistic system.

2.1. The *Haskala* period

The foundations for Hebrew's modern use is customarily traced back to the *Haskala* (Jewish Enlightenment), that arose in Berlin in the second half of the 18th century and gradually expanded eastwards. The *Haskala* preached the modernization of Jews and their integration in the surrounding societies. Using Hebrew as its main means of expression, the *Haskala* opened up Hebrew to all written *genres* of European cultures (Shavit 1993; Bartal 1993).

The challenges posed by this thematic expansion were coupled with the *Haskala*'s stylistic preferences, based on the notion of purism. The stylistic ideal in the belletristic literature was based on an adherence to Biblical Hebrew and an extensive use of quotations (Harshav 1993, 117–124; Shavit 1993, 117–119). The *Haskala* explored the options embedded in Biblical Hebrew and prepared the tools for the modern, secular use of Hebrew, but the tension inherent in the attempt to express modern ideas through Biblical Hebrew outlined the limitations of purism and eventually exhausted it (Kutscher 1982, 186–187).

Research of the *Haskala*'s linguistic aspects focused mainly on the biblical style and on writers' strategies to cope with the lack of means of expression (Patterson 1962; Itzhaki 1970/1). Kahn's 2009 study focused on the verbal system. Other aspects of the period's language were barely explored.

2.2. The literary revival

In the mid-1880s, the linguistic and literary makeup of written Hebrew radically changed, as S. Y. Abramovitsh, known as *Mendele Mokher Sefarim* (Mendele the Book Seller) laid the foundation for contemporary written Hebrew by replacing purism with the blending of elements from all linguistic layers. Once considered as a complete innovation (Rabin 1985, 281), Mendele's style is now analyzed as reflecting an artistic elaboration of pre-existing blended styles used in rabbinic and scientific literature (Rabin 1985, 283; Rabin, 1999, 371; Glinert 1988). Written Hebrew was opened up towards all previous linguistic layers, gradually restructuring the inventory of forms they provided and developing the semantic, stylistic and register differentiation indispensable for modern use. Foreign influences and internal processes further molded the language's structure (Rosen 1955, 37 ff.; Blanc 1954, 385; Blanc 1968; Morag 1959).

Research has tended to focus on the period's literary and cultural aspects rather than on its linguistic makeup. The lexicon was dedicated a comprehensive lexicographic study (Ornan 1996), but no systematic descriptions exist of the period's language or of its contribution to the formation of contemporary usage.

Chronologically, the literary revival in Europe coincided with the emergence of Hebrew speech in Palestine (see ch. 3). Nonetheless, the developments in speech and

writing were not inherently interconnected (Harshav 1993, 122; Rabin 1999). Most writers initially objected to the attempts to promote Hebrew speech, and only with the transition of the literary centre into Palestine during the 1920s–1930s, did the distinct development paths of written and spoken Hebrew converge into a single system. Yet, the literary activity in Europe laid the linguistic basis for the modern use of Hebrew, while the emergence of the speech community was indispensable for the long term maintenance of literary Hebrew (Rabin 1999; Mandel 1993, 205; Harshav 1993, 85). On the complex relationship between literary and spoken Hebrew in 20th century Palestine, see Shaked 1987, Ben-Shahar 1994.

3. The emergence of speech

The ability to fully reconstruct the emergence processes of spoken Hebrew is restricted by the scarcity of data. In pre-First World War Palestine no statistical records were kept by the Ottoman rulers, and information on the population and its linguistic habits derives from non-official, often unreliable sources. The general outline of the process is quite agreed upon (§ 3.2–3.4), but debates abound on its details.

3.1. The appearance of the idea to transform Hebrew into a spoken language

The rise of Jewish nationalism in the late 19th century raised the question of a common spoken language, an essential attribute of nationhood according to Modern Nationalism (Rabin 1985, 279–281; Rabin 1999, 362–363). The idea to add a spoken dimension to Hebrew, the unifying cultural language of Jews, was raised and promoted from 1879 onwards by Eliezer Ben-Yehuda (Mandel 1993). In 1881 he immigrated to Palestine, and his ceaseless efforts to implement the idea until his untimely death in 1922 turned him into a legendary symbol of speech revival (see Kuzar 2001, 85–92). Nonetheless, as shown by Fellman (1973, 36–93, 112–139), in practical terms his *direct* contribution to the spread of Hebrew speech was relatively small. The breakthrough in the spread of Hebrew did not occur in his immediate environment, but in other social circles and geographic locations, more than a quarter of a century after the onset of his activity.

3.2. The dissemination of Hebrew speech

The weakening of the Ben-Yehuda myth led to a proliferation of studies on the emergence processes of spoken Hebrew. The various periodizations suggested in the literature point to a gradual process, whose phases correspond to central events in the history of the Jewish society in Palestine during the pre-state period.

In the first phase (1882–1903) Hebrew was introduced as a language of school instruction. The ‘Hebrew via Hebrew’ method, based on the exclusive use of Hebrew in class, was accompanied by indoctrination about the importance of speaking only

Hebrew whenever possible (Haramati 1979; Fellman 1973, 94–111; Elboim-Dror 1986; Nahir 1988, 283, 285).

Difficulties abounded, and the scope of the enterprise remained limited: at the end of the period only some 60 teachers and 5 % of all schoolchildren in Palestine took part in the Hebrew schools (Glinert 1993, 97; Fellman 1973, 102). Although many of those children spoke Hebrew naturally within the peer group, few continued to use it regularly in adult life, and the adoption of Hebrew speech among adults was restricted to a handful of zealots (for estimations see Haramati 1979, 156; Fellman 1973, 47). The period's achievements produced proof that the use of Hebrew as a daily means of communication was possible, but the language remained confined to the individual level, hardly penetrating into the social sphere.

The turning point in the spread of Hebrew speech occurred in the decade preceding the First World War. Hebrew gradually acquired the status of a public language, the first Hebrew-speaking social cells emerged, and the language became a central component in the self-identity of the Jewish society of Palestine (Harshav 1993, 85, 91, 146; Rabin 1985, 261; Morag 1993, 216). This phase culminated in the so-called 'Language War' of 1913, when mass support of the general public was given to students and teachers who struggled for the place of Hebrew in higher education (see Rinot 1972, 184–226; Elboim-Dror 1986, 315–350). Of special interest is the independent process of speech dissemination conducted by local teachers in the northern part of Palestine, resulting in the short-lived existence of a special 'Galilean dialect' (Bar-Adon 1975).

Opinions diverge concerning the reasons for the relatively sudden change in the status of Hebrew speech during that decade. Some scholars point to the wave of immigration that arrived in Palestine from 1904 onwards (e.g. Harshav 1993, 133 ff.; Fellman 1973, 35; Morag 1993, 216). Others highlight the role of the local youth and the impact of growing stabilization in the school system (e.g. Nahir 1988; Nahir 1983; Haramati 1979, 91; Ornan 1984). As opposed to teachers' isolated activities in the former period, the formation of a teachers' association in 1903 enabled coordination, and the introduction of uniform terminology and curriculum. Furthermore, as elementary schools were gradually supplemented by kindergartens, high schools and vocational schools, education could be completed solely in Hebrew (Fellman 1973, 104; Nahir 1988, 286).

While speech revival was an ongoing process, by the end of the Ottoman period the predominance of Hebrew among the younger generation was apparent. In the first systematic survey conducted among the Jews of Palestine between 1916–1918, the share of Hebrew-speaking children amounted to more than 53 % in the country overall, and to more than 76% in the main centres of Hebrew, namely Tel-Aviv and the agricultural settlements (Bachi 1956, 185–186). As the main stronghold of Hebrew was among the younger generation, prospects for its future consolidation were secured (Bachi 1956, 187; Harshav 1993, 136–137, 144–145, 151).

3.3. Consolidation and standardization

Under British rule (1918–1948), Hebrew was declared an official language, alongside English and Arabic, but the implementation of the rights connected with this legal status involved a meticulous struggle with the British authorities (Efrati 2004, 201–214). Hebrew was already the frame language of Jewish society, and a native usage

emerged (Harshav 1993, 91; Morag 1993, 216). The number of speakers grew from 34,000 to more than half a million (Bachi 1956, 186, 191), and with the acquisition of statehood in 1948, Hebrew became the main language of the State of Israel. Yet, as multilingualism prevailed, and was periodically enhanced by waves of immigration (Bachi 1956, 188–192, 207–211), the position of Hebrew was felt to be at risk. Hostility towards other languages, as well as a constant struggle for Hebrew, were thus part of the period's social reality (Helman 2002).

Linguistically, Hebrew experienced comprehensive consolidation and standardization processes, partly spontaneous and partly reflecting the impact of language planning activities (Morag 1959). Of particular importance was the Language Committee, the main language planning organ of the pre-state period (Fellman 1973, 86 ff.; Ben-Hayyim, 1992, 109 ff.; Efrati 2004).

It is worthwhile noting that simultaneous with the processes in Palestine, attempts were made in Europe to encourage Hebrew speech, and modern education in Hebrew flourished. The impact of such activities on the emergence and dissemination of Hebrew speech was not explored.

3.4. Factors of success

Many studies have attempted to explain the successful transformation of Hebrew into a spoken language. All point to a combination of factors that coincided in a specific historical constellation (see e.g. Harshav 1993, 113–152; Nahir 1983; Morag 1993; Blau 1981, 15–16).

Ideological factors triggered the process and nourished the motivation to speak Hebrew despite the inherent difficulties. Reflecting the centrality of the spoken language in Modern Nationalism, Hebrew served both as a means and objective of the cultural revival. It provided the basis for national identity in an age of secularization, and was a central component in an intensive ideological commitment to a total transformation of Jewish life (Rabin 1999, 365 ff.; Harshav 1993, 92; Kutscher 1982, 298; Morag 1993, 210–211; Even-Zohar 1980, 171–172; Nahir 1983, 275). The contempt for Yiddish – the spoken vernacular of Ashkenazi Jews – and indoctrination in Hebrew schools played a significant role in maintaining ideological fervor throughout the process (Harshav 1993, 139 ff., Morag 1993, 213; Even-Zohar 1980, 172; Nahir 1983, 270–278).

Among the background conditions which enabled success, of particular importance were the former knowledge of Hebrew (Ornan 1984; 243–245; Harshav 1993, 115–119; Blau 1981, 1–17), the modernization of written Hebrew since the *Haskala* (see ch. 2; Harshav 1993, 120–132; Rabin 1999, 37), and the special circumstances which prevailed in Palestine, such as the lack of a competing language, characteristics of the Ottoman rule, and demographic and social attributes of the Jewish population (Harshav 1993, 142; Harshav 1993, 133–152; Blau 1981, 18 ff.; Ornan 1984, 240–245; Nahir 1983, 266–270; Nahir 1988, 286 ff.). While most studies focus on specific factors involved in the process, Even-Zohar (1980) highlights some of the *principles* which affected cultural and linguistic choices in the emerging Hebrew society.

4. Linguistic study and principal debates

The transformation of Hebrew into a modern national language involved far-reaching structural changes. Signs for the formation of a typical common usage were already noticeable in the 1920s (e.g. Lipschütz 1920; Avineri 1929), but its systematic study began only in the 1950s and was accompanied by heated debates (Kuzar 2001, 137 ff.). The absence of studies or recordings from the formative years of spoken Hebrew limits the possibility of its reconstruction (Glinert 1991, 109–112; Izreel 2002, 224–225, 229–231; Reshef 2005). The period's written language is well documented, but its study to date has been limited, providing few insights about its course of development (e.g. Reshef 2002; Reshef 2004). Much scholarly attention was dedicated to the analysis of language planning activity (e.g. Ben-Asher 1969; Ben-Hayyim 1992, 109–173; Bar-Asher 1990; Tene 1996; Elder 2010), but assessments vary regarding its practical effect. The relationship between planned and spontaneous developments was rarely explored (Morag 1959).

Despite the considerable gaps in research, scholars debate on the essence of the transformation undergone by Hebrew during these formative years. Controversy surrounds Modern Hebrew's typological classification as a Semitic language (Rabin 1992). Evident signs of the first speakers' Indo-European substrate and the continued influence of Standard Average European led certain scholars to claim that Modern Hebrew is "a European language in a transparent Hebrew cloak" (Bergsträsser 1928, 47). Others, conversely, underline the continuity with classical usage, based both on structural affinity and speakers' perception (Harhsav 1993, 123; Rabin 1999, 375–376; Ben-Hayyim 1992, 13–15; Bar-Asher 2002). Non-Semitic phenomena documented in Modern Hebrew do not surpass – and in many cases are less far-reaching – than those found in Semitic languages whose use as vernaculars has never been interrupted (Goldenberg 1996). Furthermore, as the dependency on foreign models weakened over time, many early usages were replaced with alternatives that better conform to classical usage both in grammar (Rosen 1992) and lexicon (Maman 1997, 155–157).

Controversy also surrounds scholars' attempts to redefine what was *linguistically* involved in the transformation of Hebrew into a modern national tongue. Several theories were suggested in recent years as an alternative to the former notion of revival (e.g. Wexler 1990; Izreel 2002; Zuckermann 2006). Though differing in scholarly value and soundness of argumentation, none were well accepted in academic circles (see e.g. Blau 2003, Goldenberg 1996, 173–184; Izreel 2002, 228–229, n. 14). As opposed to the thorough treatment of the sociolinguistic aspects of the reemergence of Hebrew as a national language, the linguistic dimensions of the process have not yet been sufficiently explored. The linguistic history of Modern Hebrew in its formative years presents an open field for further research.

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27. Old Aramaic

1. Definition
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Abstract

This article gives an overview on the sources, grammar and vocabulary of the oldest attested variety of Aramaic in alphabetic script from 9th to 7th ct. BC, i.e. Old Aramaic.

1. Definition

1.1. Extension in space and time

“Old Aramaic” (OA) defines the most ancient phase and variety of the Aramaic language; the earliest manifestations of OA thus coincide with the first known texts in Aramaic alphabetic script, attested from the early 9th century BC (cf. 1.2.). On the other hand, there is little agreement on an end date for this bracket, in itself and in regard to the subsequent one, “Imperial Aramaic” (IA). Specifically, it is a matter of debate whether OA should also include the Aramaic texts on clay tablets (discovered in steadily growing numbers during recent decades) or other media which were used as everyday vehicles for law and administration within the Assyrian empire throughout the 7th century BC (thus e.g. Kaufman 1997, 114).

A temporal border between OA and IA, not easy to pinpoint linguistically (cf. now Folmer 2009), might historically be fixed with the birth of the Assyrian imperial system of provinces in the last half of the 8th century BC; thus, the last inscriptions of OA hitherto known would be those of Bar-Rakib of Sam'al 2.2.1 (4), a contemporary and ally of Tiglath-pileser III (745–727). Not by chance, the following reign of Shalmaneser V (726–722) marked the issuing of a series of bronze lion-weights (new edition: Fales 1995), which were inscribed with short bilingual (Assyrian/Aramaic) epigraphs, officially recording their weight and the relevant standards: “by the mina of the king” / “by the mina of the land” (*mnh zy mlk' / mnh zy 'rq'*).

To be sure – taking up older opinions on the matter (e.g. Garbini 1956, Degen 1969, 2) – the temporal range of OA may still be said to reflect by and large the lifespan of various autonomous polities in western (or trans-Euphratic) Syria, which have left us written documentation of official character (historiographical-commemorative texts, treaties) in Aramaic alphabetic script, prior to their downfall and absorption in the Assyrian empire by the last half of the 8th century BC. Such documentation was

long since split up into two fully distinct dialectal subdivisions: Syrian Aramaic (or “Standard Early Aramaic”, Greenfield 1978) and the archaic and partly Canaanite-flavored Samalian (cf. 2.1–2.). Already at this level, it may be noted, OA showed a greater degree of complexity than all other Northwest Semitic (NWS) languages of the time.

But much has changed in recent decades. New epigraphic discoveries have considerably widened the geographical range of OA, as well as the overall “profile” of its dialectal components. Specifically, (i) Aramaic was used in mutual interference with Akkadian in northwestern Mesopotamia since the 9th century BC, with distinctive features (cf. 2.3.); (ii) a fragmentary text on the plaster walls of a building at Deir ‘Allā (Jordan), dated to approx. 800 BC, shows a local dialectal variety of OA replete with Canaanite features (2.1 (6)); (iii) Syrian OA was employed in a stele of political content (mid- to late-8th century) found as far afield as Iranian Azerbaijan (cf. 2.4. (2)).

Thus, while northwestern Mesopotamia presents the earliest historical testimonial for the presence of peoples of alleged Aramean stock (cf. 1.2.), there is at this time no absolute certainty regarding the geographical range within which OA could have originally been in exclusive or even predominant use. A related problem regards the dynamics of the spread of OA in the Syro-Mesopotamian horizon itself, vis-à-vis the pervasive and traditional diffusion of Akkadian and to the contemporary attestation of other varieties of NWS, especially of the Canaanite group, within that horizon. And finally, even in inner western Syria of the 9th–8th century, OA should be viewed as vying culturally with Luwian of the Indo-European language family, written in hieroglyphic script for official and private purposes in many contemporaneous Neo-Hittite kingdoms (Thuesen 2002; and cf. 2.2.; 2.3. (3)).

The new discoveries and the consequent issues have some bearing on the way the linguistic origins of OA for the chronological phases prior to its actual attestation in writing should be nowadays theorized and characterized. Traditional research into a “Proto-Aramaic” forerunner is still ongoing, causing exclusions or inclusions of specific features and/or dialectal varieties as regards a common grid (cf. e.g. Huehnergard 1991; Tropper 1993, 2001). On the other hand, a more “processual” view of language development has been gaining ground in the last decades (Garr 1985), whereby the distinctive features of OA may be seen as emerging initially from a NWS linguistic continuum, and – even after having emerged – being repeatedly challenged by contiguous, but varying, linguistic traits (as the Kuttamuwa and Deir ‘Alla texts demonstrate).

1.2. Historical and linguistic origins

The linguistic-descriptive term “Aramaic” derives from the gentilic *Aramayu*, first applied in Assyrian texts to population groups which were encountered by king Tiglath-pileser I (1115–1077 BC) on the Upper Euphrates, and then pursued and defeated around the chain of the Jebel Bīšri, well known to Mesopotamian tradition as the geographical and religious “homeland” of the Amorites around 2000 BC. The semi-nomadic nature and the NWS affiliation of the *Aramayu* may be made out from many descriptive clues in the Assyrian texts, among which is a combination with the monikers “Suteans” (a traditional term for West Semitic nomads) and *Aḫlamû* (possibly a synonym of “Amorite”, attested here and there in cuneiform texts from the Mari period

onward). In the course of time, the ethnonym *Aramayu* disappeared from the Assyrian annals, also due to the progressive fixation of the groups into many distinct territorial-political enclaves, all characterized by designations formed by the noun *Bît*, “house (hold)”, followed by the linguistically West Semitic personal name of an eponymous ancestor figure.

In point of fact, no straight correspondence between the adoption of these designations – of decided tribal origin – for polities and the use of Aramaic as their main language may be maintained. The combination *Bît* + *WSem PN* is first known for *Bît-Zamāni* in the 13th century (cf. Lipiński 2000, 45) and it was also applied to the three main confederations of the Chaldeans in southern Mesopotamia (*Bît-Dakkuri*, *Bît-Amukkanni*, and *Bît-Yakin*), who took on Babylonian mores and personal names, and thus also possibly language, since the early 9th century (cf. Fales 2007). However, both direct textual evidence (for *Bît-Agūši*, later Arpad) and the onomastics of rulers or leaders (e.g. for *Bît-Baḫiāni*/Guzana and *Bît-Adini*) suggest that a form of early Aramaic could have represented the main linguistic-cultural component of many of these Syro-Mesopotamian polities.

From the beginning of the 8th century, a toponym “Aram” (*ʿrm*) with mixed geographical and political connotations makes its appearance in OA texts (cf. 2.1. (1) – (3)) referring to the land ruled either by Arpad or by Damascus, insofar as such polities were at the head of coalitions of Transeuphratic states. In the Sefire Treaties (2.1 (3)), a wider multi-regional Syrian horizon seems implied by the double indication of “Upper and Lower Aram” (*ʿly ʿrm w tḥth*, Sefire I A, 6). In the Old Testament “Aram” is applied only to the rulers of Damascus, Reṣin, Ḥazāʾel, and Ben-Hadad, and their land (Pitard 1987, 99 ff.; Lipiński 2000, 349 ff., with diverging reconstructions). In 8th- and 7th-century Assyrian texts, the gentilic *Aramāyu* occurs again, but is employed for the Aramaic language/script (as e.g. in *ṭupšar Aramāyu* = “alphabetic scribe”), while a territorial entity “Aram” is no longer attested.

2. The corpus of Old Aramaic texts

A bibliography of OA and IA texts in book form is Fitzmyer/Kaufman 1992. Electronic updates to this volume, by S. A. Kaufman, are regularly brought forth in the framework of the *Comprehensive Aramaic Lexicon*: <http://cal1.cn.huc.edu>; this resource also comprises the full corpus of Aramaic epigraphical texts, with search facilities. In paper format, cf. the updated and comprehensive corpus edition by Schwiderski 2004; however, in this article, references will be given to the more “anthological” but practical KAI by Donner/Röllig (see now the updated 5th edition, 2002). A comprehensive, although extremely compact, grammatical sketch of OA (excluding Samalian, but with IA) is now given by Folmer 2009.

2.1. Texts from Syria, Palestine, and adjacent regions

OA texts from the northern Transeuphratic region and the Levant comprise inscriptions of official nature engraved on stone, while other media seem to have been employed for texts of different scope.

- (1) The most ancient inscription on stone (KAI 201) is the dedicatory stela to the Phoenician god Melqart from Tell Burayġ/Breġ (near Aleppo) on the part of a ruler named Bar-Hadad, who dubs himself *mlk 'rm*. On the basis of his patronymic Attar-šumki (I), this Bar-Hadad must be a king of Arpad.
- (2) From the same general period (beginning of the 8th century) comes the stela of Zakkur, a king of Hamath, discovered in three fragments at Tell Afis in 1903 (KAI 202). Zakkur, a pro-Assyrian ruler, relates how the god Ba'al-Šamayin saved one of his major cities, Ḥazrek, from a massive siege by a coalition of 17 kings led by Damascus, and specifically by "Bar-Hadad, son of Ḥazā-'el, king of Aram" (*mlk 'rm*).

Zakkur was a contemporary of Adad-nirari III of Assyria (810–783 BC). The latter resolved a border dispute along the upper Orontes river between Zakkur and Attar-šumki (I) of Arpad, commemorating the deed on a stela in cuneiform now at the Antakya Museum. It is thus possible that Zakkur may have aided the Assyrian ruler in his attack on Damascus in 796 BC, giving rise to the retaliation by Bar-Hadad (cf. Lipiński 2000, 285–302). Finds of recent date from Tell Afis comprise a small fragment of a basalt stela, possibly bearing the personal name Ḥazā-'el (Amadasi Guzzo 2005), plus minor epigraphs.

- (3) Particularly prominent inscriptions are on the fragments of three stelae (I A,B,C – II A, B,C – III) found at Sefire (SE of Aleppo) bearing the text of a treaty stipulated ca. 750 BC between Mati-'el, son of Attar-šumki (II), king of Arpad, and one Bar-ga'yah, king of KTK (KAI 222–224). A much-favored theory identifies the latter with Šamši-ilu, commander-in-chief (*turtānu*) and powerful viceroy during a period of political frailty of Assyrian kingship with a base at Til-Barsib on the Euphrates (Lemaire/Durand 1984; Liverani 2008).

Admittedly, a treaty in cuneiform between the Assyrian ruler Assur-nirari V and the same Mati-'el (Parpola/Watanabe 1988, n° 2) has many parallels with Sefire, and the gods by which Bar-ga'yah swore were decidedly Assyrian. However, logical and historical doubts remain, concerning this individual's alleged use of an Aramaic pseudonym or dynastic name ("son of kingship") and especially for his substitution of "Assyria" with the obscure place-name KTK.

The Sefire treaties represent the longest texts in OA, but they are also lexically and syntactically complex (e.g. they show many conditional clauses) and thus represent the practical benchmark for the Syrian variety of OA. But these texts are also of particular interest for their historical-geographical data (I B, 9–11) and for their literary elements. Specifically, the rich imagery of the curse-formulae (along a common typological scheme: *a maximal effort will lead to minimal gain*) finds close parallels at Tell Fekheriye – 2.3 (2) – and at Bukān – 2.4 (2) as well as in the Bible.

- (4) The important role of Damascus as regional power in the 9th–8th century (cf. 2.1. (2)) is reflected in two fragments of a stela discovered at Tel Dan in Upper Galilee (KAI 310), in which an Aramean king boasts of his victories over a king of Israel, and over a ruler ([Aḥaz]yah) of the "House of David" (*bytdwd*). The Aramean king was identified (Biran/Naveh 1995) with Ḥazā-'el of Damascus (approx. 842–805 BC).

However, a recent reexamination (Athas 2003) has subverted all accepted results, pointing to Ḥazā-'el's son and successor Bar-Hadad around 800 BC, with [Aḥaz]yah to

be viewed rather as a patronym (of king Joash). According to this author, *bytdwd* should refer to the city-state of Jerusalem and not to the kingdom of Judah as previously thought.

Linguistically, the Tel Dan text shows the lack of the emphatic state in the noun, with Deir 'Allā (2.1 (6) and against OA (4.1.); the lack of *zy* in all its usages (5.1.); but several cases of the consecutive *waw*, as in Deir 'Allā and Zakkur (cf. 4.2.).

- (5) On media other than stone, some fifty graffiti with a few words of text were retrieved at Hamath, scratched on red-polished slabs forming a sort of pavement around public buildings. The texts, of a dedicatory nature, are to be dated to the 8th century BC (cf. Otzen 1990; in part KAI 203–213).
- (6) From Deir 'Allā, in the mid-Jordan valley, excavated by a Dutch expedition (Hoftijzer at al 1976), come the 119 minute fragments of a long inscription painted in black and red ink on the chaff-tempered lime plaster that covered the walls of a room within an extended architectural complex (KAI 312).

This complex has been at times defined as a sanctuary, on the basis of the inscription but also due to the presence of a temple in the previous Bronze Age phase. However, the architectural features and the artifacts mark out the Iron Age building as destined to handicraft and storage, either for domestic or trade activities (cf. the plan in Hoftijzer/van der Kooij (eds.) 1991, 19, Fig. 1). The chronological pinpointing of the text is also controversial: a general date between 850 and 750 BC may be suggested, based on ¹⁴C samplings from the relevant phase of the settlement (Phase IX, which was destroyed suddenly, possibly by an earthquake), on the associated archaeological finds, and on some palaeographic traits regarding cursive forms (cf. 3.) in the inscription itself.

The Deir 'Allā (DA) inscription comprises two groups of plaster fragments, known as *combinations I and II*. The ductus was regular and well-formed, indicating a professional scribe's effort, with red ink marking "rubrics" (titles and important passages) and was set out in columns, within an upper and lateral frame marked by heavy red lines. The lines of text were of regular length, approx. 31,5 cm, and thus similar in size to the layouts on later papyrus scrolls (Ahiqar, Behistun).

The text of Combination I begins thus: "(1) The account of Balaam, son of Beor, who was a seer of the gods (*bl'm br b'r š' hzh 'lhn*). The gods came to him in the night, and spoke to him (2) according to these words" (italics for uncertain readings). The following lines concern Balaam's vision as related in fear to his people, concerning a world turned upside-down and overshadowed by an oracle of doom. The text may be defined as a literary text of prophetic genre which was recopied from a manuscript, presumably of earlier date (Lemaire 1991, 45). Balaam son of Beor is known from *Numbers* 22–24 and *Deuteronomy* 23 as a non-Israelite prophet, involved in a territorial and religious contrast between the king of Moab and Moses' people returning from Egypt; thus the locale of the story and the figure of Balaam fit in general with the setting and the data of the epigraphic text (see e.g. Delcor 1981, Lipiński 1994, 110–113). Apart from this, however, the elucidation of the compositionally complex, and partly contradictory, Pentateuchal narrative concerning this seer has for the moment found only limited feedback from the DA text, and vice versa.

The language of DA has received extensive discussion, leading in the main to a definite link with OA (cf. e.g. McCarter 1991, Huehnergard 1991; Pardee 1991; Tropper 1993, 301 ff.; Lipiński 1994, 168–170).

Many features are shared with OA against Canaanite (e.g. the form of the numeral “1” as *ḥd*, the use of *-at* as the 3rd person sg. fem. ending of the perfect verb), but the emphatic state of the noun seems absent. On the other hand, numerous Canaanite traits are present in the vocabulary (e.g. the relative *ʾš*), and in some verbal forms (e.g. *lkw*, “go!”, and the initial *ʾ*- in the tD stem). Finally, some aspects link DA with Moabite, mainly also in agreement with Hebrew (and Aramaic), but at times only with Aramaic (e.g. in the final *-n* of the masculine plural).

Thus, perhaps the best working definition is simply that of “something in between Hebrew, Aramaic, and Ammonite” (Kaufman 2002, 303) – i.e. viewing DA processually within the dialect geography of the area (cf. 1.1.), and relinquishing attempts to pinpoint which (alleged) stage of “Aramaization” it may have attained.

2.2. Texts from Samʿal

The site of present-day Zincirli in SE Turkey, excavated by a German expedition from 1888 to 1902, yielded a number of inscriptions of the 9th–8th centuries on stelae, statues, and dedicatory objects (2.2.1). A renewed archaeological effort by an American expedition at Zincirli (2006–) has yielded further inscriptions of the same general period (2.2.2).

For the history of the excavation at Zincirli by Felix von Luschan and Robert Koldewey and an overview of its discoveries, cf. Wartke 2005. A monumental inscribed stela of the Assyrian king Esarhaddon (680–668) was also discovered on the same site. For the account of the new excavations by the Oriental Institute of Chicago, and of its results (2.2.2.), cf. for the moment the website <http://ochre.lib.uchicago.edu/zincirli/>.

2.2.1. The older inscriptions from Zincirli

The older inscriptions from Zincirli fall in three NWS languages or dialects (Phoenician, Samalian, Syrian OA) all going back to the ruling dynasty of the local polity of *smʿl* (= Samʿal in the cuneiform sources; at times also known as *yʿdy*) and its associated social environment; a Luwian seal is also attested.

The deep interrelations among these varying linguistic-cultural elements may be further appreciated through the partly Luwian, partly NWS personal names, and by noting that the alphabetic inscriptions on stone (dolerite, a volcanic rock similar to basalt) were carved in raised relief, in a learned imitation of hieroglyphic Luwian epigraphical custom (cf. Struble/Herrmann 2009, 20). On the other hand, Phoenician cultural prestige in this general area between the 9th and 8th centuries may be traced also in the dedication to the Tyrian god Melqart in the Bar-Hadad inscription (2.1 (1)), but especially to the NE, with the monolingual inscription of Hassan-beyli, the Phoenician-Luwian bilinguals of Karatepe and Cineköy, and the Luwian-Phoenician-Assyrian trilingual of Incirli (cf. Lipiński 2004).

The earliest NWS inscription (ca. 825), of king Ki/ulamuwa (KAI 24), is in Phoenician, although his patronymic is marked by the Aramaic word for “son” (*br*, and not *bn*). The king extols his deeds as superior to those of his ancestors, and then boasts

of having “hired” the Assyrians to aid him against the oppressive Danunians (from nearby Quwe).

Three inscriptions are couched in Samalian, the local dialect of OA (2.2.1 (1)–2.2.1 (3)). Chronologically, they range from the reigns of Ki/ulamuwa to that of Panammuwa I (prior to 745), of Panammuwa II (743[?]-733), and of the latter’s son, Bar-Rakib (733–approx. 720). Finally, two longer and four shorter inscriptions from the site are in Syrian OA, and they all go back to Bar-Rakib (2.2.1.4. (4a)–(4f)).

- (1) A short dedicatory text (KAI 25) on a sword sheath (*smr*) is again authored by Ki/ulamuwa; it was attributed by numerous scholars to Phoenician, but the preposition with 3rd m. sg. pron. suff. *lh* in l. 7 indicates, for Tropper 1993, 52, a precise non-Phoenician trait.
- (2) A Samalian inscription (KAI 214) is on a colossal statue of the weather-god Hadad found at Gercin, 7 km from Zincirli, and bears a 34-line text authored by Panammuwa I (first half of the 8th century).

The text extols the magnanimity of Hadad, who “gave me the land as my heritage ... and on my succession to the throne gave the land in my hand to build” (ll. 13–14). The statue was thus erected in gratitude for this gesture. Panammuwa expects that at his death his “soul” (*nbš*) will be mentioned together with name of the god, as eating and drinking together with Hadad: this communion with the deity will be auspicious for his descendants (ll. 15–19). In case of negligence, the opposite will be true. After a generally positive description of the king’s reign, Panammuwa’s text ends on a note of concern regarding a succession without bloodshed and violence (esp. ll. 27 ff.).

- (3) The third inscription in Samalian (KAI 215) is written on the statue of Panammuwa II (743[?]-733) by his son Bar-Rakib. It bears 22 lines of text, and is rich in historical intimations in the account of Panammuwa’s reign, racked early on by harsh dynastic conflicts, and then marked by a subordinate alliance with the expanding Assyrian state of Tiglath-pileser III, for the sake of prosperity and expected stability.

A number of interesting literary-historiographical motifs characterizes this text. The list of comparative prices for various goods (l. 6) has parallels in Hittite and Assyrian official inscriptions, which however use the *topos* to underscore a favorable economic situation, while here it serves the opposite aim. The presentation of Panammuwa II as the subordinate ally abjectly “running at the wheel” of Tiglath-pileser’s chariot (l. 13), is applied *verbatim* by Bar-Rakib to himself in the OA texts (2.2.1.4 (4a)–(4b)). Totally unique, on the other hand, is the account of Panammuwa’s death during Tiglath-pileser’s war effort (at the siege of Damascus? cf. Lipiński 2000, 244) and of the lament of the Assyrian king, of the other allies, and of the army for his death (ll. 16–17). Finally, the notion that the Assyrian king, honoring the dead ally, “let his soul (*nbš*) eat and drink” (l. 18) finds parallels in Panammuwa I’s text and in that of Kuttamuwa (2.2.2).

- (4) A number of inscriptions on stone, but also on seals and silver bars, come from the site, authored once more by Bar-Rakib, but couched in Syrian OA.
- (4a–b) Two longer inscriptions on dolerite (KAI 216, 217) commemorate the king as a loyal and faithful “servant” of Tiglath-pileser III (described as “lord of the (four) quarters of the earth”, *mr’ rb’y ’rq’*, with a straight loan-translation from Akk. *šar kibrāt erbettim*), as well as of the dynastic god Rakib-El.

The deity was already mentioned by the same king in the statue of Panammuwa II (l. 22) as *b'l byt*, “lord of the dynasty”. For a suggested reading Rakkāb-El, with /rakkāb/, “charioteer”, on the basis of an Assyrian parallel, cf. Lipiński 1994, 206–207; but the reconstruction of the king’s name as Bar-Rakkāb clashes with the Luwian attestation of the same name.

- (4c) Orthostat (KAI 218) depicting the king on his throne, with a standing scribe, stylus in hand, facing him. The inscription praises the Moon-god of Harran (*b'lhryn*).
- (4d–f) (Three fragments of one or more stone orthostats commemorating the king (KAI 219–221). On the most extensive one, the topical phrase on the Assyrian king and the dynastic god as guaranteeing Bar-Rakib’s kingship is repeated.
- (4g–i) The label “Property (*l-*) of Bar-Rakib, son of Panammuwa” is attested on a seal and on three silver bars of varying weight (Tropper 1993, 150–152).

2.2.2. The Kuttamuwa stele

The recent American expedition to Zincirli has yielded a handsomely written and executed 13-line funerary stele of one Kuttamuwa, servant of Panammuwa (Pardee 2009). The dialectal variety employed in this text falls somewhere between OA and Samalian: e.g. the retention of diphthongs /aw/ and /ay/ in internal position is in decided contrast with Canaanite, the plural noun ending is *-n* as in OA, but as in Samalian there is no marker of an absolute state (cf. 4.1.). It thus might have represented a further local dialect, parallel to Samalian, perhaps in use for non-royal inscriptions.

As for contents, the text has attracted much attention for the historical-religious implications of the clause in which Kuttamuwa offers *ybl lnbšy.zy.bnšb.zn*, “... a ram for my ‘soul’ that (is/will be) within this stela” (l. 5; and cf. also *bnbšy* in l. 11), although the notion of the ‘soul’ feasting with the gods in the afterlife appears in two Samalian official inscriptions (2.2.1 (2)–(3)). More widely, this specific Samalian concept might be connected to the Hittite and late-Hittite distinction of “soul” and body (see e.g. the Luwian inscription of Kululu in Hawkins 2000, 445–447). The mention of the deity Kubaba also points to Anatolia, although this goddess is also attested in a fragmentary stele from Tell Sifr near Aleppo (Michellini Tocci 1962).

Two further very small fragments of OA (?) inscriptions were found in the 2006 and 2008 campaigns (Boyd et al. 2009).

2.2.3. Sam’alian: summing up

With the addition of the Kuttamuwa text, the linguistic situation of Sam’al appears increasingly complex, such as to require a comprehensive reevaluation. As things stand, the OA of Bar-Rakib seems to be (with Degen 1969 and Garr 1985, and against Greenfield 1978) rather tied to the OA Syrian horizon than to the Mesopotamian one (2.3.). Certainly, the OA of Sam’al has some traits in common with the Syrian variety (initial *h-* in the causative and Gt stems), as well as the regressive dissimilation of emphatics (/q/>/k/ before /š/ or /t/, e.g. *kys’* for *qys’*, “summer”), also attested at Sefire.

Samalian, on the other hand, may be defined as a somewhat archaic dialect of OA, albeit presenting many Canaanisms (Troppe 1993, 287–297).

The most conspicuous distinctive linguistic features of Samalian vis-à-vis OA are the following: shift of voiceless to voiced consonant (*nbš* < *npš*, “soul”); *nota accusativi* = *w*; preservation of a nominative *-w* and an oblique *-y* in plural nouns (e.g. *qwm* ‘my’ *’lhw*, KAI 214 1:2; *’š[l m]n* *’lhy*, KAI 214) 1:4; etc.); no absolute state marker; pronoun of the 1st p. sg. *’nk(y)*; independent object pronoun (1st p. sg. *wty*; 3rd m. sg. *wth*); proximal demonstrative pronoun of the f. sg. *z’*; relative pronoun of the f. sg. *’zh*.

2.3. Texts from Mesopotamia

- (1) The most ancient OA inscription from Mesopotamia, and perhaps also in absolute (mid-9th century BC) is along the lower rim of a small “altarpiece” in gypsum discovered in the early 20th-century German excavations at Tell Halaf (ancient Guzana) but destroyed during World War II (KAI 231). The retrieval of photographs and of a cast of the text allowed to establish that the piece was in fact the base for an image, to which the noun *dmwt* applies (Dankwarth/Müller 1988). Similarly to the Tell Fekheriyeh text (2.3 (2)), the script presents archaizing characteristics (Lipiński 1994, 15–18).
- (2) Of great cultural and linguistic significance is the bilingual (Akkadian-Aramaic) inscription engraved on a life-sized anthropoid statue retrieved at Tell Fekheriyeh (TF), near Guzana itself (Abou-Assaf et al. 1982; Fitzmyer-Kaufman 1992, 36–37; KAI 309). The Akkadian inscription bears 38 lines, the Aramaic one 23 lines; the two versions of TF fully match one another as a dedicatory inscription to the storm-god Hadad (who should have had a temple on the site) on the part of the donor, an elsewhere unknown individual named *Hadad-yiṭī (alphabetic *hdys’y*; cuneiform 10 (= *Adad*)-it-’i). One of the very few inner variations lies in the (politically significant) self-definition of Hadad-yiṭī in Aramaic as “king” but in Akkadian as “governor” of the cities Guzana and Sikani (this probably being the ancient name of the site).

But the TF text also allows a further detailed breakdown: it was formed in both languages by two inner “halves” or parts (Fales 1983). Part I – largely concerned with high-resounding epithets extolling the virtues of the deity (Akk., ll. 1–18; Aramaic, ll. 1–12) – may be analyzed as an Akkadian original (in the Standard Babylonian literary variety) which was rendered into a somewhat stilted form of OA. On the other hand, Part II (Akk., ll. 19–38; Aramaic, ll. 12–23) – which includes a series of dire West Semitic curse-formulae (cf. 2.1. (3)) – appears to be based on an Aramaic original input, which was thereupon rendered into slightly awkward Akkadian (of the Neo-Assyrian dialectal variety). This “double bilingualism” thus opens the possibility that the text as we have it coalesced two previous inscriptions in one monument – at least in one of the two linguistic traditions.

The paleography of the TF text presents a number of decidedly archaizing traits (esp. in the graphemes *d*, *k*, *m*, *’*, *š*, *q*) which have caused the dating of the (archaeologically non-contextualized) monument to fluctuate from the 11th century downwards, and to raise problems not only regarding the overall development of the alphabetic

script in Phoenician and Aramaic, but also the passage of Semitic sign-shapes to Greek (cf. e.g. Beyer 1986, 12; Lipiński 1994, 26–30). In point of fact, a mid-9th-century date, as suggested in the *editio princeps*, seems more acceptable; however, it is merely based on the iconographic details of the statue and stylistic considerations on the Akkadian text.

The orthography/phonology of the Aramaic text is also of interest: by looking specifically at onomastics, <s> at TF would seem to correspond to all the phonological positions that Syrian OA assigns to <š>, except for /š/ itself. Thus, <s> stands for etymological /t/ (as may be seen from the double version of the donor's name), and for /š/ (as in his father's name, *ssnwry* = Akkadian UTU-ZALÁG = traditionally **Šamaš-nūri*). However, since *šm* “placed” (root ŠYM) is also attested in the text of TF, the realization of /š/ as <s> in personal names might be due to the fact that Aramaic <s> was closer to the pronunciation of Neo-Ass. Š than <š> (as suggested in Abou-Assaf et al. 1982, 44). At all events, one may suggest the presence of a local, Northwestern Mesopotamian, form of the Sun God's name as **Šāš* (<**Sawš* <**Sam(a)š*), with the second sibilant becoming <s> through progressive assimilation. Of particular interest, moreover, is that **Šāš* continues to be attested in Assyrian-Aramaic personal names in the Balikh-Khabur-Euphrates area down to the 7th century, i.e. at Tell Shioukh Fawqani (*ssly*=**Šāš-ilī*), at Ma'allanate and at Tell Sheikh Hamad (in both contexts, *ssbšr* = **Šāš-abu/a-ušur*).

This point hints at the possibility that the Northwestern Mesopotamian form of OA was one of the significant components of “Assyrian Aramaic” as used during the last century and a half of the Assyrian empire – thus with a certain historical-linguistic continuity between OA and one of the varieties of IA, as maintained e.g. by Greenfield 1978 (cf. 1.1.).

- (3) At Arslan Tash (ancient Hadattu), some 30 km east of the Euphrates, which was first a stronghold of Bit-Adini and later an Assyrian provincial city, a French expedition discovered monumental lion statues placed at the E and W city gates, with fragments of Assyrian and Aramaic inscriptions (Thureau-Dangin et al. 1931, 79–86). The dissemination of the pieces in various Syrian museums (Aleppo, Raqqa) has recently brought about new examinations and results (Röllig 2000, 183; Galter 2004). A unique trilingual inscription, bearing 9 lines in OA, 9 lines in cuneiform, and 4 lines in hieroglyphic Luwian, on a pair of basalt lions guarding the east gate of the city is of particular interest. The OA text is poorly preserved, but it seems to be a translation of the rather clear cuneiform text (Röllig 2000, 183; Galter 2004).

The Luwian text (publication: Hawkins 2000, 245–246) reports the building activity in “Hatata” (*Hadattu*) of the “country lord” of Masuwari, i.e., the Neo-Hittite name of Til-Barsib. On the other hand, the OA and the Assyrian texts mention Ninurta-bel-ušur (= alphabetic **nrtblšr*), provincial governor of Kar-Shalmaneser (the name bestowed by the Assyrians on Til-Barsib after 855 BC), who is further defined as a eunuch of Šamši-ilu: on this basis, the date should be after 780 BC. It is possible that all three texts were written at the same time.

- (4) On the border between Mesopotamia and Syria, at Tell Awshariye – a site on an elevation at the confluence of the Sajur with the Euphrates opposite to Til Barsib, possibly corresponding to the town of Pitru known from Assyrian texts – a unique epigraph, presumably to be ascribed to OA on palaeographical grounds, was discov-

ered in recent years by a Danish archaeological expedition. The text is a fragment of a rectangular limestone tablet bearing 18 lines in alphabetic script on two columns.

The 5 surviving lines at the beginning of col. I (upper right) are incised on top of an inked draft. The second column of the text is made out solely in black ink, suggesting that the scribal operation was interrupted, perhaps because the tablet broke. The painted characters, presenting some cursive traits, are very faded and thus hardly legible. F. M. Fales and A. Lemaire are at present working jointly on the publication of the text (Younger 2007, 142). The results of the excavation may at present be seen on the website <http://www.aushariye.hum.ku.dk/>.

2.4. Texts from other proveniences

- (1) Ḥazā-ʿel, ruler of Damascus (cf. 2.1. (2), 2.1. (4)), is the protagonist of a brief commemorative inscription which was reproduced on richly decorated bronze plaques in the shape of horse frontlets and blinkers, found at Samos and Eretria in Greece (edition: Bron/Lemaire 1989; Eph'al/Naveh 1989; KAI 311); a further ornamental specimen on ivory was retrieved at Arslan Tash (KAI 232).

The inscription runs thus: “(This object is) what (the god) Hadad gave to our lord Ḥazā-ʿel, from Unqi, in the year that our lord crossed the river”. The inscription was obviously engraved on multiple items of the Damascene war booty from the conquest of pro-Assyrian Unqi/Pattina in northern Syria; the objects thereupon entered a commercial or gift circuit disseminating them far and wide.

- (2) Decidedly unique for the moment is an OA epigraph on a stone stele from Bukān in western Azerbaijan (KAI 320). The main fragment of the piece was discovered by Iranian archaeologists in 1985; an additional and smaller fragment was recovered from the antiquities market in 1990 (cf. Lemaire 1998; Eph'al 1999). The Bukān stele measures 1,50 m in width, but merely 0,80 m in height: it is preserved only in its bottom half for 13 lines of text. Paleographically, the similarity of sign-shapes with Sefire is striking. The extant text bears solely curse-formulae similar to those of Sefire (2.1 (3)) and Tell Fekheriye (2.3 (2)), albeit with reference to both a Syrian god (Hadad) and to the Urartian main deity Haldi (*hldy*).

The reconstruction of the historical context is debated. The stele could have been written to ratify relations between a Syrian Aramaic state (perhaps Arpad) and Urartu or one of its allies (Fales 2003), or could have derived from a bilingual (Assyrian and Aramaic) milieu, such as the one reconstructed at Sefire for Šamši-ilu, who moreover led expeditions against Urartu (Liverani 2008).

3. Script and phonology

The Aramaic linear alphabet – or *abjad* (from the Arabic sequence **ا ب ج د**) as a writing system only/mainly formed by consonants has been recently defined (Daniels 1997, 16 ff.) – derived its sign shapes from the adoption of its Phoenician counterpart (which in its turn derived from Canaanite alphabetic forerunners of the 2nd millennium BC).

The texts of the OA corpus are almost exclusively incised on hard and durable media; since the majority is on stone, their script has been termed *lapidary* or formal. There are no fundamental inner variations in lapidary script within OA save for the archaic sign shapes in the Tell Halaf and the TF inscriptions (cf. the paleographic chart in Lipiński 2001, 65). On the other hand, some forms of cursive script are randomly attested.

The definition of *cursive script* for OA (and generally NWS) paleography (cf. van der Kooij in Hoftijzer et al. 1976, 40 ff.) regards the simplification and informalisation of individual sign-shapes (beginning in the mid-8th century). On the other hand, actual elements of *cursive writing* (implying e.g. ligatures between signs) developed only from the 7th century onward, in texts incised/painted or solely painted with multicolored inks, respectively on clay tablets and on soft media (papyrus, parchment). The DA text in painted multicolored script is the main example of cursive writing in OA, but it is obvious that such a practice must have enjoyed a vast dissemination (cf. the Awshariye text, 2.3. (4)).

As for graphophonemics, the so-called Proto-Semitic phonemic inventory seems to have survived in OA with only minor changes in articulation. However, the Aramaic alphabet was forced to coalesce its 29 constituent phonemes within the “Phoenician” set of 22 signs, thus allowing for a certain degree of polyphony. The following correspondences between signs and phonemes apply, as may be judged from inner and comparative historical developments (cf. Garr 1985, 24–78).

Tab. 27.1: Representation of OA phonemes in the alphabetic script

Signs	Phonemes
<š>	/š/, /ś/, /t/ (TF: <s> = /ś/ , /t/, cf. 2.3 (2))
<z>	/z/, /ḏ/
<š>	/š/, /z/ (emphatic unvoiced interdental)
<q>	/q/, /ḏ/ (emphatic voiced interdental, possibly realized as emphatic lateral spirant due to diffuse pharyngalization)
<ḥ>	/ḥ/, /ḥ/
<ʿ>	/ʿ/, /ġ/

A diffuse feature involving OA consonants is the regressive assimilation of /n/ before an immediately following consonant (see e.g. 4.3. for the 2nd p. sg. personal pronoun ʾi). For the regressive dissimilation of emphatics, 2.4 (2).

Short vowels in final position may be considered to have disappeared already at the onset of OA. Long vowels both within the word and at the end come to be marked by specific signs (<ʾ>, <ḥ>, <w>, <y>), not used in their consonantal value but as “reading guides” (*matres lectionis*) to represent /ā/, /ē/, /ū/, /ī/ respectively (Folmer 2009, 107–108). OA, and especially the TF text, gives definite impulse to this innovative graphophonemic process against Phoenician. The diphthongs /-aw/, /-ay/ in internal position are retained.

4. Morphology

With its mere few hundred lines of (not always fully preserved) text hitherto known, the OA corpus obviously cannot for the moment yield a comprehensive and exhaustive

grammatical outline. The following sections thus aim to point out the main features of OA morphology from Syria and NW Mesopotamia. For specific traits in texts from the southern (Tell Dan, DA) and northeastern (Samalian) fringe cf. the previous sections.

4.1. Noun

OA shows the Common Semitic features of two genders and three numbers (sg., pl., and dual for naturally paired elements), but the noun is inflected for three states: absolute, construct (for the *nomen regens* of the construct chain, 5.1.), and emphatic. The emphatic (or determined) state, which is an Aramaic innovation, is in fact a suffixed definite article *-a'* (with the ' retaining a consonantal value, against later developments), which may be applied to the absolute-state noun in all its syntactic positions.

Tab. 27.2: Inflection of the noun

	Absolute	construct	emphatic
m. sg.	<i>mlk</i> , “king”	<i>mlk</i> , “king of ...”	<i>mlk'</i> (<i>-a'</i>), “the king”
m. pl.	<i>mlkn</i> (<i>-īn</i>)	<i>mlky</i> (<i>-ay</i>)	<i>mlky'</i> (<i>-ayya'</i>)
f. sg.	<i>mlkh</i> (<i>-ā/ah</i>)	<i>mlkt</i> (<i>-at</i>)	<i>mlkt'</i> (<i>-ata'</i>)
f. pl.	<i>mlkn</i> (<i>-ān</i>), <i>mlkt</i> (<i>-āt</i>)	<i>mlkt</i> (<i>-āt</i>)	<i>mlkt'</i> (<i>-āta'</i>)

NOTES. For the f. pl., cf. e.g. š 'n, “ewes” (Sefire I A 23), but *mln lhyt*, “evil words” (Sefire I C 20, III 2), with a possible distinction between nouns and adjectives in this regard (Garr 1985, 95). To be noticed is that in other OA texts, final weak plurals ended in **-awwā* + the fem. pl. ending, e.g. *mḥnwt*, “camps of ...” in Zakkur A 9 and *s'wn*, “ewes” in TF 20.

Case endings have disappeared in Syrian and Mesopotamian OA, possibly under the influence of the emphatic state (Kaufman 1997, 123). The existence of broken plurals in OA, especially in TF, has been suggested of late (Lipiński 2008). Despite the wholly consonantal script, some extended nominal patterns with regular semantic function may be discerned, such as e.g. *C₁aC₂C₂iC₃*, an adjectival formation connected to the passive participle.

4.2. Verb

4.2.1. Conjugations

Agreeing with all NWS, OA has a “prefix-conjugation” (P-C) and a “suffix-conjugation” (S-C), albeit with some particularities. The basic scheme and attested forms of the P-C is as follows, e.g. with the root (= √) *ktb*, “to write”, in the G-stem (4.2.2.).

Tab. 27.3: Inflection of the Prefix-Conjugation

Person	Prefix	Suffix (long)	Suffix (short)
3 rd m. sg.	y-√	-Ø	-Ø
2 nd f. sg.	t-√		
1 st c. sg.	ʔ-√	-Ø	-Ø
3 rd m. pl.	y-√	-n	-w
3 rd f. pl.	t-√	-n	-n
2 nd m. pl.	t-√	-n	-w
1 st c. pl.	n-√	-Ø	-Ø

The P-C works primarily as tense of the present/future, i.e. pointing to an unaccomplished (“imperfect”) action. It may be further subdivided in a short form with suffixes Ø/long vowel (in the 2nd and 3rd m./f. pl.), of basically volitive meaning (either as mode of command, or precativ); and a long form, in which the long vowels are augmented by the suffix *-n*, of indicative meaning.

NOTES. The precativ is attested in Mesopotamian OA with the prefixed particle *l-*, but not in Syrian OA (cf. *lhynqn*, “may they suckle”, in the TF curses, but *yhynqn* at Sefire and Bukān), and thus may be viewed as of ultimate Akkadian origin. At TF, moreover, the 3rd f. pl. shows long forms in both meanings: e.g. *lhynqn* and *yhrqn*. No long imperfect is attested at Tel Dan.

At times an inserted *-n-* connects the P-C with the pronominal suffix, perhaps as a residue of an older “energetic” conjugation in *-an/* or *-anna/* (e.g. *wyqtlnh*, “and he should kill him”, Sefire II A, 26). With an initial *w* (the “consecutive *waw*”) the P-C functions as a narrative tense (attested at Tel Dan, Zakkur, and DA), with a trait which was later lost in Aramaic. The P-C is also used for subordinate clauses.

The S-C refers to past and accomplished actions, in a stative, but also optative-jussive sense.

Tab. 27.4: Inflection of the Suffix-Conjugation

Person	Suffix	Person	Suffix
3 rd m. sg.	√-Ø	3 rd m. pl.	√-w (-/ū/)
3 rd f. sg.	√-t (-/at/)	3 rd f. pl.	not attested
2 nd m. sg.	√-t (-/tā/)	2 nd m. pl.	√-tm (-/tūm/)
2 nd f. sg.	√-ty (-/tī/)	2 nd f. pl.	not attested
1 st c. sg.	√-tʕ (-/t/)	1 st c. pl.	√-n (-/nā/)

The *imperative* (only 2nd person) has the same affirmatives as the P-C: m.sg. Ø; m. pl. *-w*. Feminine forms are not attested in OA. The *participle* has the active form *ktb* (= /kātib/) and the passive form *kt(y)b* (= /katīb/). Participles are treated like nouns and may take on fully nominal functions (in the construct and emphatic state). The *infinitive* is attested both as absolute infinitive and as construct infinitive (the prevailing type in IA). In the G-stem, the infinitive has no prefix in Syrian OA, as in Hebrew. As for derived stems, OA shows the infinitive with no prefix, but with (feminine?) suffixes *-h* or *-t* in the D (e.g. Sefire *lʾbdt*, *lhzyh*) and the H (e.g. Sefire *lhldt*, *lhmtty* with suffix); only at TF, a prefix *m-*, but no suffix is attested (e.g. in the D, *lmʾrk ywmh*, “for the

lengthening of his days”). Cases of derived stems without suffix elsewhere are *lšgb* at Sefire and at Tell Dan (l. 2, [*bh*]*tlh̄mh*, < **lh̄m* + 3rd m. sg. object pronoun, “when he fought”). At TF, *lkbr*, *lšlm* and *lhyy* could be infinitives of derived stems without prefix or suffix, or abstract nouns.

4.2.2. Simple and derived stems

The main verbal patterns deriving from the root, and internally connected by a specific meaning, are in OA the G, the D, and the H. For the G-stem, or *peʿal*, relevant to the basic meaning of the root, cf. above. The D-stem, with geminated II radical (*paʿʿel*) has an intensive meaning, or a causative one with verbs of basic intransitive meaning: its written realizations in OA are indistinguishable from the G (*ktb*, *yktb*). The H stem (*hapʿel*), of causative meaning with transitive verbs, shows a prefix *h-* in the S-C, unlike later phases, where *h-* > ʔ-. An N-stem (*nipʿal*) only appears at DA, and possibly in Samalian. Passive meanings thus seem rather to be expressed by inner modification of vowels, not recorded in writing. The medial/reflexive forms with *-t-* infix are rare: a tG form is attested (e.g. Sefire I A 28 *ythzh*, “it can be seen”), while TF shows a Gt (*ygtzr*, “it may be cut off”, l. 23).

4.3. Pronouns

Attested personal pronouns in OA are: 1st c. sg. ʔ*nh*; 2nd m. sg. ʔ*t* (= /att/ or /atta/); 3rd m. sg. *hʾ* (= /huʾ/); 3rd m. pl. *hm* (*hmw* in Zakkur).

Pronominal possessive suffixes. With singular nouns, the following are attested: the 1st person sg., *-y*; 2nd p. m. sg. *-k*; 2nd p. f. sg. *-ky*; 3rd p. m. sg. *-h*; 3rd p. f. sg. *-h*; 1st p. pl. *-n*; 3rd p. m. pl. *-hm*; 3rd p. f. pl. *-hn*. In TF, the 3rd p. pl. suffixes present contracted forms (*-hm* > *-m* / *-hn* > *-n*) after the noun *kl*, “all”, due to elision or to assimilation. With plural nouns or “plural” prepositions: 2nd p. m. sg. *-yk*; 3rd p. m. sg. *-wh*. With verbs (i.e. as objects of the action): 1st p. sg. *-ny*; 2nd p. m. sg. *-k*; 3rd p. m. sg. *-h*; 2nd p. m. pl. *-km*.

The proximal demonstrative pronouns (“this, these”) are: *znh* (m. sg.), *zʾ* (fem. sg.; but *zʾt* at TF), ʔ*lʾln* (common plural, with resp. defective and plene writing); for the distal pronoun, cf. 5.1. The relative pronoun is **q̄l*, realized as *zy* (cf. 5.2.). Interrogative pronouns are *mn*, “who?” and *mh*, “what?”.

4.4. Particles and prepositions

Particles and prepositions worthy of note are: *p*, with a consecutive sense (“then”, or sim.), attested also in Ugaritic; *l-*, “no, not”, which is prefixed to the verb; *mn*, “from”, which is never prefixed, its *nun* thus remaining unassimilated; *hn*, “if”, which opens conditional statements (the relevant verbs are in the P-C for the protasis, in the P-C or S-C for the apodosis).

5. Syntax

5.1. Use of pronouns

The personal pronoun (esp. 1st p.) is used for the subject, at times marking a distinction vis-à-vis other persons. The personal pronoun of the 3rd person is also used as distal demonstrative pronoun.

5.2. Genitive phrase

OA exhibits two types of genitive phrase, the oldest being the construct chain, well attested in Semitic but also in some Afro-Asiatic languages (cf. 4.1.). In OA, perhaps under Akkadian influence, the construct chain begins to be replaced by nouns in the absolute state joined by the particle *dī, “of”, realized as <zy>, which is derived from the relative pronoun (4.3.).

For the double use of zy cf. e.g. the opening line of TF: *dmwt' zy hdys'y zy sm qdm hddskn*, “The image of Hadad-yīṭī, which he placed before the god Hadad (of) Sikan”).

5.3. Word order

The OA word order is most often the standard Semitic one, verb-subject-object (VSO). However, in TF also clauses with SOV, of possibly Akkadian influence, may be found.

6. Vocabulary

OA shows a number of lexical oppositions vis-à-vis Canaanite which will mark all of Aramaic, e.g. *br*, “son”, *mll*, “to speak”, *'th*, “to come/go”, *yhb*, “to give”, *'bd*, “to make”, *šgb*, “to protect”. An aphaeresis in *hd* (< *'hd*), “one” is common to OA, Samalian, and DA. Especially in Mesopotamian OA, many technical terms from Assyrian are attested (Kaufman 1974).

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28. Imperial Aramaic

1. Introduction
2. Writing and phonology
3. Morphology
4. Syntax
5. The Hermopolis letters
6. Biblical Aramaic
7. References

Abstract

This chapter provides a concise grammatical sketch of Official Aramaic (achämenidisches Reichsaramäisch), that is, the standard language promoted by the Achaemenid chancellery and attested by a variety of documentary and some literary texts throughout the Persian Empire, most of them from Egypt, during the fifth and the fourth centuries BC. Official Aramaic is based on a Babylonian dialect of Aramaic with distinct orthographic conventions and grammatical features. The so-called “Hermopolis letters”, composed in an older variety of Aramaic whose spelling practice already exhibits traces of the Achaemenid standard, are also included, as is Biblical Aramaic, since it attests a more progressive Official Aramaic offshoot influenced by Judaeian Aramaic.

1. Introduction

In present-day scholarship, the term “Imperial Aramaic”, or *Reichsaramäisch*, covers various linguistically distinct forms of Aramaic (Folmer 1995, 9–13). Especially in the English-speaking world, it often refers to Aramaic as the *lingua franca* of the Neo-Assyrian, Neo-Babylonian, and Persian Empires from the 8th century BC onwards. However, several linguistic features suggest that the administrative language of the Achaemenids (538–331 BC), now mostly labelled “Official Aramaic” (OffA) or *achämenidisches Reichsaramäisch*, should be distinguished from preceding stages (Gzella 2008). The following remarks focus on OffA, this being the original idea of the term *Reichsaramäisch* coined by Joseph Markwart (1927, 91, n. 1). It is based on an otherwise unknown local dialect of Aramaic used in Babylonia. Greenfield 1974, followed by others, postulates a literary language alongside of and distinct from OffA (which he restricts to communication purposes), but this supraregional “Standard Literary Aramaic” has never been clearly defined and hence remains elusive. A grammar of OffA as such does not exist; the texts from Egypt have been described by Muraoka/Porten ²2003; Leander 1928 (phonology and morphology only), however, often has a more sophisticated treatment. For an up-to-date sketch, see Folmer 2009. The entire lexicon is included in Hoftijzer/Jongeling 1995, part of it, from a diachronic point of view, also in Beyer 1984–2004. Porten 1968 provides a fine, albeit dated, introduction to the world of the Elephantine texts.

While the stabilizing function of the Achaemenid chancellery accounts for the greater uniformity of this official standard as opposed to the highly heterogeneous texts from the 7th and 6th centuries BC, interaction with other dialects and languages, as well as different social and stylistic levels, led to much variation in the corpus (survey in Gzella 2004, 35–56). This corresponds to the typology of prestige languages (Kahane 1986). OffA is thus only one type of Aramaic current in the Persian period. Most of the material has been discovered at the Jewish military colony Elephantine in the 19th/20th c. The dry climate preserved numerous 5th c. BC papyri chiefly containing letters, contracts, accounts, lists, a translation of the Bisutun inscription, and a version of the Ahiqar novel. They provide the earliest documentation of the socio-economic situation and every-day life of a Judaeon diaspora community (edited afresh by Porten/Yardeni 1986–1999, which is the basis of Muraoka/Porten ²2003 and whose sigla have been adopted here; the older editions with their philological commentary, however, must always be consulted). Peculiar features in texts from other sites, like Hermopolis (see 5.) or Saqqāra (Segal 1983 with Williamson 1987, 267), prove that the language situation in Persian Egypt remained diversified even concerning Aramaic, but they also show how the Achaemenid prestige idiom encroached on earlier local varieties. OffA is moreover attested by 4th-c. papyri from Samaria (Dušek 2007), and by numerous honorific, dedicatory, and funerary inscriptions as well as *Kleinstinschriften* (seals, coins etc.) from Egypt, the Arabian Desert, Asia Minor, Babylon, Persepolis, Afghanistan, and Pakistan (5th–3rd c. BC; references in Beyer 1984, 29–33). After Alexander's conquest, OffA was gradually transformed due to continuous interaction with local dialects. This process gave rise to several new written languages, most of which preserve at least some distinctive orthographic features (see ch. 30).

2. Writing and phonology

The 22 letters of the alphabet used for OffA by and large reflect at least 23 (according to some scholars even 25) different consonantal phonemes: the voiced and unvoiced laryngeals /ʔ/ and /h/, the pharyngeal fricatives /ʕ/ and /ħ/ (and perhaps /h/, written with {h}, as well as /ġ/ = Arabic غ, written with {ʕ}, cf. Beyer 1984, 101 f.), the velars /g/ and /k/, the sibilants /z/ and /s/, the dentals /d/ and /t/, the bilabials /b/ and /p/, further the palatovelar /š/, the lateral /ś/ (normally written with {š} and exceptionally with {s}), the “emphatic” counterparts of the unvoiced velar, sibilant, and dental, i.e., /q/, /s/ (presumably pronounced [ʕ], cf. Beyer 2004, 45 f.), and /t/, as well as the lateral resonant /l/ and the dental thrill /r/, the nasals /n/ (dental) and /m/ (bilabial), and the glides (semi-vowels) /y/ (palatal) and /w/ (bilabial). Post-vocalic velar, dental, and labial stops were in all likelihood still plosives (Beyer 1984, 125–128; a few scholars consider an onset of spirantization already in OffA [Kaufman 1974, 117; Muraoka/Porten ²2003, 5], but there is no direct evidence). Previous stages of Aramaic preserved reflexes of the Proto-Semitic interdentals */d/, */t/, */t/, and the voiced velar or uvular affricate /ḡ/ < */ḡ/ (to be distinguished from /ġ/, cf. Steiner 1991, 1499–1501). Since the underlying alphabet was originally designed for another Semitic language, which had already lost these phonemes, they were graphically represented by the letters for the respective sound correspondences in Phoenician or by those for similar sounds, i.e., {š} for /t/, {z}

for /d/, {s} for /t/, and {q} for /g/ (e.g., *'rq'* for /'arġā/ 'the earth', the choice of the letter {q} instead of {g} being due to "emphatic" pronunciation). While in OffA the interdentals had merged with the corresponding dentals (*t/ > /t/, *d/ > /d/, /t/ > /t/, all before the 7th c. BC: Beyer 1984, 100) and /g/ eventually with /' (as in *'r'* /'ar'ā/ 'the earth', after 600 BC and supposedly via /g/; see Beyer 2004, 51), older spellings persisted due to scribal conservatism. Especially {z} for *d/ > /d/ was still regularly employed in the high-frequency demonstrative pronouns and the relative marker (e.g., *zy* for /dī/ < *dī/, cf. Leander 1928, 9; Huehnergard 2002, 605 f.). Younger phonetic spellings with {d} occur rarely and begin to appear in the sub-standard orthography of private letters. (The frequent spelling *šql* 'shekel' [< *tiqlu/ 'weight'], alternating with expected *tql*, may either point to historical orthography or to a borrowing from Babylonian, see Kaufman 1974, 29.)

The vocalic system has to be reconstructed from consonant letters indicating vowels, transcriptions in other writing systems, later vocalized traditions of Aramaic, and comparative philology. This information points to the following phonemic vowels: /a/ and /ā/ (the latter sometimes dropped to /ō/ in pronunciation, mostly before /n/, cf. Beyer 1984, 137), /e/ (< *i/) and /ī/, /o/ (< *u/) and /ū/, /ē/ and /ē/. Differences in quantity are obvious from minimal pairs or the cuneiform Uruk text (200–150 BC) like *ti-ḥu-ú-tú* for [tēḥōt] 'below'. The correct representation of the phonemic vowel quantity in most Akkadian words borrowed by Aramaic (Kaufman 1974, 146), many of which entered the language during the Late Babylonian Period, also suggests that OffA fully preserved a distinction between long and short vowels (*contra* Muraoka/Porten ²2003, § 7). Vowel letters ("plene writing") usually mark long vowels only, although quite often even they are not indicated either ("defective writing"): { } for word-final /ā/ and /ē/ (word-medial { } is generally historical for *//), {h} for word-final /ā/, rarely /ē/ and /ō/, {w} for word-final and medial /ū/ (and /ō/ < *//), {y} for word-final and medial /ī/. The diphthongs /aw/ and /ay/ were not yet monophthongized (Folmer 1995, 173–188). While the complete loss of short vowels in open syllables, common to all later varieties of Aramaic, evidently dates to the end of the 2nd c. AD (Beyer 1984, 128–136), Kaufman 1984 suggests a gradual reduction from OffA times onwards (but cf. Huehnergard 2002, 606).

Numerous sound changes had long taken place by then, but they are often hard to trace: the elision of /' in syllable-final position (with */a' > /ē/, cf. Beyer 1984, 104–106); the assimilation of /n/ to the immediately following consonant (a similar assimilation of /l/ in the "imperfect" of *lqh* 'to take' and *slq* 'to go up', though common in older and later varieties, is more difficult to pinpoint in OffA: Muraoka / Porten ²2003, 12); the dissimilation of emphatics (Kaufman 1974, 121 f.; Folmer 1995, 94–101). In pronunciation, dentals caused assimilation within a stress-unit even beyond word-boundaries (hence occasional sandhi writings like A4.7:20 [uncorrected] *'znh* for *'d znh* 'until this [day]'; B.7.1:3 *'dbr* for *'l dbr* 'on account of'). Sporadic loss of intervocalic /' and /h/ in, e.g., Syriac may be prefigured by *byš* /bīš/ 'bad' (KAI 258:3, 5th c. BC) as opposed to regular *b'yš* /ba'īš/ (a by-form according to Beyer 1984, 131; differently Kaufman 1984, 90) and perhaps *hn lw* 'if not' for *hn P hw* (C1.1:176). Personal names in cuneiform sources seem to indicate a change */a/ > /e/ before syllable-final /', /h/ or /h/ (Beyer 1984, 107 f.) and indistinct anaptyctic vowels beginning to break up word-final consonant clusters (ibid., 112–115), both systematically attested only in later Aramaic. According to the same evidence, /e/ gradually replaced /a/ as the pre-

formative vowel in the G-stem “imperfect” perhaps as late as from the 5th BC onwards. This bears on the Barth-Ginsberg-Law and the resulting change */ya-/ > */yi-/ (Aramaic /ye/) of the “imperfect” preformative, but the extent to which it was operative in earlier Aramaic is controversial (see 3.). Stress mostly falls on the final syllable. The frequent preservation of etymological */n/ before another consonant in writing (like *yntn* for /yattēn/ < */yantēn/ ‘he will give’) and even the regular use of the letter {n} for long (“geminate”) non-glottal obstruents in general (e.g., *šnpr* for /šēpper/ ‘bird’) is an OffA innovation. Scholars are divided as to whether this is a purely orthographical device indicating gemination, though ultimately based on a phonetic reality in Babylonian (Beyer 1984, 89–95; cf. Folmer 1995, 74–94), or whether it reflects true “degemination” by means of nasalization (i.e., */CC/ > /nC/; Garr 2007). Because of strong evidence for the assimilation of */n/ and the use of such spellings in cases where nasalization is unlikely (e.g., *tnl* from ‘ll ‘to enter’), many opt for the former.

3. Morphology

The *independent personal pronouns* mark the subject in nominal clauses (the 3rd person also serves as a copula) or reinforce it in verbal ones, usually preceding the verb; the 3m.pl. further expresses the object of a finite verb (Muraoka/Porten ²2003, § 39): *’nh* /’anā/ ‘I’; *’nt* /’attā/ (Cook 1990, 63 f.) ‘you (m.sg.)’; *’nty* (rarely: *’nt*) /’attī/ ‘you (f.sg.)’; *hw* /hū/ ‘he’; *hy* /hī/ ‘she’; *’nhn(h)* /’anāhnā/ ‘we’; *’ntm* /’attūm/ ‘you (m.pl.)’; *hm(w)* /hōm(ū)/ ‘they (m.)’. No 2/3f.pl. forms have been discovered so far. Spellings with *-nt-* in the 2nd person are an OffA innovation. The proximal deictic *demonstratives* (‘this’) follow the noun to which they refer: *znh* (rare sub-standard spellings: *dnh*, *zn*’, *dn*’) /denā/ (m.sg.); *z*’ /dā/ (f.sg.); *’lh* /’ellē/ (pl.); likewise their distal counterparts (‘that’; Folmer 1995, 198–209): *zk* (variant spelling: *dk*) /dēk/ (m.sg.; rare by-forms: *znk* /denāk/;

zkm or *dkm* /dōqōm/(?)); *zk* (or *dk*) /dāk/ and *zky* (*dky*) /dākī/ (f.sg.); *’lk* /’ellēk/ and older or sub-standard *’lky* /’ellēkī/ (pl.). The *relative marker*, *zy* (*dy*) /dī/ (in fact a fossilized genitive of older Semitic */dū/), connects words in a genitive relationship (‘A of B’) and introduces relative as well as object clauses. The oscillation between traditional {z} and its later variant {d} is purely orthographic (see 2.). The *interrogative pronouns* preserve an archaic distinction between animate and inanimate: *mn* /man/ ‘who?’; *mh* /mā/ ‘what?’. The *indefinite pronoun* is *mndm* /medde(ə)m/ ‘anything’ (Beyer 1984, 594 f.); for persons, *gbr* /gābar/ ‘someone’ (lit.: ‘man’) is also used frequently.

Nouns in OffA, including adjectives, follow the usual Semitic root and pattern system into which also Akkadian, Iranian, and Egyptian loanwords (Muraoka/Porten ²2003, 342–356) are integrated to a varying degree. Leander 1928, § 43 gives the best overview. The non-reconstructible *qātōl*-pattern typical for later Aramaic still seems unattested; as in older Northwest Semitic throughout, the originally monosyllabic patterns *qatl*, *qitl*, *qul* have a bisyllabic plural base with /a/ between the second and the third radical: /malāk/ (< */malk/ ‘king’, /malākīn/ ‘kings’. All nouns inflect for gender (masc./fem.), number (singular, dual, plural), and state (absolute, construct, emphatic). Not every feminine noun is formally marked; at times singular and plural differ in

gender (Beyer 1984, 446 f.). The abs.st. acts as the default form and is also used with *kl* /koll/ ‘every’, with numerals, and for predicative adjectives; a noun in the cstr.st. forms a stress unit with the following one and expresses a genitive relationship (although with, e.g., Persian loanwords and certain constructions a periphrasis with *zy* is preferred); the emph. (or “determinate”) st. marks definiteness, i.e., identifiability in context. These dimensions of the noun are highlighted by endings:

Tab. 28.1: Nominal inflection

Singular	Dual	Plural
m.abs. /-Ø/	/-ayn/ -yn	/-īn/ -n, -yn
m.cstr. /-Ø/	/-ay/ -y	/-ay/ -y
m.det. /-ā/ -ʔ, rarely -h	/-ayyā/ -yʔ (?)	/-ayyā/-yʔ, rarely -yh
f.abs. /-ā/ -h, -ʔ (< */-at/)	/-tayn/ -tyn	/-ān/ -n
f.cstr. /-at/ -t	/-tay/ -ty	/-āt/ -t
f.det. /-tā/ -tʔ, -th	*/-tayyā/ (unattested)	/-ātā/ -tʔ, -th

The f.abs.pl. ending /-ān/ is a characteristic trait of Aramaic vis-à-vis other Semitic languages. Due to the consonantal writing system, the dual often cannot be distinguished from the plural, but it seems to be hardly productive and restricted to the numerals ‘two’ and ‘two hundred’ as well as parts of the body that come in pairs (note that the only possible attestation of the m.emph. in C2.1:11 is somewhat problematic, see Hoftijzer/Jongeling 1995, s.v. *rgl*₂, ad 3). In the discussion about the old f.abs.sg. ending /-at/, which is allegedly preserved in a few cases (cf. Folmer 1995, 252–257), it has generally been overlooked that most instances from OffA proper (on the Hermopolis letters, see 5.) can be explained as adverbs: *qblt* ‘[to send] complaining’ (A6.8:3), alternating with the variant expression *šlh qbylh* ‘to send a complaint’; *zpt* ‘on loan’ (B3.1:3); *ʔntt* ‘as a wife’ (B3.8:22); *rhmt* ‘affectionately’, alternating with *brhṁh* ‘in affection’ (*passim*). Adverbs tend to preserve /-(a)t/ in later Aramaic, too (Beyer 1984, 96 f. and 444). *ʔgrt* ‘letter’, by contrast, may simply be a by-form of *ʔgrh* closer to Akkadian *egirtu* (Kaufman 1974, 48).

Some classes of nouns behave differently: gentilicia in /-āy/ (also used for Aramaic ordinals excepting /tēnyān/ ‘second’, which in OffA is the only securely attested form) have /-ē/ instead of /-ayyā/ in the m.det.pl. (/yahūdāy/, /yahūdāy-ē/ ‘Judean(s)’) in order to avoid */-āyayyā/ due to euphony (Kaufman 1974, 127 f.). Feminine nouns originally ending in */-āt/, */-īt/, and */-ūt/ (Leander 1928, § 57; Beyer 1984, 454–456) by and large also lost their /-t/ in the abs.sg. (except in the greeting formula *šrrt* /šar-rīrūt/ ‘health’: an archaism?) and pl., but preserve the long vowel of the stem (e.g., abs.sg. *ʔhḥ* /ʔaḥā/, cstr. *ʔht* /ʔaḥāt/, ‘sister’). Plural forms, however, expand their long vowels into triphthongs before vocalic endings: abs. /-awān/, cstr. /-awāt/, det. /-awātā/ for */-āt/; /-iyān/, /-iyāt/, /-iyātā/ for */-īt/; /-uwān/, /-uwāt/, /-uwātā/ for */-ūt/ (to be reconstructed from Biblical Aramaic, cf. cstr. מְלְכֻתָּא; < */malkuwāt/, det. מְלְכֻתָּא; < */malkuwātā/ ‘kingdoms’). Nouns ending in */-ī/ (> /-ē/ in Northwest Semitic, as evidenced by the vowel letter {h} which is not used for /ī/), including the participles of verbal roots IIIḥ, follow similar principles (Leander 1928, § 54; Beyer 1984, 456–458): m.abs. and cstr.sg. /-ē/, det. /-iyā/; abs.pl. /-ayn/, cstr. /-ay/, det. /-ayyā/; f.abs.sg. /-iyā/, cstr. /-iyat/, det. /-itā/; abs.pl. /-iyān/, cstr. /-iyāt/, det. /-iyātā/. Other nouns are irregular (cf. sg.det. *byr* /baytā/ ‘house’, abs.sg. *by* /bay/ < */bayt/, det.pl. *bty* /bāttayyā/;

some expand a biconsonantal sg. base in the pl. by /-ah-/, or even use an entirely different root (“suppletion”), like *’nth* /’əttā/ ‘woman’, abs.pl. *nš(y)n* /nəšīn/ (Muraoka/Porten ²2003, 74 f.; Leander 1928, § 59; Beyer 1984, 452).

Pronominal suffixes (Leander 1928, § 12) can be attached to nouns in the cstr. state for indicating possession. Together with *zyl* /dīl-/, they form an independent possessive pronoun; proleptic suffixes before the relative marker often indicate inalienable possession (Folmer 1995, 304–312). Judging from vocalized texts in later Aramaic varieties, consonantal endings (m.sg. of the regular noun and throughout in the feminine) have a linking vowel with the same quality as the original vowel of the suffix: /-ī/ -y ‘my’; /-āk(ā)/ -k ‘your (m.sg.)’; /-ēk(ī)/ -ky or rarely -k ‘your (f.sg.)’; /-ēh/ -h ‘his’; /-āh(ā)/ -h, rarely -hh ‘her’; /-ān(ā)/ -n, infrequently -n’ ‘our’; /-ōkūm/ -km (occasionally /-ōkūn/ -kn) ‘your (m.pl.)’; /-ēkenn/ -kn ‘your (f.pl.)’; /-ōhūm/ -hm, very rarely -hwm ‘their (m.)’ (in the latest documents also /-ōhūn/ -hwn); /-ēhenn/ -hn (?) ‘their (f.)’ (not securely attested). However, suffixes are added directly to the ending /-ay-/ of the m.cstr.pl. and m./f.cstr.du.: /-ayy/ -y ‘my’; /-āy-k(ā)/ -yk ‘your (m.sg.)’; /-āy-kī/ -yky ‘your (f.sg.)’; /-āw-h(ī)/ (< */-āy-hū/ -why, rarely (as in Old Aramaic) -wh ‘his’; /-āy-h(ā)/ -yh, rarely -yhh and -yh’ ‘her’; /-āy-n(ā)/ -yn, infrequently -yn’ ‘us’; /-ay-kūm/ -ykm ‘your (m.pl.)’; /-ay-kenn/ -ykn ‘your (f.pl.)’; /-ay-hūm/ -yhm, very rarely -yhwm ‘their (m.)’; */-ay-henn/ ‘their (f.)’ (unattested). *’b* /’ab/ ‘father’ and *’h* /’ah/ ‘brother’ attach consonantal suffixes to a vocalic cstr. in /-ū/ also in the sg., yet note *’by* /’ābī/ ‘my father’ in the 1sg. (*hm* /ham/ ‘father-in-law’ is only attested in Post-Achaemenid times, but behaves the same way: *whmwwhy* ‘and his father-in-law’, PAT 0117:3 [Palmyra]). It is unclear whether word-final /ā/ and /ī/ in some forms were still pronounced (cf. Cook 1990). The peculiar 3m.sg. suffix with vocalic forms /-āw-h(ī)/ instead of expected /-āy-h(ū)/, which also graphically distinguishes between the masc. and the fem., defies a straightforward historical explanation (see Beyer 1984, 150 f., and Muraoka/Porten ²2003, 47, n. 219 for some proposals).

Cardinal numbers (Muraoka/Porten ²2003, § 21) are spelled out but infrequently due to a widespread use of ciphers and are thus little known; ‘one’ and ‘two’ are adjectives, the other numerals substantives, of which the masculine forms ‘three’ to ‘ten’ have a feminine ending and vice versa. ‘Twenty’ to ‘ninety’ are plurals.

Various *prepositions*, of which *b* /ba-/ , *l* /la-/ (the /a/ is due to paradigmatic levelling), and *k* /ka-/ are proclitic, mark spatial, temporal or logical relations between entities. They govern a noun or a possessive suffix; some prepositions which go back to plural nouns take suffixes attached to the ending /-ay-/. *Function words* like coordinating (*w* /wa-/ ‘and’; *’w* /’aw/ ‘or’) and subordinating conjunctions (e.g., *hn* /hen/ ‘if’, or the relative marker *zy* combined with a proclitic preposition like *kzy* /ka-dī/ ‘when’) establish connections between clauses. *Particles* like *’p* /’ap/ ‘also’ express all sorts of nuances; *deictics*, such as *h’* /hā/ ‘lo!’, often act as discourse markers. The existence marker *’(y)t(y)* /’īt(ay)/ ‘there is’ (negation: *lyt(y)* /layt(ay)/) together with the preposition *l* /la-/ replaces the verb ‘to have’ which is lacking in Aramaic. Prohibitive expressions use the *negation* *’l* /’al/, all other utterances *l’* /lā/. Since Aramaic has but a restricted number of *adverbs* (some being lexicalized usages of nouns), adverbial relations are often conveyed by means of modal verbs.

Verbs express the interaction of tense, aspect, and modality by using of two main inflectional categories marking distinctions of person, number, and gender by means of affirmatives alone or pre- and affirmatives, i.e., the “perfect” (with a merger of

3m.pl. and 3f.pl. in OffA) and the “imperfect” conjugation. Syllabic spellings may indicate that a total levelling of the preformative /yɛ-/ of the “imperfect”, as in the vocalized traditions, is rather late in Aramaic, the first direct attestation being *lypwq* /ləp-pōq/ ‘may he go out!’ in a papyrus from ca. 200 AD (Beyer 1984, 108–112). However, Lipiński 1981, 192 f., suggests that it was */yi-/ already in early Aramaic. The normal “imperfect” has a shorter counterpart (“jussive”) serving also as the base of the imperative (on which see Beyer 1983, 131 f.) and a by-form attaching /-an/ to forms without affirmatives (“energetic”). The verb *ktb* ‘to write’ acts as an example for sound roots in the unmarked stem (“G”) here, with a characteristic vowel after the second root consonant (“radical”, referred to as I, II, or III) in both the “perfect” and the “imperfect”:

Tab. 28.2: Finite verbal forms

Perfect	Imperfect	Jussive	Imperative
3m.sg. <i>ktb</i> /katab-Ø/	<i>yktb</i> /ya-ktōb-Ø/	<i>yktb</i> /ya-ktōb-Ø/	–
3f.sg. <i>ktbt</i> /katab-at/	<i>tktb</i> /ta-ktōb-Ø/	<i>tktb</i> /ta-ktōb-Ø/	–
2m.sg. <i>ktbt</i> /katab-t(ā)/	<i>tktb</i> /ta-ktōb-Ø/	<i>tktb</i> /ta-ktōb-Ø/	<i>ktb</i> /k(ə)tōb-Ø/
2f.sg. <i>ktbt(y)</i> /katab-ū/	<i>tktb(y)n</i> /ta-ktōb-īn/	<i>tktb(y)</i> /ta-ktōb-ī/	<i>ktby</i> /k(ə)tōb-ī/
1sg. <i>ktbt</i> /katab-(ə)t/	<i>’ktb</i> /’a-ktōb-Ø/	<i>’ktb</i> /’a-ktōb-Ø/	–
3m.pl. <i>ktbw</i> /katab-ū/	<i>yktb(w)n</i> /ya-ktōb-ūn/	<i>yktbw</i> /ya-ktōb-ū/	–
3f.pl. <i>ktbw</i> /katab-ū/	(unattested)	(unattested)	–
2m.pl. <i>ktbt(w)n</i> /katab-tūn/	<i>tktb(w)n</i> /ta-ktōb-ūn/	<i>tktbw</i> /ta-ktōb-ū/	<i>ktbw</i> /k(ə)tōb-ū/
2f.pl. <i>ktbt(n)</i> /katab-tēn/	<i>tktb(n)</i> /ta-ktōb-(ə)n/	<i>tktb(n)</i> /ta-ktōb-(ə)n/	(unattested)
	or /ta-ktōb-ān/		
1pl. <i>ktbn</i> /katab-n(ā)/	<i>nktb</i> /na-ktōb-Ø/	<i>nktb</i> /na-ktōb-Ø/	–

(Concerning the feminine plural of the “imperfect”, later evidence unanimously points to an affirmative /-ān/, presumably on analogy with the masculine /-ūn/. This change from expected */-n/ either occurred secondarily [Beyer 1984, 147] or had already happened by the time of Old Aramaic [Huehnergard 1987].)

The “perfect” covers various nuances of relative past (punctual, durative, resultative; in subordinate clauses also pluperfect) and performatives as well as gnomic expressions; in the protasis of conditional clauses it acts as a kind of *futurum exactum*. The “imperfect” is less strongly marked for tense, expressing a broad range of present-future notions (with *zy* /dī/ also for final clauses) and several types of deontic as well as epistemic modality (Gzella 2004, 301–310). OffA by and large preserves the old distinction between the “jussive” for deontic modality and the “(long) imperfect” (see 6.), but not all forms can be clearly distinguished on morphological grounds. No specific meaning of the “energetic” has yet been identified, but it acts as the default form for suffixed “imperfects”. The active participle *ktb* /kātēb/, inflected like a noun, had begun to be integrated into the verbal system as a present-tense or imperfective form already in a previous stage of the language. Together with the “perfect” or “imperfect” of the auxiliary verb *hwy* ‘to be’, it explicitly renders the imperfective aspect for the durative or iterative *Aktionsart* in the past and in the future respectively. Its passive counterpart *kt(y)b* /katīb/ is sometimes used actively, most notably in the resultative construction /šamīr lī/ ‘it is heard by me’, i.e., ‘I have heard’, a calque from Old Persian (Gzella 2004, 184–194, and 2008, 92 f.). The infinitive *mktb* /maktab/ (except for the fossilized archaism *’mr* /lēmar/ ‘saying’ always with a prefixed /m-/ in OffA: Gzella 2008, 97 f.) marks verbal complements.

Several derivational categories (“verbal stems”), by contrast, express distinctions in *Aktionsart* and voice, thereby also intersecting with tense, aspect, and modality. Their semantics in Aramaic are underresearched, but generally speaking (leaving unpredictable usages apart), the D-stem with its lengthened middle root consonant expresses plurality or, with intransitive verbs, factitivity. The C-stem has a prefix */ha-/ > /ʾa-/ (spellings with {h} are presumably historical) and expresses causativity; those few causatives with a prefix /š/ or /s/ in Aramaic are generally believed to be lexical loans from other languages (Kaufman 1974, 123 f.). The basic stems each have a medio-passive variant with a /-t-/ prefix (Gt, Dt, Ct [on which see Beyer 1984, 150]; root-initial sibilants swap position with and, if voiced, undergo partial assimilation to that /t/) and an ablaut passive (Gp, Dp, Cp), but except for the participle, the latter is gradually disappearing, beginning with the “imperfect” (Gzella 2009). Some forms are only attested in Biblical Aramaic with a later vocalization (see 6.):

Tab. 28.3: Verbal stems

3m.sg.	Perfect	Imperfect	Imperative	Participle	Infinitive
G	/katab/	/yaktəb/	/k(ə)təb/	/kātəb/	/maktab/
Gp	/katīb/	(see 5.)	—	/katīb/	—
Gt	/ʾətkatəb/	/yətkatəb/(?)	/ʾətkatəb/	/mətkatəb/(?)	/ʾətkatābā/ (BA)
D	/kattəb/	/yakattəb/	/kattəb/	/makattəb/	/kattābā/
Dp	(unattested)	(unattested)	—	/makattab/	—
Dt	/ʾətkattab/	/yətkattab/(?)	/ʾətkattab/	/mətkattab/(?)	הַתְּכַתֵּב (BA) [cstr.], Eśr 7:16
C	/(h)aktəb/	/ya(h)aktəb/	/(h)aktəb/	/ma(ha)ktəb/	/(h)aktābā/
Cp	/(h)əktəb/	(unattested)	—	/ma(ha)ktab/(BA)	—
Ct	/ʾə(h)aktəb/	(unattested)	(unattested)	(unattested)	(unattested)

Roots with unstable consonants or long vowels as radicals exhibit a number of changes: /ʾ/ in syllable-final position is elided (with compensatory lengthening of the preceding vowel: */yaʾmar/ > /yəmar/ ‘he says’), which triggered a merger of verbs IIIʾ and IIIī (Folmer 1995, 222–236); /n/ in verbs *ln* and /l/ in *lqh* ‘to take’ is assimilated to the following consonant, and the imperative has a biradical basis (*qh* /*qah*/ ‘take!’). Presumably in analogy with this feature (Huehnergard 2002, 606), several verbs *Iy* lengthen their second radical in the “imperfect” in order to compensate for the unstable first radical (*yd*ʿ /*yadda*/ ‘he knows’; Beyer 1984, 149) and also form a biradical imperative (*hb* /*hab*/ ‘give!’). In the C-stem series of these verbs, original root-initial */w/ (> /y/) reappears. Verbs with a geminated second radical lengthen the first one instead (often with “degemination”, at least in spelling; see 2.) in forms with preformatives or prefixes ending in a vowel, e.g., *ʾlt* /ʾallət/ ‘I entered’ (G-perf. 1.sg.), but *tn*ʾ /taʿəl/ ‘you enter’ (G-impf. 2m.sg.), perhaps due to a simplification of the imperative (*/ʿəl/ > /ʿəl/ ‘enter!’) or vice versa. Gt, D, and Dt forms (and perhaps also the G-participle, as in later Aramaic) inflect like sound roots. “Hollow roots” with a long vowel as a middle radical have that vowel in forms based on the G-“imperfect”, otherwise the corresponding long vowel of the sound verb: *qm* /*qām*/ ‘he rose’, but *yqwm* /*yaqūm*/ ‘he rises’. The G-stem active participle and the entire D-stem of most verbs inflect like sound roots: *šymyn* /šāyemīn/ ‘fasting (m.abs.pl.)’; some, however, have a L(engthening)-stem instead of the D (like *rym*, cf. BA מְרִימִים ‘exalting’). Verbs IIIī

preserve their original word-final /-ī/ in all “perfect” and imperative forms (> /ay/ with /ī/ and > /aw/ with /ū/ of the affirmatives), but change it to /-ē/ in all “imperfect” and participle forms and in the G-infinitive. Many verbs, however, have a “perfect” in /-ā/ (/ay-/ before consonantal affirmatives, /-āt/ in the 3f.sg., /-aw/ in the 3pl.).

Pronominal suffixes can also be attached to all verbal forms except for the participle in order to mark a pronominal direct object (e.g., *yhbth* /yahabtā-hā/ ‘you gave her’), but from OffA on, the 3m./f.pl. suffix has been regularly replaced by the independent pronoun as a direct object (Gzella 2008, 93). Practically the same suffixes as with nouns are used, no doubt including the linking vowel after consonantal forms. However, the 1.sg. has /-(a)nī/ -ny ‘me’, and “imperfect” forms without affirmatives usually attach suffixes to the “energetic” ending /-an/, but without a linking vowel; /n/ presumably assimilates to /k/ in pronunciation: *yšymnk* /yašīmákkā/ < */yašīm-án-kā/ ‘he places you’. The morphological opposition between “imperfect” and “jussive” is thus restored. Vocalic forms of verbs IIIī dissolve into diphthongs before the linking vowel (e.g., *hḥwyn* /(h)aḥwiyān(ā)/ ‘he informed us’).

4. Syntax

A supposed VSO word order as in Old Aramaic seems not rigid in OffA, since many pragmatic factors cause variation; a tendency towards verb-final sentence patterns has often been attributed to Akkadian influence (cf. Folmer 1995, 521–587), and fronting of the direct object to Persian. Double subordination is avoided in favour of parataxis (Gzella 2004, 160). When a definite, animate noun acts as a direct object, it normally has the object marker *l* (presumably identical to the preposition; Folmer 1995, 340–371). Agreement in number and gender between subject and predicate is often straightforward, but can be overridden with coordinative subjects, passive predicates, and collectives like *ḥyl* ‘force’ (ibid., 429–492).

5. The Hermopolis letters

Eight private letters on papyrus discovered at Hermopolis in 1945 (A2.1–7; Hug 1993, 35–41, with grammar) are clearly distinct from OffA proper, whose “official air” they lack, no less than from the rest of Old Aramaic. On palaeographic grounds, they can be dated to the late 6th/early 5th c. BC and presumably reflect a typologically older variety of Aramaic present in Egypt even before Persian times. Its provenance, however, remains controversial; based on some linguistic features, Greenfield/Porten 1968, 219–223 suggest a Western origin, but the matter requires further investigation. Most personal names in these documents are Aramaean or Egyptian. The spelling is largely phonetic and less consistent, with non-standard {h} instead of {ʔ} for /ā/ also in the m.det.sg., *dh* instead of *z*ʔ for the f.sg. proximal deictic, and a certain preference for defective spelling; as in Old Aramaic, etymological */n/ is often not written. Due to its prestige, however, Achaemenid spelling practice has left some traces (see Hug 1993, 53). In striking contrast to OffA, but like other 7th/6th c. material, the noun patterns attested are almost exclusively “internal”, i.e., without pre- and suffixes (ibid., 61–63),

and the 3pl. object suffix *-hm* with verbs has not yet been replaced by the independent pronoun *hmw* (ibid., 20 and 59). Possessive suffixes of the 2/3m.pl. ending in */-n/* are a hallmark of the Hermopolis corpus as opposed to the rest of older Aramaic (but do not necessarily prelude the same change in later Aramaic, since */m/* and */n/* alternate frequently in Semitic); unfortunately, there is no instance of the 3f.pl. “perfect”, whose identity with the masculine form counts as a diagnostic feature of OffA. Further, the old f.abs.sg. ending */-at/* has been preserved even in nouns which act as grammatical subjects and direct objects (Folmer 1995, 252–257; the few instances of the same ending in OffA, by contrast, seem to mark adverbs), but there is no obvious functional distinction as opposed to younger */-ā/* (the fact that almost all cases of */-at/* occur with direct objects no doubt results from the general scarcity of feminine subjects in this corpus). A similar feature in the Aramaic contracts from Saqqāra might have been influenced by Phoenician, also used in that area (cf. Segal 1983, 11 f.). The Hermopolis letters might still attest a (fossilized?) “imperfect” of the G-stem passive **/yōktab/* (*y(w)bl* /*yūbal*/ ‘let it be delivered’, often in a formulaic expression at the end; see Muraoka/Porten ²2003, 119 f.). As in later Western Aramaic and Syriac, the C-stem infinitive has a prefix */m-/* (Folmer 1995, 192–198). The most distinctive syntactic feature is the “periphrastic imperative”. It has been explained as polite (Gzella 2004, 266–269) or conative (Gianto 2008, 21), but both are not mutually exclusive (e.g., ‘try to be on time!’ is a conative expression used for politeness).

6. Biblical Aramaic

With Ezr 4:8–6:18 and 7:12–26, Dan 2:4b–7:28 (containing many famous passages like those about the Feet of Clay, the young men in the Fiery Furnace, the Writing on the Wall at Belshazzar’s Feast, the vision of the Son of Man etc.), Jer 10:11, and Gen 31:47, Biblical Aramaic (BA) encompasses ca. 1 % of the Old Testament canon. While the exhaustive grammar of Bauer/Leander 1927 has not yet been replaced, Rosenthal ⁷2006 provides a concise and reliable modern presentation. Dictionaries of Biblical Hebrew normally include the BA lexicon as well, but Vogt 1971 is unrivalled in its attention to philological detail, whereas Beyer 1984–2004 situates all words in their broader Aramaic context. Since the heterogeneous material covers several centuries of language history, its linguistic position oscillates, but most scholars agree that BA is largely identical with OffA (Rosenthal 1939, 60–71; ⁷2006, 10). According to redactional criticism, too, the nucleus of Daniel goes back at least to the 4th c. BC, and Ezra might contain even older material (Gzella 2004, 41–45).

Literary reworkings (the final redaction of Daniel took place ca. 165 BC), scribal transmission, and vocalizations (Tiberian and Babylonian; on the latter cf. Morag 1964) which were heavily influenced by a much later stage of the language, however, led to a quite distinct linguistic garb, because in Palestine OffA came into contact with a local Judaeen variety and developed further. The Tiberian pointing of BA is more heterogeneous than that of Biblical Hebrew, but follows similar principles: stops in weak articulation are spirantized (also after */ay/*) and short unstressed vowels in open syllables lost or, rarely, lengthened. At times, consonantal text and pointing reflect forms belonging to different varieties of Aramaic (Gzella 2004, 125 n. 31; 133). The

inconsistent use of 𐤁 and 𐤂 foreshadows the later merger of */s/ and */š/ (Rosenthal ⁷2006, § 19; Beyer 1984, 421) which began in the West and spread from there. Occasional /-ā²-/ in gentilics instead of /-āy-/ before another vowel (e.g., in the m.abs. and det.pl.) is characteristic for Judaeen Aramaic (Beyer 1984, 53), cf. /kaśdā'in/ 'Chaldaeans' in Dan 3:8 and, similarly, the participle of "hollow roots" (/qāyem/ > /qā'em/ 'standing'). As in Talmudic Aramaic, some feminine nouns ending in */-ī/ have plural forms with /-aw-/ (apparently taken over from the feminines in */-āt/) instead of /-iy-/ (Rosenthal ⁷2006, § 54); as in Aramaic texts found at Qumrān and, rarely, contracts from Murabba'āt, the 3rd person "imperfect" of *hwy* 'to be' has a preformative /l-/ (originating from a precative particle, which in Eastern Aramaic has been generalized to all verbs at a certain stage; Kaufman 1974, 124–126), perhaps in order to avoid the same sequence of letters as in the Tetragram. These peculiarities are mostly difficult to pinpoint in time, but the prosthetic aleph in *šty 'to drink', which is first attested in Dan but occurs regularly in Syriac and Jewish forms of Aramaic, may be relatively old (Beyer 1984, 127 with n. 2; 134 with n. 3). Later forms in BA also include 𐤌 'wood' (OffA: 'q) and, in Dan, the independent pronouns and 2./3.m.pl. "perfect" forms in /-n/ (often in Post-Achaemenid Aramaic, but also in the Hermopolis letters) instead of /-m/ (OffA and Ezra). The latter are sometimes adduced as evidence for subsuming Dan under "Middle Aramaic", but may simply be orthographic modifications (though already present in the Qumran fragments of Dan). Genuine Hebraisms (Rosenthal 1939, 50–52), apart from lexical loans, are a few instances of the plural ending /-īm/ instead of /-īn/ (Dan 4:14; 7:10; Esr 4:13; similar cases recur in Qumran Aramaic, in the Qumran fragments of Dan also in 2:27; 2:41; 2:42) and, presumably, the preference for /h/ instead of /ʔ/ in the prefix of the reflexive stems in the Masoretic Text. (The fragments of Dan from Qumran are closer to OffA orthography, since they have /ha-/ instead of /ʔa-/ as the C-stem prefix and mostly /ʔ/ instead of /h/ in the reflexive stems.) Dan also has one instance of the old Western object marker *yt* /yāt/ (3:12: 𐤕𐤓𐤕𐤓𐤕 𐤕𐤓𐤕𐤓𐤕 'whom you appointed'), which is unattested in OffA (Folmer 1995, 108 n. 483) but reappears afterwards, and uses the 3m.sg./pl. independent pronouns as distal demonstratives (2:32: 𐤕𐤓𐤕𐤓𐤕 𐤕𐤓𐤕𐤓𐤕 'that statue'; 2:44: 𐤕𐤓𐤕𐤓𐤕 𐤕𐤓𐤕𐤓𐤕 'those kings'). BA verbal syntax reflects several innovative tendencies in Aramaic, especially the growing use of the participle as a present-future form which includes a *praesens historicum* in narrative past (in Dan; Gzella 2004, 120–136) as well as performatives (ibid., 209–215), and a *futurum instans* with *b'y* 'to wish' (ibid., 229–231). The "imperfect" can express concomitant actions in the past (ibid., 136–151), which is a common Semitic usage presumably only by coincidence unattested in OffA. The old "short imperfect" ("jussive") gradually disappeared (Rosenthal ⁷2006, § 108), a development presumably triggered by the reanalysis of the former participle as a present-future which then promoted the use of a single "imperfect" form for various modal functions. This process, however, was only completed in Post-Achaemenid times (see ch. 30).

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29. Imperial Aramaic as an Administrative Language of the Achaemenid Period

1. Imperial Aramaic
2. Aramaic in the Achaemenid period
3. Other languages in the Achaemenid period
4. Some characteristics of Achaemenid Imperial Aramaic
5. References

Abstract

This chapter describes the role of Imperial Aramaic as the administrative language of the Achaemenid Empire (539–331 B.C.E.), one of the large empires of the Ancient Near East. After a general discussion of the terminology (1.), the rise and distribution of Aramaic as an administrative language of the Achaemenid Empire (2.) and the use of other (administrative) languages in this empire (3.), follows a description of the most important characteristics of Achaemenid Imperial Aramaic (4.). These characteristics are particularly strongly present in the official correspondence of Arsames, a satrap of Egypt (late 5th century). The spelling of these letters displays a uniformity not encountered within less formal texts. The Arsames letters also have some syntactic, lexical and stylistic characteristics.

1. Imperial Aramaic

Imperial Aramaic, more precisely Achaemenid Imperial Aramaic, is the administrative language of the Achaemenid Empire (539–331 B.C.E.). The beginnings of this empire are traditionally identified with Cyrus' capture of Babylon in 538 B.C.E., which also marked the end of the Neo-Babylonian Empire. The term Imperial Aramaic was coined for this variety of Aramaic by the Iranist Markwart (Reichsaramäisch) (see also ch. 28). This variety of Aramaic is often referred to in the literature with the term 'Official Aramaic' and sometimes by the term 'Standard Aramaic'. The term Official Aramaic is inspired by the official character of these documents, while the term Standard Aramaic derives from the view that a certain variety of Aramaic must have been selected by the central Achaemenid authorities to represent the standard language, as against substandard-languages of this period, which are also documented. This variety of Aramaic needs to be distinguished from other dialects of Aramaic which existed in the Achaemenid period, although it is not always clear where Achaemenid Imperial Aramaic ends and where a local or non-standard dialect begins. The reason for this is that even though the Achaemenid period is richly documented, many pieces of information necessary for putting together the difficult puzzle of the linguistic situation in the Achaemenid period are missing. In this contribution the more specific term Achaemenid Imperial Aramaic is used instead of the term Imperial Aramaic, which in

the literature, like the term Official Aramaic, is sometimes inaccurately used to refer to the official brand of Aramaic in use in the subsequent Neo-Assyrian, Neo-Babylonian and Achaemenid Empires. The term Achaemenid Imperial Aramaic stresses the individuality of this variety of Aramaic and distinguishes it from its precursors in the Neo-Assyrian and Neo-Babylonian periods (see ch. 27).

2. Aramaic in the Achaemenid period

The use of Aramaic by the Achaemenid administration is deeply rooted in the use of Aramaic as an administrative language under the previous Neo-Assyrian and Neo-Babylonian administrations (see ch. 27). When the Achaemenids came to power in the middle of the 6th century they were confronted with the difficult task of administering a vast and pluriform empire. It was only natural for the Achaemenid rulers to adopt successful elements of the preceding administrations for their own administration. As Aramaic was the one language most widely known, thanks to its widespread use under the previous administrations, it was embraced as the official language of the Achaemenid administration. This promotion of Aramaic as the official language of communication may have contributed to the unification of the multilingual, multicultural and multiethnic Achaemenid Empire. It was probably during the reigns of King Darius I (521–486) and King Xerxes (486–465) that Aramaic became widely used as the language of the Achaemenid administration, as demonstrated by the distribution of Aramaic documents datable to their reigns (Briant 2002, 507). A good example of this is provided by the Aramaic administrative tablets and dockets in the archives from Persepolis, the capital and administrative centre of the empire from the time of Darius I (see 3.). Evidence from other satrapies for the use of Aramaic in the higher echelons of Achaemenid bureaucracy includes:

- (a) The official letters of Arsames, the satrap of Egypt (end of the 5th century; including two letters found at Elephantine; see below (next paragraph))
- (b) administrative texts from Saqqarah/Memphis, the seat of the satrap of Egypt, such as TAD C3.7, the now famous custom account, a palimpsest which was reused for the Aḥiqar text (ca. 475 B.C.E.; probably from Memphis)
- (c) *bullae* (clay envelopes) with Aramaic inscriptions/seals from Daskyleion, the seat of the satrap of Phrygia, coins from Cilicia with Aramaic inscriptions, and the trilingual inscription from Xanthos in Asia Minor on a commemorative stele erected by Pixodaros, the satrap of Lycia and Caria
- (d) a correspondence on papyrus from Bactria of a governor with the satrap of Bactria (2nd half of the 4th century; see Shaked 2004 and the forthcoming publication of these texts by Naveh and Shaked)

No complete satrapal archive has been preserved, partly due to the fact that Aramaic was written on papyrus or leather, a perishable material. The *bullae* from Daskyleion and references to writing on leather in archives from Persepolis evidence the use of Aramaic written on papyrus and leather (see Jones/Stolper 2008, 36; see also 3.).

The clearest and foremost example of the use of Aramaic by the Achaemenid authorities is the correspondence between Arsames, satrap of Egypt (late 5th century)

and the estate managers of his landed estates. His correspondence consists of thirteen letters (and some fragments) written on leather (TAD A6.3–16). In most of these letters Arsames is the sender, while in three of them he is the addressee. The letters were written from one of the capitals of the Achaemenid rulers in the east (Susa or Babylon). Arsames probably sent his letters to Memphis, the place of the headquarters of the satrap of Egypt. Even though this correspondence was uncovered at an unknown place in Egypt, scholars assume that the letters were preserved in the chancellery at Memphis. The letters deal with the administration of Arsames' royal dominions in Egypt during his absence and give an insight into the complex Achaemenid administrative system. Arsames is also mentioned as one of the correspondents in two letters on papyrus preserved in the chancellery at Elephantine (TAD A6.1 = C 17; dated 427 B.C.E.; TAD A6.2 = C 26; dated 411 B.C.E.). One of them (TAD A6.1) is addressed to Arsames. The senders of this letter are Persian officials. The letter is probably a copy of an original which was sent to Arsames' residential quarters in Memphis. Copies of important letters were preserved in the chancellery at Elephantine (see also below). The second letter, TAD A6.2, was sent by Arsames from Memphis to Elephantine. The addressee was a local official (with an Egyptian name). The letter concerns the repair of a boat. This letter, which abounds in Persian loanwords, gives an insight into the bureaucratic system of the Achaemenid administration.

Local authorities also employed Aramaic as a vehicle of communication. The ten official letters belonging to the so-called Yedaniah archive found at Elephantine clearly bear witness to this. Yedaniah bar Gemariah was the leader of the Jewish community at Elephantine during the last quarter of the 5th century. The letters deal with several topics of importance to the Jewish community at Elephantine, such as the celebration of Passover (TAD A4.1) and the destruction of the Jewish temple at Elephantine (TAD A4.7; 4.8). The last two letters mentioned are addressed to the governor of Yehud, of whom permission is requested to rebuild the temple at Elephantine. This request was finally granted by the governors of Yehud and Samaria. An Aramaic memorandum of this authorisation is found among the documents (TAD A4.9).

Another important source for Aramaic as an administrative language is the collection of legal documents. Most Aramaic legal documents from the Achaemenid period come from Egypt (TAD B). The oldest legal document from Egypt was written in 515 B.C.E. in the town of Korobis in the Delta (TAD B1.1). By far the largest group of Aramaic legal documents comes from Elephantine (5th century). Another important collection is formed of court records (and other documents) in an archive of the Achaemenid administration in Saqqara (TAD B8.1–4; 6–12; in addition to many Demotic texts). In Palestine a collection of slave sales was found in Wadi Daliyeh, near Samaria, from the end of the Achaemenid period (2nd half of 4th century; Gropp 2001). In the Achaemenid Empire, legal documents were also framed in Babylonian and Demotic. The documents in Aramaic have a Jewish background. How these three legal languages and traditions have influenced each other is a subject of scholarly discussion (see the introduction by B. Levine in Muffs ²2003).

Economic texts constitute another group of administrative texts. To date, most administrative texts of an economic nature have been found in Egypt, Palestine, Babylonia and Persia. They are written on papyrus (Egypt), ostraca (Egypt and Palestine) and tablets (Babylonia and Persia). From Elephantine and Saqqara/Memphis there are many accounts and name lists (collected in TAD C and TAD D). An important text

is the erased custom account on which the Aḥiqar text was written (also known as the shipyard journal; probably from Memphis). Palestine is particularly rich in administrative ostraca. Among these, the ostraca from Idumaea constitute the largest group (ca. 1400 legible ostraca, partially published; see Lemaire 2006 for an overview). Aramaic is also found on dockets and in monolingual tablets in archives from Babylonia (particularly from Nippur) and Persia (Persepolis). In Babylonia and Persia Aramaic ranked as the second administrative language, next to Babylonian Akkadian and Elamite respectively. On the archives from Nippur and Persepolis, see 3.

Until recently most of the administrative texts known to date from the Achaemenid period were from 5th century Persia, Babylon and Egypt. The 4th century and major regions, such as the satrapies in the east and Palestine (part of the satrapy 'Beyond the River'), were less lavishly documented. The publications of the Wadi Daliyeh papyri and the ostraca from Idumaea, together with the expected publication of some thirty papyri from the eastern satrapy of Bactria (see Shaked 2004; Naveh/Shaked), all datable to the 4th century, fill important linguistic gaps. The letters from Bactria are particularly important as prior to this the only evidence for Aramaic used on the Iranian plateau and beyond was based on finds from the Hellenistic period (inscriptions of King Aśoqa from Afghanistan and Pakistan; Aramaic heterograms in Middle Persian).

The corpus of Aramaic texts from this period includes many inscriptions. Aside from the inscriptions from Asia Minor referred to above, there are dedicatory inscriptions, funerary inscriptions, boundary stones, graffiti, seals, coins and many other types. They are known from all over the empire, including areas not represented by other text types (such as Arabia). Many of these inscriptions are the private expressions of individuals, but they are nevertheless an indirect witness to the spread of Aramaic as an administrative language. They often reveal orthographic, grammatical and lexical characteristics of the official language.

The same is true for private letters on ostraca and papyrus. These have been found at Elephantine (papyrus and ostraca), Hermopolis and other places in Egypt (TAD A; TAD D). Other sources for Aramaic in the Achaemenid period include literary texts (Aḥiqar story and proverbs; TAD C1.1) and a historical text (Aramaic copy of the Bisitun inscription; TAD C 2.1), both from Elephantine.

Characteristic of this large corpus is the uniformity of the cursive script in which all the texts are written. There are no local varieties and a lapidary style did not develop until the late 4th century B.C.E.

3. Other languages in the Achaemenid period

A one-sided emphasis on the widespread use of Aramaic in the Achaemenid Empire would mask the intricacies of the linguistic landscape in this period. In fact, a multitude of languages is documented for this period, in addition to Aramaic. Among the languages documented are Old Persian (OP), Babylonian Akkadian, Elamite, Egyptian (Demotic), Lydian, Lycian, Phrygian, Phoenician, Greek, Hebrew and Eastern Iranian languages. Most of these languages were (former) national languages and some of them were principally, though not exclusively, locally used. So, for instance, were Lydian, Lycian and Phrygian in Asia Minor. The complex linguistic situation in the Achaeme-

nid period is evidently related to the size and multifarious ethnic composition of the empire. It is further complicated by the large-scale migration of individuals under previous and Achaemenid administrations.

The widespread use of Aramaic as a vehicle for communication obviously did not prevent the use of local languages (see also Kuhrt 2007, ch. 17). The Achaemenid authorities may by default have communicated with their subjects in Aramaic, but if this for one reason or another was impossible they made use of the expertise of official interpreters employed in the chancellery to have their documents translated into one of the many local languages used in the empire (cf. Porten 1968, 56 f.; his interpretation of *m^efāraš* in Ezra 4:18 as a technical term for ‘in (Persian) translation’ is widely held, but controversial). A nice example of this practice is provided by the Demotic correspondence between the satrap Pharandates and the priests of the temple of Khnum at Elephantine from the beginning of the 5th century. While the letter of the satrap was translated from Aramaic into Demotic, the priests replied in Demotic (Briant 2002, 508).

The finds of several bilingual, trilingual and quadrilingual inscriptions confirm the complex linguistic situation in this period: the bilingual and trilingual royal inscriptions of Achaemenid kings in OP, Babylonian and/or Elamite (e.g. the Bisitun inscription); the bilingual dedicatory inscription from Sardis (Asia Minor) in Aramaic and Lydian; the trilingual commemorative inscription from Xanthos (Asia Minor) in Aramaic (on the front side of the stele), Lycian and Greek; the bilingual funerary inscription from Limyra (Asia Minor) in Aramaic and Greek; and the quadrilingual inscriptions in Egyptian, Babylonian, Elamite and OP on vases found in Susa (see Briant 2002, 450 f.). Both Babylonian and Elamite accompany OP in several trilingual royal inscriptions from Darius I onwards, demonstrating that at the time these languages enjoyed prestige status, emanating from their elevated standing in previous administrations.

A Neo-Babylonian copy of the trilingual Bisitun inscription by Darius I (carved from stone in Elamite, OP and Babylonian) was found in Babylon and an Aramaic version of it, written on papyrus, was uncovered at Elephantine. The Aramaic text is a copy from the time of Darius II (ca. 420 B.C.E.) and differs at several points from the original inscriptions. Some scholars believe that the Elephantine copy was disseminated by Darius II at the centennial of his ancestor, while others hold that it is a schoolboy’s exercise (Porten/Greenfield 1982, 3). Whatever the relationship between the different versions, it can at least be said that both Babylonian and Aramaic copies circulated in the empire, in agreement with § 70 of the Bisitun inscription (OP), which reports that copies written on clay and leather and in other languages (i.e. Akkadian and Aramaic) were sent to the provinces of the empire (cf. Esther 3:12).

OP was the native tongue of the Achaemenid rulers (De Vaan/Lubotsky 2009, 160), but (as yet) there is no evidence that OP was widely spoken (Briant 2002, 508 f.). There probably was no written tradition in Persian before the rise of the Achaemenid Empire (Briant 2002, 126 f.). Almost all of the OP inscriptions come from Iran and most are monumental inscriptions decreed by an Achaemenid king (evidence from Darius I–Artaxerxes III [522–338 B.C.E.]). The syllabic cuneiform script was probably created by the Achaemenid rulers, most probably by Darius I. As such, the use of OP is strongly linked with the royal court (Kuhrt 1995, 649; Briant 2002, 126), but there is some evidence for a more widespread use of OP (cf. the recent find of an administrative text in OP among the Persepolis Fortification Tablets; see Stolper/Tavernier 2007).

Apart from Aramaic, the use of both Elamite and Babylonian Akkadian as administrative languages is well documented for the Achaemenid period. The use of these languages in the Achaemenid period should be understood in the context of their use as administrative languages under earlier administrations.

The ancient kingdom of Elam, with its capitals Anshan on the Iranian plateau and Susa in the plain, was located in present-day southwest Iran. Elamite, the language of this kingdom, has been documented as an administrative language since the beginning of the second millennium (Old Elamite) (Kuhrt 1995, 367). Contrary to previous scholarly beliefs, the capture and destruction of Susa by the Assyrian king Assurbanipal (646 B.C.E.) did not herald the end of the Neo-Elamite kingdom. Recent research has shown that the Elamite kingdom witnessed a revival, which possibly lasted until the reign of Darius I. An archive with economic documents in Elamite dates from this period. Elamite culture deeply influenced Persian culture in both the organisation of the state and its administration (Henkelman 2008, 4 ff.).

In texts from the Achaemenid period, Elamite is principally known from the so-called Treasury and Fortification tablets from Persepolis. Persepolis had been the capital and administrative centre of the empire since Darius I. The Treasury tablets were found in a palace building which has been identified as the royal treasury. The texts (ca. 100) date from the period 492–458 B.C.E. and cover the later part of the reign of Darius I, the reign of Xerxes and the beginning of the reign of Artaxerxes I. These administrative texts record disbursements in silver paid to the workers. In addition to these tablets, 163 Aramaic inscriptions on mortars, pestles and other stone objects were found in the Treasury (published by Bowman; see Schwiderski 2004, 337 ff.). They contain information on the donation of the object on which they are written.

The Fortification tablets date from the period 509–493 B.C.E. According to recent estimations, they number in the thousands (15,000–18,000) and many of these have yet to be published (see Stolper/Tavernier 2007; with bibliographical references). The administrative texts record food rations disbursed to persons of different classes connected to the royal palace. These texts give an insight into the administrative system of the royal court. In addition to the tablets in Elamite (some of which have an Aramaic docket), there are also monolingual Aramaic tablets (700–800) and tablets with just a seal impression (5000–6000) (Stolper/Tavernier 2007). A possible explanation suggested for the fact that the texts are not later than the reign of Artaxerxes I is that the chancellery changed to the use of Aramaic and that since Aramaic was probably written on papyrus or some other perishable material, these Aramaic administrative texts would not have been preserved (Kuhrt 1995, 650). It is, however, difficult to reconcile this with the fact that a considerable amount of tablets, ca. 6–7 % of the total, are written in Aramaic. The Elamite Fortification tablets also mention copies of letters and copies of documents written on leather (Jones/Stolper 2008, 36), in other words, documents written in Aramaic on perishable material. There is increasing evidence that Elamite was more widely used as an administrative language in Achaemenid Iran (see Briant 2002, 743 f., 753, 763; Stolper/Tavernier 2007, 17 f.). It was used as an administrative language at least until the middle of the 5th century (Kuhrt 1995, 367). The switch to Aramaic written on leather may have been a gradual process.

Neo-Babylonian Akkadian was the literary and administrative language of the Neo-Babylonian Empire (626–539 B.C.E.), whereas the vernacular at the time was Aramaic (see ch. 28). Babylonian Akkadian continued to be used as an administrative language

in the Achaemenid period. An important source for Babylonian Akkadian from this period is the Murashu archive from Nippur in Babylonia, datable to the second part of the 5th century, and contemporary with the Elephantine papyri. This archive contains documents pertaining to a different kind of business transaction relating to land tenure (such as land grants and leases) of the wealthy Murashu family. Some of the Babylonian tablets in this archive have dockets in Aramaic similar to those from the preceding Neo-Babylonian period (written on both legal and administrative tablets).

4. Some characteristics of Achaemenid Imperial Aramaic

In the following outline emphasis is given to the Arsames correspondence in Aramaic, since these letters provide the most detailed picture of what Achaemenid Imperial Aramaic, the language used by the central authorities, may have looked like.

4.1. Orthography and phonology

In the Arsames correspondence variation in spelling is practically absent and the presence of a standard orthography is clearly demonstrable. This uniformity is not found in other official documents from this period, in either the official letters from the more or less contemporary Yedaniah archive from Elephantine or in other official texts from this period. As a whole, the spelling of this correspondence is very conservative in nature. The Arsames letters probably emanate from the royal chancelleries and hence the spelling found in them may be considered to reflect the official standard spelling. The uniformity in spelling and its conservative character is clearly visible in for instance (1) the rendering of proto-Semitic */d/ (merged with dental /d/). In this correspondence the older spelling *z* is found without exception in pronouns and compound words with a pronominal element (always *zy*, *zyl-*, *znh*, *zky*, *zk* and *kzy*), whereas the later spelling *d* for */d/ is found in other words (nouns, verbs etc.); (2) The voiced affricative velar (or uvular) sound /g/ (< */ġ/) is always rendered by *q* (*qrqw*, *'rq*, *l'bq*); the later spelling *ḡ* is not found; (3) Even though it is clear from other texts that regressive assimilation of */n/ to a following consonant was a fact in the Achaemenid period, */n/ is always represented with *n* in the spelling of verba *In* (e.g. *yntnw*), in nouns with */n/ (e.g. *mndt'*) and in the pronouns *'nt* and *'ntm*; (4) Etymological /' / at the end of a syllable has always been preserved in the spelling (e.g. *t'th*, *y'mr*); (5) The original diphthongs /ay/ and /aw/ are always rendered with their original consonantal elements *y* and *w*; (6) The pron. sf. pl.3m. and pl.2m. always end with *-m* and are found in the defective spelling (*-hm* and *-km*); (7) In the *hafel* the original *h*, both in initial (sf. conj, imperative, infinitive) and in intervocalic position (pref. conj., participle) has been retained in the spelling; (8) /-ī/ is always represented in the pron. sf. sg.3m. *-hy* (in combination with nouns and prepositions); (9) The spelling of medial /-ī-/ in the pl.m. morpheme *-īn* is always defective.

The only fluctuation in spelling in these letters is found in the spelling of final /-ā/. The pron. sf. pl.1c. *-nā* is found once in the plene spelling (*zyln'* in TAD A6.10.2), whereas the spelling *-n* is normal in these letters. The spelling of the emphatic state

morpheme normally is -ʾ in these documents, but -h occurs once as well (*sprh* in TAD A6.12,3).

The same uniformity and conservative character appears in the spelling of the two Arsames letters found at Elephantine (TAD A6.1 and 6.2), but there is no evidence for all the points listed. At one particular point, the evidence is not consistent. While in the Arsames letters on leather the spelling of medial /-i-/ in the pl.m. morpheme *-in* is defective throughout (*-n*), TAD A6.2 has at least one example of the plene spelling as well (*msmryn* ‘nails’ in l. 16).

From the above, the conclusion may be drawn that the orthography of the Arsames correspondence only fluctuates in the use of vowel letters.

The Arsames correspondence also features the representation of geminated consonants by *nC* in a few instances where *n* is not etymological. This phenomenon is counted as one of the hallmarks of Achaemenid Imperial Aramaic. It is not attested in texts prior to the Achaemenid period. It is not certain whether it is just an orthographic phenomenon (to indicate doubling of a consonant) or whether it reflects a phonetic reality (degemination of doubled consonants through nasalisation, a phenomenon well-known from Babylonian Akkadian) (Folmer 1995, 74–94; Muraoka/Porten 2003, 10–16). It is not a widespread phenomenon in Aramaic and only occurs in some words. In this correspondence it occurs where it can be expected: in *mndʿm* and in forms of the verb *ʿll* (*mnʿl* pe. inf., *hnʿlw* af. imp.). (There is no evidence for relevant forms of the verbs *ydʿ* and *slq*).

The local authorities at Elephantine, on the other hand, did not strictly apply the rules of the official standard orthography as reflected in the Arsames correspondence. The official letters of the Yedaniah archive demonstrate variation in spelling at every above-mentioned point, which often reflects phonological changes (in the Arsames correspondence often masked by the spelling). Sometimes the spelling even indicates that Aramaic was a spoken language at Elephantine. An example for such a pronunciation-induced spelling in the Yedaniah archive is *ʿznh* [‘addenā] in *ʿznh ywm* ‘until this day’ (TAD A4.7,19), which was corrected by the scribe into *ʿd znh*. A comparison with other letters from Elephantine has shown that the spelling of the Aḥiqar story and the Aramaic Bisitun inscription (both texts with an ‘eastern’ signature) largely matches that of the Arsames letters. The spelling of private letters, particularly the letters on ostraca, on the other hand, evidences a lax application of the orthographic rules. The spelling of legal documents from Elephantine in general is conventional, but advanced spellings sometimes appear (for details see Folmer 1995).

A particularly instructive example is the occurrence of *mndʿm* in one of the Hermapolis papyri (TAD A2.5,4; end of 6th century). It demonstrates that even early in the Achaemenid period, Achaemenid Imperial Aramaic had begun to influence local and less formal varieties of Aramaic (:: *mdʿm* in l. 2). See also 4.3.

4.2. Syntactic characteristics

The syntax of Achaemenid Imperial Aramaic has several characteristics, some of which are attributable to Akkadian or Persian. An important feature of the Arsames letters is the construction *qatīl l* + pron. sf., which indicates the resultative perfect (Muraoka/Porten 2003, 202; Gzella 2004, 193). The construction *qatīl l* + pron. sf. first appears

in Achaemenid Imperial Aramaic. The construction is borrowed from Persian and can be explained through the intensive contact of Aramaic with the Persian prestige language (Folmer 1995, 376–380; Gzella 2004, 184–194). In this construction the pron. sf. attached to the preposition indicates the logical subject. In Achaemenid Imperial Aramaic only two examples are found, both with the transitive verb *šm* ‘to hear’. One instance occurs in one of the Arsames letters: TAD A6.10,3 *wk^cn tnh kn šmy^c ly* ‘and now, thus I have heard here’. (The other letter was written from Migdol in the Delta [TAD A3.3,13 *kzy kn šmy^c ln*]). The construction is later found in Eastern Aramaic, both with transitive and intransitive verbs. In Eastern Neo-Aramaic and Turoyo the construction has a preterite function and it has ousted the suffix conjugation (perfect) (Hopkins 1989, 413).

Other syntactic features of the Arsames correspondence are, for instance: *zy*-phrases expressing possessive relationships, often with a proleptic pron. sf. attached to its first term: e.g. *bgh zy pmwn zk* ‘the domain of that Pamun’ (TAD A8,5) (Folmer 1995, 259–312); the use of the *nota objecti l* indicating definite animate direct objects (Folmer 1995, 430–371); a tendency to place the verb in final position, which can be attributed to Akkadian influence (Folmer 1995, 521–587). All of these features are also present in other Achaemenid Imperial Aramaic texts, though not always to the same degree.

4.3. Lexical characteristics

The lexicon of Achaemenid Imperial Aramaic contains many loanwords from Akkadian, Persian and Egyptian and a few from Greek (Muraoka/Porten 2003, 342–356). Akkadian and Persian loanwords concern official and administrative terms. Egyptian loanwords on the other hand, concern daily life (particularly strongly represented are terms relating to shipping). While Akkadian loanwords have been found in Old Aramaic (Kaufman 1974), Persian loanwords first appeared in Aramaic texts from the Achaemenid period. Persian loanwords are predominant among the loanwords in Achaemenid Imperial Aramaic (cf. also Muraoka/Porten 2003, 342 ff.). The language of the Arsames correspondence is particularly rich in Persian loanwords. In particular, nouns (easy to adapt to the inflectional system of nouns) and to a lesser extent adverbs, are borrowed from Persian. Many loanwords in these letters designate functions of persons active in the complex Achaemenid administrative system, such as *hmrkr* (< OP **hmārakara-*) ‘accountant’ (in: *hmrkry^c zy gnz^c* ‘the treasury accountants’ [< OP **ganza-* ‘treasure’]), *ʾzdkr* ‘herald’ (< OP **azdākara-*), *nwpt* (< OP **nāupati*) ‘shipmaster’, *prmnkr* (< OP **framānakara-*) ‘engineer’ or ‘foreman’ and *grd* (< OP **grda-*) ‘domestic staff’. Other words refer to the complex Achaemenid system of allocation of rations in kind and plots of royal land: *ptp* (< OP **piθβa*) ‘rations’, *bg* (< OP **bāga-*) ‘domain, property’ and *dšn* (< OP **dāšna-*) ‘grant, gift’. Words such as *nštwn* (< OP **ništāvana-*) ‘rescript’, indicate official documents. Other texts from this period are also rich in Persian loanwords, such as for instance the official letters in the Yedaniah archive from Elephantine. By contrast, the private letters known as the Hermopolis papyri (TAD A2.1–2.6; late 6th century) are completely devoid of Persian loanwords. In legal documents from Elephantine, Persian loanwords appear from the second half of the 5th century onwards (Muraoka/Porten 2003, 352).

The Arsames letters also feature the linking of the verbs of motion to their directional element by the preposition 'l if this directional element denotes a living being. This is another hallmark of Imperial Achaemenid Aramaic (Folmer 1995, 589–616). The single occurrence of this phenomenon in one of the Hermopolis papyri (TAD A2.2,6 f.; end of 6th century) demonstrates that even at an early period Achaemenid Imperial Aramaic had an influence on local and less formal varieties of Aramaic (Folmer 1995, 596 f.). There is more evidence of this in these letters (see 4.1).

4.4. Official epistolary style

The Arsames letters are framed in what can be called the official style of letters. The correspondence has some features which are virtually not found outside this corpus: (1) The address formula in these letters is *mn PN₁ 'l PN₂*. The phrase, with the sender mentioned first and with the preposition 'l to indicate the addressed person, is characteristic of letters of a superior to a subordinate person and it may have had its origin in the royal chancelleries in the east, from where it spread to the west (there is one example from an Elephantine ostrakon). It continued to be used in the later epistolary tradition of the eastern regions of the former Achaemenid Empire (Folmer 1995, 626). In letters written in the west, the old preposition 'l is normally found in the address formula and the order is addressee - sender. However, the addressee in these instances is never a subordinate person; it is always an equal or superior person. Outside of the address, the preposition 'l is not found in Imperial Achaemenid Aramaic - the preposition 'l is used instead; (2) The phrase *wk't* 'and now then' is used as a transition marker in these official letters. It follows the opening formulae (the address; greeting formulae) and marks the transition to the body of the letter (alternatively *k't PN kn 'mr* 'now, PN says thus' is found, without the conjunction). *wk't* is characteristic of the official style of letter writing as reflected in the Arsames correspondence. It is not found in letters on papyrus and ostraca from Elephantine, including the official letters belonging to the Yedaniah archive. In these texts, the variant forms *k'n* and *k'nt* are used. The only parallels are found in the Hermopolis papyri (TAD A2.1–6) from the early Achaemenid period.

Abbreviation

TAD = Porten/Yardeni 1986–1999.

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Rem.: Full bibliographical references to these texts and texts mentioned in the following are found in Fitzmyer / Kaufman 1992 and Schwiderski 2004. This contribution only includes references to recent publications. Texts from Egypt are referred to by their numbers in Porten / Yardeni, 1986–1999 (TAD A-D).

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30. Late Imperial Aramaic

1. Introduction
2. The Dead Sea material
3. Nabataean
4. Palmyrene
5. Eastern Mesopotamian
6. Post-Achaemenid Iran
7. References

Abstract

This chapter introduces various local forms of Aramaic in the Graeco-Roman Near East which had become written prestige languages some time after the fall of the Achaemenid Empire. It covers Qumran, Nabataean, Palmyrene, Eastern Mesopotamian and Arsacid Aramaic, since they all exhibit a considerable influence from the Achaemenid chancery language and share a common cultural framework. By assessing the shared retentions and innovations, it becomes possible to outline principles of a fairly complex dialectal landscape characterized by diversity, close contact and extensive multilingualism. In this environment, Aramaic was used for a number of different purposes: in the Western and Eastern peripheries, that is, North Arabia and Parthia, it seems to have been confined

to official or formal functions, whereas the more innovative forms in Syria and Eastern Mesopotamia suggest that they might even have been spoken as vernaculars. Aramaic continued to dominate the Ancient Near East even in Hellenistic and Roman times.

1. Introduction

Official Aramaic (henceforth OffA), promoted by the Achaemenid chancellery, was widely accepted as a standard in the entire Persian Empire (see ch. 28–29). Beneath its surface, however, a fair amount of older variation survived. When the Greek and Roman conquests of Syria-Palestine and Arabia once again led to political stability (the suppression of the Bar Kosiba Revolt was followed by a long era of relative peace) no less than to fresh trading opportunities, several wealthy city-states emerged and remained in constant contact with their nomadic surroundings. A combination of established scribal culture and new national pride elevated local dialects throughout the former imperial territory to written languages, each further developing a distinctive branch of the official script. They maintained the Achaemenid heritage with varying degrees of precision, so the general term “Middle Aramaic” acts as the common denominator of a noticeably heterogeneous group (cf. Cook 1992). Aramaic had been reinforced as a prestige language of the elite, with the striking boom in epigraphic production as a facet of Hellenism. Orthography underwent some modernization, but it was essentially modelled according to the Achaemenid norm, which was often the only available pattern. The instances of contact-induced change spread easily, though unevenly, across the dialect continuum. Hence, many of these forms of Aramaic exhibit considerable convergence, while subtle differences in language and style persist (Gzella 2006). They, as well as similar phenomena in art, architecture, and pottery, indicate that several local centres and their peripheries coexisted, participating in a common matrix culture, maintaining their individuality, and engaging in cultural conflicts.

2. The Dead Sea material

In Post-Achaemenid and Roman Palestine, a multilingual environment, Aramaic is directly attested by the ca. 120 literary texts discovered at Qumran (officially published in *Discoveries in the Judean Desert*, 1955 ff.), but of controversial origin, letters and, often dated, legal documents from the 1st and 2nd c. AD (Yardeni 2000; Yadin et al. 2002), as well as inscriptions found in Jerusalem and its surroundings (Yardeni 2000), all written in square script with an increasing use of vowel letters (Beyer 1984, 1994 and 2004 proposes many alternative readings); Josephus and the New Testament also include a few words and phrases in Greek transcription. No complete scholarly descriptive grammar exists, but Cook 1998 provides a useful survey. The lexicon is treated by Beyer, who also discusses numerous issues of phonology and morphology from a broad historical perspective. Sokoloff 2003 covers the documentary material with its later reflexes.

These texts clearly witness to the existence and development of both regional dialects and literary registers. The older contracts closely resemble OffA, using, for example, the rare, archaizing, spelling {z} for /d/ (< */d/) in the demonstrative ‘this’, and

partake in the OffA legal tradition (Cotton 2005, 153 f.). On the other hand, the language of the literary compositions from Qumran (“Qumran Aramaic” or, with Beyer, “Hasmonaeen”, after the ruling dynasty in Judaea 142–37 BC; see Fassberg 2002), dated on palaeographic grounds between the 2nd c. BC and 70 AD and heterogeneous among themselves, has been more strongly influenced by the local Judaeen dialect (foreshadowing later “Jewish Palestinian”). “Qumran Aramaic” thereby contains, unsystematically, both older features eclipsed by OffA and later innovations, so this material defies a classification in purely linear terms, but has a distinctly “transitory” character between OffA and later Palestinian Aramaic. Significant examples of such interference are these: a few D and C stem infinitives prefixed by /ma-/ (Beyer 1984, 150; 2004, 18); the frequent occurrences within one text of younger and older forms of demonstrative as well as personal pronouns (*dn* ‘this’ [m.] instead of older *dnh*; *l(y)n* or *hlyn* ‘these’ as opposed to *’lh*; *nwn* ‘they’ [m.] coexists with *hmwn*; similarly the suffix *-h(w)n* / *-h(w)m* ‘their’, Nebe 1993, 310 f.) and the relative particle (*d* and *dy*: Díez Merino 1983); the rare 3m.sg. suffix *-wy* instead of *-why* (Beyer 1984, 118 n. 1; Fassberg 2002, 26); the reappearance of the ancient Western object marker *yt* (Gzella 2007, 105; Folmer 2008). An etymological /n/ which assimilates in pronunciation is less frequently represented in writing than in OffA, and the merger of */š/ with */s/ spread from the 2nd c. BC onwards, as inconsistent spellings show (Beyer 1984, 102 f.). The truly distinctive features of “Qumran Aramaic” against other contemporary varieties, however, are the new demonstrative *dn* ‘this’ (m.), the frequent (Hebraizing?) 2m.sg. suffix *-kh* / *-kā* (Fassberg 2002, 24 f.), and the still productive “short imperfect” (cf. Cook 1992). The former two might be mere peculiarities of orthography, though; on the preformative /l-/ with the verb *hwy* ‘to be’ see Ch. 28.6. In the course of time, and in any case after 37 BC, Judaeen dialectal influence gradually increased at the expense of the OffA layer and inherited spelling conventions (Beyer 1984, 34 f.). Texts from the Second Jewish Revolt, i.e., the Bar Kosiba letters and later contracts like XHēv/Se 8a and 50, provide ample evidence for this, such as the growing use of the object marker *yt*, formerly rare, and the decline of the “short imperfect” in favour of the long form; as in the Hermopolis letters, the ending /-ā/ of the emphatic state is frequently spelled with {h} instead of older {ʔ}. Close contact with Hebrew, still used as a literary idiom and briefly revived during the Jewish Revolts for nationalist purposes (Beyer 2004, 201; Cotton 2005, 153 f.), led to further mutual interference and language mixing (Gzella 2007), whereas Greek influence is restricted to a few loan words in the documentary texts. At present, there seems to be no obvious break between this and Jewish Palestinian material from the 3rd c. AD onwards, including reliable manuscripts of Midrash Bereshit Rabba and Cairo Geniza fragments.

3. Nabataean

The Nabataean kingdom, transformed into the Roman *provincia Arabia* in 106 AD, goes back to a tribe or tribal federation of unclear provenance (referred to as “Arabs” by Graeco-Roman historians) which subsequently enriched their nomadic way of life by settled forms of existence. They initially controlled the Incense Road, became part of the Hellenistic world (Hackl et al. 2003, 98–106), and were eventually absorbed

into the Umayyad Empire. Due to the prestige of their language and script, Nabataean writing enjoyed a wider diffusion across a vast, multilingual cultural area (Macdonald 2003). This situation no doubt facilitated communication among the heterogeneous population itself and international business relations. The Nabataean corpus, now comprising almost 6000 texts in total, includes brief, mostly funerary and dedicatory inscriptions (the few honorific ones refer to the king alone), some of which rather proclaim property rights of the respective tomb. All of the latter, excepting one from Petra, stem from Hegra, modern Madā'in Šālīḥ (Healey 1993). The reason for this local peculiarity is unknown. There are also thousands of graffiti from Arabia, Jordan, Syria and Egypt (exceptionally also from the Greek islands and southern Italy) on the one hand (2nd c. BC–4th c. AD; references in Beyer 2004, 23, add Graf/Said 2006; many more are still unpublished) and a handful of legal papyri in the Achaemenid tradition on the other (60–122 AD; Yardeni 2000, 265–99). These papyri were hidden by their owners, presumably members of Jewish communities from the periphery of the Nabataean kingdom, in caves near the Dead Sea during the upheavals caused by the Jewish Revolts against Rome. The inscriptions on stone are all executed in a cursive type of the Aramaic alphabet and its variations. It was employed for monumental purposes and later gave rise to the Arabic script. Based on a few Nabataean-like features, Beyer (2004, 204 ff.) formally extends the corpus to some “Pseudo-Nabataean” papyri in square script. These are normally classified as Jewish Palestinian, and the similarities with Nabataean are presumably contact-induced phenomena. After the 4th c. AD, Nabataean was replaced by Greek and Arabic. Not more than a fraction of the material was known when the only full grammar appeared (Cantineau 1930–1932, now outdated). Hoftijzer/Jongeling 1995 serves as the standard dictionary; for the personal names (surviving, as the Petra papyri show, even into the Umayyad period), cf. Macdonald 1999. No comprehensive edition exists.

Nabataean, at least in its consonantal garb, is closer to Achaemenid Aramaic (Healey 1993, 55–59) than the other contemporary varieties. Common features include the preservation of */n/ before consonants in writing, the use of {š} for */ś/, and the extension of the 3m.pl. “perfect” to the feminine. The relatively few innovations of Nabataean chiefly affect spelling: an increasing use of {d} instead of {z} for */t/ > /d/; *plene* writing for the m.pl. ending /-īn/; mostly {ʔ} instead of {h} in the causative stem prefix. For the relative marker, older {dy}, rarely {zy} (at times both in the same text), is consistently sustained, as opposed to {d} elsewhere (see Ch. 30.4); the suffix pronouns ‘our’ and ‘their’ (masc.) are still *-n*’ and *-hm*. However, the ancient (Western and then sub-standard?) object marker *yt*, which is not clearly attested in OffA, reappears, as it does in Jewish Palestinian (and very rarely in Palmyrene, where the object is normally unmarked, but sometimes introduced by *l*: PAT 0278:4); the personal pronoun 3m/f.pl. *ʔnw* can be used as a demonstrative besides *ʔn*. The determined m.pl. ending /-ē/ (cf. 30.4), by contrast, is not attested that far in the West. Occasional changes of /l/ > /n/ and /ā/ > /q̄/ may perhaps be attributed to a dialectal substrate pronunciation. This conservatism is due both to the peripheral location of the speech area and the likely fact that the authors of Nabataean inscriptions at least from North Arabia spoke Arabic, as many words denoting items of everyday life, certain syntactic constructions, and numerous personal names indicate (Beyer 2004, 23 f.; add the “optative perfect”, Gzella 2004, 242; the ‘En-ʿAvdat and the Namara inscriptions feature entire passages of Arabic in Nabataean script). Hence, as far as the core region is concerned, Aramaic

may have been used in writing only (Rosenthal 1939, 92; Macdonald 1998, 185–188 has some caveats). Even in remote village communities it was employed for legal purposes and, according to a minority opinion, also spoken (Cotton 2005). The few Greek loanwords mostly refer to Hellenistic architecture.

4. Palmyrene

Palmyra, Aramaic Tadmor, is a caravan city located in the Syrian Desert. Urbanization of the oasis probably began in Persian times due to the creation of a direct desert route connecting the Levantine coast with Mesopotamia and promoted the rise of a prosperous mercantile elite by the 1st c. AD (Hartmann 2001, 45–64). Eventually, the Aramaic heritage met the Graeco-Roman epigraphic habit and monumental architecture. The local dialect, attested all over the Roman Empire and written in a particular Aramaic script, largely resembles the Achaemenid chancellery language with a few innovative, specifically Eastern Aramaic, traits. It has been ably described by Cantineau 1935 (synchronic) and Rosenthal 1936 (historical-comparative), but the amount of epigraphic material unearthed during the last decades and the progress in historical linguistics make a new treatment necessary. This also applies to Stark 1971 on the personal names, whereas dictionaries are more up-to-date: the glossary in Hillers/Cussini 1996 contains clear definitions with examples given in context, whereas Hoftijzer/Jongeling 1995 has a full scholarly apparatus. Almost all Palmyrene texts then published, together with their respective Greek and Latin parallel versions, but without translations, have been assembled in Hillers / Cussini 1996 (= PAT, with bibliography; add Naveh 2002, 243–245; Cussini [ed.] 2005, 89–102; 130–136). Unfortunately, this edition contains many mistakes and, despite some fresh collations, a number of outdated readings. Apart from an extensive tax tariff (PAT 0259), the corpus consists of some 3000 mostly brief and formulaic funerary, honorary, and dedicatory inscriptions, including several hundred *tesserae* (presumably “entry tickets” to ritual meals), all dated between 44 BC and AD 279/80. Honouring the great men of the city in a Hellenistic fashion with statues and busts adorning large parts of the centre was more widespread here than elsewhere in the Roman Near East. Since one of these texts was the first Semitic inscription published in modern times, the study of Palmyrene Aramaic marks the beginning of Semitic epigraphy (Daniels 1988). Some 200 texts also have a generally elegant Greek or, rarely, a Latin parallel version, each following the respective genre conventions (Gzella 2005). Palmyrene expatriates, mostly legionaries, left inscriptions all over the Roman Empire; Latin versions were much more frequent abroad, often with the Latin being the primary version and the Aramaic reduced to a mere token of identity. This extensive bilingualism is typical for Palmyrene Aramaic.

Strictly speaking, Palmyrene Aramaic preserved only one morphological innovation of OffA, i.e., the extension of the 3m.pl. “perfect” to feminine subjects (PAT 0259:I:5: *whww mtgbyn* ‘and they were taxed’, referring to *’bydn*, sg. *’bydh*, ‘articles’). To a considerable extent, its Achaemenid garb thus results from a conservative spelling practice which remained in use after the fall of that Empire. This applies especially to instances of an etymological /n/ in writing where it is likely to assimilate in pronunciation (*’nt* ‘you’ in the only attestation of this pronoun and *’nth* ‘his wife’, Cantineau

1935, 45 f.) and the use of vowel letters for long vowels only, at least in native words. Consistent modernizations are few and conform to other contemporary dialects ({} instead of {h} in the causative stem prefix and an increase of *plene* spelling of the m.pl. ending /-īn/). Orthographic variation, however, at times even within the same text, points to several innovative features of phonology and morphology also attested elsewhere in the Aramaic dialect continuum during that time. The disappearance of unstressed word-final /ī/ and /ū/ can be assumed with certainty: consider *bnwh* ‘his children’ in, e.g., PAT 0046, but usually written *bnwhy* (Hillers/Cussini 1996, 349) and *’qym* ‘they have erected’ instead of the more frequent *’qymw* etc. (Cantineau 1935, 56 f., who gives good examples, but his rather complicated explanation fails to convince, see Rosenthal 1939, 102 and, more generally, Beyer 1984, 122–125, who dates this change to ca. 100 BC). Perhaps /t/ assimilated to a following consonant (cf. *mqrh* ‘he is called’ in PAT 0049:1 as opposed to regular *mtqr’* or *mtqrh*). An etymological spelling of such forms prevails in Old and Official Aramaic, but is gradually replaced by the assimilation of the /t/ even in writing after the Achaemenid period, both in Western and in Eastern dialects (Beyer 1984, 94 n. 1; 1998, 128). At present, one cannot determine whether this is a genuine phonetic change or just an adaptation of spelling to a pronunciation which was already customary. The same goes for /ʔ/ assimilating to a preceding /t/ (Beyer 1984, 469). Judging from the writing *d* for traditional *dy* (many examples in Hillers/Cussini 1996, 356), the relative marker **/dī/* < **/dī/* had turned into a proclitic /da-/ (via **/dī/ʔ/*), as it did elsewhere (cf. 30.5). A similar variation between the bound forms *brt*, as is usual in OffA and Nabataean, and *bt* ‘daughter’, the latter always in proper names, indicates that the pronunciation was /bat/ (Rosenthal 1937, 33, *pace* Cantineau 1935, 117). Further, Greek transcriptions of personal names show that /k/, /p/ and /t/ (= consistently χ, φ and θ) were aspirated in all positions; according to the relative chronology of Aramaic sound laws, they, as well as /b/, /g/ and /d/, would already have been spirantized in weak articulation, but this cannot be proved directly (Cantineau 1935, 38 f.; Beyer 1984, 125–128; *pace* Kaufman 1974, 117, spirantization thus seems to have spread in waves instead of being inherited from OffA). There is no unambiguous evidence for the disappearance of short unstressed vowels in open syllables, which had been reduced to zero in contemporary Aramaic, and for the change of /a/ to /ə/ near sibilants (Beyer 1984, 115 f.). Greek renderings of Palmyrene Aramaic personal names still witness to an older stage (see, e.g., Samisgeramou in PAT 1375:2 [Greek], reflecting both the original /a/ after a sibilant [**/šamš-/* ‘the Sun’] and a reflex of the ‘perfect’ vowel /a/ in an open syllable [**/garam/* ‘he decided’]), but obviously these equivalents may have been coined long before the corresponding sound laws became active and preserved afterwards (*pace* Cantineau 1935, 59).

With the determined m.pl. ending /-ē/, like the singular written with -ʔ, the language of Palmyra exhibits the most distinctive feature of Eastern Aramaic (see 30.5). It occurs next to the still more frequent -yʔ, which originally rendered older /-ayyā/ (Cantineau 1935, 123 f.). One cannot say whether the latter reflects a phonetic reality or was simply preserved as a less ambiguous spelling. Other ‘Eastern’ characteristics, however, are absent, such as the expansion of the demonstrative pronouns by /hā-/ (*dnh*, *dh* and *ʔn* are attested for the m.sg., f.sg. and common pl. near deixis ‘this’) and /n-/ or /l-/ instead of older /y-/ as the preformative of the “imperfect” (Kaufman 1974, 124–6). Paradigmatic levelling led to a younger by-form of the 3m.sg. suffix with plural nouns /-ayh/ < **/ayhī/* regularly attested in the East (see Ch. 30.5) and concurring with older /-awh/

< */-awhī/ (contrast *bnyh* ‘his sons’ in PAT 0334:3 with *bnwh(y)* elsewhere). Palmyrene Aramaic also has the later 1pl. and 3m.pl. suffixes *-n* and *-h(w)n*. Internal passives of the G-stem “imperfect”, still known in OffA, were most likely lost, just as the old jussive in favour of the “long imperfect”. Pace Rosenthal 1936, 56.62, the only alleged example *yktb* PAT 0259:I:8 (*bis*) does not have to be analysed as an internal passive (‘may it be written’), but rather as an active form with impersonal subject (‘may one write’) or perhaps even as a more modern spelling of a G-stem reflexive with passive meaning (instead of the expected, but unattested, writing **yktb*; the Gt-stem of this verb is only attested in the participle *mtktb*: PAT 0259:I:5), just like *mqrh* instead of *mtqrh* (Cantineau 1935, 81–84). Since a G-stem passive “imperfect” of the verb *ktb* is also unattested in earlier periods, it is unlikely that this form constitutes a fossilized lexicalization. Again, this conforms to analogous developments in other Aramaic varieties after 400 BC (Beyer 1984, 152). The participle in a generalizing relative clause (PAT 0259:II:57: *dy hpkyn* ‘who go round’), too, is more recent: OffA normally uses the “imperfect” (Gzella 2004, 198–201).

Hence, the inherited Aramaic dialect gradually underwent change in Palmyra due to active use throughout the social strata until the Romans put an end to the city’s bloom in 272 (Rosenthal 1936, 105; confirmed by variation in the formulae, Gzella 2006, 26), but spelling practice often lagged behind these changes and was but slowly adapted. Loanwords could permeate the language more easily and point to the symbiosis of various traditions, Eastern and Western alike: 75 words, several of them fully integrated into the nominal system, have been identified as Greek and refer to administrative as well as architectural terms (Brock 2005); others come from Arabic (Maraqten 1995 lists 23 items, but several of them are controversial). Together with various Arabic personal and divine names, the latter point to an Arab element in the population; the few Akkadian (Kaufman 1974) and Iranian words (Cantineau 1935, 154) probably belong to the inherited Aramaic vocabulary. Apart from Graecisms in some phrases (Gzella 2005, 447–449), there is little evidence for calques in syntax and style. As regulations concerning the transfer of burial property feature prominently in funerary inscriptions (“cession texts”), a couple of usual Aramaic words carry a special, legal, meaning attested only here. All in all, then, the Palmyrene texts reflect the cosmopolitan character of the speech community without overshadowing its national awareness.

5. Eastern Mesopotamian

Towards the end of the 2nd c. BC, when Seleucid power faded, Eastern Mesopotamia, too, saw at least two local dialects turn into written languages using Aramaic scripts (Gzella 2006, 32–38). Another variety is incidentally attested by a cuneiform incantation text from Uruk (Beyer 2004, 25–27) whose Eastern character is evidenced by at least the plural ending /-ē/. In Edessa, an early stage of Syriac appeared and served as the official idiom of the Abgarid dynasty that ruled 132 BC–242 AD. Following the end of paganism, it became and remained the *lingua franca* of most of the Christian Middle East as late as the Middle Ages. Another variety, here labelled “Eastern Mesopotamian” (= EM), dominated the area between Hatra, which after an inconspicuous past acted as the capital of a Parthian kingdom between ca. 165 and 240/241 AD, and

the ancient city of Assur. It exhibits a comparable level of standardization, but disappeared with the sack of Hatra (Drijvers 1977). Apart from three contracts on parchment reflecting Achaemenid legalese, Syriac is attested by some 100 funerary, dedicatory and memorial inscriptions dated between 6 and 252 AD (Drijvers/Healey 1999; add Healey 2006), EM appears in ca. 600 texts of similar genres and bearing dates 44 BC–238 AD (Beyer 1998 and 2002; add al-Jadir 2006, 305–311; Moriggi 2010; more await publication). Modern editions include grammatical sketches and brief glossaries, Hoftijzer/Jongeling 1995 give a full discussion of the vocabulary. Despite Hellenistic influence in art and architecture, no bilingual epigraphic culture has emerged. The underlying linguistic situation defies a complete reconstruction, but in all likelihood there were many other forms of Eastern Aramaic in active use in this area: for example in Dura Europos, where, even though Greek was employed for official purposes throughout, different manifestations of Aramaic have been discovered (Beyer 1984, 47 f.; 2004, 28), including what appears to be the oldest witness of Jewish Babylonian (pDura 151 from ca. 200 AD, Yardeni 2000, 187).

Syriac and the EM varieties are much more innovative than the direct successors to OffA, which suggests that another language, presumably Greek, interrupted the use of the Achaemenid chancellery idiom. Due to the prestige of OffA, some traditional spellings were taken over when then orthography was fixed: etymological /n/ in a few cases, *bṛt* for /baṭ/ (cf. 30.4) and, in early Syriac, {š} for */š/ (Beyer 1984, 103). The use of vowel letters increased; in EM in particular it was (perhaps under Iranian influence?) extended to short vowels (notably /ĕ/ and /ō/), although unsystematically and with local variations. This practice points to the loss of short unstressed vowels in open syllables after the end of the 2nd c. AD throughout (e.g., *qwdm* /qōḏām/ ‘before’ as opposed to later *qdm* /qdām/; Beyer 1984, 128–136; 1998, 125 f.). At least in Hatra (evidence is less unambiguous for early Syriac), as in Palmyra, unstressed word-final /ī/ and /ū/ dropped out in pronunciation but not in writing; *dy* alternates with *d* in the relative marker, so older */dī/ had presumably turned into /da-/ (< */dī/?), supposedly an Eastern innovation which later spread to other parts (Cook 1992, 9; cf. Beyer 1984, 548 f.). There is no direct evidence for the spirantization of stops and /a/ > /e/ near sibilants (see Ch. 30.4). Various instances of phonetic assimilation are consistently reproduced in spelling; in EM, /aw/ and /ay/ were always monophthongized. Morphology, too, reflects several diagnostic features of Eastern Aramaic, most importantly, /ē/ spelled -ʿ as the determined m.pl. ending. This innovation precedes OffA but was then eclipsed by it (Rosenthal 1939, 173 f.; Beyer 2004, 50). The expansion of the demonstrative pronouns by a deictic element /hā-/ (Nebe 2006) is only securely attested from Roman times onwards as a distinctive feature, as is the preformative of the 3rd person “imperfect”. The latter is still /y-/ in the oldest Syriac inscriptions, but changed to /n-/ (as in classical Mandaic) shortly before 200 AD (Healey 2008 perceptively suggests internal variation), while EM has /l-/ (like Jewish Babylonian, cf. already pDura 151:18). The forms *zḏq* < *šḏq* ‘just’ and *ṭwl* /ṭol(l)/ < */ṭel(l)/ ‘shadow’ are also typically Eastern (Beyer 1984, 98), and the suffixes -*n* (1pl.) and -*h(w)n* (3m.pl.) common Post-Achaemenid developments. The 3m.sg. suffix with plural nouns is regularly /-ēh/ < */-ayhī/, a by-form first evidenced by the cuneiform Uruk-text and also occasionally attested at Palmyra (see Ch. 30.4; Beyer 1984, 150 f.).

Orthographic modernizations and grammatical peculiarities thus indicate that in Edessa and Eastern Mesopotamia several local dialects of Aramaic (some of which

may already have taken on their distinctive shape long before) turned into administrative languages with but a limited influence from the Achaemenid standard. Thereby non-Greek identity was asserted and the immediately preceding Seleucid tradition downgraded (Healey 2008). The few Greek loanwords, as opposed to a fair number of Iranian elements, and the absence of any public epigraphic habit distinct from earlier practice point into the same direction (Gzella 2006, 34 f.). Consequently, these “Eastern” forms of Aramaic have to be distinguished from the “Late Imperial Aramaic” varieties in the strict sense.

6. Post-Achaemenid Iran

During the Achaemenid period Aramaic language and script had become so firmly rooted in the area extending from the Iranian plateau far into what is now Chinese Turkestan that its heritage survived until the Islamic conquest. Most Iranian languages eventually adopted writing systems related to the OffA ductus (Skjærvø 1995). Under the Seleucids (3rd–2nd c. BC) Aramaic was still employed for coin legends, and around the same time the Indian king Aśoka had parallel versions of his rock edicts, found in Afghanistan, composed in a variety of Aramaic imitating, not altogether successfully, the Imperial standard (Gzella 2004, 39–41). While their linguistic status is unclear, the phenomenon of “alloglottography” appears clearly in Iran from the 1st c. BC onwards: Parthian or Middle Persian words, the “heterograms” (at times they constitute entire texts), were represented by their corresponding Aramaic forms, but alternated with native words and endings or ungrammatical constructions (e.g., MLKYN MLKA ‘king of kings’ is un-Aramaic, but corresponds to a straightforward Iranian word order *šāhān šāh*). This indicates that they were read as Iranian (Skjærvø 1995, 286–288). The orthography of the ca. 600 “frozen” forms in part still reflects Achaemenid spelling practice (e.g., ZNE < *znh* ‘this’ with traditional {z} instead of later {d}). This principle applies to most of the material (one of the Awroman land sale documents, more than 2500 ostraca with wine receipts from Nisa and several inscriptions from Cappadocia, Media, Georgia and the heartland, Beyer 1984, 43 n. 2; 2004, 24 f.). A gradual shift led from an imperfect learning of Aramaic to truly heterographic writing. Although Parthian became the administrative language of the Arsacid dynasty, other idioms were also in use, depending on region and situation (Schmitt 1998, 164 f.).

The Arsacid inscriptions from 2nd c. AD Elymais, the Šimbar valley and Xuzistan (Gzella 2008), by contrast, cannot be verified as Iranian. They exhibit a particular, strikingly cursive script, and a language seemingly close to Achaemenid Aramaic ({z} instead of later {d} in the demonstrative pronoun *znh* and the relative marker *dy*; determined m.pl. ending -y’ /-ayyā/; long unstressed word-final vowels still written cf. 30.4; “imperfect” preformative /y-/), but also an advanced use of vowel letters ({y} for /ē/, {w} for /ō/ and {ʔ} for word-medial /ā/) and peculiar local titles. Eastern innovations presumably did not reach this peripheral region, and Aramaic may not have been used as a vernacular at all here, but employed by the native elite of a Parthian client kingdom for representative purposes.

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31. Jewish Palestinian Aramaic

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Abstract

The article discusses salient features of Jewish Palestinian Aramaic grammar and vocabulary in the context of other Aramaic varieties.

1. Name

Jewish Palestinian Aramaic (JPA) – formerly known as Galilean Aramaic – was the Aramaic dialect spoken and written by Jews, mainly in Palestine, during the Byzantine Period (3rd century CE – Arab Conquest) and for some time afterwards, corresponding to the Amoraic and Geonic (post-Amoraic) Periods. Together with Christian Palestinian and Samaritan Aramaic, it comprises the Western branch of Middle Aramaic (MWA) which has survived to the present day in the modern Aramaic dialect of Ma'lûla and of several other villages in Syria.

2. Sources

The sources of JPA are the following (see Sokoloff 2002, 19–28):

- (1) Inscriptions – These have been found mainly in synagogues and archeological sites throughout Palestine.
- (2) Targumim – Aramaic translations to the Pentateuch were composed in various localities in Palestine for use in the synagogue. Some have survived in manuscripts from the Cairo Geniza (Fragments of the Palestinian Targumim, FPT), while others are known only from later manuscripts (e.g. the Neophyti Targum).
- (3) Aramaic portions of the Palestinian Amoraic Midrashim – Edited some time in the 5th–6th cents., these bilingual Hebrew-Aramaic texts contain exegetic discussions of biblical texts, anecdotes, stories, etc.
- (4) Aramaic portions of the Palestinian Talmud – Edited in the 5th century in Tiberias and Caesarea, this bilingual Hebrew-Aramaic compilation contains legal and Aggadic material arranged according to thirty-nine tractates of the Mishna.

- (5) Halachic literature – Texts dealing with religious law (*halacha*) composed during the Geonic Period have been preserved in manuscripts emanating from the Cairo Geniza.
- (6) Poetry – A number of anonymous and undated poems written before the Arab Conquest have been preserved mainly in manuscripts from the Cairo Geniza as well as in later European Medieval manuscripts.
- (7) Papyri – A small number of fragmentary letters and documents from Egypt dating to approximately the 5th century CE has been found.
- (8) Amulets – Magical and apotropaic texts written on various types of metals have been found at various sites in Palestine.
- (9) *Ketubbot* (Marriage contracts) – A number of these original texts, all stemming from the Palestinian community in Egypt and dating to the Medieval Period, have been found in the Cairo Geniza.
- (10) Masoretic Notes – Medieval Tiberian Bible codices are accompanied by many brief and extensive notes.

3. History of Research

In the Middle Ages the center of Jewish culture shifted from Palestinian to Babylonian Jewry in present-day Iraq and Iran, and later to Western Europe, where JPA texts on the whole were neglected and not studied. This had a detrimental affect on the textual and linguistic transmission of the manuscripts since the scribes were generally much more familiar with other varieties of Aramaic written by Jews (e.g. Onkelos-Jonathan Targumic Aramaic, Jewish Babylonian Aramaic [JBA]). As a result, the later manuscripts which formed the basis of the first printings of JPA texts were linguistically very corrupt and presented a distorted picture of this dialect. These were further corrupted in later printings. Medieval Jewish grammarians dealt only with Biblical Hebrew, and Christian Hebraists, who were the first to write grammars of Aramaic, dealt only with Biblical and Targumic Aramaic. The earliest lexica (e.g. *Aruch*, Buxtorf's *Lexicon*) rarely cite JPA. Unlike JBA, which had a continuous exegetical tradition from the Gaonic Period onwards, the first extensive commentaries to JPA texts were only written in the 18th century. The first dictionary to deal extensively with JPA vocabulary was Levy, 1876.

A turning point in the study of JPA came at the end of the 19th century with the work of G. Dalman (1894) who based his grammar on the first printed editions of the literary texts and laid a solid groundwork for the understanding of its structure. Modern study of JPA begins with Kutscher 1976 (originally published in Hebrew in 1950–2). He approached the dialect as a Semitic linguist and put forward criteria for an unbiased linguistic analysis of the texts. Thus, he insisted that all work should be based only on the most accurate linguistic material (e.g. epigraphic material, manuscripts from the Cairo Geniza, reliable manuscripts like Ms. Vat. 30 of *Bereshit Rabba*) together with a comparison with the other MWA dialects.

While much work has been done on the grammar of this dialect (see Khan 1997 for the phonology; Fassberg 1991 for the Targumic texts), there is still no up-to-date and complete grammar or syntax. The JPA vocabulary has now been thoroughly treated in

Sokoloff 2002. This dictionary differs from previous dictionaries of Rabbinic literature in that it is a dictionary of Aramaic vocabulary in the JPA dialect and not of Aramaic found in specific Rabbinic texts.

4. Orthography

As opposed to the earlier Aramaic dialects, JPA spelling is plene. Thus, ״ is used to indicate consonantal /y/ and the diphthong /ay/. The string װ is used to indicate consonantal /w/ and the diphthong /aw/.

Final /â/ is universally indicated by the grapheme [h] irrespective of its historical antecedent. Since this usage is already found also in the 5th century BCE Hermopolis papyri, it may be a survival of an ancient orthographic practice. In any event, it is not found in any other MWA dialect.

The grapheme [š] was retained, and occurs often in JPA long after it had merged phonetically with /s/ (this is the case also in Biblical and Rabbinic Hebrew as well as in the early pagan Syriac epigraphical texts). The fact that it is common in the root שׁדד [later סדד *to testify*] found often in legal documents seems to point to orthographic conservatism.

5. Phonology

5.1. Consonants

The consonantal inventory of JPA is identical with that of Biblical Aramaic, including the occurrence of the dual pronunciation of the consonants /bgdkpt/ as plosives and fricatives. There is evidence for the merger of the consonant /w/ with the fricative allophone of /b/, e.g. לבב = [לבו].

Final /n/ has several interesting phonetic characteristics:

- (1) Continuing a phenomenon occurring in Late Biblical, Dead Sea, and Rabbinic Hebrew, /n/ is appended to non-inflected words ending in a vowel, e.g. in personal names like יודן [< יודה < יודה]; in adverbs, like סגין [< סגיא < סגיא]; in 3pl. m. and f. verbal forms, like עברון [עברו], עברין, עברין.
- (2) As in Rabbinic Hebrew, final /m/ often merged with /n/, and many examples of this phenomenon are already found in transcriptions in the LXX.
- (3) /n/ is often elided following the diphthong /ay/, e.g. בעי (< בעי*; cf. BA בעי). This was later confused with the elision of /n/ in the verbal ending /-in/ in JBA, but these two phenomena are unconnected.
- (4) The glottal stop /ʔ/ and the laryngeal fricative /h/ are often elided in intervocalic position, e.g. גן [= נאן], נידה [= נידה].
- (5) The pharyngeals /ħ/ and /ʕ/: Evidence for the weakening of these consonants comes from a variety of sources: Anecdotal stories concerning the pronunciation of residents of various towns; interchanges and losses as reflected in the manuscript sources; transcriptions in Arabic proper and place names containing these conso-

nants. Additionally, on occasion the texts also show the phonetic shift /ħ / > /ʕ/, e.g. **עִיָּא** for **חִיָּא** ‘snake’. After weighing all of the evidence, Kutscher came to the conclusion that the cause of the weakening was the Greek substrate, but that there were areas where the residents were not affected by it (Kutscher 1976, 67–96).

5.2. Vowels

Since most JPA texts are unvocalized, the evidence for the vowels is limited and comes mainly from the FPT texts which are partially vocalized with either Palestinian or Tiberian signs. Phonologically, the vocalization reflects what is known for Rabbinic Hebrew from the contemporary Hebrew texts, i.e. there was a merger of historical /ā/ (Tiberian /ā/) with /a/ and /e/ with /ɛ/. As a result, the phonological system contains the five vowels /a e i o u/.¹

As in most of the other Aramaic dialects /e/ is lowered to /a/ before the laryngeals, pharyngeals, and *reš*. The vowels /i/ and /ɛ/ merged to /ɛ/ in closed syllables.

5.3. Diphthongs

The treatment of diphthongs varies greatly among the various Aramaic dialects, and in some dialects (e.g. Biblical Aramaic) they were contracted along the lines of Biblical Hebrew. However, in JPA as in Syriac, there is a tendency to retain them, as can be seen from orthographies such as **טוּרְרָה** ‘the mountain, field’, **בֵּיתָה** ‘the house’, **מֵיִתִּי** ‘he brings’.

6. Morphology

On the whole, the MWA dialects are more conservative than the MEA ones, and their morphology is very similar to that of Biblical Aramaic. In the following discussion, changes in JPA morphology from the earlier periods will be discussed.

6.1. Pronouns

The independent pronouns are:

	sg.	pl.
1	אֲנִי	אַנְיָ
2m	אַתָּה	אַתְּוִין
2f	אַתְּ, אַתְּיָ (ן)	אַתְּתִין
3m	הוּא	הוּ (י)נִין, הוּ (י)נִין
3f	הִיא	הִיא (י)נִין, הִיא (י)נִין

The specific 2f.sg. form is first attested in Official Aramaic as אַנְתִּי and was retained separately also in the other MWA dialects. The 2f.sg. form which is identical with the 2m.sg. form is most likely due to contamination from other Jewish Aramaic dialects (e.g. Targumic Aramaic). The 3pl. forms with /h/ are peculiar to this dialect and preserve this consonant which occurs in the more ancient form (הַמֹּחֵ) found in BA.

The nominal conjugations with suffixed possessive pronouns are:

(a) For nouns ending in a consonant:

	sg.	pl.
1	שׁוּרִי	שׁוּרְכִּי
2m	שׁוּרְךָ	שׁוּרְכֹּךָ
2f	—	—
3m	שׁוּרֵהּ	שׁוּרְהֶון
3f	שׁוּרֶיהָ	שׁוּרְהֵין

(b) For nouns ending in a vowel:

	Singular	Plural
1	שׁוּרִי	שׁוּרְיָנִי
2m	שׁוּרְךָ	שׁוּרְיָכֹךָ
2f	—	—
3m	שׁוּרֵהּ, שׁוּרְהִי	שׁוּרְיָהֶון
3f	שׁוּרֶיהָ	שׁוּרְיָהֵין

The possessive pronouns attached to forms ending in a consonant are nearly identical with those of BA, though the earlier forms with final /m/ (e.g. אַנְתִּי-) have now completely disappeared and the older 1pl. form אֲנֵא- now been shortened to אֲנִי-. Intervocalic /h/ is assimilated in the 3sg.m. suff. of both sg. and pl. m. nouns, e.g. אָבִי 'his father', שׁוּרָיו 'his walls'. According to the vocalized FPT texts, in m.pl. nouns, the diphthong /-ay-/ > /-e-/ , e.g. שׁוּרֵיהָ (cf. BA *šurah* according to the *qere*; according to the *ktiv*: שׁוּרֵיהָ). An independent poss. pron. -דִּיד- is commonly used.

The demonstrative pronouns are similar to BA, although the earlier דִּנְהָ – surviving only in Targumic texts in temporal phrases for BH דִּנְהָ – has now been replaced by דִּין. For reasons that are unclear, an alternative m.sg. form אֵהִין – also known from Samaritan Aramaic – occurs in PT. The accusative pronouns are the same as in the other Aramaic dialects with the exception of that of the 1sg., which is /-i/ and not /-ni/, e.g. נִסְתִּי וְאַעֲלִי לְגַן פְּרִדְסָא 'he took me and brought me into the garden'. The relative/genitive particle is דִּי in the Targumic texts and –דִּי in the non-Targumic ones.

6.2. Verb

As in the other Middle Aramaic dialects the passive stems have completely disappeared and their functions have been replaced by either the corresponding *t*-forms or by the composite הוּי + pass.part. A new *t*-stem formed from the *af^{el}* (< *haf^{el}*) developed in this period. The following is the structure of the stems:

<i>Pe'al</i> (G)	<i>Pa'al</i> (D)	<i>Af'al</i> (A)
<i>Itpe'al</i> (tG)	<i>Itpa'al</i> (tD)	<i>Ittaf'al</i> (tA)

6.2.1. G-stem

As in all of the other A dialects and Semitic languages, two thematic vowels [V1/V2] listed in the lexicon are associated with each verbal root. The attested vowels are:

V1 – <i>a, e</i>
V2 – <i>a, o, e</i>

The following paradigms present the major inflections of the G-stem of the triliteral verb.

6.2.1.1. Perfect

1	קָטַלְתָּ	קָטַלְנָא
2m	קָטַלְתָּ	קָטַלְתּוּנָא
2f	—	קָטַלְתִּין
3m	קָטַל, קָטַלְתָּ	קָטַלְוּ, קָטַלְוּ, קָטַלְוּ
3f	קָטַלְתָּ	קָטַלְוּ, קָטַלְוּ

The suff. *-el* of the 3f.pl. form is an MWA innovation and is also found in CPA and SA, as well as in the orthographic practice of Syriac (*-y*, unpronounced). It replaces the common Semitic ending *-āl* for this person which is attested in BA (e.g. כְּתָבָא) and in other Aramaic dialects.

6.2.1.2. Imperfect

	sg.	pl.
1	אֶקְטֹל, נִקְטֹל	נִקְטֹל
2m	תִּקְטֹל	תִּקְטֹלוּ
2f	—	—
3m	יִקְטֹל	יִקְטֹלוּ
3f	תִּקְטֹל	יִקְטֹלוּ

The most notable prefix form here is the 1sg. with */n-/*. According to the best manuscript sources, this prefix appears exclusively in the non-Targumic texts, while the Targumic texts occasionally have */'-/*, possibly under the influence of the Hebrew original. In addition to JPA, this prefix is found in the modern WA dialect of Ma'lûla, as well as in Palestinian Amoraic Hebrew.

The other thematic vowels are represented by the forms יִשְׁמַע, יַעֲבִיר.

6.2.1.3. Imperative

The imperative has the same thematic vowels as the imperfect.

2m.sg.	קְטוּל
2f.sg.	—
2m.pl.	קְטוּלוּ
2f.pl.	—

6.2.1.4. Infinitive

The infinitive is found in two forms, viz. מְקַטֵּל (e.g. מעבד) and מְקַטּוּל (e.g. מְשֻׁמוֹעַ). There is a strong tendency for infinitival forms to end in [o] as opposed to the classical [a], a phenomenon found also in the imperfect.

6.2.1.5. Active participle

This form is declined exactly as in BA. It should be noted that in reliable manuscripts the m.sg. form is consistently written defectively as קַטֵּל, since /e/ > /ɛ/ in closed syllables. As a result, the participle can be distinguished from the perfect in unvocalized texts in such cases only syntactically.

6.2.2. Other stems

Like the infinitive of the G stem, the infinitives of all the derived stems begin with /m-/, e.g. מְקַטֵּלָהּ. This form also conforms with that found in the earlier Hermopolis papyri.

6.2.3. III-y roots

In the non-Targumic texts, the 3m.pl. pf. form has the ending וִין (e.g. דִּוּוִין) as opposed to the Targumic texts which retain the older form without final *nun*. Since various forms of these roots contain the string /-ayn/, they are subject in the non-Targumic texts to the phonetic change mentioned above in 5.1. Thus, the m.pl. part. is בְּעֵי and the 2f.sg. imp. is תִּבְעֵי. Also in the non-Targumic texts, various forms of the pf. combine with the direct object marker — יָת, e.g. חָמַתָּה יָת ‘he saw him’.

6.3. Prepositions

Besides the common לְ which also indicates the accusative, we find both לְיָד and לְנוֹת in the meaning ‘to, towards’. The form קִי(ו)רָם occurs in both Targumic and non-Targu-

mic texts, but in the latter we find the form קומי with the exceptional assimilation of /d/ as in CPA 𐤓𐤕𐤕. Typical for this dialect are compound prepositions with מן, e.g. בתר מן ‘after’, מן גו ‘from among’, מן קודם ‘before’, etc.

6.4. Adverbs

Being non-declinable morphemes, adverbs tend to receive an additional /n/ or /-ān/ at their end, e.g. כרין ‘now’, סגין ‘much’, תיבן ‘again’.

7. Syntax

7.1. Nouns

As in all the Aramaic dialects, the noun in JPA also occurs in three states: Absolute, construct, and determined/emphatic. True to its more conservative nature, the MWA dialects all preserved the classical usage of these states as opposed to the MEA dialects where the determined state on the whole usurped the place of the old absolute state.

The use of the split genitive construction with or without the proleptic pronoun – a usage well attested in BA and going back in Aramaic to the 8th century BCE – is quite common in JPA, e.g. שמיה דאבוי ‘his father’s name’.

7.2. Demonstrative Pronouns

The demonstrative pronoun may either precede or follow the noun in the various Aramaic dialects. Thus, in BA, it can occur in either position. In JPA, the demonstrative always precedes the noun, whether it is a near or a far deictic pronoun, e.g. ההיא איתתה, הדין גברה.

The demonstrative pronoun frequently appears before personal or geographic names for apparently no particular reason, e.g. הדין יורדננס, הדין לאה.

7.3. Verb

7.3.1. Tenses

In general, the perfect expresses completed action, e.g. אתעבר מלך ‘he became king’, but it is employed in the protasis of a conditional sentence even when the action has not yet taken place, e.g. אין בעיתון מזבון מולוון ‘if you want to buy mules’.

The old participle has now been integrated into the verbal system and is loosely termed to be the present tense, which it expresses. From a temporal point of view, one of its more common usages is to express the future in independent clauses, e.g. בה אין בעיי אתון, אנה מרמי בה ‘if you wish, I will deceive him’. Its subject, whether a

noun or a pronoun, generally precedes the verb, e.g. **אָנאָ יִהְיֶה לְכוּן**. 'I will give it to you.'

In a dependent clause, the imperfect is used either to express the future, e.g. **שׁוּי לֵה חֲמֶרָה דִּיזִיל לֵה** 'he saddled his donkey to go away', or as a modal form, e.g. **אָמַרְהוּ קִלְיוֹן {ת} <ד> יִיזוּן בְּנֵי תֵלַת יוֹמִין וַיַּעֲלִין וַיִּסְחֹן וַיִּתֵּן לְנַבִּי מַה נַּעֲבִיד לֵיהּ** 'I command that they should heat up the bath for three days, they should enter (it), bathe, and come into my presence'. In independent clauses, it also has a modal usage, e.g. **מַה נַּעֲבִיד לֵיהּ** 'what should we do to him?.'

The old participle with the verb **הוּי** expresses repetitive or continued action, e.g. **כָּל אוֹתוֹ הַלַּיְלָה הוּן מַגְעִין בְּאַלְיָן דַּעֲשׂוּ וְהוּן אֲמַרְיָן לְהוּן** 'that whole night, they were striking those of Esau and were saying to them'.

The infinitive is used either with **-ל** or without it. Following a growing trend in MA, other verbal forms replace the infinitive in various syntactic formations, e.g. the participle **שׁוּרֵי עֵקֶר** 'he began to uproot', or **-ד** followed by the imperfect, e.g. **בֵּה בַּעַר רַבִּי** 'PN began to get angry at him'.

8. Vocabulary

The vocabulary of JPA is similar to that of the other MWA dialects, and contains roots not found in EA. Typical JPA roots are **גּוּב** af. 'to answer', **חֲזֹר** pe. 'to return', and **חֲמֵי** pe. 'to see'. Loanwords from Akkadian (e.g. **שִׁיב** 'to rescue', **אֵינַר** 'roof', **אַרִּיס** 'tenant farmer') are a legacy from the Official Aramaic period. Most of the loanwords in JPA originated in Greek, e.g. **אוּרִיר** 'air', **אַיסְטוּלִי** 'garment', **אַיסְטֶרַט** 'road', **טַכְס** 'banner'. Surprisingly, there are few Hebrew loanwords, and they are generally limited to the religious sphere, e.g. **יּוֹם טַב** 'holiday', **מוֹעֵד** 'festival'.

Abbreviations

A = Aramaic; BA = Biblical Aramaic; BH = Biblical Hebrew; CPA Christisan Palestinian Aramaic; EA = Eastern Aramaic; FPT = Fragments of the Palestinian Targumim; JPA = Jewish Palestinian Aramaic; MEA = Middle Eastern Aramaic; MWA = Middle Western Aramaic.

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32. Samaritan Aramaic

1. Affiliation and history
2. Literature
3. Script
4. Language
5. Morphology
6. Vocabulary
7. References

Abstract

Samaritan Aramaic, a branch of Western Aramaic, circulated in Palestine along with Jewish Aramaic and Christian Aramaic during the Roman and Byzantine periods. It

was the language of Samaria: the territory enclosed between the Galilee in the North, Judaea in the South, the river Jordan in the East and the Mediterranean littoral in the West. Along with Hebrew, Greek and Latin, Aramaic was a language of everyday life in communities in certain Hellenistic cities outside Samaria (such as Gaza, Ascalon, Emmaus, Yamnia and Antipatris). With inroads made by Arabic in the 7th century C.E., Aramaic was gradually abandoned as a spoken language. Aramaic continued to be commonly used as a written language until the 10th century C.E., and appears sporadically in later liturgical compositions. Samaritan Aramaic shares with the adjacent Jewish and Christian dialects the characteristics of Western Aramaic, as inherited from the Standard Aramaic which held sway in the region during the Hellenistic and early Roman periods. Bred on the territory formerly dominated by Hebrew, there is little wonder that, like other Western Aramaic dialects, Samaritan Aramaic manifests an abundance of Hebrew influence in both grammar and vocabulary.

1. Affiliation and history

1.1. Samaritan Aramaic as part of Western Aramaic

Samaritan Aramaic is a branch of Western Aramaic, which circulated in Palestine along with Jewish Aramaic and Christian Aramaic during the Roman and Byzantine periods. The scarcity of material from the preceding Hellenistic period does not permit any serious study. Very few fragmentary inscriptions have been unearthed from the sacred site on Mount Gerizim (destroyed in the 2nd century B.C.E.), and these contain few words, mainly names of various persons written in Hebrew and in Aramaic (Naveh-Magen 1997, 37–56). They reveal very little about the nature of the language(s) used by the Samaritan community.

1.2. History

Samaritan Aramaic was the language of Samaria, the territory enclosed between the Galilee in the North, Judaea in the South, the river Jordan in the East and the Mediterranean littoral in the West. Along with Hebrew, Greek and Latin, Aramaic was a language of everyday life in communities in certain Hellenistic cities outside Samaria (such as Gaza, Ascalon, Emmaus, Yamnia and Antipatris). Archaeological evaluations estimate that at its peak a population of approximately 200,000 individuals used Samaritan Aramaic. Today, the Samaritan community numbers less than 700 souls, divided between Shekhem and Holon, near Tel-Aviv. Although Aramaic is recited in synagogues, Aramaic has otherwise fallen from use and has been forgotten by the modern Samaritan communities, who use Modern Hebrew and Arabic.

1.3. Documents

The earliest extant Samaritan Aramaic documents date to the 4th century C.E., when the Samaritan ruler Baba Rabba was entrusted with the affairs of the community.

Samaritan chronicles describe his deeds in great detail: he organized the community, established schools, built synagogues and encouraged all kinds of cultural activity (Florentin 1999, 88; Stenhouse 1985, 175–192). Philosophy, exegesis and literature flourished under his leadership. Much of the literary works of his time have been preserved for posterity. Aramaic continued to be commonly used as a written language until the 10th century C.E., and appears sporadically in later liturgical compositions. Aramaic was no longer a living language that engendered vivid pieces of literature, but a conventional means of composition, flooded with stereotype phrases, borrowed from the ancient authors. It also bears unmistakable traces of the vernacular Arabic. After the 10th century, Arabic displaced Aramaic from its prominent position both in homeland and Diaspora communities (i.e. Egypt, Syria). Nevertheless, the skill and care taken in the use of the older language is remarkable (see 2.4). From the 11th century on, a new language emerged that would develop into Neo-Samaritan Hebrew. This language arose at a time of spiritual weakness, and would develop and expand to a peak in the 14th century. At this time, cultural activity prospered as a response to the growing need for an instrument of literary expression. Neo-Samaritan Hebrew is a hybrid language, a mixture of Hebrew and Aramaic, in which strong Arabic influences are recognizable. Never spoken, it became the main vehicle of liturgical composition, also penetrating secular literary use alongside Arabic (Florentin 2005, 59–71). At that time, although Aramaic was no longer their literary language, the protagonists of the Samaritan *Renaissance* (see 2.4) were still able to produce some quasi-Aramaic poems.

1.4. Relationships with adjacent dialects

Samaritan Aramaic shares with the adjacent Jewish and Christian dialects the characteristics of Western Aramaic, as inherited from the Standard Aramaic which held sway in the region during the Hellenistic and early Roman periods. The three main distinguishing features of the Western dialects of ‘Middle Aramaic’ established by scholars long ago, are also present in Samaritan Aramaic: (1) The preformative *y* of the 3rd person masculine of the imperfect, (2) the plural ending *-in* of the masculine noun, and (3) the functionality of the article. These features separate the Western from the Eastern Aramaic dialects, where the preformative of the imperfect is *n/l*, the masculine plural ends in *-e* and the article has no function: *gabra* meaning both ‘a man’ and ‘the man’ (Rosenthal 1939, 104–159). Bred on the territory formerly dominated by Hebrew, there is little wonder that, like other Western dialects, Samaritan Aramaic manifests an abundance of Hebrew influence in both grammar and vocabulary. Christian Palestinian was under perpetual Syrian influence, and the influential Babylonian center constantly exerted a linguistic force on Jewish Aramaic, especially on the scribal transmission of its texts. However, in contrast with these other dialects of Western Aramaic, as the language of a community whose spiritual center never moved from the sacred mountain, Mount Gerizim, Samaritan Aramaic was never subjected to non-Western Aramaic intrusions. There were, however, cultural contacts with Judaism from the earliest periods, and despite mutual animosity, common traditions may be found in Jewish and Samaritan works.

2. Literature

2.1. Introduction

The Samaritan Aramaic texts represent the literary production of the community over many centuries, from the Roman period, when Aramaic was its spoken language, up to the Arab domination, when Aramaic was gradually supplanted by Arabic, first in everyday speech, and then as a literary language. In comparison with the vast Jewish Aramaic literature, with its Targumim, Talmud, and Midrash, Samaritan literary treasures are relatively small. As the 14th century historiographer Abū l-Faṭḥ reports (Stenhouse 1985, 165), after centuries of persecution, during which Samaritan books were destroyed, a great part of their literature disappeared. The major surviving works are listed here:

2.2. Targumim

The Targum of the Pentateuch is the oldest expression of Samaritan Aramaic, allegedly composed in the 3rd to 4th centuries C.E. in Palestine. The rest of the Bible was never translated, as the Samaritans do not recognize the Prophetic or Hagiographic biblical literature. It is, therefore, a contemporary of the Jerusalem Targum, with which it has a visible linguistic kinship. Throughout the ages, the Targum was subject to a permanent metamorphosis, to the extent that every period left a trace on its linguistic form. As a result, the manuscripts hardly resemble each other. In fact one may distinguish three main periods in the process of development of Samaritan Aramaic as portrayed in the Targum, according to its manuscript evidence. The Targum embedded in MS BL Or. 7562 is composed in the oldest Samaritan Aramaic. It has many features in common with Onqelos and with the Aramaic of the Dead Sea Scrolls, although its language reflects a somewhat later stage of development. The second type, represented by MS 6 of Shekhem Synagogue, reflects a stage of development contemporary with Talmudic Aramaic, evolved from the 4th century onwards. The differences between the types largely parallel the differences between the Jerusalem Targum and the Jerusalem Talmud, and thus define the chronological stratum of each of them (Cowley 1909, xxxiv; Tal 1983, 104). The third type, represented by MS No. 3 of the Shekhem Synagogue, is the result of the intervention of Neo-Samaritan Hebrew, the literary language that emerged when Aramaic was no longer spoken within the community (see 2.4).

2.3. Midrashim

Tibāt Mârqe is the major Samaritan midrashic composition (also known as Memar Marqah), a work attributed to the foremost Samaritan scholar, the philosopher and poet Marqe, of the 4th century C.E. The composition is rather a collection of discourses, consisting of six separate books. The first five contain homilies on certain portions of the Pentateuch, especially on Exod. 15, 'The Song of the Sea', and Deut. 32, 'The Great Song', as well as expanded narratives of the main events related in the story of

the Exodus and the subsequent wanderings in the desert, until Moses' death. The sixth book consists of a discourse on the Creation and a dialogue between Moses and the letters of the alphabet about the role they played in the history and life of the Children of Israel. The first book and large portions of the second are written in Aramaic, and are probably of Marqe's authorship. Their language roughly corresponds to the second stage of the development of the Targum. The rest, although attributed by tradition to Marqe, is much later, judging by the Neo-Samaritan Hebrew in which it is written (Ben-Hayyim 1988, iv–v).

2.4. Liturgical texts

The current Samaritan prayer ritual includes reading of portions of the Hebrew Pentateuch and recitation of hymns and prayers, the oldest of which are ascribed to the great Samaritan poets, Amram, Marqe and Ninna, of the 4th century C.E. Most of these are composed in Samaritan Aramaic. They are included in the basic and most ancient prayer book, *The Defter*. Between the 10th and 12th centuries a different category of Aramaic was used in liturgical composition and other literary pieces. Although this Aramaic was a language still understood, it was no longer spoken. Poets like Tabya ben Darta, Ildustan, and Ab Isda composed a number of prayers in this late Aramaic (1.2). A few prayers were composed during this period in Pentateuchal Hebrew, with hardly any Aramaic elements. They are the antecedent of the Neo-Samaritan Hebrew liturgy, which developed further and reached its peak in the 14th century liturgical compositions of Yusef Arrabban, his son Finās Arrabban and grandsons Elāzar and Abisha (Ben-Hayyim 1967, 10–22).

2.5. Historical literature

The Book of Asatir (Arabic 'tales': Ben-Hayyim 1943, 107), is a quasi-chronicle whose subject parallels the Pentateuch, treated in an expanded way, with many legends developed from the biblical narrative. It deals mainly with the succession of figures from Adam to Moses, described as a string of twenty-six generations supported by the four "foundations of the world": Adam, Noah, Abraham and Moses. The whole book is written around the story of their lives and deeds, as handed down in oral traditions. In this it differs from other Samaritan chronicles whose usual starting point is the end of the Pentateuch, i.e. the conquest of Canaan by the sons of Israel. The book is divided into twelve chapters, the first ten of which are devoted to the period between the Creation and the war against the Midianites (Num. 31). The 11th chapter is partly a geographic account of the Land of Canaan according to Num. 34. The remainder deals with the days to come, until the coming of the *Taheb*, the Redeemer. It is written in Late Aramaic, very much resembling that of the poems of Ab Isda and his contemporaries, from which it differs mainly in the lack of effort to preserve 'good' Aramaic. With its heavy Arabic and Islamic influences, it is quite clear that Asatir is a product of the late 10th century (Ben-Hayyim 1943, 112).

3. Script

Excavations on Mount Gerizim have revealed ‘the sacred precinct’ around a worship structure (reported by Josephus in his description of the destruction of a Samaritan temple by John Hyrcan in the 2nd century B.C.E. – *Ant.* 13:256; *BJ* 1:62–63). Amongst the debris many fragmentary inscriptions have been uncovered, some of which are written in the Aramaic ‘square’ script, used mainly by Jews up to the present day, while others are written in the ‘Paleo-Hebrew’ script. Paleographers agree that during the Persian period both communities used both scripts, and it was only later that each community adopted its own means of graphic expression. Jews adopted the ‘square’ script, while Samaritans preferred to use the ‘Paleo-Hebrew’ (or ‘Ancient Hebrew’) script. An account of this paleographic separation is given in the Babylonian Talmud, (tract. Sanhedrin, f. 21b). All surviving Samaritan records are written in this script, and it is still used in Samaritan communities today.

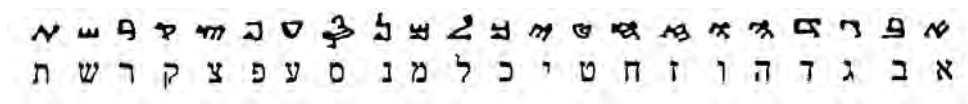


Fig. 32.1: Samaritan letters with Hebrew equivalents

4. Language

4.1. Phonology

The phonology of Samaritan Aramaic, basically identical with that of Samaritan Hebrew, is known from the present-day recitation of the Aramaic liturgical pieces still in use in the synagogue service. Although such a source clearly has its disadvantages, it is the only source of information, and, treated carefully, may yield a lot of information if two important and opposing factors are kept in mind: (1) the oral transmission along many generations is by nature subject to alterations and external influences, but, (2) the meticulous handling of such sacred texts assures that interference from external agents is kept to a minimum. With these factors in mind, the following sketch proposes a short list of the characteristic traits of Samaritan Aramaic, as presented in the written and oral transmission (Ben-Hayyim 1967, *passim*; Ben-Hayyim 2000, 29–95).

4.1.1. Consonants

The consonantal system of Samaritan Aramaic consists of twenty phonemes. Of the Old Aramaic phonemes three have been lost: *h* (𐤀), *ḥ* (𐤁), and *š* (𐤃). The first and the second of these phonemes vanished in the course of time as a result of the general tendency of ‘Middle’ Aramaic dialects to drop the gutturals. The last phoneme merged with *s* (𐤄), as in other contemporary Aramaic dialects.

Little has survived of the old system of plosive/fricative בנרפ"ת allophones (*b, g, d, k, p, t*, vs. *b̥, g̥, d̥, k̥, p̥, t̥*), and the two allophones are no longer distinguished in Samaritan Aramaic. Thus, ת, כ, ד, ג, ב are invariably plosive in both initial position and after vowels (although medieval Samaritan grammarians still distinguish between plosive and fricative ת, פ, כ). As for פ, it is usually pronounced *f*: *fāl'yān* (פליאן) and, when geminated, its pronunciation is *bb*: *abbəq* (אפק).

י has a twofold realization. It is regularly pronounced as the plosive *b*, although when functioning as the standard Semitic conjunction it is realized as *w*: *wlit* (ולית). Similarly *w* is preserved in diphthongs, as in *ēluwwəm* (אלהים).

ט, ש and ק (טצ"ק) are emphatic. They occur with great regularity and are clearly distinct from the non-emphatic parallels *t, s* and *k* (תס"ך).

The gutturals (אהה"ע) gradually weakened and merged into ' (א), which then weakened to zero, although in certain conditions the glottal stop ' (א) and the pharyngeal ' (ע) still exist. The former, either as a constant precedent of initial vowels: *ūbād* (עובר), or as a glide between successive vowels: *rā'əq* (רחיק). The latter in initial position, when a previous ה or ע precedes an *a* vowel: *ālāmā* (עלמה). The dropping of the gutturals has produced major changes in the structure of words. Two adjacent identical vowels merge into a long vowel: *rū:tā* (< **ru'ūta* < **rə'ūta* רעותה), while adjacent different vowels resulted in diphthongs which were either contracted in various ways or separated by ' , or by a doubled semi-vowel *w/y*, depending on the preceding vowels: *w* after an *u* *našuwwā* (נצוהה), *y* after an *i* *qammiyyon* (קמיהיון). Where a guttural occurred at the end of a non-final syllable it assimilated to the following consonant, which becomes geminated: *lāššā* (לחצה). Finally, when a guttural is dropped after a consonant in a final syllable, a long stressed vowel emerges: *nē'sān* (נצחן). As a result of these changes, which made the guttural letters redundant, אהה"ע were used as *matres lectionis*: *qām* (קעם), or as markers of a glottal stop, separating successive vowels: *gā'əz* (געז).

Some phonemes are neutralized in final position: *m/n*, סמנים רברבים vs. פסקולין *m/n*; *d/t*: חדר vs. חדת; *f/v*: כרף vs. כרב. Occasionally, *s/z* interchange in medial position: תסע vs. תזע; יוסף vs. יוזף, etc.

4.1.2. Vowels

Samaritan Aramaic has seven vowels: *i, ə, e, a, ā, o, u*. With the exception of *ə*, which is always short, all vowels vary in quantity, according to syllable structure. A short vowel occurs in closed syllables: *nibyā* נביה; *qabbəl* קבל; *muwwi* מוחי. A medium vowel occurs in a final post-tonic open syllable: *šēfi* צפי (imperative singular). A long vowel occurs in both open (not in post-tonic position): *nūmār* נימר; *šēlāmā* שלמה; *zēkūtā* זכותה, and closed stressed syllables formerly containing a guttural: *lāl* לעל; *nē'sān* נצחן. A long vowel also occurs in a double closed syllable: *rēmām* רחמים. An extra-long vowel occurs in open syllables, whether stressed: *ētā:bəd* אתעבר; *mū:nā* מעונה, or unstressed: *lā:būdo* לעבוריו. It often results from the dropping of a guttural and the merging of two syllables into one. *a* and *ā* are distinct, especially when long; the former being low-front while the latter is a back vowel. *o* and *u* are mutually exclusive. Generally, the former occurs in closed syllables, and is short; the latter in open syllables, and is long: *nātor* נטור, vs. *nātūra* נטורה. However, in an open post-

tonic syllable *o* appears too, where it results from a contracted diphthong, such as in the 3rd masc. pronominal suffix (with plural nouns): *rā'emo* רחמיו (written יי- under Hebrew influence). Similarly, *o* is found where a final guttural once occurred: *sālo* סלוח (*nomen agentis* of the type *qātōl*). Characteristic of Samaritan Aramaic is the shift of the short vowel *u* to *a/ā* in closed syllables: *kal* 'עלמה *ālāmā*; כל; *tisgād* תסגד. *a* is short. Its sound varies between *i* and *e*, and occurs in closed post-tonic syllables: *mallal* מלל, *aktābān* כתבין.

The old reduced vowel known as *shewa* (mobile) no longer exists in Samaritan Aramaic. Such a vowel, habitual in, for example, Biblical Aramaic, has been completely dropped, giving way to consonantal clusters. When initial, the cluster has been dissolved either by a prosthetic vowel: *aktāb* (cf. כתב), *algu* (cf. לגו), or by a vowel following the first consonant: *kēlom* (cf. כלום), *dēbāq* (cf. דבק, imp.). When medial, a full vowel appeared: *askāmu* (cf. אסקמו, 'end'), *mālēkām* (cf. מלכין).

4.1.3. Diphthongs

Historical descending diphthongs, i.e. sequences of vowels and semi-vowels, usually contract into a vowel. *aw* > *o/u*: *yom* יום, *tūtāb* תותב. *ay* > *i/e*: *bit/bet* בית (both construct state, respectively); *mīṭab* מיטב. *uy* > *o*: (**mašruy* >) *mašro* משרי. Likewise, *oy* > *o*: (**alohi* > **aloy* >) *ālo* עליו. Under certain conditions the diphthong is maintained, especially when the vowel is long: *yī'dāy* יחידא, *sēgāy* סגא. Alternatively, the semi-vowel is doubled: *ubayyā* חוביה, *ēluwwām* אלהים. Ascending diphthongs do not change: *yaskām* יסכם, *yākāl* יכל, *yisgād* יסגד, *yūmā* יומה, etc.

4.1.4 Stress

Stress normally falls on the penultima syllable. Ultima stress occurs mainly where two syllables contracted as a result of dropping of a guttural: *šā'mīn* שמעין, (**rattāya* > **rattā'a* >) רתאה.

5. Morphology

The great changes to the phonological system of Samaritan Aramaic produced considerable morphological metamorphosis in verbal roots. Dropping of gutturals caused large-scale merging of III-guttural roots, e.g. *yīšba* יצבע (= יצוח) and *yīšma* ישמע, etc., which in turn merged with III-ʿ, e.g. *yīqra* יקרא. II-guttural roots merged with II-w/y, e.g. *yēšol* ישאל, etc. Numerous tri-radical roots became bi-radical after losing their initial radical, e.g. *āt* אעת, 'went down', perfect Qal of נחת, developed from the Afel אחת, after the assimilation of נ in אנחת*. In addition, secondary roots arose from the integration of preformatives in bi-radical roots, e.g. *ātmanr* – imperative *Itpa'al*, denominative of מגיר, a derivative of גור. In several cases, a preposition has been appended to a verb forming a new root. Thus הנה 'to reckon' with its following ל resulted in חנל 'to look, see', and פסק 'to allocate', with ל yielded פסקל 'to make a

covenant', from which the noun פסקול 'covenant' is derived. Another category of secondary constructions consists of truncated roots, which resulted from tri-radical roots, whose first radical was taken as a preformative and detached from the body of the word yielding a new bi-radical word. Such is the preposition כתי 'below', which developed from the noun מכה 'lower' (מכך) in its construct form מכת. At a later stage, its 1st radical was dropped by analogy with the מ of its synonym מתחת. The verbal and nominal patterns (including the pronominal system) do not differ – in general – from the 'Middle Aramaic' paradigm.

6. Vocabulary

The vocabulary of Samaritan Aramaic has much in common with its neighbouring dialects in Palestine. Words by which these dialects distinguish themselves from the Eastern dialects, such as זעור vs. זעיר (although Syriac also has זעור) 'small'; חמה vs. חזה 'to see'; ציבחר vs. זעיר 'little'; טלק vs. שרא 'to throw', etc. (Dalman, 1905, 44–51), are also present in Samaritan Aramaic. However, there is a large number of distinct vocabulary items in which Samaritan Aramaic is distinct. Indeed, its most visible characteristics lie in its vocabulary. Many idiosyncrasies set Samaritan Aramaic apart from its neighboring dialects, especially in the domain of particles and structural words, e.g. -אכר 'still' vs. עור; טטה 'then' (Greek loan: τότε) vs. ארין; שריר 'very' vs. לחרה, etc. Needless to say, peculiar non-structural words abound in Samaritan Aramaic, such as the verbs ארכן 'to elevate' (denominative of ארכון, Greek loan: ἄρξω); רצם 'to crush'; ברשי 'to arrive'; שמק 'to hear'; the nouns אנכל 'cluster' (secondary from אתכל); ארש 'foundation' (secondary from אשש), and many others.

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33. Christian Palestinian Aramaic

1. Introduction
2. Chronology and text types – outline
3. Textual editions
4. Reference works
5. Dialect grouping and selected linguistic features
6. References

Abstract

Christian Palestinian Aramaic (CPA) is one of the modern scholarly names given to the form of Palestinian Aramaic (PA) employed by the Christian Melkite community in Palestine from around the 5th to the 13th centuries. It is mainly preserved in short inscriptions, palimpsests and later liturgical manuscripts. The dialect shares many linguistic features with Jewish Palestinian Aramaic and Samaritan Aramaic.

1. Introduction

Christian Palestinian Aramaic (CPA) is one of the modern scholarly names given to the form of Palestinian Aramaic (PA) employed by the Christian Melkite community in Palestine from around the 5th to the 13th centuries. Only epigraphic texts represent original compositions in the language, while the manuscript evidence is entirely comprised of translations from Greek works of a religious (Christian) nature. The surviving evidence suggests that language ceased to be employed for any function around the 13th century, and it was only rediscovered as a linguistic entity independent of Classical Syriac in the 18th century. In its original form, it shares many characteristics with Jewish Palestinian Aramaic (JPA) and the classical period of Samaritan Aramaic (SA).

The literary remains written in the dialect never mention its name, and it is referred to by several names in the scholarly literature:

- *Palestinian Syriac*, a name which reflects the contemporary Palestinian usage of the term ‘Syriac’ as a name for Aramaic, for example in the writings of the Church Fathers and in rabbinic literature. It also emphasizes the early influence of the Syrian church on the Melkite community. In the early period, this expresses itself most apparently in the adoption of a script based upon the Northern Mesopotamian Estrangelo.
- *Christian Palestinian Aramaic*, a name that emphasizes the Christian identity of its users and also an entity distinct from the Classical Syriac of Edessa.
- *Jerusalem Syriac*, a name that emphasizes more precisely the environs in which most of the epigraphic material was found.
- *Melkite Aramaic*, a term coined more recently which emphasizes the denomination of the dialect’s writers.

2. Chronology and text types – outline

Only one inscription may be dated with any certainty, while the earliest dated manuscript was copied in 1030 C.E. (Bar-Asher 1977, 125). Nonetheless, the surviving sources may be ascribed to at least two distinct phases, with some evidence now existing for an intermediate phase.

2.1. The early phase: 5th to 8th centuries

In the earlier phase, CPA was a spoken language which also served its community for a wide variety of literary purposes. Persecutions in the early Islamic period and the gradual Arabization of Palestine appear to have brought about its decline. The evidence for this phase comes primarily from palimpsests and from brief epigraphic sources.

2.2. The late phase: 10th to 13th centuries

The Melkite community evidently underwent a brief cultural renaissance during this period, and CPA texts were once again copied for liturgical purposes. However, in contradistinction to the first period, the evidence suggests that it was not employed beyond this liturgical setting, and that Arabic has superseded it as the language of daily life and study.

2.3. ‘Middle’ phase from 8th–9th centuries?

Recently, Müller-Kessler has proposed the existence of a ‘middle’ period of around the 8th–9th centuries, based primarily upon a fragmentary manuscript of Galatians found at the Monastery of St. Catherine on Mount Sinai. The manuscript was already identified and published in transcription in the 1890s; however, on the basis of recently

published photographs, Müller-Kessler 1999a, 631 maintains that the script is demonstrably different from those of the earlier manuscripts. Brock has published parts of Pseudo-Chrysostom's Homily on the Prodigal Son from a Sinai manuscript which he tentatively dates to the 9th or 10th centuries (Brock 1999). It is logical that in order for the later revival to have taken place, some measure of cultural continuity within the Melkite community must have existed during its 'dark age'.

2.4. The early period: characteristics

The sources for the early period divide into two categories: epigraphic sources and manuscripts. The epigraphic sources are of great importance for locating the geographical and sociological distribution of the dialect; in particular, they prove that CPA was not merely a language of study (Milik 1953, 537). The vast majority of the early inscriptions originate in a 30 kilometre radius around Jerusalem, with sporadic evidence coming from further afield, most notably from 'Evron in the Galilee (Bar-Asher 1977, 354–361; Müller-Kessler 1991, 2). The earliest of these inscriptions appear to date back to the late 5th century (Jacques 1987). The genres represented by these sources are mainly dedicatory and commemorative inscriptions and some seals. However, several documents written on softer materials are of particular interest. A fragmentary papyrus letter discovered at Khirbet Mird (the remains of the Monastery of Kastellion; Rubin 2003, 89–90) while a ten page magic text written on parchment was found in the Judaean desert. The booklet contains the recipe for a magical substance followed by prayers against scorpions and vipers (Baillet 1963). A magic text on bronze of unknown provenance has been published (Naveh/Shaked 1993, 107–9). Notwithstanding their historical importance, the epigraphic texts are generally short and only of limited value for linguistic study. Bar Asher 1977, 342–354 as well as Müller-Kessler 1991, 10–15 and Bar Asher 2003 have discussed some of the linguistic problems connected with these texts, while Puech 1983 discusses in part the onomasticon.

The majority of the manuscripts that survive from this period are palimpsests or highly fragmentary, a fact that greatly hinders their decipherment. Some of the manuscripts published in the late 19th or early 20th century are now inaccessible or lost. A detailed list of all the manuscripts known up to the 1970s appears in Bar-Asher 1977, 55–95, while Sokoloff/Yahalom 1978 represented an important attempt to reconstruct the original manuscripts of the palimpsest from the Cairo Geniza. Other supplements and corrections to the Bar-Asher catalogue may be found in the various publications by Müller-Kessler.

The surviving manuscript evidence suggests that in the early period, CPA literature covered a variety of genres of interest to the Melkite community, Old Testament, New Testament and Apocryphal works, writings of the Church Fathers, and lectionary collections. The contents of these works are succinctly summarized in Van Rompay 2007. It is generally assumed that a CPA translation of the entire Christian Bible once existed. The hypothesis that the surviving manuscripts contain the remnants of a once more complete version of the Bible is strengthened by the fact that the same translations (with minor textual differences) serve in the liturgical collections of the later period. It is reasonable to assume that the other biblical passages cited in the later liturgy were similarly drawn from early, more complete sources.

Several manuscripts contain lectionary or liturgical collections, as may be discerned from their contents and rubrics. In this early period the rubrics are written in Aramaic, in contrast to the latter period when Arabic fulfills this role. At least one palimpsest contains liturgical poems.

2.5. The later period: characteristics

From the end of the 10th century to the early 13th century we find evidence for a significant revival in the use of CPA. Most of these manuscripts were found in the St. Catherine's Monastery in the Sinai Desert. However, these sources suggest that in this later period, the dialect was employed solely as a liturgical medium, whereas Arabic had become predominant as the language of day to day life and study. This shift is evident in two essential aspects, which are interlinked: the linguistic profile and the literary genres represented. Palaeographic considerations may also be of significance.

On the linguistic level, the texts of the latter period are characterized by the loss of many of the distinctive dialect features found in the earlier texts, as well as a marked increase in the number of copying errors. Many of these changes stem from the copyists' familiarity with Classical Syriac, and this is particularly notable in the omission of word-final vowels in historically open syllables which were elided in Classical Syriac. Furthermore, the linguistic world of the scribes had changed. Whereas in the earlier period, as noted above, Aramaic served as both the language of the rubrics and of the texts themselves, in this latter period many of the rubrics are written in the Arabic vernacular (often in Syriac characters).

This shift from Aramaic to Arabic as the first language of the Melkites is reflected in a notable literary change, namely a considerable reduction in the number of genres represented in the corpus. While in the earlier period CPA served its community for a wide range of uses, in the latter period the manuscript evidence comprises only collections of a liturgical nature. The Evangeliiar contains readings of the Gospels for selected services on appointed dates, while the Lectionary, which served a similar purpose, drew its material from the other biblical books. The Lectionary is unusual in retaining mostly Aramaic rubrics, which were presumably copied from a more ancient exemplar that dated to a time when Aramaic was the primary language of the community. The Horologion contains readings, many of them drawn from the Book of Psalms, for appointed hours of the day and night, while the Euchologion contains the rituals for specific church ceremonies.

3. Textual editions

The printed editions of the texts that were published up to 1976 have been described by Bar-Asher 1977, 6–12, who distinguished between the more and less accurate editions. The text of the Pentateuch and Prophets were republished in Hebrew script in the edition of Goshen-Gottstein/Shirun (1973), according to the best facsimiles available at that time. A stern critique of this edition was published by Sokoloff/Müller-

Kessler 1998. Recently, the text of Psalms was printed in the second volume of this series (Goshen-Gottstein/Shirun 2009). The manuscripts from the earliest period have been republished in recent years by Müller-Kessler/Sokoloff (1996–9). Desreumaux (1997) has published most of the fragments of the Codex Sinaiticus Rescriptus (reviewed in Müller-Kessler 1999a). The currently available editions of the later manuscripts are inadequate for modern research and there is a great need for new collations.

4. Reference works

Though an important contribution in their time, the long-standing reference works by Schultheß (1903 and 1924) are now outdated. Many of the characteristics of the dialect were established in Bar-Asher's significant study of the available sources (1977), in which he clearly presented the differences between the early and late strata. A systematic grammar of the phonology and morphology is found in Müller-Kessler 1991 (see Beyer 1995). A syntactic description which will take account of both the Greek Vorlage and of the syntactic structures of contemporary Palestinian remains a major desideratum. Shirun 1982 deals with nominal clauses, but both the organization and presentation of this work render it difficult to use.

Schultheß 1903 remains the only comprehensive lexicon, but naturally does not take account of subsequently published texts. While most subsequent textual editions have been accompanied by glossaries, these cannot substitute for a comprehensive new lexicon, which is now reportedly in preparation (Müller-Kessler, oral communication).

5. Dialect grouping and selected linguistic features

For the reasons outlined above, a description of this dialect's linguistic profile must take into account the provenance of the source. The earlier sources are the most reliable witnesses to the language in its living form, and even these may have been subject to some outside influences (Müller-Kessler 1999b). The evidence from the earliest sources demonstrates that geographically and linguistically, CPA shares many features with the PA dialect group, of which some are shared developments and others the preservation of archaic features lost in the Syrian and Mesopotamian dialect group. The following list presents representative examples of some of CPA's shared and distinctive features, but is not exhaustive.

5.1. Script

While the script is a developing form of Syriac Estrangelo, the CPA alphabet contains a unique symbol, an inverted *pe* which is used in early sources to transcribe Greek π . In later manuscripts it also represents the unvoiced Aramaic *p* (Müller-Kessler 1991, 27–28).

5.2. Phonology

Several striking phonological features have considerably altered the structure of the dialect in comparison with its more conservative compatriot, JPA, but relate it closely to contemporary SA: (1) the loss of the pharyngeals (Bar-Asher 1993, 61–66), e.g. ܫܒܕܐ *šibād* < **šibḥad* ‘a few’; (2) the loss of the *shewa*, which has either entirely elided, e.g. ܐܙܒܢܐ *azben* < *zəben*, or shifts to a full vowel, e.g. ܟܬܐܒܐ *kitābā* < **kātābā* ‘the book’ (Bar-Asher 1988, 39–44); (3) the shortening of unstressed *ī vowels in closed syllables, e.g. ܡܝܩܡܐ *miqām* < **māqīm* (Bar-Asher 1988, 44–47, Bar-Asher 1993, 58–61); and (4) the merger of the *o and *u vowels into two allophones of a single phoneme, e.g. in an open syllable ܐܘܠܐ *’uled* < **’oled* < **’awled*, and in a closed syllable ܝܪܓܡܢܐ *irgumon* < **irgumun* (< **irgāmun* < **irgāmūn* < **yirgāmūn*) (Bar-Asher 1977, 483–505).

5.3. Some notable morphological features

5.3.1. Noun morphemes

In the early sources, the distinction is maintained between the absolute and emphatic forms of the noun, as in PA. These discrete forms are often lost in the later manuscripts (Bar-Asher 1977, 308).

5.3.2. Object pronouns

The use of the object pronoun *-i* instead of historical *-ni* is notable, e.g. ܐܝܬܐܢܝܐ *’he saved me*’ (Schultheß 1924, 78; Bar-Asher 1977, 18; Müller-Kessler 1991, 70–1). This is a feature characteristic of PA (Dalman 1905, 362; Ben-Hayyim 1967, 243; Macuch 1982, 132).

5.3.3. Verbal stems

As well as the six verbal stems common to the Late Aramaic dialects (G, D, C, Gt, Dt, Ct), CPA texts contain evidence for the existence of distinct *pā’el* and *etpā’el* forms without the gemination of the middle radical. The Gt and Dt stems occasionally show the assimilation of the *taw* morpheme, producing forms that are indistinct in their orthography from the C-stem, e.g. ܐܘܪܝܬܐܢܐ *’are written*’. Both of these phenomena are common PA (Bar-Asher 1987; Bar-Asher 1988, 50–53).

5.3.4. Perfect

Notable are the 3f.pl. forms with a final *-i* vowel such as ܬܝܬܝܬܐܢܐ *’they feared*’. The pointing of the final *yod* indicates that the vowel was actually pronounced (Bar Asher 1977,

325; Müller-Kessler 1991, 152). The same morpheme is found in SA (Macuch 1982, 143), while similar forms are found in JPA (Fassberg 1990, 164–5; Boyarin 1981, 623–33).

5.3.5. Imperfect

The 1c.s. prefix may be either *aleph* or *yod*, apparently reflecting a single pronunciation of *i-/e-*. The 1c.s. n- prefix, which is attested in the other PA dialects, appears not to be used in CPA, and the few apparent examples may be regarded as scribal errors (Bar Asher 1977, 355 n. 76).

5.3.6. Participle

CPA shares with the other PA dialects the widespread use of the *pā'ōl* pattern as an alternative to the pan-Aramaic *pā'il/ pā'el*, though its use with a nominal meaning still predominates (Bar-Asher 1977, 291–95; Bar-Asher 1988, 53–55; Kutscher 1976, 30–31; Ben-Hayyim 1967, 109).

5.3.7. Infinitive

It has long been noted that verbal infinitives are rare in this dialect, and that most of the attested examples of the historical infinitives serve as abstract nouns (Nöldeke 1868, 505). Nonetheless, the attested forms are of interest. Particularly striking are the forms of the infinitive without the prefixed *mem*, and the infinitive forms of the derived stems that end in *-ū*. The latter feature is already found in documentary sources from the Bar Kokhba period (Greenfield 1991). The absence of the *mem* is occasionally attested in the G-stem, e.g. 𐤒𐤕 'to carry' (Müller-Kessler 1991, 162), and this stands in contrast to most of the middle Aramaic dialects. The *-ū* suffix is found in the D stem, viz. 𐤔𐤕𐤕 'palsy' (170). The preservation of verbal nouns on the pattern *'aq-tālū(tā)* (Müller-Kessler 1991, 177) without the *mem* characteristic of the infinitive forms in the PA dialects of late antiquity is a feature shared with those dialects (Tal 1983, 212; Fassberg 1990, 169).

5.3.8. Adverbials

The adverbial of time 𐤔𐤕 is common to the PA dialects, but not found beyond them.

5.3.9. Vocabulary

Though no systematic study of CPA vocabulary has been carried out, it has long been shown that CPA shares many lexical items with the other PA dialects. Most of these are recorded in the lexica of JPA (Sokoloff 2002) and SA (Tal 2000).

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34. Syriac

1. Definition
2. Name
3. The context of Aramaic
4. The Syriac scripts
5. The Syriac language
6. Modern use of Classical Syriac
7. References

Abstract

This chapter summarizes linguistic data on Classical Syriac, one of the best attested of the literary dialects of Aramaic (alongside Jewish Aramaic and Mandaic). Classical Syriac survives in restricted ecclesiastical and literary use.

1. Definition

The ‘Syriac’ under discussion here is primarily the Classical Syriac of the (mostly theological) Middle Eastern Christian literature from the anonymous *Odes of Solomon* (c. 125 CE?) to Barhebraeus/Bar ‘Ebrōyō (13th century CE). The 2nd century CE does not mark an absolute beginning any more than the 13th century marks an absolute end: the treatment below also covers the ‘Old Syriac’ inscriptions and the continued use of classical literary Syriac in later times (*ktōbōnōyō*). It does not include discussion of Ṭurōyō or the North-Eastern Neo-Aramaic languages.

2. Name

The term ‘Syriac’ like many terms in the field of Semitic, including the term ‘Semitic’ itself, is potentially both confusing and controversial. What used always to be called in English the ‘Syrian Orthodox’ church now prefers the title ‘Syriac Orthodox’ in a conscious effort to avoid identification with the Syrian Arab Republic or any specific geography. Though an understandable viewpoint, this involves the neologism of using the term ‘Syriac’ for something other than a language. The linguistic usage of ‘Syriac’ has been established in English since the early 17th century, though it was sometimes used of Aramaic in general (Biblical Aramaic and the Aramaic of Jesus). From the 19th century onwards it came to be restricted to the specific form of Aramaic associated with the Middle Eastern churches of Syria/Lebanon, Iraq and Turkey (with some remoter pockets in Iran and beyond). There is still some ambiguity, however, and some remnants of the vaguer usage persist (e.g. ‘Palestinian Syriac’ for Christian Palestinian Aramaic). The terms ‘Modern Syriac’ and ‘Neo-Syriac’ are quite widely used for the surviving spoken dialects of eastern Aramaic, though there are considerable differences between the known modern vernaculars and the classical language.

It is necessary to begin with some remarks on the context of Aramaic.

3. The context of Aramaic

Within the most widely used system of chronological classification of Aramaic dialects, that proposed by Fitzmyer (1979, 57–84; 2004³, 30–32), Syriac falls into the phase of ‘Late Aramaic’, with a Middle Aramaic precursor in the form of Old Syriac. Despite the fact that Aramaic in various forms is attested widely and over a long period (from c. 900 BCE to the present), continuities in particular geographical regions are hard to trace. Syriac is associated especially with the region of Edessa (modern Şanlıurfa in Turkey; cf. Segal 1970), but we have very little Aramaic from this area of northern Mesopotamia in earlier times, so that it is not easy to trace earlier stages of the emergence of this particular dialect. Scholars have naturally turned to other better-known Aramaic dialects which are attested from earlier times in other regions (the Egyptian Aramaic of the Achaemenid period, Judaean Aramaic of the Roman period, Arsacid period Aramaic in places like Hatra, etc.), but it is unlikely that any of these different dialects provide an accurate reflection of the Aramaic of the Edessa region in earlier times.

The study of Middle Aramaic has tended to be dominated by a paradigm which assumes that Aramaic was unified under the Achaemenids and then split into separate dialects in post-Achaemenid times. This paradigm is defensible in terms of the emergence of the separate scripts (cf. 4.), but it is misleading when applied to the underlying linguistic realities. Folmer (1995) and others have shown that Achaemenid Aramaic was far from unified, while Boyarin (1981) has shown that a family-tree model of the emergence of Middle Aramaic (common descent from Achaemenid Aramaic) does not work linguistically. The evidence suggests that there was considerable variety in the spoken Aramaic of the Achaemenid period and the impression of unity was created by the fact that a particular dialect was adopted as a *lingua franca*, the same *lingua*

franca developing subsequently into a Standard Literary *koiné* (Greenfield 1974) which continued in use over a wide area (see discussion in Healey 2008). Alongside this *koiné* the various dialects continued to develop in a dialect continuum. The Aramaic of the Edessa region was *one* of these dialects, which was turned into an official language in pre-Christian Edessa and then into a Christian literary language.

4. The Syriac scripts (Fig. 34.1)

The scripts used for the different dialects of Middle Aramaic appear to have had a common origin in the Achaemenid period. Released from the unifying demands of mutual legibility in official communications, the scripts developed regional characteristics and these regional scripts correspond broadly to variations in the dialects known to us through epigraphy. Thus the Nabataeans developed their own script for their dialect, the Palmyrenes also and the Hatrans. In Edessa a distinctive form of script developed which has its closest known relative in the Palmyrene script. It is occasionally difficult to decide whether to classify a particular inscription as Syriac or Palmyrene in the absence of clear linguistic criteria.

The Syriac script has a conceptual unity in that it has a consistent set of rules determining not only the direction of writing and fundamental shapes of letters (inherited from Achaemenid scripts), but also determining the joining of letters and the provision of special final forms. These essential elements are already visible in the earliest Syriac texts, the so-called ‘Old Syriac’ inscriptions and documents. However, even at that very early stage the script could be realized in more than one way, varying in accordance with usage (see Healey 2000).

Most of the Old Syriac texts are carved on stone or set in mosaic (Drijvers/Healey 1999). Three are legal documents written on parchment (P1–3 in Drijvers/Healey 1999). Though few in number, these documents constitute quantitatively the major part of the surviving material (over 100 lines of text). The inscriptions on stone are often rather angular and resemble the *estrangelā* script of slightly later times; the inscriptions in mosaic reveal more cursive features (imitating writings on papyrus/parchment?); the legal documents are written in a fully cursive character with many features similar to the *serṭō* script found in later texts, especially those associated with the Syrian Orthodox.

Whereas the traditional perception of the history of the Syriac script treated the *estrangelā* script as a proto-script from which the *serṭō* derived, the true situation seems to be that the two were used alongside each other already in the earliest known Syriac for different purposes: an *estrangelā*-type script was formal and monumental, while a *serṭō*-type script was informal and cursive, used for everyday purposes. There are continued traces of the informal, *serṭō*-type script in the colophons of later manuscripts which use *estrangelā* for the main body of the manuscript.

A third script is usually distinguished from the other two: it is an eastern version of the *estrangelā* script, fully developed later and closely associated with the Church of the East (otherwise often known as the Nestorian Church). This third script is often referred to as ‘eastern’ or ‘Nestorian’ (though the latter term perpetuates an historical misnomer).

Transliteration	Sertō	Eṣṭrangēlā	Eastern
ʾ	ܐ	ܐ	ܐ
b	ܒ	ܒ	ܒ
g	ܓ	ܓ	ܓ
d	ܕ	ܕ	ܕ
h	ܚ	ܚ	ܚ
w	ܘ	ܘ	ܘ
z	ܙ	ܙ	ܙ
ḥ	ܚ	ܚ	ܚ
ṭ	ܬ	ܬ	ܬ
y	ܝ	ܝ	ܝ
k	ܟ	ܟ	ܟ
l	ܠ	ܠ	ܠ
m	ܡ	ܡ	ܡ
n	ܢ	ܢ	ܢ
s	ܣ	ܣ	ܣ
ʿ	ܥ	ܥ	ܥ
p	ܦ	ܦ	ܦ
ṣ	ܨ	ܨ	ܨ
q	ܩ	ܩ	ܩ
r	ܪ	ܪ	ܪ
š	ܫ	ܫ	ܫ
t	ܬ	ܬ	ܬ

Fig. 34.1: The Syriac scripts (with final forms)

These three versions of the Syriac script (sufficiently different from each other to present problems for learners) share the fundamental feature of being basically consonantal. There developed, however, western and eastern systems for marking vowels. The western system used stylized Greek letters A, O, E, H and OY, reduced in size, above and below consonants to indicate the following vowels: /a/, /ō/, /e/, /ī/, /ū/. The eastern system used dots above and below the line to mark similar distinctions. Not all distinctions of quality and length were represented unambiguously and this makes it difficult to reconstruct actual pronunciation except on the basis of the traditional (i.e. modern) ways of reading of the texts within the church tradition. (There is some variation in reading tradition, e.g. between Tūr ‘Abdīn and the Lebanon.)

This problem can be illustrated by two examples. (i) The long /ā/ of earlier Aramaic (as assumed in the tradition of reading of Biblical Aramaic, Jewish Aramaic, etc.) is realized in eastern Syriac as /ā/, but in western Syriac as /ō/ (cf. 5.2.2.). (ii) The *shewa*, reconstructed in traditional scholarly treatments as resolving consonant clusters (typically at the beginnings of words, where it is known that a vowel present in earlier Aramaic has been dropped), is not in fact represented in any of the scripts and is often treated as a figment of the western scholarly imagination by native speakers or readers of Syriac. Thus in the transliteration of *k^etab* the *shewa* is not represented in the script and it is not consciously pronounced in the native tradition: where it appears in scholarly works it involves an element of etymologizing reconstruction.

There are other graphic signs used in the Syriac script as aids to correct pronunciation and interpretation (Segal 1953). The most important of these became incorporated into the alphabet, the dot above {r} distinguishing it from {d}: ܐ v. ܕ (*estrangelā* versions). Others are used less systematically and affect both meaning (a double-dot sign served to distinguish plurals from singulars, since unvocalized forms are otherwise often ambiguous) and pronunciation (dots below {b}, {g}, {d}, {k}, {p} and {t} to indicate pronunciation as spirants: /v = b/, /g/, /d/, /k/, /f = p/, /t/). A dot above marked the plosive pronunciation. Thus in *k^etab* / *k^etab*, there would be a dot above the {k} and dots below the {t} and {b}. (Since spirantization of these consonants is originally the result of an immediately preceding vowel, the spirantization of /t/ indicates that there was a vowel between the first two letters of the word at some stage in its history: hence the scholarly insertion of the *shewa*).

5. The Syriac language

The language is dealt with here under three headings: Old Syriac, Classical Syriac and ‘Modern Use of Classical Syriac’.

5.1. Old Syriac

The Old Syriac material consists of about 120 inscriptions and three lengthy legal parchments (Drijvers/Healey 1999). All come from the region of Edessa, though the legal documents appear to have been carried around by their owners and were found outside the city. The earliest dated text comes probably from 6 CE (date not entirely

certain; indisputable is the date of an inscription of 73 CE); the legal documents are dated in the early 240s CE. None of these texts could be described as literary and none shows any sign of Christian content.

There is some variation in this corpus, a fact which imposes a degree of methodological caution. One of the dialects represented is very close to the later Classical Syriac; the other is more remote. Arguably the more remote dialect should be treated independently as a non-Syriac dialect which happens to use the Syriac script. Both dialects appear to be represented in Edessa and its immediate region.

The major feature which separates the two dialects is the form of the 3rd masculine singular imperfect of the verb (in all verbal stems). One group of the texts displays the form *yqtl*, while the other has *nqtl*. Although there is no direct evidence of vocalization, it is reasonable to assume that these represent *yī/eqṭūl* and *neqṭūl*. The former corresponds to the *yī-* prefix form of earlier Aramaic and later western Aramaic (e.g. Judaeoan, Nabataean, but also Palmyrene), where the *yī-* prefix was retained. The latter corresponds to the *ne-* prefix of Classical Syriac and is more in line with the forms in Hatran Aramaic (*l-*), Mandaic (*n-*) and, for the most part, in Jewish Babylonian Aramaic (*n-* and *l-*). This variation affects the whole verbal system and it is a feature which many scholars have used as a criterion in distinguishing western and eastern branches Aramaic.

So far as Old Syriac is concerned, this variation is susceptible to a number of different possible interpretations. The evidence of dated inscriptions suggests that the *yī-* form is confined to inscriptions dated before c. 190 CE, while the *ne-* form becomes the norm thereafter. This might suggest the gradual normalization of what was at first regarded as colloquial. The alternative interpretation would be to see each form as representative of dialects current in Edessa and its region, variants within the dialect continuum. These two explanations are not mutually exclusive: the colloquial variant (*ne-*) might have eventually been normalized through use in particularly prestigious literary texts such as the translations of the Bible.

There are other, less dramatic, features which distinguish the Old Syriac material from Classical Syriac, such as continued and systematic distinction between original *s* and *ś* by use of {š} for the latter in etymologically transparent words such as *šryn* ('twenty') and *šmt* ('I erected'). Similarly, pre-consonantal /n/ is normally retained in writing at least (*'ntt'*, *'ntt*, etc.), but once we find *'tt* for *'ntt* (Drijvers/Healey 1999, Am3: 7), which suggests that written forms like *'ntt*, as in Classical Syriac, had already assimilated the /n/. These forms are merely historical spellings, a hangover from the Achaemenid orthographic tradition.

It is noteworthy that there is a relatively high incidence of Greek and Iranian loanwords in the Old Syriac texts (Healey 1995). This remark must be tempered with the observation that the majority of Greek loans are found in the Roman dating formulae which occur in the legal parchments (drawn up in Roman Edessa) and do not of themselves prove that Greek had had a major impact on the language of Edessa in this early period. However, Edessa had been refounded c. 303/2 BCE as a Seleucid city and it had a Greek-dominated administration at least until its local Aramaean or Arab dynasty became established in the middle of the 2nd century BCE. From the earliest evidence of Classical Syriac literature we can see clear Greek impact in a wide range of semantic fields, e.g. in the *Book of the Laws of Countries* (dialogue of Bardaišan, early 3rd century CE and, at least in its original form, predating the legal parchments) (Schall 1960, 71–80 and in general).

5.2. Classical Syriac

As soon as we reach the Classical Syriac of the earliest surviving literature, Christian in authorship, though quite varied in content, we are dealing with a language which is far more unified. Even so, there is more variability in the texts than is usually assumed, as has been pointed out by van Rompay (1994) (cf. Joosten 1999; Brock 2003).

5.2.1. Classical Syriac literature

A survey of the whole of Syriac literature is not possible within this context. For surveys ancient and modern see Wright (1894; reprint 1966), Baumstark (1922) and Brock (1997). Literary sources include both translations from other languages, especially from Greek, and original compositions.

Many of the earliest works in the language come from the Edessa region, which is regarded as the original base for the emergence of Syriac as a literary tongue. How this essentially local language spread so widely so quickly is not easy to see, but within a few centuries Syriac is attested not only as the language of the immediate area of Edessa, but also further east in the Tūr ‘Abdīn of south-east Turkey. The great religious poet Ephrem the Syrian (d. 373) only spent the last few years of his life in Edessa, having lived and composed poetry for decades in Nisibis. At the latest by the early fifth century the Church of the East in Mesopotamia was conducting its affairs in Syriac (as we see from surviving church documents). Indeed, one of the earliest known Syriac authors, Aphrahaṭ (*floruit* c. 340), lived within the Sasanian Empire.

The translation of the New Testament into Syriac and the formation of the Peshitta (*pšittā*, ‘simple, plain [translation]’) Bible, finalized and promulgated in the early 5th century, through a complex process which may have involved the adaptation of pre-existing local Jewish translations of the Old Testament (Brock 2006), was particularly decisive in the expansion of Syriac, since the Syriac of the Peshitta had a wide-ranging impact on Christians of the Middle East. Even those Aramaic-speaking Christians whose own dialect was not Syriac and not Edessan Syriac began to regard the Syriac of the Peshitta as normative. The situation is like that of the Arabic of the Qur’ān, which became the prestige language of Arabic-speaking Muslim converts as well as the religious ideal for non-Arabic speakers. As the Christian era progressed many Greek patristic texts were translated into Syriac, not least because the Syriac churches became embroiled in the Christological controversies which shook and divided the Byzantine world.

After the arrival of Islam, the position of Syriac as the unique literary language of the area was gradually challenged by Arabic. In areas where Classical Syriac was not the vernacular, resistance to the spread of Arabic became an issue of identity in which a division emerged between the use of Aramaic dialects domestically and the increasing use of Arabic and later Kurdish in the public arena, where interaction with the Arabic- and Kurdish-speaking Muslims was involved. Subsequently Turkish too played its part. Syriac thus retreated from widespread general use to use in restricted spheres: in the church context and in the village and household contexts. In the latter, it was naturally the local Aramaic dialects rather than the Classical Syriac of the great literary tradition which prevailed, though it appears that a form of language close to the Classi-

cal was used even in business documents (as is suggested by legal ostraca from 9th century Tikrit [see Harrak 2009]). Brashear (1998; corrections by Brock 1999) published a 7th-century letter on papyrus. The vernaculars eventually received scholarly attention from western missionaries in the 19th century and scientific linguists of the 20th and 21st (note especially the many publications of Jastrow and Khan, and the survey by the latter in Khan 2007. See also ch.s 39 and 40 in this volume.).

Classical Syriac continued to be written extensively during the first few centuries of Muslim rule. Theologians and historians continued to prefer it, though some of the later historians, such as Barhebraeus (d. 1286), would also write in Arabic. Indeed one of the special roles which Syriac fulfilled during the Abbasid era arose because of the existence of Syriac-speaking translators who, largely as a result of demand at court, translated Greek philosophical and scientific works, especially medical works, into Syriac and then into Arabic (Gutas 1998).

There was, however, a slow and inexorable decline in the prominence and prestige of Syriac so that after the 13th/14th centuries there are no *major* authors producing works in Syriac. This is not to say that the writing of Classical Syriac ceased, as Brock (1989) especially has noted (following on from native literary historians).

The golden age of Classical Syriac had lasted from the early second century CE to the 13th century CE. It is this language which forms the basis for the descriptive remarks which follow.

As we have seen, Syriac belongs in terms of classification to Late Aramaic with a Middle Aramaic precursor. It can be regarded as the most important of the Late Aramaic dialects and developed into a major literary language (unlike Nabataean, Palmyrene and Hatran, which had disappeared completely by the 4th century CE). It is also different from Mandaic in that its continuous grammatical and scribal tradition means that our understanding of it is virtually complete: learning Classical Syriac is like learning Latin, once you have grasped its structures you can read the whole literature with little difficulty, perhaps with the exception of highly technical scientific and medical material, which tends to be full of specialist vocabulary. The poetry is often difficult or even baffling, leading Segal (1970, 89) to give a negative assessment even of Ephrem the Syrian. But Syriac has a coherence which sets it apart from the Jewish Aramaic of the *Babylonian Talmud*, which is not unified and which reflects to a much larger extent the spoken language situation of the communities concerned. One of the consequences of this situation is that Classical Syriac lends itself uniquely among the different forms of Aramaic to a full grammatical and syntactical study: it is thus still a popular area for linguistic research, as may be seen in the many modern publications and contributions in periodicals like the *Journal of Semitic Studies* and *Aramaic Studies*.

More attention has been given in recent times to the native grammatical tradition, though there are still many lacunae in our knowledge of the grammatical works by the Syriac authors themselves. Note may be made of the summary article of Talmon (2000). It is sufficient in this context to draw attention to the surviving works of two major figures in the tradition, Jacob of Edessa (d. 708), who operated within a Greek cultural framework and applied Greek grammatical concepts to Syriac (and also devised an early form of the western vocalization system: see Segal 1953), and Barhebraeus (d. 1286), whose works show how deeply the grammatical tradition came to be influenced by the Arab grammarians.

Classical Syriac has been repeatedly and authoritatively described by numerous great Semitists of the western tradition (Duval 1881; Nöldeke 1904 [reprint 2001; German original 1898² [reprint 1966]; Brockelmann 1899 [and later editions]; Muraoka 2005²). Certain features of Syriac are worthy of note, including the following:

5.2.2. Phonology (see Daniels 1997)

The Syriac script in its fullest version frequently marks the elision of assimilated consonants, using a supra- or sublinear line (the *linea occultans*), while retaining historical spelling. The consonant most subject to assimilation is /n/, which always assimilates when directly followed by a consonant. In verbs beginning with N (such as NPL, ‘fall’) the assimilation originally resulted in doubling of the following consonant, though this was not marked and the first root letter is not visible in written forms. At the same time we know that real doubling of the consonant has in modern times been reduced to a non-doubled pronunciation, at least in western Syriac (i.e. the Syriac of the Syrian Orthodox Church). Thus *ypwl* represents:

**yinpōl > yippōl > yipōl.*

The doubling of the {p} could be reflected in carefully written manuscripts by the placing of a dot over it to mark plosive rather than fricative pronunciation, since an originally doubled consonant resisted spirantization.

In other cases, typically in nouns, an assimilated /n/ is retained in historical spelling, while the reader is often reminded that it is not pronounced by the use of the *linea occultans*. The same line is used for other elisions such as /ʔ/ (*nāš* pronounced *nāš̄* and *sālqīn* pronounced *sāqīn* and *bart* pronounced *baṭ̄*). While the loss of vowelless /ʔ/ is a common feature of pronunciation and orthography, the loss of /l/ and /r/ is much rarer and is probably to be explained in terms of the ‘liquid’ consonants as in the much more common loss of /n/. (Nöldeke 1904, 22–23; 1898², 21–22 [§§ 28–31])

Another major feature of Classical Syriac phonology is the difference in the vocalic pronunciation traditions of the East and the West (cf. 4.).

Broadly the East preserves an historically more ancient tradition, as can be seen from the fact that it coincides more closely with other branches of Aramaic of known vocalization. The most striking example can be experienced even by a non-Aramaicist listening to the reading of texts in the two traditions. In the East the vowel transliterated traditionally as /ā/ is pronounced long and open, as in English ‘father’. This vowel is statistically very frequent in Syriac: it appears at the end of nouns and adjectives of the most common morphological type and in the first syllable of all simple-stem participles. The sound of western Syriac thus presents an immediate and strong contrast since this vowel is pronounced in the West as /ō/ (sometimes short) as in British English ‘raw’, American English ‘more’. Thus the overall sound of the two ‘accents’ is quite different:

East: *lā (h)wā hānā nagārā brāh dmaryam*

West: *lō (h)wō hōnō nagōrō brōh dmaryam*

(‘Is this not the carpenter, the son of Mary?’, Matt. 6: 3)

Although this is the main difference between East and West, it is not the only one. Another is the fact that East Syriac preserves an ancient distinction between original

/ō/ and /ū/ which is lost in West Syriac pronunciation, so that both vowels ended up the same, as /ū/ (eastern *qātōlā* > western *qāṭūlā*, pronounced *qōṭūlō*). (A dot is frequently placed below the *mater lectionis* {w} to indicate pronunciation as /ū/.)

We have already noted the slightly ambiguous situation over *shewa*. The distinction in Biblical Aramaic and Hebrew between silent and vocal *shewa* does not arise in Syriac since there is no sign representing the shortened vowels implied. It is difficult to know at what stage the unstressed vowels in question were shortened and then eliminated, but Beyer 1984, 128–136 is of the opinion that this took place by the 3rd century CE.

5.2.3. Morphology

Syriac belongs in terms of conventional classification to the eastern branch of Middle/Late Aramaic and displays features which it shares with Jewish Babylonian Aramaic and Mandaic.

The most important of these features has been understood traditionally as the key isogloss setting off eastern from western Aramaic and concerns the prefix of the imperfect of the verbal forms in the 3rd masculine singular and 3rd masculine and feminine plural. The universal prefix in Classical Syriac is *ne-* and this contrasts with all the western dialects, which have *yi-*. The situation of the eastern dialects is, however, somewhat more complicated. Hatran Aramaic has a *l-* prefix, while in Mandaic we find *n-* and in Talmudic Aramaic we find a variety of forms, normally *l-* or *n-*, though occasionally *y-*, this latter either an archaism or a reflection of dialectal variety *within* eastern Aramaic. Despite these complexities, it seems clear that the *l-/n-* prefix imperfect is an eastern feature and *n-* is certainly universal in Syriac. This very universality makes the *y-* prefix of the earliest inscriptions, normally counted as Syriac, stand out.

There is no separate jussive: the form used is identical with the imperfect in all cases. (Note apocopated forms of HW' with no special meaning: Nöldeke 1904, 124; 1898², 128 [§ 183 (8)].)

Also in verb morphology, Syriac has gone over completely to an ' - prefix in the perfect of the causative verbal theme. Western dialects vary considerably, but many use *h-*, as in Biblical Aramaic (predominantly) and Hebrew.

Verbal themes or stems are restricted to six.

Tab. 34.1: Verbal themes

	active	passive/reflexive
simple	<i>p'al</i>	<i>'etp'el</i>
intensive/factitive	<i>pa'el</i> (originally with doubled middle root letter)	<i>'etpa'el</i> (originally with doubled middle root letter)
causative	<i>'af'el</i>	<i>'ettafal</i>

There are some other, lexicalized forms which have their origin in derived stems which must once have been productive (such as *ša'bed*, 'to enslave', the *šaf'el* of 'BD, 'to serve'). The simple stem passive (*p'il*) found in earlier forms of Aramaic (and

increasingly rare, though possibly attested in Palmyrene) has disappeared, being replaced by *ʿetpʿel*. As in other Semitic languages, actual forms of the different stems are often lexicalized, with meanings which cannot be derived systematically from the meaning of the simple stem (where it exists).

Infinitives from all the stems have an initial *m-* and normally appear with an *l-* prefix equivalent to English ‘to’: *lmeqʿal*, ‘to kill’.

The Syriac demonstratives are variants on the forms which appear in other types of Aramaic, the *hānā* of the masculine singular ‘near’ demonstrative being the only remarkable form.

Tab. 34.2: Demonstrative pronouns

	‘near’ demonstrative	‘remote’ demonstrative
masculine singular	<i>hānā</i>	<i>haw</i>
feminine singular	<i>hāḏē</i>	<i>hāy</i>
plural	<i>hālēn</i> (common)	<i>hānōn</i> (western <i>hānūn</i> , feminine <i>hānēn</i>)

It is to be noted that these demonstratives can be placed before or after the referent.

In principle Syriac retains the full and elaborate system of noun and adjective morphology of Aramaic, distinguishing three states, the two genders and singular and plural (but with no dual except residually in the numeral ‘two’ [*trēn*]). The three states are ‘emphatic’ or ‘determined’, absolute and construct. Both ‘emphatic’ and ‘determined’ are misleading traditional terms which could usefully be replaced by ‘ordinary’ or ‘normal’.

Tab. 34.3: Nominal/Adjectival morphology

	masculine singular	plural	feminine singular	plural
ordinary/emphatic	<i>ṭāvā</i>	<i>ṭāvē</i>	<i>ṭāvtā</i>	<i>ṭāvātā</i>
absolute	<i>ṭāv</i>	<i>ṭāvīn</i>	<i>ṭāvā</i>	<i>ṭāvān</i>
construct	<i>ṭāv</i>	<i>ṭāvay</i>	<i>ṭāvāt</i>	<i>ṭāvāt</i>

Although the theoretical paradigm presents the forms, it may be noted that syntactically the absolute is restricted in use to nouns in numerical and distributive expressions, though commonly used in adjectives to form predicates. The construct is rarely used for adjectives (only when they stand as substantives) and is in general statistically not very common (since the genitive is normally expressed analytically [cf. below in this paragraph]). The so-called ‘emphatic’ state marked definiteness in earlier Aramaic, but this characteristic has been totally lost in Classical Syriac: only context can determine whether *malkā* refers to ‘the king’ or ‘a king’.

Of the forms represented here note may be made of the ordinary masculine plural in *-ē*. This form, replacing the older *-ayyā*, had already become widespread in Palmyrene, Hatran and Old Syriac.

There are distinctive Syriac developments in the uses of certain particles.

d-, always prefixed to the word which follows, has the following uses:

- to mean ‘of’
- as the invariable relative particle
- as a subordinating conjunction (either alone meaning ‘that’ after verbs introducing indirect speech or ‘in order that’ or in combination with other words, as in *bāṭar d-*, ‘after ...’)

It is also used to introduce *direct* speech, in which case it has no translation equivalent in English (equivalent to quotation marks indicating direct speech). Note also *lam*, a particle that indicates that the associated words are a quotation, effectively ‘he said’ in parentheses.

The use of *d-* to mean ‘of’ is extremely widespread and in Syriac it replaces and renders largely redundant the older Semitic construct. The construct remained productive, but it became the exception rather than the norm for genitive expressions and fossilized set phrases form the majority of occurrences. Thus, for example, *bēt nūrā*, ‘fire-temple’ (literally ‘house of fire’). Such set phrases sometimes came to be treated as real compound nouns: *b’eldvāvā*, ‘enemy’ (< *b’el dvāvā*, literally ‘man of legal process’), which could not be rephrased analytically using *d-* (Nöldeke 1904, 161–62; 1898², 154–5 [§ 205(A)]).

When *d-* is used to form genitive constructions it is common, and preferred style, to add an anticipatory pronoun to the *nomen regens* which refers forward to the *nomen rectum*. Thus ‘the apostle of Christ’ is either *šlīḥā ḡamšīḥā* or *šlīḥeh ḡamšīḥā*, the latter meaning literally ‘his apostle of Christ’.

Phonetically *d-* and a series of other monosyllabic words are treated in the same way: *w-* (‘and’) and the prepositions *b-* (‘in, with’) and *l-* (‘to, for’). (This last is also used as an object-marker. It exists already in Biblical and Egyptian Aramaic, becoming more common in later dialects. *yt* appears as an object-marker also, though it is rare and a Hebraism, a calque on *’et-*). These prefixed particles are followed by an /a/ vowel when there is no vowel after the first consonant of the following word. Otherwise they remain vowelless. Thus adding *w-* to *malkā* produces *wmalkā*, but adding it to *šlīḥā* produces *wašlīḥā*. This rule applies mechanically even if what follows the prefix is itself a prefix, thus ‘the one who is in heaven’ becomes *dvašmāyā* (< *d + b + šmāyā*).

5.2.4. Syntax

Some aspects of syntax have been touched on above (5.2.3.). There is much research still to be done on Syriac syntax. What follows concentrates on a few particularly problematic areas.

The tense system of Classical Syriac retains the traditional ‘perfect’ and ‘imperfect’ forms, the latter normally with future significance, while extending the range by using analytical forms combining participles and even already-finite forms with the verb ‘to be’ (and also with *’l-*, see below). Thus:

šqal (perfect) ‘he took’

šāqel (masc. sing. active *p’al* participle of ŠQL: separate pronoun unnecessary in the 3rd person) ‘he is taking’

šāqel (h)wā (active *p’al* participle of ŠQL + perfect of HW, with /h/ elided) ‘he was taking’

šqal (h)wā (perfect of ŠQL + perfect of HW) ‘he had taken’ or ‘he took’ (punctual)

There are also other more subtle combinations.

The existential predicator ܐܠܐ, fundamentally ‘there is’, plays a peculiar role in Syriac, developing into a pseudo-verb (taking pronominal suffixes as for a plural noun) and often used in combination with the verb ‘to be’ (*hwā*). The negative version of the same particle is *layt*, though this retains its non-verbal character. (It is interesting that Arabic *laysa* became a verb.)

Finally, a striking feature of Syriac prose style is the use of the particles *dēn* and *gēr*. The meanings of these are hard to pin down, the usual glosses being ‘but, however, now’ and ‘for, since’. The fact that both are governed by the strict rule that they cannot be placed first in a well-formed sentence and are normally placed second (though ‘after the first main phrase’ would be a more exact formulation) reflects the fact that both came to prominence in the Syriac dialect of Aramaic under the influence of Greek *δέ* and *γάρ*: *man* = Greek *μέν* is less common in earlier texts. At least in the case of *dēn* there may be involved a partially transformed Aramaic etymology in *‘edayin*, common in Biblical Aramaic, which may account for the use of the particle to indicate a new topic rather than contrast with what went before (Bar-Asher *forthcoming*). (Nöldeke emphatically denied the Greek origin of *dēn*: 1904, 101, n. 1; 1898², 98, n. 2; reasserted by Brock 1996, 258).

6. Modern use of Classical Syriac

Syriac did not disappear after the 13th century. Apart from its continued use in liturgy, it continued and continues also in scholarly and literary use. Thus from the 15th/16th centuries we have authors like Iša’yā of Bēt Špīrīnā (d. 1492), Iṣḥāq Qardāḥē Šbadnāyā and Syrian Orthodox Patriarch Nūḥ Leḥnānāyā (d. 1509). Neo-Syriac began to be written down in subsequent centuries, but other works continued to be written in Classical Syriac and western works were translated into it (works like the *Imitatio Christi*). In the 20th century we have Classical Syriac translations of secular western literature (Shakespeare, Dickens and others), as well as the publication of periodicals in or partly in Classical Syriac (Baumstark 1922, 326–34; Macuch 1976, 10–65, 398–484; Brock 1989, 82–3; Murre-van den Berg 2008).

This post-classical use of Classical Syriac — we acknowledge the contradiction in this formulation — was encouraged by the role the language had in the Syriac-using churches. This continued literary language is now usually called *ktōḇḥōnōyō*, literally the ‘book language’, a term which neatly distinguishes it from modern spoken Aramaic, which was not normally written down (except in recent linguistic descriptions). The terminology is not, however, used with complete consistency. Notably, Kiraz prefers to restrict the use of this term *ktōḇḥōnōyō* to the *vernacular* use of Classical Syriac (Kiraz 2007). Such vernacular usage is, however, extremely rare outside the immediate context of the Syrian Orthodox monasteries where Classical Syriac is taught to students who do not otherwise share a common spoken dialect. Classical Syriac functions in this context as Latin did in the past in the Roman Catholic seminaries in Rome. Members of the Syrian Orthodox Church have attempted to extend this usage through publications.

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35. Syriac as the Language of Eastern Christianity

1. From Edesseean to Syriac
2. Different Syriac traditions
3. A Christian literature
4. Syriac and Church missions
5. Language and script
6. References

Abstract

Syriac is the cultural language of the Aramaic speaking Christians. It originated in the form of Aramaic used in Edessa (Urfa), a town which played an important role in the Christianization of the Orient. It emerged in two traditions, the Western, in Upper Mesopotamia and North Syria, where it was used by the 'Monophysite' party, and the Eastern, in the Sassanian Empire, where it was used by the 'Nestorian' church (Church of the East). In both cases, the writings preserved are almost all of a religious nature. After the arrival of Islam, Syriac was progressively superseded by Arabic but the use of the Syriac script in certain places and cases to write Arabic shows the extent to which Syriac was considered linked with Christianity.

1. From Edesseean to Syriac

The language now commonly known as Syriac originated as the Aramaic dialect of the city of Edessa in Osrhoene.

Edessa (modern Urfa), in Upper Mesopotamia, North of Harran, was founded as a colony during the Seleucid Empire and named Edessa after a city in Macedonia. Soldiers of the Macedonian army were settled there and mixed with the local population. The name Orhai, which is given to the city in Aramaic documents, is most probably derived from an earlier form of the toponym, prior to the Macedonian conquest.

At the beginning of the Christian era, Edessa was the centre of a small kingdom whose rulers bore the Arabic names of Abgar and Ma'nu. This kingdom was to be taken over by Rome in the mid 240s. Inscriptions in Edesseean Aramaic, on stone and mosaics, and three texts on parchment, give an insight into the society and culture of this small kingdom. Aramaic speaking and writing, it was situated at the cross-roads of Graeco-Roman, Persian and Arabic influence, with a local Jewish community. Christianity appears to have reached the region quite early on. Although the story of the exchange of letters between king Abgar and Jesus, reported by Eusebius in the 4th century, is clearly a legend (Desreumaux 1993), the narrative of a flood that affected the town in the year 200 AD, which was inserted into the Chronicle of Edessa from the city archives, already mentions the destruction of a 'church of the Christians'. The teaching of the Christian philosopher Bardaisan and the *Acts of Thomas* are but two examples of Syriac literature written in the 2nd century in Edessa. This does not, however, mean that Christianity had any official or prominent position in the city: all the religious inscriptions are in honour of pagan gods, and an analysis of local onomastics also reveals devotion to the old divinities alone (Drijvers/Healey 1999). After the middle of the 3rd century, there is a gap in the documentation preserved in Edesseean Aramaic. New written documents emerge only at the beginning of the 5th century – inscriptions as well as manuscripts – and in both cases these are Christian writings.

The earliest dated Syriac manuscript was copied in Edessa, like the majority of the oldest manuscripts, and was completed in 411 AD. It was preserved in the monastery of Deir es-Suryani in the desert of Scete in Egypt, and now belongs to the collection of the British Library in London (Add. 12150; Wright 1870–1871). As for Syriac Christian inscriptions, the oldest one known (406–407 AD) was recently excavated in Syria and commemorates the completion of a mosaic in a martyrion (Ayash, Balty, Briquel Chatonnet et al. 2008). Although the second oldest inscription mentions the bishop Rabula and probably comes from Edessa (Briquel Chatonnet, Desreumaux and Moukarzel 2008), the majority of the other inscriptions of the 5th century have been found in the region of Antioch. This demonstrates the spread of the Syriac language beyond Edessa and Osrhoene in Christian contexts. From this time on, one should speak not of Edesseean but of Syriac. In the Aramaic speaking communities of North Syria, it was Syriac, and not the local dialect, which was adopted as the ecclesiastical and cultural language, although it was often used alongside Greek.

The early spread of Christianity in the East is not as well known as that in the Mediterranean area, due to the lack of local texts equivalent to the Acts of the Apostles or the Pauline Epistles. Later tradition does however provide some interesting clues. The *Doctrina Addai* states that Addai, one of the 70 disciples of Christ, was sent to Edessa after Pentecost to convert the king and was instrumental in the foundation

of the church there. According to the *Acts of Mar Mari*, Addai himself sent another disciple from Edessa, Mari, to evangelize the whole region from Upper Mesopotamia to Southern Iraq. The region to the East of this was the territory granted to Thomas, who went as far as India. The links of Thomas with Edessa are also very strong: after his martyrdom in India, his mortal remains are supposed to have been brought back to Edessa. These disparate traditions thus agree on the central role played by Edessa in the process of the Christianization of the Middle East. All this is in accordance with the fact that Syriac, that is, the Edesseean Aramaic dialect, was used as the main Christian language in all the communities stretching from modern Iraq into Asia. Even though there existed numerous other local Aramaic dialects along the Tigris valley, as shown for example by the inscriptions of Hatra and Assur (Beyer 1998), the church nevertheless always used Syriac as its own language and not the other local Aramaic dialects.

It is important to note that for all these Christians, Syriac was considered to be a major part of their identity and culture. This is perhaps unsurprising in a civilization which insisted on the importance of script, as opposed to Greek culture which placed greater emphasis on the value of images (Briquel Chatonnet 1991). Until the present day, scribes have continued to produce Syriac manuscripts, and often detail in long colophons the importance this task has in their spiritual life.

2. Different Syriac traditions

Syriac developed as the language of Syriac Christianity in two regions: inside the Roman Empire, in North Syria and Upper Mesopotamia, and the other in the Persian Empire, in Middle and Lower Mesopotamia.

The former was the native region of Syriac, as Edesseean was used there before Christianization. Parchments originating from Dura-Europos or the Middle Euphrates region (Teixidor 1990; Teixidor 1993) are witnesses to a form of cursive and everyday script that was to be the origin of the *serto* script (Healey 2000). This script was thus in its origins a regional one and its confessional use was only the consequence of a later evolution (Briquel Chatonnet 2001). The council of Chalcedon (451 AD), which stressed that Christ was one person in two natures, divine and human, was not accepted by a significant portion of the Christians in Syria and elsewhere in the Orient. Although in the beginning this so-called 'monophysite party', which remained faithful to the definition of Cyril of Alexandria 'One nature, after the Incarnation, of God the Word', was composed of Greek-speaking as well as Syriac-speaking people (its most prominent writers in the 6th century were Severus of Antioch, who wrote in Greek, and Philoxenus of Mabbug, who wrote in Syriac), progressively the boundary between Chalcedonians and anti-Chalcedonians also developed into a linguistic boundary, and Syriac became the language of the anti-Chalcedonians in Syria. Syriac was also the language of the Maronite party, which was to emerge from an attempted christological compromise between the two parties based on the notion of a unique will in Christ, 'monothelitism' (Suermann 1998). Thus the use of both the Syriac language and the *serto* script are common to the Syrian Orthodox and Maronite churches, as well as to the Syrian Catholic church which was born in the 18th century as a Catholic offshoot of the Syrian Orthodox. When the Chalcedonian 'melkite' party, which followed the emperor (*malka*) in the Byzantine Orthodox tradition, also began to write in Syriac, it developed its own 'melkite' script (Desreumaux 2004).

Although Edessa was the cultural centre of the Syriac Christians, they were dependant, at the institutional level, on the patriarchate of Antioch. That became a problem for the Christians in the Sassanid Empire when the Roman Empire became Christian and the Emperor proclaimed himself to be the protector of all Christians (Brock 1982a). Being dependant on a foreign church leader closely linked with a foreign state was most uncomfortable, especially in times of war between Rome and Persia. That is why the Church of the East, whose centre was in Seleucia-Ctesiphon, developed secessionist trends and affirmed its hierarchical autonomy. As early as 410, the acts of its first known synod affirm this position, without asserting any theological difference. Only later did the Church of the East reject the council of Ephesus and refuse to condemn the christological positions of Theodore of Mopsuestia (Baum and Winkler 2003), and so it is incorrectly labelled as 'Nestorian' by other Christians, with reference to the patriarch Nestorios, whose positions were condemned in Ephesus. The patronage was never emphasized by the Church of the East itself. As Syriac was not the local language of everyday life in this region (Beyer 1998), both language and script preserved more conservative features than in the West: the formal or *estrangela* script was in use for a long time and only slowly developed into the so-called 'Nestorian' script.

3. A Christian literature

As Syriac-speaking Christians never formed a realm or a state, their common identity was focussed in their churches and their common patrimony is their language, and the literature produced through this medium. This literature is large, creative, and as it was copied and preserved over the centuries in monasteries, is now almost exclusively of a religious character (Baumstark 1922; Brock 1997). As early as the 2nd century, the major part of the Old Testament was translated from Hebrew into Syriac, forming the core of the *Peshitta* (Brock 2006a; Weitzmann 1999). Around key Biblical figures, apocryphal narratives were composed or translated in Syriac (Debié, Desreumaux, Jullien and Jullien 2005). Exegesis was developed by such authors as Ephrem in the 4th century, Dionysios bar Salibi (d. 1171 AD) among the Syrian Orthodox, and Ishodad of Merv (9th century) in the Church of the East. Poetic homilies were greatly appreciated, and composed in various metres. One of the most popular forms was that in lines of 12-syllables, known in the west as the metre of Jacob of Sarug (d. 521 AD), and in Mesopotamia as that of Narsai (d. 502 AD). Ephrem is known as 'the harp of the Holy Spirit', being the author of a numerous hymns for different moments in the liturgical cycle. Although mention should be made of manuscripts containing works of theology, asceticism, hagiography, grammar, and lexicography, the great majority of surviving manuscripts preserve liturgical books intended for the divine service (Brock 2006b).

Syriac literature and tradition was deeply rooted in the Greek heritage. Oriental Christians translated and adapted Greek texts connected with historiography (Debié 2005), philosophy (Hugonnard-Roche 2004), sciences (cosmography and medicine), as well as patristic theology. Greek influence grew more intensive in the 6th and 7th centuries (Brock 1982b) and different revisions or new versions of the Bible were produced, based on the Septuagint. It was by means of such Syriac translations that Muslim Arabic scholars first became acquainted with the classical heritage and Syriac authors played an important role in the transmission of thought from Greek to Arabic.

4. Syriac and Church missions

Christianity entered the Persian Empire by means of the Sassanian deportations of local Syrian populations during their periodic raids on the Roman Empire (Jullien and Jullien 2002). It developed along the overland and maritime trade routes, and from the 5th century on, into the early centuries of Islam, churches are attested along the Arabo-Persian gulf in Kuwait, Bahrain, Oman and on the island of Kharg. As early as the 6th century, Cosmas Indicopleustes reports the existence of a diocese on the Malabar coast of India (modern Kerala). In the 7th century, Christianity officially reached the capital of the Chinese empire, Xian.

In each case, there is testimony that Syriac was the language of the local church. Several of the most prominent Syriac writers are from Beth Qatraye, the Syriac designation for the Eastern coast of Arabia (Brock 1999–2000). In Kerala, although no Syriac inscription can be securely dated prior to the arrival of the Portuguese (Briquel Chatonnet, Desreumaux and Thekeparampil 2008), the Acts of the Synod of Diamper of 1599, which formalized the links with the Roman Catholic church, condemn numerous Syriac texts which were to be found in Kerala (Zacharia 1994), and several Keralan Syriac manuscripts predating the arrival of Latin missionaries are preserved in the Vatican Library. In China, the famous Xian stele which relates the arrival in the 7th century of the Syriac monk Alopen in the imperial capital, and the emperor's authorisation for the establishment of the new religion, is written in Chinese but with Syriac signatures (Pelliot and Forte 1996). Later funerary inscriptions in Syriac, dating to the Mongol period, are found along the Silk Road, from Kyrgyzstan (Klein 2000) to China (Niu, Desreumaux and Marsone 2004). In 1928 Öngüt princess, Sara, had a beautiful manuscript copied for her, a Syriac Evangelion, but one which follows a Chinese model (Borbone 2003).

Although Syrian Orthodox missionaries did not travel quite as far, its expansion was also linked with a diffusion of its own particular script. One of the most famous collections of ancient Syriac manuscripts was preserved in Egypt, in the monastery of Deir as-Suryani, in the desert of Scete, which was one of the most prominent monastic institutions of the Syrian Orthodox Church in the 10th century. Syriac manuscripts were also copied in *serto* in outposts such as Palestine and Cyprus, and the script was also in use in Mesopotamia, where 'monophysite' communities were established from the 6th century onwards.

5. Language and script

The development and history of the Syriac script continued even after the use of the Syriac language itself declined among Near Eastern Christians, for the Syriac alphabet was used to transcribe Arabic, a phenomenon given the mysterious name of *garshuni* (Briquel Chatonnet 2005). As the Arabic alphabet has 28 letters and the Syriac only 22, this transcription was not straightforward and involved either some ambiguity in reading or the addition of diacritic points. The aim was not to have a cryptic script, as anyone could learn the Syriac alphabet, nor was it due to an ignorance of the Arabic script, since Christian Arabic manuscripts are known long before the appearance of

garshuni. This transcription was related to the issue of identity: Syriac script was understood as a Christian script and people wanted to use it to declare their Christian faith and to share this cultural heritage within their community.

The oldest *garshuni* manuscripts seem to appear around the 14th century. It was first developed among the Syrian Orthodox and was soon adopted by the Maronites. It became much more frequent from the 17th century onwards. Syro-Oriental copyists did not use it very often, which is probably linked to the fact that they continued to write in the Syriac language much later than other groups. It was used for all types of documents and texts and many manuscripts combine both Syriac and *garshuni*. One can find, for example, parallel versions of the same text, such as the Gospels or Psalms, written in two columns, one in Syriac and the other in Arabic, but both written in the Syriac script. There are also numerous liturgical manuscripts with the prayers and readings in Syriac and the liturgical rubrics and directions in *garshuni*.

This use of the Syriac script to transcribe another language is most commonly used for Arabic, but other varieties of *garshuni* are also found, for the transcription of languages such as Turkish, Kurdish, Armenian, Greek, and Persian. In Kerala, a ‘Malayalam *garshuni*’ system was created that required the creation of new signs to write the various sounds of Malayalam with no equivalent in Semitic languages (Koonamakkal 1997; 2005). A significant number of manuscripts were produced using this script. In Central Asia, Sogdian texts were written in Syriac script, and in China, in the Mongol era, some inscriptions were written in the Uigur language and Syriac script.

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36. Jewish Babylonian Aramaic

1. Name
2. Sources
3. History of Research
4. Orthography
5. Phonology
6. Morphology
7. Syntax
8. Vocabulary
9. References

Abstract

This chapter discusses salient features of the grammar and vocabulary of Jewish Babylonian Aramaic as written from the 3rd to the 11th century.

1. Name

Jewish Babylonian Aramaic (JBA) was the spoken and written language of Jewish communities in parts of what are today Iraq and Iran during the Sasanian and post-Sasanian Periods (3rd–11th centuries CE), corresponding to the Amoraic, Savoraic, and Geonic Periods of Jewish chronology. Together with Syriac and Mandaic, JBA forms the eastern branch of Middle Aramaic (MEA), which has survived to the present day in the modern Aramaic dialects spoken by Jews, Christians, and Mandaeans in an area ranging from Eastern Turkey to Iran.

2. Sources

- (1) The Babylonian Talmud – Edited during the Sasanian Period in the 5th–6th cents. CE in the various academies of Jewish Babylonia, this compendium of Jewish law and lore, which is organized as a commentary on thirty-seven tractates of the Mishna, is our main source for knowledge of JBA.
- (2) Geonic Literature – During the post-Talmudic Period (6th–11th cents. CE) the heads of the academies in Jewish Babylonia, called the Geonim, wrote commentaries on the Babylonian Talmud, responsa, monographs on aspects of Jewish law, and lexicographical works, much of them in Jewish Babylonian Aramaic.
- (3) Writings of Anan – Anan b. David (8th cent. CE), the founder of a sect which was a forerunner of Karaism, compiled an exegetical work on the Pentateuch on the basis of his principles and beliefs. Parts of this work have survived in manu-

scripts from the Cairo Geniza and in substantial quotations in the works of later Karaite authors.

- (4) Magical texts – By the end of the 20th century, about 250 Jewish magic bowls from Iraq and Iran, dating between the 5th–8th cents. CE, had been published by a number of scholars in varying degrees of accuracy, though a far greater number of bowls in both public and private collections still remains to be published. Though the dialect of these texts is not identical with the standard Jewish Babylonian Aramaic of the literary texts and includes many archaic and dialectal features, the importance of these texts cannot be overstated, since they are the only epigraphic remains of this dialect which have survived from antiquity. Additionally, *Harba de-Moše* ‘The Sword of Moses’, a book of magical practice, dates from this period.
- (5) Babylonian Masora – Many of the notes in the various Babylonian Masoretic treatises are written in the dialect of the Geonic Period.

3. History of Research

The first attempt to collect the vocabulary of JBA was that of R. Nathan b. Yehiel, of Rome (11th century), who composed the *Aruch*, a dictionary of the Rabbinic and Hebrew Aramaic dialects. The first modern dictionary was composed in the 17th century by J. Buxtorf and this was followed by the dictionaries of J. Levy (Levy 1876–1889) and M. Jastrow (Jastrow 1903) in the 19th century. The first dictionary to treat JBA as a separate Aramaic dialect and not as the language of a particular text (viz. the Babylonian Talmud) is Sokoloff 2002. This was also the first dictionary to be based entirely on manuscript material and not upon the corrupt printed editions of the Babylonian Talmud.

Although JBA was used as a literary language into the period of the major Spanish Hebrew grammarians, it was completely neglected by them. The first attempt to compose a grammar was made in the 19th century by Luzzatto 1876. The works of Levis in English and later in Hebrew show many idiosyncrasies and should be used with caution. Overall, the most useful grammar for the student remains Margolis 1910. Epstein 1960, published posthumously from the author’s notes, contains much valuable material from manuscript sources but is eclectic. Kutscher 1977 demonstrated that a new grammar must be based on the most reliable sources and put forth a proposal for their use, but this task has still not been fulfilled.

The work of S. Morag and Y. Qara (Morag 1988; Morag/Kara 2002) on the Yemenite reading tradition of JBA, which has been published in the form of a morphology of the verb and the noun, contains much valuable phonological and morphological material from the only reliable reading tradition of this dialect to have survived. However, much remains uncertain, since the present-day Yemenite reading tradition is based on the corrupt printed editions and not on manuscripts.

4. Orthography

As opposed to the earlier Aramaic dialects, JBA spelling, especially in the reliable manuscripts, is plene. Medial **𐤌** is commonly employed to represent /ā/, e.g. 𐤍𐤁𐤏𐤌 ‘they sleep’; 𐤍𐤏𐤌 ‘it is different’; 𐤍𐤏𐤌 ‘apprentice’; 𐤍𐤏𐤌 ‘daughters’; etc.

Final /ā/ is also universally indicated by א, irrespective of its historical antecedents, e.g. נָבְרָא 'man'; שָׁרָא 'he threw'; אָנָא 'I'; etc. ה is exceptionally employed only in the word הָוָה 'he was' in order to differentiate it from the common pronoun הוּא 'he'. The gentilic ending /-ā/ is always written אָה- in order to avoid two consecutive *alefs*.

With few exceptions, historical /s/ is written with ס, e.g. סָהַד 'to testify'; סָמְלָא 'left'; but occasionally שְׂעֵרְתָא 'barley'; שָׂרַף 'to gulp down'.

י is used to indicate word initial and middle consonantal /y/ (e.g. יִימַר 'he will say', יְדִיר 'he dwells') as well as the diphthong /ay/ in word middle position (e.g. אָיִתִּי 'he brought'). However, א is consistently used for /ay/ in word final position (e.g. בְּנֵאִי 'my children'; שָׁרָא 'she threw').

ו is used to indicate consonantal /w/ (e.g. בְּנוֹי 'windows', שְׁוֹיִי 'to place') as well as the diphthong /aw/ (e.g. דְּיוּלָא 'bucket').

5. Phonology

5.1. Consonants

The Jewish community of Babylonia dates to the 6th cent. BCE and was in contact for centuries with languages which possessed neither laryngeal nor pharyngeal consonants, viz. first Neo-Babylonian and later Persian of the Arsacid and Sasanian Periods. Unfortunately, since no Aramaic literary or epigraphic texts written by Jews have survived from Babylonia from until the end of the Amoraic Period (5th–6th century CE) we cannot follow the development of the Aramaic dialect of the Jews in Babylonia for most of this period. The written material in JBA, however, points to the fact that Jews began to write this dialect only after the loss of the laryngeals and pharyngeals had occurred. The fact that these consonants are often retained in the written texts should be attributed to the strong influence of historical orthography. Older forms of Aramaic, viz. Biblical and Targumic Aramaic, were utilized during this entire period. Thus, evidence for the disappearance of these consonants generally comes from roots whose historical antecedents went unrecognized.

ע is often reduced to /o/ and is represented either by א (e.g. אָמַד 'to dive' < *md*; אִשְׁמָא 'bone' < *ʾm*; –א 'upon' < *ʾal*) or by 0 (e.g. הָשְׁתָּא 'now' < שְׁתָּא; e.g. מִבְּרָא 'ferry' < מַעְבְּרָא; e.g. שְׁוָתָא 'speech' < שְׁעוּתָא*).

ח is often reduced to ה (הָרַר 'to return' < *hḏr*; חֲזַר 'together' < *ḥadāde*; cf. נַחְמָא 'bread' < נַחְמָא* (לַחְמָא)). Especially in Geonic texts, ב is represented by ו (e.g. אִתְוֹד 'it was lost').

ד is occasionally assimilated to a following consonant (e.g. אָוְנָא 'ear' < אִוְנָא; הָא 'this' (m.) < קָמָא; הָרִין 'first' < קָמָא; הָרִין).

נ is often replaced by ל and vice versa (e.g. נַחְמָא 'bread' < לַחְמָא; נִינְרָא 'foot' < לִינְרָא; נָקַט – לָקַט; רִינְלָא).

The following consonants are often unpronounced in word-final position:

- (1) ב – e.g., תָּו 'again' < תִּיבָא; אִיָּהָא 'he gave' < יָהָב.
- (2) ה – e.g., בּוּלִי 'all of it' (< בּוּלִיָּה); סוּפָא 'its end' < סוּפָאָה.
- (3) ד – e.g., נִיבִי 'he will do' < נִיבִיָּד.
- (4) ל – e.g., אָזָא 'he went' < אָזַל; שָׁקָא 'he took' < שָׁקַל.

- (5) – e.g., אָמְרִי ‘they say’ < אָמְרִין ; לָהֶן ‘to them’ < לָהֶון .
 (6) – e.g., אָמַר ‘he said’ < אָמַר ; אָדָּכָא ‘he mentioned’ < אָדָּכָר .
 (7) – e.g., כְּתָבִי ‘I wrote’ < כְּתָבִת

In the *t*-stems of the verb, this consonant assimilates to the first consonant of the verbal root, e.g. אֵינְכֵר ‘it was done’ < אֵתְעֵכֵר ; אֵיקָטֵל ‘he was killed’ < אֵתְקָטֵל.

5.2. Vowels

According to the Babylonian vocalization of both Hebrew and Aramaic, the vowel /ɛ/ did not exist and was pronounced as /i/ or /e/ (e.g. חֵילָמָא, אֵיקָטֹל).

In closed syllables, occasionally /a/ > /i/, e.g. דִּירְכָא ‘way’ < דִּירְכָא ; לֵיצָלָן ‘may he save me’ < לֵיצָלָן.

As in most of the other Aramaic dialects /e/ is lowered to /a/ before the laryngeals, pharyngeals, and *reš*.

As in the other MEA dialects, original long vowels in open unstressed final syllables are reduced to /o/, e.g. רַב ‘my teacher’ < רַבִּי ; נַפְשִׁי ‘my soul’ < נַפְשִׁי ; שְׁוִיִּי ‘he made me’ < שְׁוִיִּי.

5.3. Diphthongs

The diphthongs /ay/, /aw/ are always monophthongized in word-final position (e.g. בְּנִי ‘sons’ (cs.), בְּנִי ‘they built’), and also mostly in word-middle position (e.g. חֵילָא, יוֹמָא ‘strength’). /ay/ is often preserved in word-middle position (e.g. מֵיִתִּי ‘he brings’)

6. Morphology

In general, the morphology of the MEA dialects has changed much more from the classical forms of the Official Aramaic Period than the MWA dialects. JBA is notable in that it has alternative forms for the same morpheme, probably owing to the fact that our composite texts cover different periods of the language.

6.1. Pronouns

The independent pronouns are:

1	אֲנָא	אֲנִי
2m	אַתָּ	אַתָּה
2f	אַתָּ	—
3m	אֵיהֶו, הֵוָא	אֵינְהֵו, אֵינְהֵו
3f	אֵיהִי, הֵיאָ	אֵינְהִי, אֵינְהִי

The forms with initial א serve as copula pronouns.

The paradigms for nouns with suffixed pronouns are:

(1) For nouns ending in a consonant:

	sg.	pl.
1	שׁוּר, שׁוּרְאִי	שׁוּרִין
2m	שׁוּרְךָ	שׁוּרְכֵּיכֶם
2f	—	—
3m	שׁוּרְהוּ	שׁוּרְהֵם
3f	שׁוּרְהָא	שׁוּרְהֵי

(2) For nouns ending in a vowel:

	sg.	pl.
1	שׁוּרְאִי	שׁוּרִין
2m	שׁוּרְךָ	שׁוּרְיֵיכֶם
2f	—	—
3m	שׁוּרְהוּ	שׁוּרְיָהֶם
3f	שׁוּרְהָא	שׁוּרְיָהֵי

The possessive pronouns attached to sg. nouns whose cs. forms end in a vowel are like the pl. m. nouns, e.g. אֲבוּהָ 'his father'.

The near demonstrative pronouns are:

m.	הָאִי	הָנִי
f.	הָא	—

The far demonstrative pronouns are formed by adding the deictic element /-k/:

m.	הָאִיד	הָנִיד
f.	הָאִד	—

The independent possessive pronoun is formed with – רִיד, while the form – רִיל is rare and dialectal.

6.2. Verb

As in the other Middle Aramaic dialects the passive stems have completely disappeared and their functions have been replaced by either the corresponding *t*-forms or by the composite הוּי + pass.part. A new *t*-stem formed from the *af'el* (< *haf'el*) developed at this period. The following is the structure of the stems:

<i>Pe'al</i> (G)	<i>Pa'al</i> (D)	<i>Af'el</i> (A)
<i>I(t)pe'al</i> (<i>tG</i>)	<i>I(t)pa'al</i> (<i>tD</i>)	<i>Ittaf'al</i> (<i>tA</i>)

6.2.1. G-stem

As in all of the other Aramaic dialects and Semitic languages, two thematic vowels [V1/V2] listed in the lexicon are associated with each verbal root. The attested vowels are:

V1 – a, e

V2 – a, o, e

The following paradigms present the major inflections of the G-stem of the triliteral verb.

6.2.1.1. Perfect

	sg.	pl.
1	קְטִיל, קְטִילַת	קְטִילְנָא, קְטִילְנָא, קְטִילְנָא
2m	קְטִילְתָּ	קְטִילְתִּי, קְטִילְתִּי
2f	קְטִילְתְּ	—
3m	קְטִיל, קְטִיל, קְטִיל	קְטִילוּ, קְטִילוּ, קְטִילוּ
3f	קְטִילְתָּ, קְטִילְתָּ, קְטִילְתָּ	קְטִילְתִּי, קְטִילְתִּי, קְטִילְתִּי

The variety of forms for the same person reflects the fact that our evidence ranges over several centuries and is intermingled in the texts as a result of the work of copyists. However, to a certain extent it is possible to discern the evolution of particular JBA forms. The 1sg. קְטִיל reflects the loss of final /t/ which is retained in forms with suffixed accusative pronouns (e.g. קְטִילְתִּי). The same phenomenon occurs in the 3f.sg. forms. Here, however, the unaccented vowel in the final syllable can further be lost leading to a merger with the 3m.sg. form (e.g. שְׁבִשְׁתָּא דַּעַל עַל 'a corruption which entered has entered'). This also occurs with the 3f.pl. form. The shortened 1pl. form results from the same phonological rule, whereas the longer form קְטִילְנָא – known also from Syriac – demonstrates how the final vowel can be preserved by closing the syllable. The 3m.pl. form קְטִילוּ is unique in Aramaic and shows the protection of the final vowel by its being shifted between the second and third consonants of the root.

6.2.1.2. Imperfect

	sg.	pl.
1	אֶקְטִיל(ִי)	נִקְטִיל(ִי)
2m	תִּקְטִיל(ִי)	תִּקְטִילוּ(ִי)
2f	תִּקְטִילִי(ִי)	—
3m	לִקְטִיל(ִי), נִקְטִיל(ִי)	לִקְטִילוּ, נִקְטִילוּ
3f	תִּקְטִיל(ִי)	לִקְטִילוּ, נִקְטִילוּ

The other thematic vowels may be seen in תִּקְרִיב and תִּינָסִיב.

The most characteristic feature of the imperfect is the 3rd person marker -נ/-ל shared jointly with the other two MEA dialects. The archaic prefix -י is sometimes retained in stock phrases (e.g. in מִי יִמַּר 'may one say').

6.2.1.3. Imperative

2m.sg.	קְטִיל
2f.sg.	קְטִיל, קְטִילִי
2m.pl.	קְטִילוּ
2f.pl.	—

The short form of the 2f.sg. results from the loss of the final unaccented open vowel.

6.2.1.4. Infinitive

The infinitive has the form מִקְטִיל(ִי) and can be used with or without preceding ל.

6.2.1.5. Participles

	sg.	pl.
1	כְּתִיבָּנָא	כְּתִיבִין
2m	כְּתִיבְתָּ	כְּתִיבְתוּ
2f	—	—
3m	כְּתִיב	כְּתִיבִי
3f	כְּתִיבָּ	כְּתִיבִי

In JBA, the active participle has become part of the tense system, and as in the other MEA dialects it is combined with the independent pronouns to produce a paradigmatic scheme. In addition, there is a passive participle form כְּתִיב which forms a parallel paradigm.

6.2.2. Comments on other stems

The infinitives of the derived stems do not have an *m*-prefix and follow the pattern *qattolē* found also in Palmyrene and Mandaic. As noted above, in the *t*-stems, this consonant assimilates to the first root consonant (e.g. אִיעְבַּד 'it was done'), with the notable exception of *h* (e.g. אִיתְהַפִּיךְ 'it turned around').

6.2.3. Comments on other verbal root patterns

6.2.3.1. III-y Perfect

	sg.	pl.
1	בְּנִיא	בְּנִין, בְּנִינָא, בְּנִינִי
2m	בְּנִית	בְּנִיתוּ
2f	—	—
3m	בְּנָא	בְּנִי
3f	בְּנִיא	—

Noteworthy are the 1sg and 3f.sg. forms where the final *t* has disappeared (it reappears before accusative suffixes). The short 1pl. בְּנִין with contraction of the diphthong *ay* is very common and is similar to Mandaic מְטִין.

The m.pl. participial form בְּנִינָא with the *-o* ending is unique. It seems to have developed in the following manner: בְּנִינָא * > בְּנִי * (loss of final *n*) > בְּנִי * (contraction of diphthong) > בְּנִינָא (analogy to 3mpl. pf. form to distinguish it from sg.).

6.2.3.2. Geminate and II-w/y roots

In the Pe^{al} and Pa^{ʿel} conjugations, the geminate roots have assimilated orthographically, and possibly also morphologically, to the II-w/y roots e.g. from √עלל, pe. part. עֵלִיל / עֵלִיל 'he enters' (classical √עלל) as קָאם / קָיִים; עֵילִי pa. inf. as קִימִי.

The Af^{el} forms are אַעִיל, אַקָּם, but the II-w/y roots are often conjugated like the I-y/w roots, e.g. from √ריח, af. אֹרַח, like אֹתִיב from √יתב.

6.3. Nouns

Nominal forms are similar to those in other Aramaic dialects. The regular ending of nouns is that of the historical determinate, although this has lost its semantic force. Thus: מִלְתָּא 'a/the word'. As in the other MEA dialects, the ms. pl. ending is /-el/, orthographically י- (e.g. בְּנֵי). Its origin from either classical -*ayyā* or as a borrowing from Late Akkadian -*ê* is uncertain.

6.4. Prepositions

The following points are noteworthy:

- (1) The historical preposition עַל appears only before pronominal suffixes (e.g. עַלְאֵי). When it is used alone, the // assimilates to the following consonant and > ' , e.g. אֶהְדְּרֵי 'one upon the other'.
- (2) As opposed to all other Aramaic dialects, the *n* in מִן can assimilate to a following consonant, e.g. מִיְנוּ. 'from within'. Additionally, this preposition can employ plural suffixes, e.g. מִיְנֵיכוּ.

6.5. Adverbs

Unlike Syriac where adverbs can be generated automatically from adjectives with the ending -*āith*, in JBA, adverbs are identical with adjectives (e.g. שְׁפִיר 'well', רִיקָן 'empty') or composites of various types (e.g. הַשְׁתָּא 'now' < הָא שְׁתָּא; לְעֵנָה 'quickly'). The following adverbs are unique to JBA: אֶלְתָּר (לְ) 'immediately' (= JPA אַתְר); אֶדְרָבָא 'on the contrary'; אַכְתִּי 'still'; נְמִי 'also'.

7. Syntax

7.1. Nouns

Like the other MEA dialects, the determined form of the noun is utilized to express also the indeterminate meaning, e.g. חַד גְּבָרָא 'a man'; יוֹמָא חַד 'one day'. The abs. form is employed only in specific syntactic situations, e.g. following כָּל שֵׁם: כָּל 'any name'; כָּל תְּלָתִין יוֹמִין 'every thirty days'.

The use of the split genitive is extremely common and replaces to a great extent the earlier genitive formation, e.g. דִּינָא דְּמַלְכוּתָא 'law of the government'; פּוֹלְמָסָא דְּמַלְכָא 'royal army'. Phrases with the proleptic pronoun occur but are less common, e.g. דְּרַבְיָה דְּחַתָּנָא 'custom of a son-in-law'.

7.2. Demonstrative Pronouns

As in JPA, the demonstrative pronoun always precedes the noun, e.g. הָאֵי גְבָרָא 'this man'; הָנִי מִילֵּי 'these things'.

7.3. Verb

7.3.1. Tenses

In general, the perfect expresses completed action, e.g. **בִּירָא זְבִינִי לָךְ. מֵא לֹא זְבִינִי** 'I sold you a cistern. I did not sell you water'. When two perfects are used together, one can indicate the pluperfect, e.g. **מִדְּאִשְׁתִּיק קְבֹלִי קְבִלִיה** 'since he remained silent, he had indeed agreed to it'.

The old active participle has now been integrated into the verbal system and is loosely termed the present tense, which it, in fact, expresses. The participle is actually atemporal and may represent nearly every tense. Thus:

- (1) General action, e.g. **דַּעְבֵּר הַכִּי עֲבַד. וְדַעְבֵּר הַכִּי עֲבַד** 'the one who acts in this manner does so (properly), and the one who acts in that manner does so (properly)'.
- (2) Future action, e.g. **דַּחֲיוּ מִיִּתֵּן חַיִּי** '(if) the ones who are living will die, will the ones who die live (again)?'

The participle is often preceded by the particle **קָא**, **קֵא** (< **קָאִים**) to express an ongoing action, e.g. **דַּקָּא יִתִּיב ר' יוֹחָנָן וְקָא דְרִישׁ** 'PN was sitting and expounding'.

Together with the vb. **הוֹי**, the participle forms a durative tense. However, unlike the other Aramaic dialects which employ this tense, JBA utilizes an indeclinable **הוֹה** as a tense marker and the person marker is connected with the participle, e.g. **הוֹהִיא אִיתְתָּא דְהוּה לְבִישָׁא כְרַבְלָתָא בְּשׁוּקָא** 'a certain woman who was wearing a head covering in the street'; **הוּה יָדַעַת** 'you knew'.

The passive participle is used together with **לֵ** in the *qēṭl lē*-syntagm which is employed in place of the perfect, e.g. **לֵי שְׁמִיעָא לִי** 'I have heard it'; **לֵי הוּה חֲזִיָּא לִיה** 'לא הוה חזיא ליה' 'he had not seen her for twelve years'.

The imperfect is employed in independent clauses in a modal sense, e.g. **לִיִּצְלָן מִתְלַת וְעַד עֶסֶר לֹא לִיכְתֹּב בְּסוּף שִׁשָּׁה** 'may the Compassionate One save me!'; **מִתְלַת וְעַד עֶסֶר לֹא לִיכְתֹּב בְּסוּף שִׁשָּׁה** 'one should not write (in a document the numbers) three to ten at the end of a line'. Following **ד**-, the imperfect can often replace the infinitive, e.g. **בְּעִינָא דְאִיזִיל** 'I want to go'.

7.3.2. Cleft sentences

These are expressed by use of the impersonal phrase **הוּא ד**-, e.g. **רַבְנָן הוּא דְגִזְרוּ בְּהוּ** 'it is the scholars who decreed concerning them'; **זְכוּתִיה דְּרַבִּי הוּא דְאַנְגָּא לְהוּ** 'it is PN's merit that protected them'.

7.3.3. Tautological infinitive

This construction is used either for emphasis, e.g. **מִיזֵל לֹא מִיבְעִי לָךְ לְמִיזֵל** 'you do not indeed have to go', or in cleft sentences, e.g. **הוּא דְלֹא מְבַרְכִין הָא אִייתוּי מִייתִין** 'we do not indeed make a blessing, but we can surely bring (it) in'.

8. Vocabulary

Since JBA was in contact with Akkadian and Persian for a long period of time most of the loanwords derive from these two languages. Hebrew and Greek loanwords are much less frequent and are limited to the religious sphere. Examples of Akkadian loanwords are: **בָּבְלָא** ‘gate’ (< Akk *bābu*); **בִּיטְא** ‘legal document’ (< Akk *giṭtu*); **מִתָּא** ‘village’ (< Akk *mātu* ‘country’); **שְׁוֹרְיָא** ‘apprentice’ (< Akk *šamallû*); **שְׁלִדָּא** ‘body’ (f.; < Akk *šalamtu*). The form of the loanword **אַרְיִי** ‘tenant farmer’ (so acc. to manuscript sources) indicates that it was borrowed through Neo Babylonian *errešu*, while the form **אַרִּי** in MWA and in Rabbinic Hebrew came in through the Neo Assyrian dialect.

As can be seen from their phonetic form, the Persian loanwords were borrowed during the Sassanian Period, e.g. **אַספֿסתָא** ‘alfalfa’ (< Peh *aspast*); **הֶרְמָנָא** ‘command’ (< Parth **hrāman*); **שְׁרִינָא** ‘lamp’ (< Middle Parthian **širay*).

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37. Mandaic

1. Preliminary remarks
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Abstract

Mandaic, the most Southeastern of the Aramaic dialects spoken in antiquity in Babylonia, belongs to the Eastern branch of Middle Aramaic. The name of the language, Mandaic, derives from manda, the Mandaic word for 'knowledge, gnosis'. At its peak between the 3rd century and the rise of Islam in the 7th century, from the classical Mandaic of this period emerged the liturgical songs and prayers of the oldest, poetical portion of Mandaic literature.

1. Preliminary remarks

1.1. Overview of Mandaic

The Mandaeans attract interest not only as a surviving Semitic group but also on account of their Gnostic religion, their Aramaic language and their rich literature. The name of the language, Mandaic, derives from the self-denomination *mandaia* (pl. *mandaiia*), an adjective (Nisba-formation) from *manda*, the Mandaic word for 'knowledge,

gnosis' which is itself a nominal formation of the type *maḥsal* from the root *yḏṣ* 'to know'. *Mandaia* therefore means 'a knower, one who knows, a gnostic, γνωστίζός' and is also used as a denomination of the language. Nowadays *mandaia* generally designates the laymen in contrast to the priests, *tarmidia*, and the initiated ones, *naṣuraiia*.

Mandaic, the most Southeastern of the Aramaic dialects spoken in antiquity in Babylonia (Mesene, Characene, Khuzistān), shares similarities with Jewish Babylonian Aramaic, and both belong to the Eastern branch of Middle Aramaic. Although most scholars locate the origin of the baptizing community in the East Jordan regions (Lidzbarski, Macuch, Rudolph) the Mandaeans spent a large part of their still controversial and mysterious history alongside the great rivers in the southern borderlands between present-day Iraq and Iran. Both Mandaic and the Jewish language of the Babylonian Talmud reached their peak in the period between the 3rd century and the rise of the Islam in the 7th century. In this period emerged the liturgical songs and prayers of the oldest, poetical portion of Mandaic literature. The elaborate style and 'pure' grammatical features of the period recommend the term 'Classical' Mandaic. Later in the Islamic era, the prose texts of the priestly documents (known generally as *diuan*) were composed. Despite the strong influence of the classical language on these texts, new syntactical features and an increasing amount of loanwords from Persian and Arabic characterize the language of this period as post-Classical. Although popular expressions are attested in marriage songs and in the colophons of a number of manuscripts, the vernacular continuation of Mandaic was only discovered in 1953. Neo-Mandaic is today used by a few communities in South-western Iran, and has been described in many publications by Macuch and Häberl (on Neo-Mandaic, see ch. 41).

1.2. Textual sources of Classical Mandaic

The oldest Mandaic texts known are the short incantation formulae on magic bowls and on metal (lead, gold and silver) amulets which date to between the 3rd and 8th centuries A.D. Their provenance is Mesopotamia. The texts owe their preservation to the materials on which they were written (clay and metal), and in the past hundred and fifty years, many Mandaic magic texts on bowls have been discovered and published (see Pognon 1898, Yamauchi 1967, Hunter 1994, Segal 2000, Müller-Kessler 2005). Compared with magic bowl texts, the amount of published material of lead amulets is small (on lead, cf. Lidzbarski 1909, Macuch 1967/1968, Naveh 1975, and rare on gold, cf. Müller-Kessler 1998). Although a collection of Mandaic prayers dating as early as the last part of the 3rd century are attested (see Sävje-Söderbergh 1949), manuscripts written on paper have generally had a shorter life, and the oldest Mandaic manuscript dates to the beginning of the 16th century (Ms. Marsh 691 copied in 1529 by Adam Zihrun).

Due to intensive scribal activity, Mandaean manuscripts were transmitted either as codices or scrolls. Important religious texts like *Ginza* (edition Petermann 1867, translation Lidzbarski 1925), the *Book of John* (Lidzbarski 1905/1915), the *Qolasta* or *Canonical Prayerbook* (Lidzbarski 1920 and Drower 1959) and the astrological *Book of the Zodiac* (*Aspar Maluašia* see Drower 1949) are all codices. The majority of the ritual and priestly writings known as *diuan* were copied on broad paper scrolls (see for example Drower 1950). On more narrow scrolls known as *qmaha* 'amulet, phylactery',

various magic texts of the Mandaean were inscribed (see Drower 1938, 1939). The most important collections of Mandaic manuscripts are the Drower Collection in Oxford with 54 pieces (Drower 1934 and 1953) and the collection of the Bibliothèque Nationale in Paris with 30 manuscripts (Zotenberg 1874). Other manuscripts are held in the British Museum in London, in Leiden, the Vatican and Berlin.

2. Script and orthography

The origin of the Mandaic script is an issue hotly disputed within the history of Mandaean research (Naveh 1970, Macuch 1971, Klugkist 1986, Häberl 2006, Burtea 2008). It has been difficult to establish its relationship with the other Late Aramaic writing systems but similarities with inscriptions from Elymais and Characene support a hypothesis of a South Mesopotamian origin for the Mandaic script. In order to distinguish themselves from other competing religious groups of this area, the Mandaeans created a script of their own. Mandaic has been transliterated by Western scholars in a number of methods to compensate for limited knowledge of the Mandaic alphabet and the reduced typographic facilities of early researchers. M. Norberg, for example, used Syriac letters in the first *Ginza* edition of 1815–1816. He was followed by Nöldeke who decided to use the best known oriental alphabet of his time, i.e. the Hebrew, in rendering Mandaic in his monumental *Mandäische Grammatik* 1875. Hebrew transliteration of Mandaic text is still used by Israeli scholars.

R. Macuch developed a new system of transliteration with Latin letters, in which the abundant *matres lectiones* of Mandaic are represented by vowels. A more traditional transliteration is found in some editions of Mandaic magic bowls which do not, however, reflect the phonetic reality of the language and the fact that Mandaic makes abundant use of the *scriptio plena*. Mandaean scholars writing in Arabic or Persian use Arabic letters for transliteration (Amin Faṣīl Ḥaṭṭāb 2002, 5).

The Mandaic alphabet originally contained 22 graphemes, but was – according to the tradition – extended to 24, the number of hours in the day by adding <ḏ> and repeating the first letter <ʔ> at the end of the alphabet. Table 37.1 of the Mandaic alphabet uses Macuch's transliteration, improved by one innovation: <ʕ> is rendered not by [◌]c but by *e* (see Voigt 2007).

The Mandaic letters *a*, *z*, *i* and *š* cannot be bound to a succeeding letter on the left side.

The grapheme <ḏ> (𐤌) which marks the relative pronoun /di:/ represents a ligature of the old particle <dy>. In addition, the conjunction <kḏ> (𐤌𐤎) 'when' is a ligature of <k> and <ḏ>.

The large deployment of *matres lectiones* in Mandaic indicate the position of vowels in the word but do not, unfortunately, provide information as to the quality or quantity of the vowels.

a (𐤀) <ʔ> marks both short and long /a/ as in *kadpa* /kadpa:/ 'shoulder', *gabara* /gabba:ra:/ 'hero'. In the examples given the short /a/ occurs in closed syllables and the long /a:/ in open syllables.

u (𐤅) <w> seems to mark long and short back vowels /u/ and /o/: *buta* /bu:ta:/ 'prayer', *gupna* /gupna:/ 'vine', *iuma* /jo:ma:/ 'day', *niḡṭul* /neḡtol/ 'he will kill'.

i (𐤅) <j> marks long and short /i/, probably also /e/ if one takes the traditional pronunciation in consideration, as supported by Macuch: *bisra* /bisra:/ 'flesh', *bira*

Tab. 37.1: The Mandaic alphabet

Mandaic	Latin	Mandaic	Latin
ܐ	a	ܡ	m
ܒ	b	ܢ	n
ܓ	g	ܣ	s
ܕ	d	ܥ	e
ܚ	h	ܦ	p
ܘ	u	ܫ	š
ܙ	z	ܩ	q
ܝ	<u>h</u>	ܪ	r
ܬ	ṭ	ܨ	š
ܝ	i	ܬ	t
ܟ	k	ܕ	d
ܠ	l	ܐ	a

/bi:ra:/ ‘well’, *Bil* /be:l/ ‘lord, Bel (god)’. It probably represents the Shwa /ə/ in Mandaic which could be the vowel inserted after a consonant followed by two other consonants as in *niligṭun* /neləḡṭon/ ‘they shall grasp’.

e (ܥ) <ʕ> marks long or short front vowels /i/, /i:/, /e/, and /e:/. Furthermore, see examples for *e* in initial position: *eqba* /iqba:/ ‘heel’, *eqara* /i:qara:/ ‘glory’, *eda* /i:da:/ ‘hand’ and *eda* /iḡa:/ ‘he knew’, *ema* /emma:/ ‘mother’; for *e* in medial position: *beia* /be:je:/ ‘eggs’ (plural of *bita*), *nibeian*, *nibiian*, *nibian* and *nibeian* /neḡe:ja:n/ or /neḡja:n/ ‘they (f.) will seek’; *geuat* /gewat/ st. cstr. of *giuta* ‘pride’ (Drower/Macuch 1963, 89), *zeḡa*, var. *zeipa* /ze:pa:/ ‘falsity’; and for *e* in final position: *he* /hi:/ ‘she’; *le* /li:/ ‘to me’, *šne* /šne:/ ‘years’.

In addition to this both *a* and *e* mark the prothetic vowel in a word with two initial consonants: *aškinta*, *škinta* ‘dwelling’, *aspar*, *espar*, *spar* ‘book’, *špur*, *ašpur*, *ešpur* ‘beauty’ (Macuch 1965a, 124).

Although Mandaic h takes the place of <ḡ> it represents /h/ in the alphabet and not /ḡ/. <h> marks the personal suffix 3. m. /i:/ (< *-e/iḡ) or f. /a:/ (< *-āh) as in: *edḡ* /i:ḡi:/ ‘his hand’, *emḡ* /emma:/ ‘her mother’, *liḡṭ* /leḡṭi:/ ‘he grasped him’, *lḡ* /li:/ or /la:/ ‘to him, her’.

In some examples the characters *e* <ʕ> and also *a* <ʔ> appear before *i* and *u* not as *matres lectiones* but as relicts of the old orthography which, like in other Semitic languages, does not allow vowels in initial position: *uhra* /uhra:/ <ʕwhrʔ> ‘way’ (cf. Syr. ܐܘܪܗܐ), *ula* or *ula* /u:la:/ ‘embryo’, *ula* /u:la:/ ‘evil’, *il* /e:l/ ‘god’.

However, the defective orthography of some Mandaic words harks back to an earlier stratum of the language: *mn* ‘from’, *br* ‘son’, *pt* ‘daughter’, *rba* ‘great’, *hiia* (*hia*) ‘life’, *mia* ‘water’, *kḡ* ‘when, as’ and *kma* ‘how’. The following words attest an ancient orthography: *aqamra* ‘wool’ (besides, too *amra*), *arqa* ‘earth’, *aqna* ‘sheep’ and *aqapra* ‘dust’ (Macuch 1990, 227–230).

3. Phonology

The relationship between orthography and the phonemic structure of Classical Mandaic is not entirely clear.

Tab. 37.2: The probable vowel system of (Classical) Mandaic

	Front	Back
close	/i/ /i:/	/u/ /u:/
mid	/e/ /e:/	/o/ /o:/
open	/a/ /a:/	

However, it may be surmised, according to the phonetic findings of other Aramaic languages and Neo-Mandaic, a qualitative opposition between a close and an open *e* as in /emma:/ vs. /bē:jē:/ or /neγtōl/ vs. /šne:/ . Vocal length is phonemic in Mandaic.

Tab. 37.3: The consonant inventory of Classical Mandaic

	stops v.	vl.	emph.	nas.	fric.	lat.	trill	app.
labial	b	p		m				w
dental	d	t	ṭ	n				
alveolar	z	s	š		š	l	r	j
velar	g	k	q					
glottal	(?)				h			

Postvocalic spirantisation which is not indicated by Mandaic orthography is characteristic for the labial, dental and velar non-emphatic occlusives: /b/ [b, β], /p/ [p, ɸ]; /d/ [d, ð], /t/ [t, θ]; /g/ [g, γ], /k/ [k, x]. This fact is supported by the traditional pronunciation and also by some phonetic writings such as *abid* and *auid* ‘perished’ or *adbar* and *aduar* ‘he led’ (Macuch 1965a, 33) which document the sound change *b* > *β* > *w*.

Another feature of Mandaic phonology is the vanishing of the laryngeals ʕ and ħ: /ħ/ and /h/ > /h/, and /ʕ/ and /ʔ/ > /ʔ/ > Ø.

Frequently found in Mandaic is the dissimilation of double voiced consonants:

bb > mb	<i>hambil</i> (< *habbil) ‘to destroy’, <i>zimburā</i> (< *zibbura) ‘bee’
dd > nd	<i>manda</i> (< *maddʕa) ‘knowledge’
zz > nz	<i>enza</i> (< *ezzā) ‘goat’
gg > ng	<i>engaria</i> (< *eggaria) ‘roofs’

In some words which also show variants with the later Aramaic pronunciation with /d/, Mandaic has preserved the rendering of Old Semitic /ð/ with /z/ as in Old Aramaic: *zahba* and *dahba* ‘gold’, *ziqna* and *digna* ‘beard’, *zakra* / *zikra* and *dakra* / *dikra* ‘male, masculine’, *haza* and *hada* ‘this’, f., *zabia* and *dibia* ‘wolves’.

4. Morphology

4.1. Pronouns

4.1.1. Personal pronouns

The unconventional forms of the 2nd person sg. and pl. *anat* and *anatun/anatin* are formed by analogy with the 1st person sg. and pl.

Tab. 37.4: Personal pronouns

	Independent	Enclitics	Personal suffixes
Sg. 1.	ana	-na	-ai / -∅ / -ia; -an / -n / -in
2.m.	anat	-it	-ak / -k
2.f.	—	-it	-ik / -k
3.m.	hu	—	-(i)h / -ia
3.f.	he	-a	-h / -a / -∅
Pl. 1.	anin (anen)	-inin	-(ai)an / -(i)nan / -n
2.m.	anatun	-itun	-kun / -aikun / -(i)nkun
2.f.	anatin	-itin	-kin (ken) / -aikin / -(i)nkin
3.m.	hinun	-in	-(h)un / -ai(h)un / -(i)n(h)un
3.f.	hinin (hinen)	-a(n)	-(h)in / -ai(h)in / -(i)n(h)in

The pronominal enclitics are derived from the independent pronouns. They represent the endings of the active and passive participle present and derive from periphrastic constructions (act./pass. part. st. abs. + pronoun), e.g. *gaṭil ana ‘I am a killing one’ > gaṭil-na ‘I kill’ resp. *gṭil ana > gṭil-na ‘I am/was killed’.

The personal suffixes accompany:

- (1) a noun in order to express possession: *br-ak* ‘your son’;
- (2) a verb taking the function of the object (mostly accusative): *liḡt-h* ‘he grasped them’;
- (3) a preposition: *el-ia* ‘upon me’, *b-h* ‘in it/him’, *l-kun* ‘to you (pl.)’ and a verb with preposition: *šahib-b-h* ‘he is proud of her’, *etibhar-l-h* ‘they have been selected for him’;
- (4) the particle of existence *ait-* (neg. *lait-*): *ait-h* ‘he/she is’, *lait-h* ‘he is not’ and the particle *et-* with preposition express possession ‘to have’: *et-l-h* ‘he has’, *et-b-ak* ‘you have’, *lit-b-h* / *lit-l-h* ‘he has not’.

Only for the 1st person sg., are different forms used with nouns and verbs: *br-ai* ‘my son’; *šihl-an* ‘he sent me’.

4.1.2. Demonstrative and relative pronouns

There is a large variety of demonstrative pronouns in Mandaic.

The simplest forms are sg. m. *hahu* and f. *hahe* (*hahia*) ‘this, that’ which are a combination of the demonstrative/determinative element *ha-* and the personal pronouns. The pl. c. *hania* (*hanin*) ‘those’ and *elin/elan* ‘these’ are rather isolated. The forms with *d-* (z-) for the singular occur in *dh u-dh* ‘this and that’ only.

For pointing to the near object Mandaic uses sg. m. *hazin* (*hai*), f. *haza* (*hada*), pl. *halin* and for the farther object sg. *hak*, pl. *hanik* and sg. c. *hanata* (*hanath*, *hanatia*), pl. m. *hanatun*, f. *hanatin*, respectively.

The classical relative pronoun is *q*-: *hak dmuta q-hza* 'that shape which he saw'. After the particles *b*-, *u*- and *l*- Mandaic uses not <q> but the normal letter <d>: *l-d-iatbia* 'to them who sit'.

4.2. Word formation/Nominal formation

As in other Semitic languages the noun may consist (for example m=LaGṬ=ana 'grasping') of a combination of a root (LGṬ 'to hold') and a scheme (▪ a ▪ ▪) which can be extended by nominal prefixes (m=) and/or suffixes (=ana). Unfortunately, the Mandaic script does not mark vowel quantity or quality and the lengthening of consonants, an inconsistency which makes the identification of the nominal patterns difficult. To present the nominal patterns of Mandaic, the symbol C is used here to mark the root radicals. Apart from some old biradical roots like *aba* 'father' (but *abu-k* 'your father'), *bra* 'son', *dma* 'blood', *eda* 'hand', *suma* 'name', most Mandaic word patterns have a triradical structure:

CaCC=a	<i>malka</i> 'king', <i>gabra</i> 'man'
CiCC=a	<i>ligra</i> 'foot', <i>sidra</i> 'book'
CuCC=a	<i>bukra</i> 'first born', <i>kušta</i> 'truth'
CaCiC /Ca: CiC/ or /CaCCi: C/	(active participle, st. abs.) <i>gaṭil</i> 'killing', <i>zadiq</i> 'righteous'
CaCuC=a (nomina agentis)	<i>paruqa</i> /pa:ru:qa:/ 'redeemer', <i>kapura</i> 'infidel'
CCiC=a/=ta (passive participle G-stem)	<i>brik(a)</i> , <i>brikta</i> fem. 'blessed', <i>kšit(a)</i> 'righteous', <i>zhira</i> 'cautious', <i>škinta</i> 'dwelling'
CCuC=a/=ta	<i>truša</i> 'deaf', <i>nhura</i> 'light', <i>ptulta</i> 'virgin'
CaCaC=a/=ta	<i>ganaba</i> /ganna:ḅa:/ 'thief', <i>galalta</i> /gallalta:/ 'revelation'
CuCaC=a	<i>šuiala</i> 'question', <i>iuraqa</i> 'green'
CvCC=ana	<i>iaqdana</i> 'firebrand', <i>dukrana</i> 'remembrance'
CvCC=uta	<i>malkuta</i> 'kingdom', <i>bisruta</i> 'corporality'
maCCCa	<i>masgda</i> 'place of worship', <i>maškna</i> 'Mandaean temple'
maCCvC=ta	<i>masiqta</i> /massiqta/ 'ascent of the soul' < * <i>masliqta</i> , root SLQ 'to ascend', <i>markabta</i> 'chariot', <i>makulta</i> 'food' (root AKL 'to eat')
tvCCvC=a/=ta	<i>tušlima</i> 'completion', <i>tušbihta</i> 'praise'

4.3. Nominal inflection

The Mandaic noun has two genera (m. and f.), two numeri (sg. and pl.), and three status (absolutus, constructus and emphaticus).

In many examples the st. abs. and cstr. are distinguished from the st. emph. not only by the reduction of the ending but also by a different vocalic scheme.

The predicative adjective (participle) occurs as part of a nominal clause, in the st. abs.: *q-npiš hailh* 'whose power is great'; *ram hu* 'he is high'; *qaiamin hiia b-škinatun* 'Life (pl. tantum) is constant in His dwellings'. The status constructus is a component of the syntactically rigid genitive relation. It consists of a noun in the st. cstr. followed

Tab. 37.5: Suffixes of the nominal inflection

	St. abs.	St. cstr.	St. emph.
sg.m.	=∅	=∅	=a
f.	=a/=∅	=at/=t	=ta
pl.m.	=in/=ia	=ia	=ia
f.	=an/=a	=at	=ata

Tab. 37.6: Examples of a different status vocalisation

St. emph.	St. abs. / cstr.
malk=a	mlik [mælex] ‘king’
gabr=a	gbar [gəβar] ‘man’
ianq=a	ianuq [ja:noq] ‘child’

by a noun in the st. emph. *mlik iama* ‘the king of the sea’. The st. emph. is the normal form of the substantive.

4.4. Verb morphology

As in nominal formation, verbal morphology is based on the combination of a root and a verbal scheme – the kernel morpheme – which can be extended by verbal prefixes and/or suffixes $P=|G\dot{T}vL|=S$. The verbal root usually consists of a sequence of three (seldom of four or five) radicals, the phonetic quality of which determines the classification into strong and weak root classes. The weak roots contain at least one vowel, semivowel, sonant (*n* or *l*) or glottal *h* radical. The verbal form of weak roots is characterised by derivations from the regular paradigms. The following grammatical categories can be distinguished: person (1., 2. and 3.), number (sg. and pl.), gender (m. and f.), tense/aspect (perfect vs. imperfect resp. perfective vs. imperfective), mood (indicative, imperative, prohibitive, jussive), diathesis (active, passive and reflexive), mode of action (factitive, intensive, causative). Diathesis and mode of action are expressed by means of verbal stems.

4.4.1. Verbal stems

As in other Aramaic varieties, there are three main verbal stems which differ from each other by means of internal and/or external derivation.

The basic stem G (German ‘Grundstamm’) is traditionally called *qal* or *peal*. The latter name is not quite accurate as the root PĠL did not exist in Mandaic and even if it had existed, the form would be **pal* according to the rules of Mandaic. The following examples use existing roots such as GṬL ‘to kill’ in its simplest derivation, the 3. sg. m. perfect, GṬaL /gṭal/ ‘he killed’. The D stem (the factitive/intransitive), traditionally

Pael, for example HaŠiB /haššəb/ ‘he thought’, shows an internal derivation by the reduplication of the second radical consonant. The A-stem (the causative stem), traditionally Afel, is characterised by the external element *a-* as in aPRiŠ /apreš/ ‘he explained’. From each of these three stems a passive / reflexive stem can be derived by means of the morpheme *-t-*:

G → tG, trad. Etpeel, etiGTiL /etiḡṭel/ ‘he was killed’

D → tD, trad. Etpaal, etHaŠaB /eṯhaššab/ ‘he cogitated’

A → tA, trad. Ettafal, etaPRaŠ /ettapraš/ ‘he was instructed’

In some examples the *t*-morpheme of the tG and tD stem can be dropped or assimilated as in eMiZGaT /e(m)mizgat/ (< *etmizgat) ‘it (f.) was mixed’.

Relicts of Š-, S- and H- causative stems are also known in Classical Mandaic but are rare: šaŠQiL ‘he, they raised’, saSQiL ‘they polished’, haNP(i)QH ‘he brought him out’.

4.4.2. Verbal inflection

Each stem can form a perfect, imperfect, imperative, infinitive and active / passive participle. As in the other Aramaic languages, and generally in Central Semitic, the perfect is used to express past or perfective action, whereas the imperfect is used for present or future time (imperfective action). It should, however, be noted that Mandaic manifests a general tendency to substitute the passive participle present for the perfect and the active participle present for the imperfect (cf. 4.1.1.). This development is most fully found in Neo-Aramaic. The jussive and the prohibitive mood (i.e. the negation of the imperative) use imperfect forms. See, for example, the jussive *haṭai ai nišbiqul* ‘may they remit me my sins’ and the prohibitive *la-tikul* ‘do not eat!’.

Kernel morphemes |KM| differ within the same conjugation. The prefixes and suffixes of the verbal conjugations for all the stems are:

Tab. 37.7: Perfect, imperfect and participle present affixes

Perfect	Imperfect	Participle present
sg. 3m. KM =∅	n= KM =∅	KM =∅
3f. KM =at	t= KM =∅	KM =a
2c. KM =t	t= KM =∅	KM =it
1c. KM =it	e= KM =∅	KM =na
pl. 3m. KM =∅ / =iun	n= KM =un	KM =in
3f. –, KM =ian	n= KM =a(n)	KM =a(n)
2m. KM =tun	t= KM =un	KM =itun
2f. KM =tin	t= KM =a(n)	KM =itin
1c. KM =nin	n= KM =∅	KM =inin

In place of the common Semitic *j=* Mandaic exhibits *n=* (rare *l=*) as prefix of the imperfect 3. m. sg. and 3. m./f. pl.

The *e=* of the imperfect 1. sg. reflects the vanishing of the prefix ? – see also the corresponding A-stem prefix *i=apriš < ?apriš. As in the variant form of *eit*, i.e. *eiit*, *e* is a relict of the old orthography whereas *i=* represents the vanished laryngeal ?.

As for the kernel morpheme of the G stem, there are many classes of verbs which are characterised by the combination of a characteristic vowel in perfect and imperfect:

- perf. a : impf. u *gʔal* : *nigʔul* ‘to kill’, (‘transitive’ class)
 - perf. i : impf. a *lgiʔ* : *niʔgaʔ* ‘to hold’, (‘intransitive’ class)
 - perf. u : impf. u *bsum* : *nibsum* ‘to be pleasant’, also ‘intransitive’ class but rare.
- Some verbs oscillate between the first two classes: *dhil* : *nidhul* ‘to fear’.

Tab. 37.8 lists the kernel morphemes |KM| by specifying the appropriate persons and numbers:

Tab. 37.8: The kernel morpheme of the perfect and imperfect

	Perfect	Imperfect
G	GiʔL= 3.f./1. sg. GʔaL= other pers.	=iGiʔL= 3. m.f./2. m.f. pl. =(i)Gʔul= other pers.
D	HašB= 3.f./1. sg. HašiB= other pers.	=iHašB= 3. m.f./2. m.f. pl. =(i)HašiB= other pers.
A	aPRiŠ= all pers.	=aPRŠ= 3. m.f./2. m.f. pl. =aPRiŠ= other pers.
tG	etGiʔL= 3.f./2.c./1. sg/3. pl. etiGʔiL= other pers.	=(it)GiʔL= 3. m.f./2. m.f. pl. =i(ti)GʔiL= other pers.
tD	etHašB= 3.f./1. sg. etHašaB= other pers.	=i(t)HašB= 3. m.f./2. m.f. pl. =i(t)HašaB= other pers.
tA	etaPRiŠ= 3.f./1. sg. etaPRaŠ= other pers.	=itaPRiŠ= 2. m.f. pl. =(i)taPRaŠ= other pers.

No forms with *-t-* in the prefix seem to occur in tG- and tD-stems for 3.f. and 2.c. sg.

The imperative is formed by means of dropping the prefix of the imperfect. Masculine and feminine exhibit the same forms in sg. and pl. Plural imperative forms with endings *-un* and *-iun* are secondary and rare.

The kernel morphemes of the participle present are shown in Table 37.9:

Reflexive forms of the T-stems are not attested for all persons and numbers.

Tab. 37.9: The kernel morpheme of the participle present

	Active	Passive
G	GaʔiL= 3. m./1. sg. GaʔL= other pers.	GʔiL= all pers.
D	mHašiB= 3. m./1. sg. mHašB= other pers.	mHašaB= 3. m./1. sg. mHašB= other pers.
A	maPRiŠ= all pers.	maPRaŠ= all pers.

The infinitive of G is miGṭaL ‘to kill’ or miSMiK ‘to support’. The D and A stems also have infinitive forms without prefix *m-*: D-stem BaRuKia /barru:ke:/ ‘to bless’ and mPaQuDia ‘to order’; A-stem aGZuRia ‘to condemn’ and maŠLuMia ‘to order’.

4.4.3. Weak verbs

The derivations from the regular paradigms of the strong verb have various underlying reasons and have caused the partial or total merger of verbal classes.

For *verba primae nun* the underlying reason is the assimilation of the first radical *n* to the second or the dropping of *n* in imperative facultative: *nipuq* /nippuq/ and *ninpuq* ‘he goes out’ imperfect (root NPQ); *sab* vs. *nsib/nsub* ‘take!’ imperative (root NSB).

Likewise assimilated is the sonant *l* of the root SLQ ‘to ascend’: *nisaq* /nissaq/ ‘he ascends’. The imperative is *saq*, *siq* ‘ascend!’.

The only functional laryngeal in Mandaic, /h/, seems to avoid the third or last position in a root. The root PTH ‘to open’ has two secondary roots PHT (with metathesis) and PTA (according to the notation of Drower/Macuch 1963 with the vanishing of H): *ptaht* ‘thou didst open’, *pihtat* < **pithat* ‘she opened’ and *pta* < **ptah* ‘he opened’ (h/# > ø).

The vanishing of the laryngeals affects many roots and has led to the fusion of paradigms. As demonstrated by Voigt 2007, 158 ff., the notation used in Drower/Macuch 1963 is not appropriate for resolving the ambiguity found in weak verbal forms. This dictionary mostly uses a U (rarely an I) for middle weak roots like QUM ‘to stand’ and HIL ‘to strengthen’, and an A for other weak positions as in AZL ‘to go’, BAR ‘to burn’, ŠMA ‘to hear’.

Although [ʔ] and [ʕ] have vanished as phonemes, traces can be found in the deep structure of the morphemes. Although [ʕ] could be represented by a *j* as in the forms of the root ŠAA ‘to talk’ *eštaiia* /eštajji:/ (< *etŠaʕʕaY, perf. tD-stem, 3. sg. m.) when compared with Syriac *ʔeštaʕʔ* (root ŠʕY) or the 3. sg. f. *eštaiat* /eštajjat/, syr. *ʔeštaʕjat*, it is apparent that the Mandaic root should be noted as ŠIA or ŠII.

Another ambiguous situation concerns the classes *mediae geminatae* and *mediae U* by which many forms fuse graphically and to some degree phonetically as well. Examples for the G-stem: perf. 3. m. *qam* /qa:m/ ‘he stood’ (root QUM) and *mak* /mak/ ‘he lowered’ (root MKK), *qamit* /qa:mit/ ‘I stood’ and *makit* /makkit/ ‘I have levelled’; impf. 3. m. *niqum* resp. *nimuk*; act. part. *qaiim* /qa:jim/ ‘standing’ is identical with *maiik* /ma:jik/ ‘spreading’. Examples for D-stem: perf. 3. m. *qaiim* /qajjim/ ‘he raised’ and *malil* /mallil/ ‘he spoke’ (root MLL); impf. 3. m. *niquiim* resp. *nimalil*.

Some roots *tertia infirmae* follow the strong paradigm of the *verba mediae geminatae* in D-stem: the root GLA (< GLY) has in perf. 3. m. G-stem *gla* /gla:/ ‘he revealed’ and in perf. D-stem *galil* /gallil/ ‘he revealed’: from the root BNA (< BN?) perf. 3. m. G-stem *bnā* ‘he built’ and perf. 1. sg. D-stem *baninth* ‘I built it (h) up’.

5. Prepositions and conjunctions

5.1. Prepositions

Besides the two proclitic prepositions *b-* ‘in, by’ and *l-* ‘to, for, nota accusativi’, the main group is represented by independent prepositions like *el* (with the same meaning

as *l-*), *mn* ‘from, with’, (*a*)*luat*, *eluat*, ‘near, close, by’, (*a*)*tutia* ‘under’, *qudam*, (*a*)*qam* ‘before’, (*a*)*batar* ‘after’, *ahuria* ‘behind’, *bit*, *binia* ‘between’, *aminṭul* ‘because of’, *akuat* ‘like’, *abihdia* ‘near’. Most prepositions can be followed by personal suffixes, in some cases changing their morphology: *min-h* ‘from him’, *binat-aian* ‘between us’, *aminṭulat-ak* ‘for thy sake’.

5.2. Conjunctions

The most common conjunctions are the coordinative *u-* ‘and’, *ap* ‘also’, *eu* ‘or’ and *eu ... eu* ‘either ... or’ and the subordinative *eu* ‘if’, *hin* ‘if’, *hinila* (*hinela*) ‘if not’, *d-* ‘that, so that’, *kd* ‘when’, *alma* ‘until’.

6. Syntax

Characteristic of Mandaic syntax is the relatively free position of the parts of speech within a phrase or a clause. Only the expression of possession using the status constructus represents a fixed clause: *raz ruia* ‘the mystery of the drunkenness’ *b-šum hiia* ‘in the name of Life’. The fixed genitive construction can be substituted for a periphrastic construction using the relative particle *d-*: *b-šuma d-hiia* [st. emph. d-st. emph.], *b-šumaihun d-hiia* [st. pronominalis + suffix d-st. emph.].

As a general rule, the attributive adjective follows the substantive and agrees with the noun in gender, number and status: *naura rba* ‘the great mirror’, *anana kasita* ‘a hidden cloud’.

Ordinal numbers take a free position in relation to the determined substantive *tlitaiia raza* ‘the third secret’, *hiia tlitaiia* ‘the Third Life’.

The free syntagmatic of Mandaic stands in contrast to the standard order VSO found in most dialects of Aramaic, and is illustrated by the following examples:

SOV *u-maria₁ el abda₂ la-mšalaṭ₃* ‘and the lord₁ has no might₃ over the servant₂’

SVO *u-hiia₁ zakin₂ l-kulhun eubadia₃* ‘and Live₁ is victorious₂ over all works₃’

VSO *qaiamin₁ hiia₂ b-škinatun₃* ‘Life₂ is constant₁ in His dwellings₃’.

7. Lexicon

In addition to script, the lexicon is another disputed issue in the search for Mandaean origins. Although Classical Mandaic is considered to be an Eastern Aramaic language, there are some important terms which may indicate (for at least part of the original Gnostic movement) a Western provenance in Palestine in the 1st century CE. To this Western stratum belong important religious terms: *manda* (*mandaiia*) ‘Gnosis’, *kuṣṭa* ‘Truth’, *našuraia* ‘Naṣoraean’, *gupna* ‘vine’, *sindirka* ‘evergreen tree’, *maškna* ‘temple’, *maṣbuta* ‘baptism’. A long list of geographical and personal names may also be cited in argument for a Western origin of the Mandaeans (see Macuch 1965b, 76–131 and

Rudolph 1960, 60 ff.). Most famous among them is *Iardna* 'Jordan' but also 'baptismal water'.

Babylonian influence on the Mandaic lexicon is linked to the settlement of the Mandaeans in Mesopotamia. The Akkadian loanwords in Mandaic consist of names of objects of the material culture and religious and astrological terminology (Kaufman 1974, 163) such as: *ašganda* 'assistant', *ekura* 'pagan temple', *ginia* (pl.) 'pagan sacrifices', *kana* 'vessel', *šatama* 'temple-functionary', *šara* 'direction', *šuša* 'unit of time', *zabanita* 'scales', *ziqpa* 'astronomical term'. The Mandaic planet names are all Babylonian loan words.

Iranian loanwords form a significant proportion of loanwords in Mandaic. Most are designations for ritual and cultic instruments and parts of vestments and are of Middle Iranian origin (Widengren 1960, 89–108): *burziŋa* 'turban', *taga* 'crown', *pandama* 'the long end of the turban folded over the lower part of the face', *himiana* 'girdle', *margna* 'ritual staff', *drabša* 'banner', *paruanaiia* 'the five epagomena days', *marganita* 'pearl', *siauiā* 'black', *mana* 'spirit, soul, mind', *br guda* 'curtain'.

In contrast to Syriac and Jewish Aramaic, very few Greek loans are known in Mandaic. The postclassical language has also integrated a large amount of borrowings from Modern Persian and Arabic.

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38. Western Neo-Aramaic

1. Introduction
2. Phonology
3. Morphology
4. Syntax
5. References

Abstract

Western Neo-Aramaic consists of three dialects represented in the Syrian villages Ma'lūla, Bax'a and Jubb'adīn, which differ in the consonantal and vowel system as well as in morphology. In contrast to Eastern Neo-Aramaic, the two old Aramaic tenses (qṭal and yiqṭul) are preserved. In addition, two new tenses have evolved out of the old participles. Other peculiarities of Western Neo-Aramaic include the development of an enumeration plural and the preservation of determined and indetermined adjectival forms.

1. Introduction

Western Neo-Aramaic (WNA) is spoken in three mountain villages in the Antilibanon, north of Damascus, namely Ma'lūla (M), Bax'a (B), and Jubb'adīn (J). These represent the last remaining speech island of Western Aramaic. The population of M is Christian with a small minority of Moslems. B (official name Šarxa) and J (Aramaic name Ġup-pa'ōd) are purely Moslem villages. There are no significant differences in the dialect between Moslems and Christians in M. Many speakers of WNA live outside the three villages, mainly in Damascus and Beirut. Today the language is spoken by a maximum of 15,000 people. All speak Arabic as a second mother tongue. WNA is a vernacular, not written and only spoken in everyday life, within the village and the families. The language of instruction and worship is Arabic.

Although the three villages are situated only at a slight distance from each other there are remarkable differences in the language, so that one can speak of three different dialects. The following description focuses on the dialect of M. Divergencies of the two other dialects are noted if appropriate.

2. Phonology

2.1. Consonants

The three dialects of WNA have a somewhat different system of consonantal phonemes; therefore phonemes not occurring in all three dialects are put in parentheses in Table 38.1. Phonemes with only marginal phoneme status are put between square brackets:

Tab. 38.1: Consonants

<i>p</i>	<i>b</i>	<i>t</i>	[<i>d</i>]	<i>ṭ</i>		<i>k</i>	[<i>g</i>]	<i>ḳ</i>		[<i>ʕ</i>]
		(<i>ṣ</i>)			(<i>č</i>)	(<i>ḡ</i>)				
<i>f</i>		<i>t̤</i>	<i>d̤</i>	<i>ḏ</i>		<i>x</i>	<i>ḡ</i>	<i>ḥ</i>	<i>ʕ</i>	<i>h</i>
		<i>s</i>	<i>z</i>	<i>ṣ</i>	<i>z̤</i>	<i>š</i>	(<i>ž</i>)			
<i>m</i>		<i>n</i>								
		<i>l</i>								
		<i>r</i>								
<i>w</i>					<i>y</i>					

In B ancient **t* has been shifted to *ṣ* /ts/ whereas the two other dialects have *č* /tš/. Ancient **q* and **k* in B developed into a strongly post-velar *ḳ* and a slightly palatalized *k*. In M they correspond to a slightly post-velar *k* and a strongly palatalized *k* /kj/. J has shifted **q* to *k* and **k* to *č*, whereby the latter coincided with *č* < **t*. Arabic *ḡ* is taken over in M and J as *ž* of Damascene pronunciation, whereas B has *ḡ*.

The most noticeable sound shifts which occurred in WNA concern the Begadkephat. Although the difference between spirant and plosive pronunciation is preserved, this is fixed for each single word and for each root so that the former allophones have become phonemes. The spirants are widely preserved and have in addition spread to the word initial position, whereas the old voiced plosives were devoiced and the old voiceless plosives were palatalized. Only the consonants *p* and *b* are replaced by *f* and *b* under the influence of Arabic, which doesn't have *p* or *b*. Table 38.1 shows the sound change in the three WNA dialects.

2.2. Vowels

WNA has a vowel system consisting of five long and five short vowels and two diphthongs:

<i>ī</i>		<i>ū</i>		<i>i</i>		<i>u</i>			
<i>ē</i>		<i>ō</i>		<i>e</i>		<i>o</i>			
	<i>a</i>				<i>a</i>		<i>ay</i>	<i>aw</i>	

A non-phonemic, functionally non-syllabic, ultra-short vowel *ʾ* may be inserted between groups of more than two consonants or between two consonants in word final position:

<i>iʾr</i>	two	<i>ṣabʾta</i>	colour, dye

Tab. 38.2: Sound changes of the Begadkephat

Ancient		M	B	J	examples (M/B/J)	
*p	→	f	f	f	<i>affek/affek/affek</i>	to bring out
*p̄	→	f	f	f	<i>xēfa/xēfa/xēfa</i>	stone
*b	→	p	p	p	<i>xalpa/xalpa/xalpa</i>	dog
*b̄	→	b	b	b	<i>qēba/qēba/qēba</i>	wolf
*t	→	č	č	č	<i>berča/berča/berča</i>	daughter
*t̄	→	ṭ	ṭ	ṭ	<i>hōṭa/hōṭa/hōṭa</i>	sister
*d	→	t	t	t	<i>ḡelta/ḡelta/ḡelta</i>	skin
*d̄	→	ḏ	ḏ	ḏ	<i>ḏōḏa/ḏōḏa/ḏōḏa</i>	uncle
*k	→	k	k	č	<i>ḏokkta/ḏokkta/ḏoččta</i>	place
*k̄	→	x	x	x	<i>irrex/irrex/irrex</i>	long
*g	→	k	k	č	<i>ṭelka/ṭelka/ṭelča</i>	snow
*ḡ	→	ḡ	ḡ	ḡ	<i>foḡla/foḡla/foḡla</i>	radish

Short vowels occur in all kinds of syllables in contrast to the long vowels. These occur only in stressed open or closed syllables. Consequently there can be only one long vowel in every word. If the stress has shifted to the following syllable, long vowels are regularly replaced by short vowels, and the vowel quality of *ē* and *ō* is then changed to *i* and *u*:

	<i>bīra</i>	well	<i>birō</i>	wells
	<i>ḥūya</i>	snake	<i>ḥuyō</i>	snakes
but	<i>xēfa</i>	stone	<i>xifō</i>	stones
	<i>yōma</i>	day	<i>yumō</i>	days

If the long vowel *ō* historically derives from **ā* the vowel quality is preserved as *a* when it is shortened:

<i>mōra</i>	master, owner	<i>marō</i>	masters, owners

The following example shows how the stress shifts from the initial syllable towards the end of the word and how vowels are shortened when suffixes are added:

	<i>mōšeg</i>	he is washing
+ feminine ending	<i>mašīga</i>	she is washing
+ pronominal suffix 3 sg m	<i>mašigōle</i>	she is washing him

In WNA vowel change is also caused by umlaut. The stressed vowels *ē*, *e*, *ō*, *o* are raised to *ī*, *i*, *ū*, *u* when suffixes containing *ī/i* (in J also *ay*) are added:

<i>xefax</i>	your (m.) stone	<i>xīfīš</i>	your (f.) stone
<i>ḥōnax</i>	your (m.) brother	<i>ḥūn(i)</i>	my brother
<i>berčax</i>	your (m.) daughter	<i>birč(i)</i>	my daughter
<i>kommax</i>	in front of you (m.)	<i>ḡummiš</i>	in front of you (f.)

2.3. Stress

Final syllables ending in two consonants or containing a long vowel are stressed. Otherwise word stress is usually on the penultimate syllable.

3. Morphology

3.1. Pronouns

The suffixed pronouns express possession on nouns, pronominal objects on verbs and relation on prepositions. In B gender distinction is lost in the plural of verbs, adjectives and pronouns (the masculine form has been generalized). Thus we have the following personal pronouns:

Tab. 38.3: Independent and suffixed personal pronouns

			independent			suffixed		
			M	B	J	M	B	J
3	sg	m	<i>hū</i>	<i>hū</i>	<i>hū(h)</i>	<i>-e</i>	<i>-i/-e</i>	<i>-e/-i</i>
		f	<i>hī</i>	<i>hī</i>	<i>hī(h)</i>	<i>-a</i>	<i>-a</i>	<i>-a(h)</i>
	pl	m	<i>hinn(un)</i>	<i>hinn</i>	<i>hīn</i>	<i>-(h)un</i>	<i>-(u)n</i>	<i>-un/-Ø</i>
		f	<i>hinn(en)</i>		<i>hinnen</i>	<i>-(h)en</i>		<i>-(h)en</i>
2	sg	m	<i>hačč(i)</i>	<i>hačć</i>	<i>hāč</i>	<i>-(a)x</i>	<i>-(a)x</i>	<i>-(a)x</i>
		f	<i>hašš(i)</i>	<i>hašš</i>	<i>hāš</i>	<i>-(i)š</i>	<i>-(i)š</i>	<i>-(i)š</i>
	pl	m	<i>hačxun</i>	<i>hačxun</i>	<i>hačč²x</i>	<i>-xun</i>	<i>-xun</i>	<i>-x</i>
		f	<i>hačxen</i>		<i>haččxen</i>	<i>-xen</i>		<i>-xen</i>
1	sg	c	<i>ana</i>	<i>ana</i>	<i>ana</i>	<i>-Ø/-i</i>	<i>-Ø</i>	<i>-ay/-Ø</i>
	pl	c	<i>anaḥ</i>	<i>anaḥ</i>	<i>anaḥ</i>	<i>-(n)aḥ</i>	<i>-(n)aḥ</i>	<i>-(n)aḥ</i>

Demonstrative pronouns

Tab. 38.4: Demonstrative pronouns

			M	B	J
near	sg	m	<i>hanna</i>	<i>hanna</i>	<i>hanna</i>
		f	<i>hōd(i)</i>	<i>hōt</i>	<i>hō(d)/hōden</i>
	pl	m	<i>hann(un)</i>	<i>hann</i>	<i>hān</i>
		f	<i>hann(en)</i>		<i>hannen</i>
far	sg	m	<i>hōte</i>	<i>hōti</i>	<i>hōte</i>
		f	<i>hōta</i>	<i>hōta</i>	<i>hōta</i>
	pl	m	<i>haṭinn(un)</i>	<i>haṭinn</i>	<i>haṭīn</i>
		f	<i>haṭinn(en)</i>		<i>haṭinnen</i>

The relative pronoun is *ci* in B and *ti* with variant *či* in M and J. The interrogative pronouns are:

M	B	J	
<i>mōn</i>	<i>man</i>	<i>mūn</i>	who?
<i>mō</i>	<i>mā/ma</i>	<i>mā(h)/ma(h)</i>	what?

3.2. Nouns

3.2.1. Gender

Masculine nouns are normally marked by the ending *-a*, and the majority of feminine nouns have the ending *-ta* or *-ča* (in B *-ča*):

M	B	J	
<i>telka</i>	<i>telka</i>	<i>telča</i>	snow
<i>aḥʔšmūta</i>	<i>aḥʔšmūta</i>	<i>ḥšamūta</i>	dinner, supper
<i>ʿarūfča</i>	<i>ʿarūfča</i>	<i>ʿarūfča</i>	friday

3.2.2. Number

WNA distinguishes singular, plural and enumeration plural. The masculine plural ending is *-ō*, in J also *-ōya*. The feminine plural ending is *-(y)ōta*. The enumeration plural has no ending in B and J. In M the enumeration has no masculine ending but an archaic feminine ending *-an* is preserved:

Tab. 38.5: Nominal endings

M	B	J	
<i>yarḥa</i>	<i>yarḥa</i>	<i>yarḥa</i>	month
<i>yarḥō</i>	<i>yarḥō</i>	<i>yarḥō(ya)</i>	months
<i>iṭʔr yarḥ</i>	<i>iṭtar yarḥ</i>	<i>iṭter yarḥ</i>	two months
<i>šabʕta</i>	<i>šabʕta</i>	<i>šabʕta</i>	colour
<i>šabʕōta</i>	<i>šabʕōta</i>	<i>šabʕōta</i>	colours
<i>tarč šabʕan</i>	<i>tarč šabʕ</i>	<i>tarč šabʕ</i>	two colours

3.2.3. State

The nominal endings have their origin in the emphatic state, but the determinate force is lost. The absolute state survived in the enumeration plural. Only the adjective preserved the old determination system, e.g. *rabb* ‘big’:

	sg. m.	sg. f.	pl. m.	pl. f.
indefinite	<i>rabb</i>	<i>rappa</i>	<i>rappin</i>	<i>rappan</i>
definite	<i>rappa</i>	<i>rappta</i>	<i>rappō</i>	<i>rappōta</i>

3.3. Verbs

3.3.1. Tenses

WNA has with its four tenses a very rich verbal system compared with other Aramaic dialects. These four tenses developed as follows:

with suffixes: preterite tense	<i>ik̄tal</i> <	perfect	* <i>q̄ʔtal</i>
with prefixes: subjunctive	<i>yik̄tul</i> <	imperfect	* <i>yiq̄tul</i>
present tense	<i>k̄ōtel</i> <	active participle	* <i>q̄āṭil</i>
perfect tense	<i>ik̄tel</i> <	passive participle	* <i>q̄ṭil</i>

3.3.2. Derivation

Apart from the six inherited Aramaic derivational stems WNA has mostly integrated the Arabic verbal stems in such a way that they are indistinguishable from the traditional Aramaic system of verbal stems:

original Aramaic word			Arabic loan	
pəʿal	<i>išmeʿ</i>	to hear	I. <i>iḏhek</i>	to laugh
paʿel	<i>baššel</i>	to cook	II. <i>ḥammel</i>	to load
aʿel	<i>arkeš</i>	to wake up	IV. <i>ağreḵ</i>	to fall asleep
eṭpaʿal	<i>čḥayyaṭ</i>	to be sewn	V. <i>čḥammal</i>	to endure

Arabic stems which do not correspond to an Aramaic stem are converted in the following way:

stem	Arabic		WNA	
III.	<i>šāraṭ</i>	→	<i>šōreṭ</i>	to bet
VI.	<i>tarāfaq</i>	→	<i>črōfek</i>	to join sb
VII.	<i>infaḡar</i>	→	<i>inʔfzar</i>	to explode
VIII.	<i>iftaḡam</i>	→	<i>iʔčḡam</i>	to understand
X.	<i>istaqbal</i>	→	<i>sčakbel</i>	to accept

3.3.3. Inflexion

The preterite tense is inflected by means of suffixes. Monosyllabic bases receive an epenthetic vowel (*iftaḡ* < *pʔtaḡ* 'he opened'). The endings of the 3rd person plural have been dropped so that the 3rd person plural coincides with the 3rd person singular. In J the ending *-xun* of the 2nd person plural masculine is shortened to *-x*. In B gender distinction in the plural is lost (Tab. 38.6).

The subjunctive is inflected by prefixes and plural endings. The prefix is a single consonant to which a vowel is added if the base begins with a cluster of two consonants. The prefix vowel in M is always *i*, in the two other villages *u* also occurs if the following root vowel is *u*. The 2nd person singular feminine had until the end of the last century a prefix *š-* in M, which has been preserved now only in B and J, whereas in M it has been replaced by the masculine prefix *č-* (Tab. 38.7).

Present and perfect tense hark back to the old participles and function without a subject prefix as 3rd persons:

<i>zōben</i>	he buys	<i>izben</i>	he has bought
<i>zōbna</i>	she buys	<i>zbīna</i>	she has bought
<i>zōbnin</i>	they (m.) buy	<i>zbīnin</i>	they (m.) have bought
<i>zōbnan</i>	they (f.) buy	<i>zbīnan</i>	they (f.) have bought

Tab. 38.6: Inflection of the past tense

			M	B	J	M
3	sg	m	-Ø	-Ø	-Ø	<i>iftaḥ</i>
		f	-aṭ	-aṭ	-aṭ	<i>fathaṭ</i>
2	pl	c	-Ø	-Ø	-Ø	<i>iftaḥ</i>
		m	-ič	-ič	-ič	<i>fathič</i>
	sg	f	-iš	-iš	-iš	<i>fathiš</i>
		m	-ičxun	-ičxun	-ič ^a x	<i>fathičxun</i>
1	pl	f	-ičxen	-ičxun	-ičxen	<i>fathičxen</i>
		c	-iṭ	-iṭ	-iṭ	<i>fathiṭ</i>
	pl	c	-innaḥ	-innaḥ	-innaḥ	<i>fathinnaḥ</i>

Tab. 38.7: Inflection of the subjunctive

			M	B	J	M
3	sg	m	y(i)-	y(i/u)-	y(i/u)-	yiftuḥ
		f	č(i)-	č(i/u)-	č(i/u)-	čiftuḥ
	pl	m	y(i)-	-un y(i/u)-	y(i/u)-	-un yfuḥun
		f	y(i)-	-an y(i/u)-	y(i/u)-	-an yfuḥan
2	sg	m	č(i)-	č(i/u)-	č(i/u)-	čiftuḥ
		f	č(i)-	š(i/u)-	š(i/u)-	čiftuḥ
	pl	m	č(i)-	-un č(i/u)-	č(i/u)-	-un čfuḥun
		f	č(i)-	-an č(i/u)-	č(i/u)-	-an čfuḥan
1	sg	c	n(i)-	n(i/u)-	n(i/u)-	niftuḥ
		c	n(i)-	n(i/u)-	n(i/u)-	niftuḥ

1st and 2nd persons are formed by adding the prefixes *n-* and *č-* (with the exception of 2 sg. f. in B and J which has a prefix *š-*). Thereby gender distinction in the 1st person also came into being:

<i>nzōben</i>	I (m.) buy	<i>nzōbna</i>	I (f.) buy
<i>nzōbnin</i>	we (m.) buy	<i>nzōbnan</i>	we (f.) buy
<i>čzōben</i>	you (m.) buy	<i>čzōbna</i> (<i>šzōbna</i>)	you (f.) buy
<i>čzōbnin</i>	you (pl. m.) buy	<i>čzōbnan</i>	you (pl. f.) buy

The prefixes have an additional vowel *i* if the base begins with a cluster of two consonants (*čizbīna* ‘you (f.) have bought’). In B feminine plural forms have been replaced by the masculine plural forms.

3.3.4. Verb with object suffixes

The preterite tense and the subjunctive take three different types of pronominal suffixes. The suffixed personal pronouns are used as pronominal accusative objects. To express a pronominal dative object, the suffixed personal pronouns are connected with *-l-*. A dative object and additionally an accusative object of the 3rd person can be annexed by means of a second, infixed *-l-*:

	preterite		subjunctive	
	<i>iftaḥ</i>	he opened	<i>yiftuḥ</i>	that he opens
+ -e	<i>fathē</i>	he opened it (m.)	<i>yfuthenne</i>	that he opens it (m.)
+ -le	<i>fīaḥle</i>	he opened for him	<i>yiftōḥle</i>	that he opens for him
+ -lēle	<i>faṯḥlēle</i>	he opened it for him	<i>yfuṯḥlēle</i>	that he opens it for him

The present and perfect tenses have only one set of pronominal suffixes with the intermediary preposition *l-* to express an accusative or dative pronominal object:

Present tense:	<i>fōṭaḥ</i>	+ <i>le</i>	→	<i>fataḥle</i>	he opens it (m.) he opens for him
Perfect tense:	<i>iftēḥ</i>	+ <i>le</i>	→	<i>fīḥle</i>	he had opened it (m.) he had opened for him

3.4. Numerals

WNA has, like the older Aramaic dialects, a feminine and a masculine set of the cardinals from 1 to 19. The cardinal numbers from 3 to 19 are used in the gender opposite to the counted thing:

Tab. 38.8: Cardinal numbers

M	masculine	feminine		
1	<i>aḥḥaḍ</i>	<i>eḥḍa</i>		
2	<i>iṯʳ</i>	<i>ṯarč</i>	20	<i>ʿisʳr</i>
3	<i>eṯlaṯ</i>	<i>ṯlōṯa</i>	30	<i>ṯlēt</i>
4	<i>arpā</i>	<i>arpʿa</i>	40	<i>irpʳᶜ</i>
5	<i>ḥammeš</i>	<i>ḥamša</i>	50	<i>ḥimʳš</i>
6	<i>šeṯṯ</i>	<i>šečča</i>	60	<i>šičč</i>
7	<i>ešbaʿ</i>	<i>šobʿa</i>	70	<i>šubʳᶜ</i>
8	<i>ṯmōn</i>	<i>ṯmōnya</i>	80	<i>ṯmēn</i>
9	<i>eṯšā</i>	<i>ṯešʿa</i>	90	<i>ṯišʳᶜ</i>
10	<i>eʿsar</i>	<i>ʿasra</i>	100	<i>emʿa</i>

4. Syntax

4.1. Nominal constructions

An old construct state exists only for a few words like *bē* ‘house, family’, *ēḍ* ‘holiday’, *ebʳr* ‘son’ and *mōr* ‘master, owner’. The genitive is annexed mostly by the suffix *-l* (after -CC *-il*) after the nominal ending *-a* has been dropped. Alternatively the genitive particle *ti* ~ *či* (in B only *či*) may be used:

M	<i>berčil ḥōte</i>	the daughter of his sister
	<i>sōba ti blōta</i>	the mayor of the village

Besides the regular plural an enumeration plural is used after numerals and after *exma* 'how many, some':

M	<i>yumō</i>	days	<i>iṣṣr yūm</i>	two days
			<i>exma yūm?</i>	how many days?

The demonstrative always precedes the noun but it has lost some of its deictic power and has now only the value of a definite article. For that reason a second demonstrative can be used after the noun which always has the value of a demonstrative pronoun. Attributive adjectives always follow the noun:

<i>hanna ḡabrōna</i>	this/the man
<i>hanna ḡabrōna hanna</i>	this man
<i>xēfa ḥuwwar</i>	a white stone

4.2. Determination

Determination or indetermination of a noun can be marked by the status of the attributive adjective:

M	<i>ḡabrōna rabb</i>	a big man
	<i>ḡabrōna rappa</i>	the big man

Determination of an object noun is marked by the suffix *-l* (after *-CC -il*) on the verb. If the verb is connected with a pronominal suffix, an infix *-l-* is incorporated to express definiteness:

M	<i>ayt leḥma</i>	he brought bread
	<i>aytīl leḥma</i>	he brought the bread
	<i>aytēle leḥma</i>	he brought him bread
	<i>aytlēle leḥma</i>	he brought him the bread

4.3. Agreement

An adjective agrees with its head noun and a verb with its subject in gender and number:

M	<i>psōna z'ōra ob m-matrasṭa</i>	the little boy is in the school
	<i>bisnīṭa z'ōrča ayba m-matrasṭa</i>	the little girl is in the school
	<i>bisīnō z'ūrin aybin m-matrasṭa</i>	little boys are in the school
	<i>bisīnyōṭa z'ōran ayban m-matrasṭa</i>	little girls are in the school

If a verb refers to more than one subject the verb agrees only with the first subject:

M	<i>zelle hū w arp'a ḥamša ḥōḏ 'al-ōm m'arrṭa</i>	he and four (or) five persons go to this sepulchre (lit. he goes and four five persons to this sepulchre)

A collective term agrees with verbs and adjectives in gender and number either according to its grammatical form or *ad sensum*:

M	<i>mballšin omm̄ta yīṭyullun</i>	people (sg f) begin (pl m) to come (pl m)
	<i>hanna ša'ba 'amfarraḡ a'le</i>	the people (sg m) are (lit. is) looking on him

4.4. Verb phrases

The two old Aramaic tenses (*q̄tal* and *yīq̄tul*) have been preserved but only the perfect (now *iḡtal*) still refers to a single completed action in the past and is called here the preterite. The old imperfect (*yīq̄tul*) is no longer an action in the present tense but is used now as a subjunctive mood. A new present tense has been formed out of the old active participle *qāṭil*. The old passive participle has developed into a new perfect tense.

Similar to the surrounding Arabic dialects, verb modifiers or auxiliaries are used to express other aspects of the verb. To denote, for example, the future, the auxiliary *batt-* (in Jubb'adīn *bēl-*) precedes the subjunctive form of the verb. Present progressive is marked by a prefix *'am-* and durative or habitual actions in the past by the defective verb *wōb*:

<i>batte</i> (J <i>bēle</i>)	<i>yzappen bi'ō</i>	he will sell eggs
<i>'amzappen</i>	<i>bi'ō</i>	he is selling eggs
<i>wōb</i>	<i>mzappen bi'ō</i>	he used to sell eggs.

4.5. Negation

Negation of the verbs in the preterite tense and in the subjunctive is marked by the particle *lā*:

<i>lā ṭīzu'!</i>	don't worry!
<i>lā yīxul baḡar</i>	he should not eat too much
<i>lā nifkīt m-payta</i>	I didn't leave the house

For nonverbal parts of the clause or for verb forms of nonverbal origin the negation particle *čū* (B *čū*) is used. This is true for the two new tenses, present and perfect, that have been formed out of the old participles and for the defective verb *batt-* of the nominal Arabic origin *bi-wadd*:

<i>ču kayyes</i>	not good
<i>ču dōmxin</i>	they don't sleep
<i>ču nšawwīyin xōla</i>	we have not prepared a meal
<i>ču batt nīxul</i>	I don't want to eat

4.6. Subordination

The relative particle *ti* or *či* (B *či*) is of Aramaic origin but the way of subordinating relative clauses is fully compatible with Arabic. In syndetic relative clauses the anteced-

Asyndetic:	<i>wōt rōʿya ʿamraʿēl ʿizzōye</i> There was a shepherd, (who was) herding his goats
Syndetic:	<i>hanna ġamla ti fʿille</i> This camel, which has carried him

w hū ‘ammallex willa tōle sōbl’ blōta
While he was walking, lo and behold – the mayor of the village came.

<i>lōb arəhtīč člaḥekle</i>	If you run, you will catch up with him
<i>yīb nmaqʼtra nisbuh, la nzill naytillēle</i>	If I were able to swim, I would go and get it for him

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39. Țuroyo and Mlaḥsô

1. Țuroyo and Mlaḥsô
2. Phonology
3. Morphology
4. Syntax and lexicon
5. References

Abstract

Țuroyo was originally spoken in the Țūr ‘Abdīn area of Mardin province, in south-east Turkey. Few speakers now remain in the area but there is a large Țuroyo-speaking diaspora overseas. The closest cognate of Țuroyo is the language of Mlaḥsô which was spoken in two villages in Diyarbakir province and must now be considered extinct. Țuroyo phonology is conservative, while Mlaḥsô shows more phonological developments. Verb derivation reflects the six stems of Middle Aramaic. The inflection is based on the older participles in status absolutus. There are some differences in verb morphology, e.g. in the formation of the passive (Jastrow 1996). Both languages also differ in the way in which a pronominal object of the verb is expressed. Țuroyo and Mlaḥsô are the only Neo-Aramaic languages that have developed a full-fledged definite article, which always precedes the noun and carries the main stress.

1. Țuroyo and Mlaḥsô

1.1. Introduction

The original homeland of the Țuroyo language is the so-called Țūr ‘Abdīn, a compact area in the eastern part of Mardin province, in south-east Turkey. The Țuroyo-speaking population who lived there were Christian and largely adhered to the Syrian Orthodox Church. The ethnocide of the Armenians in 1915 also brought death and destruction to Țūr ‘Abdīn but did not lead to a wholesale extermination of the ethnic group. By 1970 an estimated 20,000 Țuroyo speakers still lived in the area, but due to continuing pressure they gradually emigrated to Western Europe and other parts of the world. The Țuroyo-speaking diaspora in Central Europe and Scandinavia is estimated at some 40,000 people, and there are also large communities in the United States, Canada and Australia while only a few hundred speakers remain in the original homeland.

Although Țuroyo is a rather uniform language there exist slight differences between the dialects of the individual villages. A somewhat more important dialectal cleavage separates the dialect of the only town (Midyat, in Țuroyo *Mədyad*) from the village dialects as a whole.

The closest cognate of Țuroyo is the language of Mlaḥsô which must now be considered extinct. Even prior to the ethnocide in 1915 this idiom was apparently spoken only in two villages, both of which were subsequently destroyed: Mlaḥsô, situated near

the present-day town of Lice, north of Diyarbakir, and ‘Anša, a village near Diyarbakir. The few individuals who escaped the massacres have all since died.

Unlike the various dialects within Țuroyo, Țuroyo and Mlaḥsô are sufficiently different to be considered two separate languages. The present description will take Țuroyo as the main variety and then describe the variant developments in Mlaḥsô.

1.2. Sources

Both Țuroyo and Mlaḥsô were unwritten vernaculars, with a solely oral transmission. In recent years European diaspora communities have made attempts to write Țuroyo, either in Syriac or in Latin characters (Heinrichs 1990). This tendency is strongest in Sweden, where Jan Beth-Sawoce (Diyarbakirli) publishes journals, books on oral history and other source material. The linguistic description of both Mlaḥsô and Țuroyo is, however, based mainly on the studies and text collections of German-speaking orientalists, such as E. Prym (Prym/Socin 1881), Ritter (1967–1990), Talay (2002, 2004) and Jastrow (1992, 1993, 1994a, 1994b, 1997, 2002).

2. Phonology

2.1. Consonants

Table 39.1. shows the inventory of consonant phonemes in Țuroyo. The consonant inventory of Mlaḥsô differs on several points, as discussed below.

Tab. 39.1: Inventory of consonant phonemes in Țuroyo

	bilabial/ labiodental	dental/ interdental	palatal	velar	uvular	pharyngeal	glottal
Stop	<i>p b</i>	<i>t d</i> <i>ʈ (d)</i>		<i>k g</i>	<i>q</i>		(ʔ)
Affricate			<i>č ġ</i>				
Fricative	<i>f v</i>	<i>ʈ d</i> <i>(ɖ)</i>		<i>x ġ</i>		<i>ħ ʕ</i>	<i>h</i>
Sibilant		<i>s z</i>	<i>š ž</i>				
Nasal	<i>m</i>	<i>n (n)</i>					
Lateral		<i>l (l)</i>					
Trill		<i>r (r)</i>					
Semi-Vowel	<i>w</i>		<i>y</i>				

Symbols in brackets designate phonemes of limited distribution. *ɖ* and *ɖ* occur in loans from Arabic and may be replaced by *d* and *z*, respectively. ʔ is distinctive only word-internally where it is rare. *n*, *l* and *r* occur in verb inflection as a result of the assimilation of stem-final *-r* to suffix-initial *n*, *l* or *K*, e.g. **komar-no* → *komaṇṇo* ‘I say’, **mir-le* → *malle* ‘he said’, **mir-Ke* → *mərre* ‘they said’.

The consonantal system of Mlaḥsô lacks the interdental fricatives *t̪* and *d̪* which have shifted to *s* and *z*, respectively, e.g. Țuroyo *kote* vs. Mlaḥsô *xose* ‘he comes, is coming’, Țuroyo *ido* vs. Mlaḥsô *izo* ‘hand’.

Middle Aramiac **p*/**p̄* have both yielded *f* in Țuroyo, e.g. *foto* ‘face’ < **pāṭā*, although the shift is not yet complete and some Țuroyo dialects preserve a sporadic *p*, e.g. *poto*. The same is true for Mlaḥsô, e.g. *poso* ‘face’. Middle Aramaic **b̄* has yielded *w* in Țuroyo but *v* in Mlaḥsô, e.g. Țuroyo *gawro*, Mlaḥsô *gavro* ‘man’, Țuroyo *itāw* vs. Mlaḥsô *itév* ‘sit down!’.

2.2. Vowels

Țuroyo has an inventory of eight vowel phonemes, five tense and three lax vowels:

<i>i</i>		<i>u</i>			
	<i>e</i>	<i>o</i>		<i>ə</i>	<i>ũ</i>
		<i>a</i>			<i>ǣ</i>

The tense vowels usually occur in open syllables and are pronounced long or half long, whereas the lax vowels occur in closed syllables and are always short. Morphological processes involving the closing of an open syllable usually result in the replacing of a tense vowel by a lax one, e.g. **sim-le* → *səmle* ‘he did, he made’, *rabo* ‘big (m.)’, *rābto* ‘big (f.)’, **domex* → *domax* ‘he sleeps’, **domx-o* → *dūmxo* ~ *dəmxo* ‘she sleeps’. The vowel *ǣ* in closed syllables is usually noted as *a*. In loanwords and in some verbal forms a tense vowel may occur in a closed syllable; in this case it is marked with a macron, e.g. *zlām* ‘man’, pl. *zlamat*; *gbīn*, f. *gbīno* ‘he/she was annoyed’ (in both forms the first vowel is identical). The vowel system of Mlaḥsô comprises the same five tense vowels (usually long to half long) but only one lax vowel, *ə*. There is no shift of tense to lax vowels in closed syllables, e.g. Mlaḥsô *simle*, *domex*, *domxo*.

Historically, Middle Aramaic **ā* has shifted unconditionally to *o* in both Țuroyo and Mlaḥsô, e.g. *ḥmoro* ‘donkey’, *malko* ‘king’. In Țuroyo, Middle Aramaic **e* shifted to *ǣ* in stressed syllables but was preserved as *e* in Mlaḥsô, e.g. Țuroyo *domǣxno* vs. Mlaḥsô *doméxno* ‘I sleep’.

2.3. Suprasegmental features

Consonant gemination occurs regularly in Țuroyo as the result of certain morphological processes, e.g. *ám-malke* ‘the kings’, *səmmə* (< **sim-len*) ‘they did, made’. In Mlaḥsô, there is no consonant gemination in native words, e.g. *á-malke*, *símlen*.

In Țuroyo word stress is usually on the penultimate syllable, but is on the last syllable in Mlaḥsô, e.g. Țuroyo *málko* vs. Mlaḥsô *malkó* ‘king’, Țuroyo *kóte* vs. Mlaḥsô *xosé* ‘he comes’. In transcription stress is marked by an acute (´) when it deviates from this rule, e.g. Țuroyo *domaxno* vs. Mlaḥsô *doméxno* ‘I sleep’ (both stressed on the penultimate), but Țuroyo *domáxwayno* ‘I used to sleep; I was sleeping’.

3. Morphology

3.1. Pronouns

3.1.1. Independent pronouns

The independent personal pronouns (table 39.2.) in Midyat best reflect the original Middle Aramaic forms, whereas in the villages, and even more so in Mlaḥsô, some analogical restructuring has taken place (Jastrow 1990).

Tab. 39.2: Independent personal pronouns

	Ṭuroyo (Midyat)	Ṭuroyo (villages)	Mlaḥsô
3. sg. m.	<i>huwe</i>	<i>hiye</i>	<i>híye</i>
f.	<i>hiya</i>	<i>hiya</i>	<i>híya</i>
pl. c.	<i>honne</i>	<i>hənnək</i>	<i>hiyen</i>
2. sg. c.	<i>hat ~hāt</i>	<i>hat</i>	<i>hat</i>
pl. c.	<i>hatu</i>	<i>hatu</i>	<i>hátun</i>
1. sg. c.	<i>āno</i>	<i>ono</i>	<i>ono</i>
pl. c.	<i>aḥna ~əḥna</i>	<i>aḥna</i>	<i>elāna</i>

3.1.2. Pronominal suffixes

The personal pronouns are suffixed to substantives and prepositions. The prepositions and a small number of nouns take suffixes which hark back directly to the respective Middle Aramaic forms (series I) while most nouns take the suffixes with an intervening empty morph *-ayd-* (Ṭuroyo) or *-ez-* (Mlaḥsô) – (series II). In Ṭuroyo, series II requires the definite article of the noun, whereas in Mlaḥsô it does not, e.g. Ṭuroyo *u= baytayde*, Mlaḥsô *beytézav* ‘his house’. Nouns which appear with series I suffixes can also take series II suffixes, but nouns which take series II suffixes cannot take series I suffixes. The noun *bayto/beyto* used in table 39.4. thus can also appear as *bayte/beytav*, etc. Note that the paradigm of Mlaḥsô *bayto* (*beytézav*, etc.) has been constructed on the basis of similar forms.

Tab. 39.3: *aṣm-/ṣam-* ‘with’ and *emo* ‘mother’ with series I suffixes

	Ṭuroyo	Mlaḥsô	Ṭuroyo	Mlaḥsô
3. sg. m.	<i>aṣme</i>	<i>ṣamav</i>	<i>eme</i>	<i>emav</i>
f.	<i>aṣma</i>	<i>ṣama</i>	<i>ema</i>	<i>ema</i>
pl. c.	<i>aṣmayye</i>	<i>ṣamen</i>	<i>emayye</i>	<i>emen</i>
2. sg. m.	<i>aṣmūx</i>	<i>ṣamox</i>	<i>emūx</i>	<i>emox</i>
f.	<i>aṣmax</i>	<i>ṣamex</i>	<i>emax</i>	<i>emex</i>
pl. c.	<i>aṣmayxu</i>	<i>ṣamékun</i>	<i>emayxu</i>	<i>emékun</i>
1. sg. c.	<i>aṣmi</i>	<i>ṣami</i>	<i>emi</i>	<i>emi</i>
pl. c.	<i>aṣman</i>	<i>ṣaména</i>	<i>eman</i>	<i>eména</i>

Tab. 39.4: *bayto/beyto* ‘house’ with series II suffixes

	Țuroyo	Mlaḥsô	gloss
3. sg. m.	<i>u=baytayde</i>	<i>beytézav</i>	‘his house’
f.	<i>u=baytayda</i>	<i>beytéza</i>	‘her house’
pl. c.	<i>u=baytatte</i>	<i>beytézen</i>	‘their house’
2. sg. m.	<i>u=baytaydūx</i>	<i>beytézox</i>	‘your (m.) house’
f.	<i>u=baytaydax</i>	<i>beytézex</i>	‘your (f.) house’
pl. c.	<i>u=baytaṭxu</i>	<i>beytézekun</i>	‘your (pl.) house’
1. sg. c.	<i>u=baytaydi</i>	<i>beytézi</i>	‘my house’
pl. c.	<i>u=baytaydan</i>	<i>beytézan</i>	‘our house’

3.2. The verb

3.2.1. Derivation

The six derivational classes or ‘verb stems’ of Middle Aramaic (Pe‘al, Pa‘‘el, Af‘el and the corresponding reflexive/passive stems Ethpe‘el, Ethpa‘‘al and Ettaf‘al) survive in Țuroyo and Mlaḥsô but the details of their inflection differ (Jastrow 1990). Apart from the inflection of the imperative which has been inherited from Middle Aramaic, the rest of the verb inflection has been completely reshuffled. The inherited categories of perfect and imperfect have been replaced by new paradigms created by using the historical participles as inflectional bases. Table 39.5. shows how the Middle Aramaic verb stems are reflected in the Țuroyo active and passive conjugation.

Tab. 39.5: Middle Aramaic stems and active/passive conjugation in Țuroyo

Middle Aram.	Țuroyo-Midin	Present	Past
Pe‘al	I. Active	<i>qoṭəl</i> ‘he kills’	<i>qtalle</i> ‘he killed’
Eṭpe‘el	I. Passive	<i>məqtəl</i> ‘he is being killed’	<i>qṭil</i> ‘he was killed’
Pa‘‘el	II. Active	<i>mzabən</i> ‘he sells’	<i>mzabanle</i> ‘he sold’
Eṭpa‘‘al	II. Passive	<i>mizabən</i> ‘it is being sold’	<i>mzabən</i> ‘it was sold’
Af‘el	III. Active	<i>madmāx</i> ‘he puts to sleep’	<i>madmaxle</i> ‘he put to sleep’
Ettaf‘al	III. Passive	<i>mitadmāx</i> ‘he is being put to sleep’	<i>mtadmāx</i> ‘he was put to sleep’

3.2.2. Inflection

There are two different types of inflection: ‘predicative’ and ‘ergative’, respectively.

In predicative inflection the inflectional suffixes are shortened forms of the independent personal pronouns (2.1.1.); in the 3. person, however, the suffix is -Ø. The inflectional bases hark back to Middle Aramaic participles, either active or passive, all reflecting the old *status absolutus*. A verb form with predicative inflection thus is historically a nominal sentence, e.g. (examples from Țuroyo, village dialect):

<i>*gorāš-no</i>	→	<i>gorāšno</i>	(pulling [am] I →) ‘I pull’
<i>*gorāš-Ø</i>	→	<i>gorāš</i>	‘he pulls’
<i>*griš-no</i>	→	<i>grāšno</i>	(pulled [am] I →) ‘I was pulled’
<i>*griš-Ø</i>	→	<i>grīš</i>	‘he was pulled’

This results in ʤuroyo having a gender distinction not only in the 3. and 2. person, as is usually found in Semitic, but also in the 1. person sg., e.g. sg. m. *domaxno* vs. sg. f. *dəmxono*. Mlaḥsô, however, has generalized the former masculine form: *doméxno* ‘I (m./f.) sleep’. The following table shows the inflection of the present tense.

Tab. 39.6: Predicative inflection: present tense *domex/domax* (root *dmx*) ‘to sleep’

inflectional base	+ inflectional suffix →	Mlaḥsô	ʤuroyo (villages)	gloss
<i>*domex</i>	-Ø	<i>domex</i>	<i>domax</i>	‘he sleeps’
<i>*domx-o</i>	-Ø	<i>domxo</i>	<i>dəmxo</i>	‘she sleeps’
<i>*domx-i</i>	-Ø	<i>domxi</i>	<i>dəmxī</i>	‘they sleep’
<i>*domex</i>	-et	<i>domxet</i>	<i>dəmxət</i>	‘you (m.) sleep’
<i>*domx-o</i>	-at	<i>domxat</i>	<i>dəmxat</i>	‘you (f.) sleep’
<i>*domx-i</i>	-tun	<i>domxītun</i>	<i>dəmxutu</i>	‘you (pl.) sleep’
<i>*domex</i>	-no	<i>doméxno</i>	<i>domaxno</i>	‘I (m.) sleep’
<i>*domx-o</i>	-no	(<i>doméxno</i>)	<i>dəmxono</i>	‘I (f.) sleep’
<i>*domx-i</i>	-na	<i>domxīna</i>	<i>dəmxīna</i>	‘we sleep’

In ergative inflection the bases are likewise derived from the historical participles in the *status absolutus*. The participles, however, always reflect a historical passive and indicate the patient (undergoer) of an action. The agent is expressed by inflectional suffixes consisting of the preposition *l-* + pronominal suffixes, e.g. **l-* + *-eh* → **leh* → *-le*: ergative inflectional suffix 3. sg. m. A verb form with ergative inflection thus is likewise historically a nominal sentence with the patient (the logical object) in the nominative and the agent (the logical subject) in the ergative, e.g. ʤuroyo:

<i>*sim-le</i>	→	<i>səmle</i>	(he/it [was] made by him →) ‘he made him/it’

Tab. 39.7: Ergative inflection: past tense *šimle/səmle* (root *sym*) ‘to make’

	Mlaḥsô	ʤuroyo	gloss
3. sg. m.	<i>šimle</i>	<i>səmle</i>	‘he made’
3. sg. f.	<i>šimla</i>	<i>səmla</i>	‘she made’
3. pl. c.	<i>šimlen</i>	<i>səmmē</i>	‘they made’
2. sg. m.	<i>šimlox</i>	<i>səmlāx</i>	‘you (m.) made’
2. sg. f.	<i>šimlex</i>	<i>səmlax</i>	‘you (f.) made’
2. pl. c.	<i>šimlekun</i>	<i>səmxu</i>	‘you (pl.) made’
1. sg. c.	<i>šimli</i>	<i>səmli</i>	‘I made’
1. pl. c.	<i>šimlan</i>	<i>səmlan</i>	‘we made’

In ergative inflection ʤuroyo makes use of the three participle forms sg. m. (e.g. **griš-*), sg. f. (e.g. **grišo-*) and pl. c. (e.g. **griši-*) to express the respective patient of the action, e.g.:

<i>*grišo-le</i>	→	<i>grišole</i>	(she [was] pulled by him →) 'he pulled her '
<i>*griši-le</i>	→	<i>grišile</i>	(they [were] pulled by him →) 'he pulled them '

This is shown in table 39.8. Mlaḥsô, on the other hand, only makes use of the participle form sg. m. as an inflectional basis.

Tab. 39.8: Ergative inflection: past tense of *grășle* (root *grš*) 'to pull' in Țuroyo (village dialect)

inflectional base	+ inflectional suffix →	Țuroyo (villages)	gloss
sg. m. <i>griš-</i>	3. sg. m. <i>-le</i>	<i>grășle</i>	'he pulled him'
	3. sg. f. <i>-la</i>	<i>grășla</i>	'she pulled him'
	3. pl. c. (K)- <i>Ke</i> ~ (v)- <i>lle</i>	<i>grășșe</i>	'they pulled him'
	2. sg. m. <i>-lûx</i>	<i>grășlûx</i>	'you (m.) pulled him'
	2. sg. f. <i>-lax</i>	<i>grășlax</i>	'you (f.) pulled him'
	2. pl. (K)- <i>xu</i> ~ (v)- <i>lxu</i>	<i>grășxu</i>	'you (pl.) pulled him'
	1. sg. <i>-li</i>	<i>grășli</i>	'I pulled him'
	1. pl. <i>-lan</i>	<i>grășlan</i>	'we pulled him'
	3. sg. m. <i>-le</i>	<i>grișole</i>	'he pulled her'
	3. sg. f. <i>-la</i>	<i>grișola</i>	'she pulled her'
sg. f. <i>grišo-</i>	3. pl. (K)- <i>Ke</i> ~ (v)- <i>lle</i>	<i>grișalle</i>	'they pulled her'
	2. sg. m. <i>-lûx</i>	<i>grișolûx</i>	'you (m.) pulled her'
	2. sg. f. <i>-lax</i>	<i>grișolax</i>	'you (f.) pulled her'
	2. pl. (K)- <i>xu</i> ~ (v)- <i>lxu</i>	<i>grișalxu</i>	'you (pl.) pulled her'
	1. sg. <i>-li</i>	<i>grișoli</i>	'I pulled her'
	1. pl. <i>-lan</i>	<i>grișolan</i>	'we pulled her'
	3. sg. m. <i>-le</i>	<i>grișile</i>	'he pulled them'
	3. sg. f. <i>-la</i>	<i>grișila</i>	'she pulled them'
	3. pl. (K)- <i>Ke</i> ~ (v)- <i>lle</i>	<i>grișanne</i>	'they pulled them'
	2. sg. m. <i>-lûx</i>	<i>grișilûx</i>	'you (m.) pulled them'
pl. <i>griši-</i>	2. sg. f. <i>-lax</i>	<i>grișilax</i>	'you (f.) pulled them'
	2. pl. (K)- <i>xu</i> ~ (v)- <i>lxu</i>	<i>grișanxu</i>	'you (pl.) pulled them'
	1. sg. <i>-li</i>	<i>grișili</i>	'I pulled them'
	1. pl. <i>-lan</i>	<i>grișilan</i>	'we pulled them'

The two types of inflection are distributed differently in Mlaḥsô and Țuroyo, as shown in table 39.9.

This leads to completely different types of conjugations for the past passive, as can be seen from the examples in table 39.10.

Tab. 39.9: Type of inflection applied

	Mlaḥsô	Țuroyo
present active	predicative	predicative
present passive	predicative	predicative
past active	ergative	ergative
past passive	ergative	predicative

Tab. 39.10: Inflection of the past passive

	Ṭuroyo Midin	Mlaḥsô	gloss
3. sg. m.	<i>qîl</i>	<i>meqtéle</i>	‘he was killed’
2. sg. m.	<i>qîlât</i>	<i>meqtélox</i>	‘you (m.) were killed’
1. sg. m.	<i>qîlno</i>	<i>meqtéli</i>	‘I (m.) was killed’
3. sg. f.	<i>qîlo</i>	<i>meqtéla</i>	‘she was killed’
2. sg. f.	<i>qîlat</i>	<i>meqtélax</i>	‘you (f.) were killed’
1. sg. f.	<i>qîlono</i>	<i>meqtéli</i>	‘I (f.) was killed’
3. pl. c.	<i>qîli</i>	<i>meqtélen</i>	‘they were killed’
2. pl. c.	<i>qîlutu</i>	<i>meqtélekun</i>	‘you (pl.) were killed’
1. pl. c.	<i>qîlina</i>	<i>meqtélan</i>	‘we were killed’

3.2.3. The expression of a pronominal object

As shown in 3.2.2. above, Ṭuroyo can express a pronominal object in the 3. person by means of the respective inflectional base of the past:

<i>grăš-Ø-li</i>	‘I pulled him’
<i>grîš-o-li</i>	‘I pulled her’
<i>grîš-i-li</i>	‘I pulled them’

The pronominal object 3. sg. m. is neutralized when the verb has another nominal or pronominal object, e.g.:

<i>mḥalaqli i=kefo</i>	‘I threw the stone’
<i>mḥalaqli-li</i>	‘I threw her/to her’

Pronominal objects in the 2. and 1. person are expressed by suffixes identical to the ergative inflectional suffixes and are added to the inflected verb form, both in the present and the past tense, e.g.:

<i>mḥalaqlăx-li</i>	‘you threw me/to me’
<i>ko-mḥalqəṭ-li</i>	‘you throw me/to me’

Mlaḥsô, on the other hand, has only one inflectional base in the past tense and therefore cannot express feminine or plural objects by the inflectional base. It allows suffixation of pronominal objects but in general seems to prefer an analytical construction based on the preposition *el-* ‘to’. Compare the following two examples from Mlaḥsô:

<i>d-šéd-lekun</i>	‘he will seize you’ (with object suffix)
<i>elêkun d-qoṭli</i>	‘they will kill you’ (analytical construction)

3.2.4. Tense and mode

Ṭuroyo and Mlaḥsô differ in their marking of present, subjunctive and future, as shown in Tab. 39.11.

An imperfect is formed by adding the morpheme *-wo/-wa* to the present. The morpheme is still clearly recognizable in Ṭuroyo while in Mlaḥsô the forms have undergone some reshuffling.

Tab. 39.11: Present, subjunctive and future prefixes

	Țuroyo	Mlaḥsô	gloss
present	<i>ko-domax</i>	<i>domex</i>	‘he sleeps’
subjunctive	<i>d-domax</i>	<i>domex</i>	‘that he sleep’
future	<i>g-domax</i>	<i>d-domex</i>	‘he will sleep’

Tab. 39.12: Imperfect inflection in Mlaḥsô and Țuroyo

	Mlaḥsô	Țuroyo-Midyat	gloss
3. sg. m.	<i>sémo</i>	<i>suyamwo</i>	‘he used to make’
3. sg. f.	<i>seyma</i>	<i>saymowa</i>	‘she used to make’
3. pl. c.	<i>seymá(yo)</i>	<i>saymiwo</i>	‘they used to make’
2. sg. m.	<i>seyméto</i>	<i>saymatwo</i>	‘you (m.) used to make’
2. sg. f.	<i>seymáto</i>	<i>saymatwo</i>	‘you (f.) used to make’
2. pl. c.	<i>seymétun</i>	<i>saymituwo</i>	‘you (pl.) used to make’
1. sg. c.	<i>seyméyo</i>	<i>suyámnowo</i>	‘I used to make’
1. pl. c.	<i>seyména</i>	<i>sayminawo</i>	‘we used to make’

3.3. The noun

3.3.1. Gender, number

Inherited masculine nouns have the ending *-o* in the singular, *-e* in the plural, e.g. Țuroyo (Ț) *gawro*, pl. *gawre*, Mlaḥsô (M) *gavro*, pl. *gavre* ‘man’; Ț/M *karmo*, pl. *karme* ‘vineyard’. Some masculine nouns show a plural ending *-one*, e.g. Ț/M *mede*, pl. *medone* ‘something; a thing’. Inherited feminine nouns have in the singular the ending Ț/M *-to* or Ț *-to*, M *-so*, e.g. Ț/M *šato* ‘year’, Ț *šan̄to*, M *šenso* ‘sleep’. The plural ending is Ț (Midyat) *-oto*, Ț (villages) *-ote*, M *-ose*, e.g. Ț/M *arfo* ‘earth; field’, pl. Ț (Midyat) *arfōto*, Ț (villages) *arfōte*, M *arfōse*.

Inherited adjectives have a sg. m. ending in *-o*, sg. f. ending in *-to*, *-to*, *-so* and a common plural ending in *-e*. In the following table the Mlaḥsô forms marked with an asterisk are not documented in the data but have been reconstructed on the basis of similar forms.

Tab. 39.13: Formation of adjectives

	Țuroyo	Mlaḥsô	gloss
sg. m.	<i>šatiqo</i>	* <i>šatiqo</i>	‘old’
sg. f.	<i>šatəqto</i>	<i>šatiqto</i>	
pl. c.	<i>šatiqe</i>	* <i>šatiqe</i>	
sg. m.	<i>halyo</i>	<i>helyo</i>	‘sweet’
sg. f.	<i>hlīto</i>	<i>helusto</i>	
pl. c.	<i>halye</i>	<i>helye</i>	

Loanwords do not follow this pattern. They usually end either with a consonant (masculine) or a vowel *-e/-a* (feminine). In ʤuroyo where there is a more extensive documentation both m. and f. loanwords form a plural in *-at* (from the Arabic plural ending *-āt*), e.g. ʤuroyo *zlām* (m.) ‘man’, pl. *zlamat*; *tfänge* (f.) ‘rifle’, pl. *tfəngat*.

3.3.2. Definiteness

Both ʤuroyo and Mlaḥsô have a definite article (Jastrow 2005) which precedes the noun and carries the main stress (this is expressed by the symbol =). The article has different forms for masculine, feminine and plural, and some variants depending on the initial consonant of the noun. In Mlaḥsô the sg. m. and sg. f. forms have merged. Likewise, Mlaḥsô has no variants of the pl. c. form, while in ʤuroyo it is *aK* preceding a single consonant (*K* here indicates the gemination of that consonant), and *a* preceding a double consonant. Preceding an initial vowel the plural of the article is usually *ann*, e.g.:

Tab. 39.14: The definite article

	ʤuroyo	Mlaḥsô	gloss
sg. m.	<i>u=karmo</i>	<i>ə=karmo</i>	‘the vineyard’
sg. f.	<i>i=qriṭo</i>	<i>ə=qriso</i>	‘the village’
pl. c.	<i>ak=karme</i> <i>a=qriyawoṭe ann=abne</i>	<i>a=karme a=qrisose</i> (not documented)	‘the vineyards’ ‘the villages’ ‘the sons’

4. Syntax and lexicon

The study of ʤuroyo syntax is still in its infancy with Hemmauer/Waltisberg (2006) among the first to contribute in this area. Concerning the lexicon of ʤuroyo, the unfinished dictionary of Ritter (1979) and Tezel’s etymological studies (2003) are noteworthy. A comprehensive dictionary of ʤuroyo is an urgent desideratum.

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40. North-Eastern Neo-Aramaic

1. Introduction
2. Phonology
3. Morphology
4. References

Abstract

The North-Eastern Neo-Aramaic dialects constitute the most diverse group of Neo-Aramaic. There are dialectal differences not only according to geographical location but also according to religious community, in that Christians and Jews spoke different dialects.

1. Introduction

1.1. Terminology, geography and affinities

The term North-Eastern Neo-Aramaic (NENA) was coined by Robert Hoberman (Hoberman 1988, 557–558; 1989, 4) to refer to a group of Neo-Aramaic dialects spoken by Christian and Jewish communities East of the Tigris river in south-eastern Turkey, northern Iraq and north-western and western Iran as far south as Kerend. In recent times many speakers of NENA dialects have become displaced from this area. The majority of the Jews left the area in the early 1950s and settled in the newly founded State of Israel. A considerable number of neo-Aramaic speaking Jews remained in Iran until the Iranian revolution in 1979, after which most left and settled, for the most part, in Israel and the USA. In the 19th century Christian neo-Aramaic speakers moved from south-eastern Turkey and north-western Iran and settled in the Caucasus. During the First World War the Christian communities of south-eastern Turkey and the border areas of northern Iraq were driven out of their villages and decimated by Turkish troops. The survivors took refuge in Salamas and Urmi, in Iran, and later were transferred to refugee camps in Iraq. A few eventually returned to their villages in northern Iraq. Some of the communities from Turkey were resettled in eastern Syria in the region of the Khabur. A large proportion of the refugees remained in the Iraqi cities. During the Kurdish uprisings in northern Iraq and south-eastern Turkey in the second half the twentieth century many of the remaining villages of neo-Aramaic speaking Christians were destroyed and the population fled to the towns or left the Middle East to make a new life elsewhere, mostly in the USA, Australia and western Europe. As a result of these events a large number of the NENA dialects are no longer spoken in the Middle East and are highly endangered. Several, indeed, have become extinct over the last few decades.

The NENA dialects exhibit a closer affinity to the Țuroyo and Mlahso dialects of neo-Aramaic, spoken in south-eastern Turkey West of the Tigris, than to the Western

Neo-Aramaic dialects or Neo-Mandaic. NENA consists of approximately 150 dialects and so is by far the most diverse group of neo-Aramaic. Some of the dialects spoken on the north-western periphery, such as Hertevin, Bohtan and Haşsan, exhibit a greater affinity to the Turoyo and Mlaḥso group than other NENA dialects, though it is clear that they should be classified as belonging to the NENA group. It appears that at some point in history the groups of neo-Aramaic on both sides of the Tigris belonged to a single dialect continuum, but this has been disrupted for many centuries (Kim 2008).

The NENA dialects differ from one another not only according to geographical location but also according to religious community. The Jews spoke dialects that were different from those of the Christians in the same geographical area (dialects spoken by Christians and Jews are distinguished in what follows by the abbreviations C. and J. respectively). This communal dialectal cleavage was found in all areas but was particularly great in the dialects spoken East of the Zab river, the Jewish 'trans-Zab' dialects constituting a distinct sub-group of NENA (Mutzafi 2008b). The NENA speaking Christian communities are of various denominations, the majority belonging either to the Assyrian Church of the East or to the Chaldaean Church. Some communities on the south-western periphery of the NENA area are Syrian orthodox or Catholic. The common term used by the Christian communities to refer to their vernacular speech is *surəθ* (< *surāṭī*). The Jewish communities use a variety of terms, e.g. *hulaula*, *hulani* 'Jewish', *lišana deni*, *lišana didan* 'our language', *lišana 'axča-u 'axča* 'the language of like this, like that', *galli gallox* 'with me with you' (i.e. sample distinctive words). After the displacement of neo-Aramaic speaking communities in recent times there has been a certain degree of convergence between dialects. This applies especially to the Christian refugee communities from south-eastern Turkey who were settled together in cities and refugee camps in Iraq, where a koine type dialect developed (Odisho 1988, 23).

The vast majority of the NENA dialects have existed only in the form of spoken vernaculars. In the Ottoman period both Christians and Jews began to write some types of texts in their NENA dialects, the Christians using Syriac script and the Jews Hebrew script. The earliest texts are datable to the 16th or 17th centuries (Sabar 1976; Mengozzi 2002). The main centres of production of the Christian texts before the 20th centuries were in Alqosh in northern Iraq and Urmi in Iran and most are written in a dialect local to one of these two regions. Jewish texts were written in a variety of places and dialects, including those written in dialects spoken West of the Zab, such as Zakho, Dohok and Amedia (see the references in Sabar 2002), and also those written in trans-Zab dialects (Rees 2008). In the 1920s and 1930s a considerable amount of NENA literature in the Christian Urmi dialect was published in the Soviet Union in a Latin based alphabet (Polotsky 1961). Written forms of Christian NENA were published throughout the twentieth century and continue to appear. These are written in Syriac script and are usually based on the Christian Urmi dialect with numerous literary neologisms.

The NENA dialects are not direct descendants of any of the literary forms of Aramaic that have down to us from earlier periods, except, of course, the earlier written forms of NENA in the Ottoman period. They share some linguistic innovations with the literary eastern Aramaic dialects, such as Syriac, Jewish Babylonian Aramaic and Mandaic, but have clearly had a separate history and should properly be regarded as descendants of vernacular forms of Aramaic that have been used in the region for many centuries. There is evidence from various sources of the existence of vernacular

forms of Aramaic exhibiting distinctive feature of NENA from the Middle Ages and earlier. The fact that some lexical elements found in NENA dialects but not in the literary Aramaic dialects are of Akkadian origin indicate that the vernacular ancestors of NENA must have been of considerable antiquity (Khan 2007, 11–12).

1.2. Sources

The following published sources have been used for the dialects named in this article: C. Barwar (Khan 2008), C. Baz (Mutzafi 2000), C. Bēšpən (Sinha 2000), C. Bohtan (Fox 2009: 52), C. Hertevin (Jastrow 1988), C. Qaraqosh (Khan 2002), C. Sat (Mutzafi 2008a), C. Təsqopa (Rubba 1993), C. Arbuš, C. Qočanaş (Talay 2008). J. Arbel (Khan 1999), J. Challa (Fassberg 2010), J. Sanandaj (Khan 2009). The source of C. Alqosh is the unpublished Ph.D. thesis of Coghill (2003) and that of the J. Amedia data is the unpublished Ph.D. thesis of Greenblatt (2008). Other data are taken from unpublished fieldnotes and data collected in the NENA database project in Cambridge by myself, Eleanor Coghill, Roberta Borghero and Alinda Damsma.

2. Phonology

2.1. BGDKPT Consonants

The original plosive and fricative allophones of the *bgdkpt* consonants have become independent phonemes which contrast in numerous minimal pairs. The new phonemes contrast after vowels or consonants and also at the beginning of a word, e.g. C. Qaraqosh: *šata* ‘year’–*šaθa* ‘fever’; *katwi* ‘they sit’–*kaθwi* ‘they write’; *guda* ‘wall’–*guđa* ‘churn’; C. Barwar *marta* ‘saying’–*marθa* ‘mistress’; *tela* ‘fox’–*θela* ‘she came’. When a verbal root contains a *bgdkpt*–consonant, fricatives and plosives do not alternate throughout its inflections as in earlier phases of North West Semitic, but rather either the fricative or the plosive comes to be treated as a radical consonantal phoneme and it occurs in all inflections and derivations of the root, irrespective of the current or historical phonetic environment, e.g. C. Qaraqosh *kθw* ‘to write’ (< **ktb*): *kaθwa* ‘she writes’, *makθowā* ‘to register’, *kθawa* ‘book’, *kaθawa* ‘writer’ (< **kattābā*). As a result of this analogical generalisation in verbal roots and lexemes, a stop at the beginning of the word remains a stop when a particle that ends in a vowel is prefixed to the word, e.g. *kaθawa* ‘the writer’, *’u-kaθawa* ‘and the writer’, *tama* ‘there’, *’u-tama* ‘and there’.

The reflexes of the fricative allophones **b*, **p̄* and **g* are broadly uniform across the NENA dialects.

The reflex of the fricative allophone **b* is generally /w/, e.g. C. Barwar:

<i>sawa</i>	‘grandfather’	< * <i>sābā</i>
<i>šliwa</i>	‘cross’	< * <i>šlībā</i>
<i>’ərwa</i>	‘sheep’	< * <i>erḇā</i>

When **b* was preceded by **u*, the sequence **ub* contracts to /u/, e.g. C. Barwar

<i>tuna</i>	‘straw’	< * <i>tuḥnā</i>
<i>duša</i>	‘honey’	< * <i>dubšā</i>

In many dialects the sequence /aw/ (< **ab*) contracts to /o/, e.g. J. Sanandaj:

<i>gora</i>	‘man’	< * <i>gabrā</i>

The usual reflex of **p* is, as a general rule, the stop /p/, irrespective of whether this was realized as a stop or fricative in earlier forms of Aramaic, e.g. C. Barwar:

<i>kepa</i>	‘stone’	< * <i>kēpā</i>
<i>napəl</i>	‘he falls’	< * <i>nāpel</i>

A few exceptions to this are found, e.g. C. Barwar *ṭlawxe* ‘lentils’ (< **ṭlapḥē*), *ruša* ‘shoulder, arm’ (< **ruṣšā* cf. Syr. *rapšā* ‘shoulder blade’) in which a post-vocalic **p* behaves like a post-vocalic **b*.

In most dialects the fricative allophone of the unvoiced velar **k* has been preserved, e.g. C. Barwar:

<i>baxe</i>	‘he weeps’	< * <i>bākē</i>
<i>naxraya</i>	‘stranger’	< * <i>naḵrāyā</i>

In a few dialects on the north-western periphery of the NENA area the unvoiced velar fricative has shifted to an unvoiced pharyngeal fricative, e.g. C. Hertevin:

<i>baḥe</i>	‘he weeps’	< * <i>bākē</i>

In the historical development of NENA, the fricative allophone of the voiced velar **g* shifted to a voiced pharyngeal fricative /ʕ/ (Tsereteli 1990). The pharyngeal has survived in some isolated words in a few dialects, generally in the environment of sonorant consonants that at some point became pharyngealized, e.g.

J. Amedia

<i>raʿola</i>	‘valley’	< * <i>rāḡōlā</i>
<i>ṭʿoya</i>	‘inside’	< * <i>ṭ-ḡoya</i>

In most dialects the pharyngeal has become weakened to a laryngeal /ʔ/ or to zero, e.g.

C. Qaraqosh:

<i>xaʿta</i>	‘thorn’	< * <i>ḥaḡtā</i>
<i>raʿola</i>	‘valley’	< * <i>rāḡōlā</i>

C. Barwar

<i>nāra</i>	‘axe’	< * <i>nārḡā</i>
<i>lina</i>	‘jar’	< * <i>lḡinā</i>
<i>rawola</i>	‘valley’	< * <i>rāḡōlā</i>

In dialects on the north-eastern periphery of the NENA area where the historical pharyngeal has been weakened to zero, the trace of the pharyngeal remains in the form of a suprasegmental retraction of the tongue in the whole word (represented here by +), e.g.

C. Urmi

+ <i>lina</i>	‘jar’	< * <i>lḡinā</i>

The original velar fricative realization of **g* is preserved in a few isolated words across a number of dialects:

C. Urmi
 +*pağra* 'body' < **pağrā*

C. Barwar
sağəð 'he worships' < **sāğīd*
šağəš 'he disturbs' < **šāğīš*

In the case of C. Barwar *šağəš* 'he disturbs' the motivation for the irregular archaism is to make a semantic distinction with the doublet *šayəš* 'he shakes', which has undergone the regular sound shift of **g* > zero in the same historical verbal root.

The historically fricative allophones of **d* and **t* exhibit the most diversity of all the *bḡdkpt* consonants across the NENA area. These are illustrated here by the reflexes of **īdā* 'hand', **māṭā* 'village' and **bayṭā* 'house' across a selection of dialects:

C. Barwar	<i>ʾiða</i>	<i>maθa</i>	<i>bəθa</i>
C. Mne Maθa	<i>ʾiða</i>	<i>maθa</i>	<i>bəša</i>
J. Zakho	<i>ʾiza</i>	<i>masa</i>	<i>besa</i>
C. Urmi	<i>ʾida</i>	<i>mata</i>	<i>beta</i>
C. Baz (Mahaye)	<i>ʾida</i>	<i>ma</i>	<i>beya</i>
J. Sanandaj	<i>ʾila</i>	<i>mala</i>	<i>bela</i>

The lateral reflex /*l*/ is a distinctive feature of the Jewish trans-Zab dialects. Most of the reflexes presented above are consistent within each of the dialects. The /*š*/ reflex of **t* in C. Mne Maθa and other Upper Tiyare dialects, however, does not occur after low vowels, as in *maθa*.

2.2. Pharyngeal Consonants

The unvoiced pharyngeal fricative **ħ* has in most dialects shifted to the velar fricative /*x*/, which, therefore, merges with the reflex of **k*, e.g.

C. Barwar
xmara 'ass' < **ħmārā*
baxe 'he weeps' < **bākē*

In some dialects in which the general shift **ħ* > /*x*/ takes place, the pharyngeal has been retained in words containing /*q*/ or an emphatic consonant, e.g.

C. Qaraqosh
ħaziqa 'strong'
raħoqa 'distant'

In some dialects in the north-western periphery of the NENA area the pharyngeal is retained in all cases. In such dialects the reflex of **k* is also /*ħ*/, e.g.

C. Hertevin
ħmara 'ass' < **ħmārā*
baħe 'he weeps' < **bākē*

The voiced pharyngeal fricative *ʕ has generally been weakened to the laryngeal /ʔ/ or to zero. These correspond to the reflexes of *ḡ, which shifted to a pharyngeal in the course of its development:

C. Qaraqosh

<i>bəʔta</i>	‘egg’	< *bīṭā
<i>tarʔa</i>	‘door’	< *tarʕā

C. Barwar

<i>beta</i>	‘egg’	< *bīṭā
<i>tāra</i>	‘door’	< *tarʕā

In some dialects the voiced pharyngeal /ʕ/ is retained in a few words that contain a /q/ or an emphatic consonant, e.g.

C. Qaraqosh

‘ <i>atiqa</i>	‘ancient’
‘ <i>apša</i>	‘gallnut’

In dialects in the north-eastern periphery of the NENA area the historical pharyngeal is weakened but leaves a trace in the suprasegmental retraction of the tongue in the entire word, e.g.

C. Urmi

+ <i>tala</i>	‘fox’	< *taʕla

2.3. Emphatic Consonants

The original emphatic consonants *ṭ and *ṣ have survived in a large proportion of dialects as emphatic consonantal phonemes. This applies particularly to the dialects of Iraq that have been in close contact with Arabic. Their articulation involves a retraction of the tongue root, either pharyngealization or velarization. Emphatic /ṭ/ and non-emphatic /t/ contrast also in their laryngeal settings, in that /ṭ/ is unaspirated whereas /t/ is aspirated. The retraction of the tongue root typically spreads beyond the consonant and affects adjacent segments in the syllable and sometimes beyond, e.g.

C. Barwar

<i>ṭarḏāle</i> [tʰɑʕrʰḏale]	‘She drives him away’

In regions that are remote from Arabic speaking areas the emphatic consonant phonemes have undergone one of two developments. In the north-western and south-eastern periphery of the NENA area the emphatic pronunciation of the consonants have undergone various degrees of weakening. This weakening is most advanced in the Jewish dialects of western Iran, where historical /ṭ/ and /ṣ/ are in most cases pronounced identically to non-emphatic /t/ and /s/, including the feature of aspiration of the stop, e.g.

J. Sanandaj

<i>ṭura</i> [tʰuːˈra]	‘mountain’	< *ṭūrā

The second type of development is found in the north-eastern periphery. Here the retraction of the tongue root has been preserved, but it is no longer a feature of the

historical emphatic consonant but rather has become a suprasegmental harmonic feature of the entire word (indicated in the transcription below with the symbol ⁺). Two degrees of this development can be identified, which are illustrated by the two communal dialects of Urmi. In C. Urmi the retraction of the tongue root becomes a harmonic feature but the historical emphatic stop *ṭ retains its distinctive laryngeal setting and is pronounced unaspirated. It is represented here by the transcription /ṭ/ to distinguish it from the aspirated /t/, with which it can contrast phonemically. In J. Urmi, however, the historical stop *ṭ has lost this distinctive laryngeal setting and is pronounced aspirated in the same contexts as historical plain *t:

C. Urmi	⁺ <i>ṭala</i>	[t ^ʰ ɑːl ^ʰ ɑː] ‘she plays’	< *ṭā ^ʰ lā
	⁺ <i>tala</i>	[t ^h ɑːl ^ʰ ɑː] ‘fox’	< *ta ^ʰ lā
J. Urmi	⁺ <i>tala</i>	[t ^h ɑːl ^ʰ ɑː] ‘she plays’	< ṭā ^ʰ lā

The dialects that have retained /ṭ/ and /ṣ/ as emphatic consonantal segmental phonemes have developed also a number of other emphatic consonantal phonemes. These are mostly sonorants, the most widespread being emphatic /r/, which contrasts with plain /r/, e.g.

C. Barwar		
ʾ <i>amra</i>	‘she says’	ʾ <i>amṛa</i> ‘wool’

This has developed in some cases due to the historical presence of a pharyngeal, e.g. ʾ*amṛa* < *ʿ*amra*. In some cases, however, it has a semantic motivation and has developed as a means of distinguishing homophones, e.g.

C. Barwar		
<i>gawra</i>	‘she marries’	<i>gawṛa</i> ‘man’

2.4. Vowels

Vowel length in the NENA dialects is determined by stress and syllable structure. In general vowels in open non-final syllables are long and those in closed syllables or open final syllables are short. In the transcription adopted here diacritics are not used when the vowel length is predictable in this way. The distinction between historical long *ā and short *a has not been preserved by a quality shift of historically long *ā > /ō/ as in Western Neo-Aramaic or the ʿTuroyo and Mlahso group, e.g.

C. Barwar		
<i>paθəx</i> [paːθəx]	‘he opens’	< *pāṭix
<i>paθxa</i> [paθxa]	‘she opens’	< *pāṭxā

In some dialects, especially on the north-western periphery, syllabically long *a* vowels undergo a backing and rounding. This is most conspicuous in the Bohtan dialect (Fox 2009, 20–21) where syllabically long *a* shifts to /o/. Although reminiscent of the Western and ʿTuroyo groups, it is important to note that this is a secondary development, since it reflects the distribution of syllabically lengthened *a* of an earlier stage of NENA, which may be called proto-NENA, and not that of originally historically long *a*.

C. Bohtan	Proto-NENA	Ṭuroyo	
<i>gorəš</i>	< *[ga:rəš]	<i>gorəš</i>	‘he pulls’ < * <i>gāriš</i>
<i>garša</i>	< *[garša]	<i>goršo</i>	‘she pulls’ < * <i>gāršā</i>

Short /a/ is raised to the environment of /e/ before a following laryngal /ʔ/ or /h/, e.g.

J. Amedia			
<i>te’la</i>	‘fox’	< * <i>ta’la</i>	< * <i>ta’lā</i>
<i>dehwa</i>	‘gold’	< * <i>dahwa</i>	< * <i>dahbā</i>

In some dialects short /a/ is raised also when a following geminated consonant is weakened, e.g.

C. Sat		
<i>keka</i>	‘tooth’	< * <i>kakkā</i>

It is likely that this raising was conditioned by a laryngal that arose in an intermediate stage of the development of such forms, i.e.

<i>keka</i>	< * <i>ke’ka</i>	< * <i>kakkā</i>

In fact the occurrence of such a laryngal is attested in this context in some dialects, e.g.

C. Qaraqosh		
<i>ša’ta</i>	‘year’	< * <i>šattā</i>

Several dialects exhibit unconditioned raising of other vowels:

e > i		
C. Qaraqosh		
<i>kipa</i>	‘stone’	< * <i>kepā</i>
o > u		
C. Urmi, C. Haṣṣan		
<i>bruna</i>	‘son’	< * <i>brōnā</i>

In dialects in which /o/ is raised to /u/, the original vowel /u/ is usually fronted either as a monophthong /i/ [y] or as diphthong /uy/:

C. Haṣṣan:	<i>ṭūra</i>	‘mountain’	< * <i>ṭūrā</i>
C. Urmi:	+ <i>ṭuyra</i>	‘mountain’	< * <i>ṭūrā</i>

The original diphthongs **aw* and **ay* have been preserved in some dialects, e.g.

C. Gramun		
<i>bayθa</i>	‘house’	< * <i>baytā</i>
<i>mawθa</i>	‘death’	< * <i>mawtā</i>

In many dialects, however, they are contracted. The diphthong **aw* contracts to /o/, e.g.

C. Urmi		
<i>mota</i>	‘death’	< * <i>mawtā</i>

The diphthong **ay* contracts in a variety of ways, as is seen in the various reflexes of the form **baytā* ‘house’:

C. Barwar	<i>bēθa</i>
C. Bebede	<i>bēθa</i>
C. Harbole	<i>bata</i>

2.5. Consonant Gemination

In most dialects the gemination of a consonant within a word has usually been weakened after /a/ or /u/, e.g.

C. Barwar		
<i>kaka</i>	‘tooth’	< * <i>kakkā</i>
<i>guda</i>	‘wall’	< * <i>guddā</i>

After the short vowel /ə/, however, gemination has usually be preserved, e.g.

C. Barwar		
<i>labbā</i>	‘heart’	
<i>ʔazza</i>	‘nanny-goat’	

In the J. Sanandaj dialect in Iran gemination is weakened even after /ə/, e.g. *laba* ‘heart’ < **labbā*.

2.6. Stress

In most NENA dialects the basic position of word stress is on the penultimate syllable, e.g. C. Barwar *bəθa* ‘house’. In the Jewish trans-Zab dialects, however, the basic position is on the final syllable, e.g. J. Arbel *belā* ‘house’. This word final placement of stress is likely not to be original but rather to have developed under the influence of Kurdish.

3. Morphology

3.1. Independent Pronouns

The independent pronouns exhibit a great diversity in the NENA dialects, which has come about by numerous innovations, mostly driven by analogical processes within the paradigm or influences from pronominal suffixes. The most conservative forms of the 3rd person singular pronouns are *ʔahu* ‘he’ and *ʔahi* ‘she’, which are attested, for example, in the C. Qaraqosh dialect. The initial *ʔa-* may be a reflex of an original *hā-* (i.e. *ʔahu* < **hā-hū*, *ʔahi* < **hā-hī*) or it may be the result of an analogical extension to the 3rd person pronouns of the initial syllable *ʔa-* that occurs in the historical forms of the 1st and 2nd persons pronouns.

In most dialects some kind of contraction of these forms takes place, e.g. C. Arbuš *ʔawu/ʔayi*, C. Barwar *ʔaw/ʔay*. Many dialects add a secondary suffix of some kind to the contracted forms *ʔaw/ʔay* to restore bisyllabicity in conformity with the rest of the paradigm of pronouns, e.g. *ʔawa/ʔaya* and *ʔawən/ʔayən*. In some dialects the gender distinction in the 3rd person singular pronouns has been levelled, most likely under the influence of Kurdish. This is a distinctive feature of the Jewish trans-Zab dialects, in which the 3ms. form has been generalized, e.g. J. Sanandaj *ʔo* ‘he/she’. In the J. Challa dialect the 3fs. form is generalized: *ʔaya* ‘he/she’.

Some dialects use the form *'at* as a common gender form of the 2nd person singular pronoun. Many dialects extend this with a suffix, e.g. C. Barwar *'ati*, C. Peshabur *'ate*, C. Urmi *'atən*. In several dialects an /h/ element is inserted after the initial *'a-*, by analogy with the 3rd person forms *'ahu/'ahi*, and a gender distinction is expressed in the final syllable, e.g. C. Qaraqosh *'ahət* 2ms./ *'ahat* 2fs. Some dialects have a glide /y/ instead of an /h/ in this position, e.g. C. Alqosh *'ayət/'ayat*. In a few dialects only one of these forms is used with common gender, e.g. C. Hertevin *'ahət* 2c., J. Challa *'ahat* 2c.

The 1s. independent pronoun has the form *'ana* across all dialects.

There are no gender distinctions in the plural form of the pronouns. The majority of dialects use a form containing an initial *'an-* element, the most widely used form being *'ani*. Some other attested forms include C. Ankawa *'anu*, C. Qaraqosh *'anhən*, C. Harbole *'anahani*, C. Karamlesh *'ahnən*, C. Hertevin *'ahni*, C. Baṭnaya *'axnehən*. Many of the Jewish trans-Zab dialects have the form *'oni* by analogy with the 3cs. form *'o*.

A widely used form of the 2pl. independent pronoun is *'axtun*, the *'ax-* element having developed by analogy with the 1pl. form *'axnan* etc. Several dialects use 2pl. forms that incorporate the 2pl. pronominal suffix, e.g. J. Dohok *'axtoxun*, J. Dobe *'a-toxun*, J. Arbel *'atxun*. Some forms use the 1pl. base *'axn-* e.g. J. Sulemaniyya *'axnāxun*, C. Qočanəṣ *'axnoxun*, which have endings corresponding to the 2pl. suffix, and C. 'Išši *'axnutən*, the ending of which corresponds to the 2pl. subject (S-) suffix.

The most widely used forms of the 1pl. pronoun in the dialects are *'axnan* and *'axni*. Other attested forms include J. Arbel *'atxan* and C. Qočanəṣ *'axtan*, which are built on the analogy of 2pl. forms, and C. Beṣpən *'axnux*, the ending of which corresponds to the 1pl. subject (S-) suffix.

3.2. Demonstrative Pronouns

All dialects have at least two types of demonstrative pronoun to point to items near the speaker and far from the speaker respectively in a speech situation, e.g. J. Arbel:

	Near deixis	Far deixis
sing.	<i>'iyya</i>	<i>'o</i>
pl.	<i>'anne</i>	<i>'oni</i>

In such dialects both the near and far deixis forms are used also as anaphoric pronouns, to refer back to referents that have been mentioned in the prior discourse.

Many dialects have three types of demonstrative, two of which are used to point to near and far items respectively in a speech situation and the third is used as an anaphoric pronoun without any deictic function, e.g. C. Barwar

	Near deixis	Far deixis	Anaphoric
ms.	<i>'awwa</i>	<i>'āwaha</i>	<i>'aw</i>
fs.	<i>'ayya</i>	<i>'āyaha</i>	<i>'ay</i>
pl.	<i>'anna</i>	<i>'ānaha</i>	<i>'ani</i>

In such dialects the near deixis form may also be used as an anaphoric. The far deixis form, on the other hand, does not have an anaphoric function. The far deixis form is the most morphologically complex. In some dialects the form is made even more phonologically robust by strengthening the /h/ to a pharyngeal /ħ/ or by pronoun-

cing the adjacent vowels as emphatic (pharyngalized), e.g. C. Peshabur *ʾāwaha*, J. Amēdia *ʾāwaha*. In most dialects with such a tripartite set of demonstratives the far deixis pronoun may be modified to express intensity, i.e. remote distance, by lengthening the penultimate stressed vowel or by inserting a laryngal /ʔ/ after the stressed vowel. Some dialects use this strategy to express various degrees of distance, e.g. C. Peshabur (Coghill 2008, 98):

Far	Very Far	Extremely Far
<i>ʾāwaha</i>	<i>ʾāwāaha</i>	<i>ʾāwaʔha</i>

A notable feature of many dialects with this tripartite set of demonstratives is that the anaphoric form may be used to refer to an item near to the addressee in a speech situation, e.g. C. Barwar *halli ʾaw-kθawa* ‘Give me that book (next to you)’.

Some dialects have a further demonstrative to indicate that the referent is accessible in the memory of the hearer rather than in the current discourse history. This is formed by combining the anaphoric pronoun with the indefinite cardinal particle *xa* ‘one, a’, e.g. C. Barwar:

ms.	<i>ʾó-xa</i>
fs.	<i>ʾá-ğða</i>
pl.	<i>ʾán-xa</i>

3.3. Copula

All dialects have a copula, which is generally cliticized to the predicate of a clause. This is conjugated for person. The dialects exhibit a considerable diversity of forms, a sample of which is illustrated in table 40.1:

Tab. 40.1: Diversity of the NENA Copula

	J. Sanandaj	C. Qaraqosh	C. Alqosh	C. Barwar	C. Tel Kepe	J. Arbel	J. Urmi
3ms.	-y, -ye	-ilə	-ile	-ile	-ile	-ile	-ile
3fs.	-ya	-ila	-ila	-ila	-ilə	-ila	-ila
3pl.	-yen	-ina	-ile	-ila	-ila	-ilu	-ilu
2ms.	-yet	-iyət	-iwet	-iwət	-iwət	-wet	-ilet
2fs.	-yat	-iyat	-iwat	-iwət	-iwat	-wat	-ilat
2pl.	-yetu	-iyetu	-iwotun	-iwitu	-iwotu	-wetun	-iletun
1ms.	-yena	-iyən	-iwen	-iwən	-iwən	-wen	-ilen
1fs.	-yan	-iyan	-iwan	-iwən	-iwan	-wan	-ilan
1pl.	-yex	-iyax	-iwəx	-iwəx	-iwux	-wex	-ilex

Most paradigms have an /l/ element in the 3rd person forms. In J. Urmi this has been extended by analogy to the 2nd and 1st person forms. The paradigms also exhibit the element /i/ or the glide /y/. The inflectional endings containing /l/ have the form of verbal object suffixes (historically derived from prepositional phrases consisting of *l-* + pronominal suffix). In origin, therefore, forms such as *-ile* appear to have been presentative constructions (‘see him’). The /i/ or /y/ element is of uncertain origin. The

enclitic copula of Țuroyo and neo-Mandaic, which are both clearly pronominal, have /y/ in the 3cs form: Țuroyo *-yo* (Ritter 1990, 7; Jastrow 1985, 33), neo-Mandaic *-ye* (Häberl 2009, 230). The /i/ or /y/ of the NENA copula, therefore, may be in origin the 3rd singular enclitic pronoun that has been extended throughout the paradigm. Other possible etymologies of this element are the /i/ of the existential particle *'iθ* or a deictic element /i/, which can be identified in some demonstrative pronouns, e.g. J. Arbel *'iyya* (cf. the Babylonian Talmudic Aramaic demonstrative *'ihā*).

In addition to the enclitic copula, most dialects also have a deictic copula, which is used to draw attention to a referent or to a proposition. This is formed by combining the enclitic copula with a preceding deictic element, e.g. *hole* (< *ha-aw-ile*), which is a common form of the deictic copula in the Christian dialects and *k-ilā* (< **kā* + *ile* C. Qaraqosh). Some dialects distinguish between near and far deixis, e.g. C. Urmi *welā* 'he is (over there)', *dulā* 'he is (here)'.

3.4. Verbs

The verbal system of NENA exhibits a radical departure from that of earlier Aramaic in that the two finite verb forms of earlier Aramaic, known as the suffix conjugation (*qṭal*) and the prefix conjugation (*yiqṭol*, *liqṭol*, *niqṭol*) have been completely replaced by participles. Broadly speaking, the erstwhile *active* participle in the absolute state **qāṭil* (known as the present base) serves as the base for verbal forms expressing present and future tenses or the past tense with an imperfective aspect whereas the erstwhile *passive* participle in the absolute state **qīl* (known as the past base) serves as the base of past tenses with a perfective aspect. In addition to the present and past bases, all NENA dialects have imperative forms in their verbal system and most also make use of a resultative participle (derived historically from the past participle in the absolute state **qīlā*), an infinitive and a verbal noun (formed by adding a feminine ending to the infinitive), e.g. C. Barwar

Present base:	<i>qaṭl-</i>
Past base:	<i>qīl-</i>
Resultative participle:	<i>qīla</i>
Infinitive:	<i>qṭala</i>
Verbal noun:	<i>qṭalta</i>

A few dialects (e.g. C. Ankawa, C. Təsqopa) make productive use of an active participle form *qaṭala* (< **qaṭṭālā*) to express an immediate future.

The subject of the present base is expressed by personal inflections known as S-suffixes. Those of the 3rd person are the number and gender inflection of the former active particle, whereas those of the 1st and 2nd persons originate in cliticized forms of pronouns, e.g. J. Sanandaj:

3ms.	-Ø
3fs.	-a
3pl.	-i (-en in final weak verbs)
2ms	-et
2fs.	-at
2pl.	-etun

1ms.	-na
1fs.	-an
1pl.	-ex

The inflections are illustrated in the following paradigms:

	<i>grš</i> 'to pull'		<i>šty</i> 'to drink'
3ms.	<i>gārš</i> 'He pulls'	<i>šāte</i>	'He drinks'
3fs.	<i>garša</i> 'She pulls'	<i>šatya</i>	'She drinks'
3pl.	<i>garši</i> 'They pull'	<i>šāten</i>	'They drink'
2ms	<i>garšet</i> 'You (ms.) pull'	<i>šātet</i>	'You (ms.) drink'
2fs.	<i>garšat</i> 'You (fs.) pull'	<i>šatyat</i>	'You (fs.) drink'
2pl.	<i>garšetun</i> 'You (pl.) pull'	<i>šātetun</i>	'You (pl.) drink'
1ms.	<i>gāršna</i> 'I (ms.) pull'	<i>šātena</i>	'I (ms.) drink'
1fs.	<i>garšan</i> 'I (fs.) pull'	<i>šatyan</i>	'I (fs.) drink'
1pl.	<i>garšex</i> 'We pull'	<i>šātex</i>	'We drink'

There are gender distinctions in all persons of the singular, including the 1st person. Some inflections of the paradigm of verbs with strong consonants, such as *grš* 'to pull', have been taken over from that of final weak verbs, such as *šty* 'to drink', apparently to maintain formal gender distinction. This applies, for example, to the 2nd person singular forms in the paradigm above, as can be seen if we compare the equivalent inflection of the strong and weak verbs with enclitic pronouns in Syriac, an earlier form of eastern Aramaic:

2ms	<i>gārš-at</i> 'You (ms.) pull'	<i>šāte-t</i>	'You (ms.) drink'
2fs.	<i>gārša-t</i> 'You (fs.) pull'	<i>šātya-t</i>	'You (fs.) drink'

The /x/ element of the 1pl. ending (*garšex*, *šātex*) corresponds to the /x/ in the 1pl. independent pronoun 'axni/'axnan.

In most dialects the present base forms have a prefixed particle when they express present realis, the most common of which are *k-* (< **kā*) and 'i-, e.g.

C. Qaraqosh	<i>k-šatə</i>	'He drinks'
C. Barwar	'i- <i>šate</i>	

In some dialects they are combined, e.g.

C. Salamas	<i>k-i-šatə</i>	'He drinks'

These prefixes are derived historically from presentative particles and forms such as *k-šatə* (< **kā-šātē*) originally expressed progressive aspect. In most dialects these forms are now used to express the habitual, the progressive being expressed by innovative forms based on the infinitive. In most dialects the future is expressed by attaching to the present base the prefix *bəd-* (or a phonetically reduced allomorph), derived historically from **bā'ē d-* 'He wants'.

The past base is a passive participle in origin. This has given rise to the development of ergative verbal constructions. In a group of Jewish dialects on the south-eastern periphery of the NENA area, mainly in Iran, a distinction is made between the inflection of intransitive past bases and transitive past bases. The subject of intransitive past bases is expressed by S-suffixes. The subject of transitive past bases, on the other hand,

is expressed by ergative L-suffixes (in origin adjunct prepositional phrases consisting of *l-* + pronominal suffix). The object of a transitive past base verb is treated like the subject of intransitive verbs and is marked by S-suffixes, which are glossed below as the absolutive:

J. Sanandaj
barux-āwal-i *brat-i* ***gərš-á-lu***
 friend-PL-my daughter-my pull_{PAST}-ABS.3FS-ERG.3PL
 ‘My friends pulled my daughter.’

brat-i *barux-āwal-i* ***gərš-í-la***
 daughter-my friend-PL-my pull_{PAST}-ABS.3PL-ERG.3FS
 ‘My daughter pulled my friends.’

brat-i ***qim-a***
 daughter-my rise_{PAST}-ABS.3FS
 ‘My daughter rose.’

barux-āwal-i ***qim-i***
 friend-PL-my rise_{PAST}-ABS.3PL
 ‘My friends rose.’

In the majority of NENA dialects the ergative L-suffixes have been extended to the inflection of intransitive verbs, e.g. C. Urmi

⁺*xor-āwat-i* ****jriš-a-lun*** *brat-i*
 friend-PL-my pull_{PAST}-ABS.3FS-ERG.3PL daughter-my
 ‘My friends pulled my daughter.’

brat-i ***qəm-la***
 daughter-my rise_{PAST}-ERG.3FS
 ‘My daughter rose.’

In some dialects an inflection with S-suffixes is used to express the present perfect, whereas the ergative L-suffixes are used to express the preterite. This is found in a number of Jewish dialects in the north-eastern periphery, in which the present perfect of intransitive verbs has an inflection with S-suffixes, e.g. J. Urmi:

brati qəmla ‘My daughter rose’
brati qima ‘My daughter has risen’

In the C. Bohtan dialect in the north-western periphery of NENA this is found with both intransitive and transitive verbs:

qəmla ‘She rose’ *qima* ‘She has risen’
qəlla ‘She killed’ *qila* ‘She has killed’

Most dialects express the perfect by a compound construction consisting of a resultative participle (*qīla* ms., *qīlta* fs, *qīle* pl.) and a copula. Throughout the vast majority of the dialects that have this feature the participle is treated as active in transitive verbs, e.g.

C. Barwar

brati qimtela (< *qimta-ila*) 'My daughter has risen'

brati grištela (< *grišta-ila*) *xawla* 'My daughter has pulled a rope'

In some Jewish dialects on the south-eastern periphery the participle and copula in transitive constructions agree with the object, e.g. J. Sanandaj:

<i>brat-i</i>	<i>xol-äke</i>	<i>gərša-y</i>
daughter(FS)-my	rope-DEF	pull _{PART.MS-COP.3MS}
'My daughter has pulled the rope'		

In some dialects east of the Zab, both Jewish and Christian, the perfect is formed by combining a particle, often a fossilized form of the copula, with the preterite, e.g.

J. Arbel *lā qimle* 'He has risen'

J. Dobe *nā qimle*

J. Barzan *'ale qimle*

C. Sulemaniyya *gi-qimle*

Most dialects use a compound verbal construction to express the progressive aspect. This is formed by combining the copula (either enclitic or deictic) with either an infinitive form or an inflected form of the present base. The infinitive construction is locative in origin and has the locative preposition *b-* in some dialects, e.g.

C. Urmi *+b-jrašəla* (< *+b-jraša-ilə*) 'He is pulling'

The preposition is omitted in many dialects, e.g.

C. Barwar *grašele* (< *graša-ile*) 'He is pulling'

J. Sulemaniyya *ğəroša-y*

Examples of constructions containing the present base:

C. Qaraqosh *k-iyən k-šatən* 'I am drinking'

C. Sanandaj *k-asən-yən* 'I am coming'

In some dialects the inflection of the copula has become fossilized in an uninflected form throughout the paradigm, e.g.

C. Sulemaniyya *k-ase-le* 'He comes'

k-asən-ile 'I come'

C. Arbel *lā ke* 'He comes'

lā ken 'I come'

The NENA dialects have preserved three verbal stems from earlier Aramaic, which correspond to the *pe'al*, *pa'el* and *'aḇ'el* forms respectively. In many dialects the stem corresponding to the *pa'el* form has been eliminated and the verbs of this stem have merged with either the *pe'al* or the *'aḇ'el* form. Furthermore there is extensive analogical levelling in the vocalism across the stems. The middle and passive stems of earlier Aramaic (*'itpe'el*, *'itpa'el*, *'ittaḇ'el*) have not survived. Their absence is compensated by the existence of a transitive-unaccusative alternation in many verbs, e.g.

C. Barwar

tlixli bəθa 'I destroyed the house'

bəθa tlixle 'The house was destroyed'

or by periphrastic passive constructions, e.g.

C. Barwar	<i>pišle qṭila</i>	‘He was (literally became) killed’
J. Urmi	⁺ <i>qṭila xdərre</i>	

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41. Neo-Mandaic

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Abstract

Neo-Mandaic is the modern reflex of Classical Mandaic, the liturgical language of the Mandaean religious community of Iraq and Iran. Severely endangered, it survives today as the first language of a small number of Mandaeans (possibly as few as 300–500 speakers) in Iran and in the Mandaean diaspora. All Neo-Mandaic speakers are bi- or even tri-lingual in the languages of their neighbors, Arabic and Persian, and the influence of these languages upon the grammar of Neo-Mandaic is considerable, particularly in the lexicon and the morphology of the noun. Nevertheless, Neo-Mandaic is more conservative even in these regards than most other Neo-Aramaic dialects. As the only known surviving modern reflex of any literary dialect of Aramaic, it has one of the longest continuous histories of attestation of any Aramaic dialect and is therefore potentially of great interest to scholars of Aramaic.

1. General information

Neo-Mandaic (ISO/DIS 639–3: mid) represents the latest stage of the development of Classical Mandaic, a language of the Middle East which was first attested during the period of Late Antiquity and which continues to be used to the present date by the Mandaean religious community of Iraq and Iran. While the members of this community, numbered at roughly 70,000 or fewer adherents throughout the world, are familiar with the classical dialect through their sacred literature and liturgy, only a few hundred Mandaeans, located primarily in Iran, speak Neo-Mandaic (known to them as *raṭnā*) as a first language. Two surviving dialects of Neo-Mandaic have thus far been documented, that of Ahvāz (in Macuch 1965a; 1965b; 1989; 1993), and Khorramshahr (in Häberl 2009). These dialects are mutually intelligible to the extent that speakers of either dialect will deny that there are any substantive differences between the two.

1.1. Genetic affiliation

Neo-Mandaic is a dialect of Aramaic, a Northwest Semitic language that was formerly spoken throughout the Middle East. Already in antiquity, a split had developed be-

tween the Western dialects of Aramaic (spoken in primarily in Syria and Palestine), and the Eastern dialects (spoken primarily in Mesopotamia and Iran) to which Neo-Mandaic pertains. The bulk of scholarship on these modern reflexes of these dialects, collectively described as Neo-Aramaic, has focused primarily on Eastern Neo-Aramaic, particularly the Central Neo-Aramaic and Northeastern Neo-Aramaic (NENA) dialects spoken by Jewish and Christian communities in Eastern Anatolia, Iraqi Kurdistan, and Iranian Azerbaijan. A smaller but still considerable volume of scholarship is dedicated to the more peripheral dialects such as the Western Neo-Aramaic dialects spoken by Christians and Muslims in three villages near Damascus, and Neo-Mandaic. Of all the dialects that have thus far been documented, only Neo-Mandaic can be described with any certainty as the modern reflex of any classical dialect of Aramaic.

1.2. History of scholarship

The first attempt at documenting Neo-Mandaic, a polyglot glossary including a column of lexical items from the Neo-Mandaic dialect of Basra, was produced roughly three hundred and fifty years ago by a Carmelite missionary whom Borghero (2000, 318) has identified with Matteo di San Giuseppe. This *Glossarium* was to have a perennial influence upon future Mandaicologists; it was consulted by Theodor Nöldeke (1862 and 1875) and Rudolf Macuch (1965a) in the preparation of their grammars, and the contents of its Neo-Mandaic column were incorporated into Drower/Macuch 1963. No complete Neo-Mandaic text was published until the beginning of the twentieth century, when de Morgan (1904) published facsimiles of five such texts (which were transliterated and translated in Macuch 1989). The last few decades have seen a marked increase in the number of Neo-Mandaic texts available to scholarship (Macuch 1965b; 1989; 1993) and a descriptive grammar (Häberl 2009).

1.3. Writing system

Neo-Mandaic is generally unwritten. On the rare occasions on which it is written, in personal letters and in the colophons that are attached to manuscripts, it is rendered using a modified version of the classical script. With the exception of /ə/, all vowels are represented, but without any indication of length or quality. The letter <ʕ> consistently represents an epenthetic vowel, either /ə/ or /ε/. Additionally, the Arabic letter ʕ has been borrowed to indicate the voiced pharyngeal fricative as well as the glottal stop. The letters , <g>, <k>, <p>, and <t> may represent stops (/b/, /g/, /k/, /p/, and /t/) or fricatives (/v/, /ɸ/, /χ/, /f/, and /θ/). Formerly the fricatives were not distinctive segments but merely allophones of the stops after a vowel; the sound rule governing this alternation is now defunct. Neo-Mandaic orthography differs from that of Classical Mandaic by using <u> to represent /w/ even when it is a reflex of Classical Mandaic /b/. As Neo-Mandaic contains several phonemes not found in Classical Mandaic, several letters from the original script have been modified with two dots placed below to represent these phonemes: <ṣ̣> may represent /t̪ʃ/, /ʒ/, or /d̪ʒ/, <ḏ̣> represents /ð̣/, and

<ḥ> represents /h/. The private Mandaic schools in Iran and Australia employ a version of this same script with a few further pedagogic modifications; see Choheili 2004, 312–314.

2. Phonology

There are 35 distinctive segments in Neo-Mandaic: 28 consonants (cf. 2.1.) and 7 vowels (cf. 2.2.). For most of these segments, there is a relatively wide degree of allophonic variation. The transcription system, which is phonemic, does not reflect this variation; nor does it reflect sporadic assimilations, deletions, and other features that are typical of allegro speech.

2.1. Consonants

Tab. 41.1: Neo-Mandaic Consonant Inventory

Stops and Affricates	Bila- bial	Labio- dental	Inter- dental	Alve- olar	Post-Al- veolar	Pal- atal	Velar	Uvular	Pharyn- geal	Glot- tal
Voiceless	<i>p</i>			<i>t</i>	<i>č</i>		<i>k</i>	<i>q</i>		
Voiced	<i>b</i>			<i>d</i>	<i>j</i>		<i>g</i>			
Emphatic				<i>ṭ</i>						
Fricatives	Bila- bial	Labio- dental	Inter- dental	Alve- olar	Post-Al- veolar	Pal- atal	Velar	Uvular	Pharyn- geal	Glot- tal
Voiceless		<i>p̄/f</i>	<i>t̄</i>	<i>s</i>	<i>š</i>			<i>k/x</i>	<i>ḥ</i>	<i>h</i>
Voiced		<i>b̄/v</i>		<i>z</i>				<i>ḡ/ġ</i>	<i>ʕ</i>	
Emphatic				<i>ṣ</i>						
Sonorants	Bila- bial	Labio- dental	Inter- dental	Alve- olar	Post- Alveolar	Pal- atal	Velar	Uvular	Pharyn- geal	Glot- tal
Nasal	<i>m</i>			<i>n</i>						
Lateral				<i>l</i>						
Apical				<i>r</i>						
Approx- imant	<i>w</i>					<i>y</i>				

Neo-Mandaic has 28 distinctive consonantal segments, including four loan-phonemes: the postalveolar affricates *č* /tʃ/ and *j* /dʒ/ and the pharyngeal fricatives *ʕ* /ʕ/ and *ḥ* /ħ/, which are found only in vocabulary of foreign origin, particularly Arabic and Persian. Two pharyngealized segments (a voiced alveolar stop *ḍ* /ðˤ/ and a voiced alveolar fricative *ḏ* /zˤ/) are found in a few Arabic loan words. They have been excluded from the phonemic inventory of Neo-Mandaic due to their marginal status. The fricatives /f/, /x/, and /s/ are assigned the values *f*, *x*, and *ḡ* when they appear in loan words rather than *p̄*, *k*, and *ḡ* as they are not subject to the same phonotactic constraints in words of foreign origin.

2.2. Vowels

Tab. 41.2: Neo-Mandaic Vowel Inventory

	Front		Central	Back
Close	<i>i</i>			<i>u</i>
Mid		<i>e</i>	<i>ə</i>	<i>o</i>
Open			<i>a</i>	<i>ā</i>

The vowel system in Neo-Mandaic is composed of seven distinct vowels, of which six (*i* /i/, *u* /u/, *e* /e/, *o* /o/, *a* /a/, and *ā* /a/) are principal phonemes, and one (*ə* /ə/) is marginal. The vowels are distinguished by quality rather than quantity. Three of the principle vowels, the “tense” vowels *i*, *u*, and *ā*, are lengthened in open accented syllables to [i:], [u:], and [ɔ:] or [ɒ:]. /i/ and /u/ are realized as [ɪ] and [ʌ] whenever they occur in closed syllables, either accented or unaccented. The other three principle vowels, the “lax” vowels *o*, *e*, and *a*, appear only exceptionally in open accented syllables. *e* is realized as [e] in open syllables and [ɛ] in closed syllables. *a* is realized as [a] in closed accented syllables, and as [a] or [æ] elsewhere. Schwa (*ə*) has the widest allophonic variation of all the vowels. It is regularly fronted, backed, raised, or lowered in harmony with the vowel of the following syllable. When it is followed by *w*, it is regularly raised and backed to [ʌ]. When the accent falls on a closed syllable containing schwa, it becomes fronted and raised to [ɛ].

There are also five diphthongs, *ey* /ɛɪ/, *ay* /aɪ/, *aw* /aʊ/, *āy* /ɔɪ/, and *āw* /ɔʊ/. The diphthongs /aɪ/ and /aʊ/, which had already collapsed in closed accented syllables to /i/ and /u/ in the classical language, have collapsed in all accented syllables in the dialects of Ahvāz and Khorramshahr, apart from those in words of foreign origin. The collapse of diphthongs appears to be further advanced in the dialect of Ahvāz; compare Khorramshahr *gāw* /gɔʊ/ ‘in’ with Ahvāz *gu* /gu:/ ‘id.’. Closely tied to the collapse of the diphthong /aɪ/ in open accented syllables is the breaking of its outcome, /i:/ to /iɛ/ in the same environment. For example, classical *baita* ‘house’ has become *bieṭā* in Neo-Mandaic. This sound change is today typical of both the contemporary dialects of Ahvāz and Khorramshahr, but is not present in the unpublished texts from Iraq collected by Drower or in Macuch 1989.

2.3. Syllable Structure

Neo-Mandaic words range in size from one to five syllables. Each syllable consists of an onset (which is optional in word-initial syllables) and a rime. The rime consists of a nucleus (usually a vowel or a syllabic consonant) with or without a coda. The onset and the coda which frame the nucleus consist of consonants; the onset is mandatory for all word-internal syllables, but the coda is optional in all environments. Whenever an enclitic pronominal suffix (see table 43.5) lacking an onset is added to a closed accented syllable, the coda of the syllable is geminated to form the onset of the following syllable (e.g. *həzon* “they saw” becomes *həzonna* “they saw her”). Whenever the voiceless interdental fricative /θ/ is geminated in this environment, its outcome is the cluster [χt] rather than the expected [θθ]. For example, when the pronominal suffixes

are appended directly to the existential particle **et* [ɛθ] (Classical *'it*), it regularly takes the form *ekt-* [ɛχt]. This rule also affects the conjugation of the verb *meṭ* ~ *moṭ* (*māyeṭ* 'to die,' e.g. *meṭ* 'he died' but *mektat* 'she died.'

The syllable patterns V (*ā* [ɔ] 'this'), VC (*ak* [aχ] 'that'), CV (*mu* [mu] 'what'), and CVC (*tum* [tum] 'then') are the most common. Slightly less common are syllables containing clusters of consonantal or vocalic segments, such as VCC (*ahl* [ahl] 'family'), CCV (*klātā* ['klɔː.θɔ] 'three'), CCVC (*štānye* ['stɔn.je] 'he is a boy'), CVCC (*waxt* [væχt] 'time'), CVVC (*biet* [biɛθ] 'house'), and CVVCC (*šielṭkon* ['ʃiɛlt.χon] 'I asked you (pl.)'). Permissible consonant clusters in Neo-Mandaic fall into two categories: clusters that form at the beginning or the end of a syllable, and those that span syllable boundaries. The former are strictly limited to certain combination of segments. The latter are less restricted; with few exceptions, Neo-Mandaic tolerates most clusters of two or occasionally even three consonants across a syllable boundary. Consonant clusters consisting of a stop followed by a sonorant, a sibilant followed by a sonorant, or a sibilant followed by a stop, are tolerated in both syllable-final and syllable-initial environments. Consonant clusters consisting of a sonorant and a stop or a sonorant and a fricative are tolerated in word final environment alone. /ə/ is regularly inserted as an anaptyctic vowel to break up impermissible consonant clusters; whenever a sonorant is the second segment in a word-final consonant cluster, the cluster is eliminated by syllabifying the sonorant. Neo-Mandaic does not tolerate clusters of the bilabial nasal /m/ and the alveolar trill /r/ in any environment. The voiced bilabial stop /b/ regularly intervenes between these two segments, e.g. *lākamri* ['la.kam.bri] 'he didn't return it.' Clusters of the voiceless glottal fricative /h/ with another consonant are also not tolerated, even across a syllable boundary; /h/ is generally deleted in this environment.

2.4. Stress

The accent preferably falls upon a tense vowel within a closed syllable. The placement of the accent is determined from the final syllable. Any final syllable (or ultima) that is closed and contains a tense vowel automatically receives the accent, e.g. *qəmahrəbāt* [qə.,mæh.rɛ.'wɔːt] 'you destroy.' If the final is open or contains a lax vowel, the accent will fall upon the penultimate syllable, provided that it is closed or contains a tense vowel, e.g. *gabṛā* ['gæv.rɔ] 'man.' Otherwise, the stress will fall on the final syllable, e.g. *əkāl* [a.'χal] 'he ate.' In words of three or more syllables, if neither the ultima nor the penultima is closed and contains a tense vowel, then the accent recedes to the antepenultimate syllable, e.g. *gaṭelnākon* [ga.'t'ɛl.nɔ.,χon] 'I will kill you.' Several morphemes automatically take the accent, such as the negative morpheme *lā-*, which causes the accent to shift to the first syllable of the verb which is negated. As in Classical Mandaic and other Aramaic dialects, vowels in open pretonic syllables are regularly subject to reduction.

3. The noun

The morphology of the noun has been greatly influenced by contact with Persian. The classical system of states has become obsolete, and only vestiges of it survive in some

frozen forms and grammatical constructions. As a result, the most common inflectional morphemes associated with the states have been replaced by morphemes borrowed from Persian, such as the plural morphemes *-ān-* (for native and nativized vocabulary) and *-(h)ā* (for words of foreign origin), the indefinite morpheme *-i*, and (occasionally in the dialect of Ahvāz, but not that of Khorramshahr) the *ezāfe*. This last morpheme indicates a relationship between two nouns (substantive or adjective) corresponding to a variety of functions (generally attributive or genitive). In Neo-Mandaic, the contextual form of the noun combines the functions of both the Iranian *ezāfe* and the Classical Mandaic construct state. Whenever a noun bearing the nominal augment *-ā* is immediately followed by another noun or adjective expressing a genitive or attributive relationship, the augment is regularly apocopated, e.g. *rabbā* ‘leader’ but *rab Manday-ānā* ‘leader of the Mandaeans’ and *kādābā* ‘book’ but *kādāb Mandāyī* ‘a Mandaic book.’

3.1. Gender and number

Despite the collapse of the system of states, and the obsolescence of the most common classical plural morpheme *-ia*, much of the morphology of the noun has been preserved. While most nouns, masculine and feminine alike, are marked with the plural morpheme *-ān-*, a number of other morphemes exist, which can indicate other distinctions beyond number. The feminine plural morpheme *-(w/y)āt-* most commonly appears on nouns marked explicitly with the feminine singular morpheme *-t-*, although it can also be found on the plural forms of many feminine nouns not marked as such in the singular. Most loan words take the plural morpheme *-(h)ā*, although a few retain the plural forms of their source languages. Additionally, most of the heteroclite plurals attested in the classical language have been retained.

Tab. 41.3: Gender and Number Marking in Neo-Mandaic

Gender	Singular	Gloss	Plural	Gloss
<i>m</i>	<i>kādāb-ā</i>	book	<i>kādāb-ān-ā</i>	books
<i>f</i>	<i>id-ā</i>	hand	<i>id-ān-ā</i>	hands
<i>f</i>	<i>tur-t-ā</i>	cow	<i>tur-āt-ā</i>	cows
<i>f</i>	<i>biet-ā</i>	house	<i>biet-wāt-ā</i>	houses
<i>m</i>	<i>gaḅr-ā</i>	man	<i>goḅr-ā</i>	men
<i>f</i>	<i>ett-ā</i>	woman	<i>enš-ā</i>	women
<i>m</i>	<i>jihel</i>	child	<i>jihel-ā</i>	children
<i>m</i>	<i>waxt</i>	time	<i>awqāt</i>	times

3.2. Identifiability and referentiality

The appearance of the indefinite and plural morphemes on the noun is determined primarily by its pragmatic status, such as the referentiality and identifiability of the referent. “Referentiality” concerns whether the speaker intends a particular, specific entity, which is thus referential, or whether the entity is designated as non-specific or

generic, and thus non-referential. Referential nouns are explicitly marked when plural as well as when they serve as the object of a verb, in which case they are marked with the enclitic morpheme *əl-* and anticipated by a pronominal suffix on the verb. The referent of an unmarked noun such as *barnāšā* can either be specific ('the person') or generic ('people') but not non-specific ('a person'). The "identifiability" of a referent reflects whether the speaker assumes that it is identifiable or unidentifiable to the addressee. The indefinite morpheme *-i* indicates that the referent is neither generic nor identifiable, but is ambiguous as to whether the referent is specific ('a particular person') or non-specific ('some person'). Macuch (1965a, 207) has noted that this morpheme, originally borrowed from the Iranian languages, is attested already in the Classical Mandaic texts. Nouns and adjectives modified by the indefinite morpheme *-i* can serve as indefinite pronouns to indicate non-specific or indefinite referents (such as *enši* 'someone' and *mendi* 'something').

Tab. 41.4: Pragmatic Status of the Noun

	Specific	Non-Specific	Generic	Identifiable	Gloss
<i>barnāš-ā</i>		—		+	people/the person
<i>barnāš-i</i>			—	—	a person
<i>barneš-ān-ā</i>			—	+	the people
<i>barneš-ān-i</i>			—	—	some (of the) people
<i>əl-barnāš-ā</i>	+			+	the person/the people
<i>əl-barnāš-i</i>	+			—	a (specific) person
<i>əl-barnāš-ān-ā</i>	+			+	the (specific) people
<i>əl-barnāš-ān-i</i>	+			—	some (specific) people

4. Pronoun

There are five types of pronouns in Neo-Mandaic: personal pronouns (both independent and enclitic), demonstrative pronouns, indefinite pronouns (introduced in 3.2.), interrogative pronouns, and relativizers (introduced in 6.). The personal pronouns are illustrated below.

Tab. 41.5: The Independent Personal Pronouns (and Enclitic Pronominal Suffixes)

Person	Masculine Singular		Feminine Singular		Plural	
3 rd	<i>huwi</i>	(-i)	<i>hidā</i>	(-a)	<i>honni</i>	(-u)
2 nd	<i>āt</i>	(-ak)	<i>āt</i>	(-ek)	<i>atton</i>	(-kon)
1 st	<i>anā</i>	(-e)			<i>ani</i>	(-an)

The independent personal pronouns are optionally employed to represent the subject of a transitive or intransitive verb. Whenever the singular forms appear before a verb, their final vowel is apocopated. The enclitic personal pronouns are in complementary distribution with them; they may represent the object of a transitive verb, a nominal or verbal complement or adjunct in a prepositional phase, or indicate posses-

sion on the noun. On nouns of foreign origin, they are affixed after the morpheme *-d-* (see Häberl 2007). On the noun *napš-* ‘self’ they also serve to form the reflexive pronouns. Neo-Mandaic also has two reciprocal pronouns, *ham* ‘each other’ and *hədādā* ‘one another.’

Tab. 41.6: The Demonstrative Pronouns

Isolated	Near-Deixis Contextual	Gloss	Isolated	Far-Deixis Contextual	Gloss
<i>āhā</i>	<i>ā</i>	this	<i>aku</i>	<i>ak</i>	that
<i>ahni</i>	–	these	<i>ahni</i>	–	those

Neo-Mandaic demonstrative pronouns distinguish between near-deixis and far-deixis in the singular, but not in the plural. They also reflect no distinction in gender. The original far-deictic plural demonstrative pronoun *ahni* ‘those’ (classical *hania*) has assumed the function of a general plural demonstrative pronoun. It is also often used in the place of the independent third plural personal pronoun. The demonstrative pronouns precede the noun they modify. In this position, the final vowel of the singular demonstratives is apocopated (these are the forms listed as ‘contextual’). Neo-Mandaic also has two locative demonstrative pronouns, *hənā* / *ehnā* ‘here’ and *ekkāk* ‘there.’

The interrogative pronouns are used to elicit specific information beyond a simple yes or no answer (which can be elicited simply by employing a rising intonation, as in English). Of these interrogative pronouns, only *man* ‘who’ and *mu* ‘what’ may substitute for either the subject or the object of a verb, obligatorily appearing at the beginning of the interrogative clause. Other interrogatives in Neo-Mandaic include *elyā* ‘where,’ *hem* ‘which,’ *hemdā* ‘when,’ *kammā* ‘how,’ *kaṭkammā* ‘how much/many,’ *mujur* ‘how, in what way,’ and *qamu* ‘why.’

5. The verb

The Neo-Mandaic verb may appear in two aspects (perfective and imperfective), three moods (indicative, subjunctive, and imperative), and three voices (active, middle, and passive). As in other Semitic languages, the majority of verbs are built upon a triconsonantal root, each of which may yield one or more of six verbal stems: the *G*-stem or basic stem, the *D*-stem or transitivity-denominative verbal stem, the *C*-stem or causative verbal stem, and the *tG*-, *tD*-, and *tC*-stems, to which a derivational morpheme, *t-*, was prefixed before the first root consonant. This morpheme has disappeared from all roots save for those possessing a sibilant as their initial radical, such as *eṣṭabā* ~ *eṣṭabi* (*meṣṭabi*) ‘to be baptized’ in the *G*-stem or *eṣṭallam* ~ *eṣṭallam* (*meṣṭallam*) in the *C*-stem, in which the stop and the sibilant are metathesized. A seventh stem, the *Q*-stem, is reserved exclusively for those verbs possessing four root consonants.

Verbs that begin with a vowel rather than a consonant are called I-weak. Verbs beginning with the approximants *n* and *y*, which were susceptible to assimilation in Classical Mandaic, have been reformed on the analogy of the strong verbs. When they appear as the second or third radical of a consonantal root, the liquids *w* and *y* are

susceptible to the general collapse of diphthongs described in 2.2. The verbs that are thus affected are known as II-weak and III-weak verbs. Those roots in which the second and third radical consonants were identical have been reformed on the analogy of the II-weak verbs; this process had already begun in Classical Mandaic.

A very large and productive class of verbs in Neo-Mandaic consists of a verbal element and a non-verbal element, which form a single semantic and syntactic unit. The non-verbal element is most often a noun such as *əḫādā* ‘deed’ in the compound *əḫādā əḫad* ~ *əḫod* (*āḫed*) ‘to work or to do something,’ or an adjective such as *ḥayānā* ‘alive’ in the compound *ḥayānā tammā* ‘to survive’, although prepositions such as *qār* ‘at,’ in the compound *qār tammā* ‘to be born to someone’, are attested. In many of these compounds, the verbal element is a “light” verb, which serves only to indicate verbal inflections such as person, tense, mood, and aspect; the meaning of these compounds is primarily derived from the non-verbal element, which always precedes the verbal element. The most common light verbs are *əḫad* ~ *əḫod* (*āḫed*) ‘to do,’ *əḫab* ~ *əḫob* (*āḫeb*) ‘to give,’ *məḥā* ~ *məḥi* (*māḥi*) ‘to hit,’ and *tammā* ‘to become.’ Although phrasal verbs similar to these are attested in Classical Mandaic, most Neo-Mandaic phrasal verbs are calqued upon Persian phrasal verbs, and many non-verbal elements are Persian or Arabic loan words.

5.1. Principal parts of the verb

Tab. 41.7: The Principal Parts of the Seven Stems

Stem	Perfective	Imperative	Imperfective	Gloss
<i>G</i> -stem (a~o)	<i>gəṭal</i>	<i>gəṭol</i>	<i>gāṭel</i>	to kill
<i>G</i> -stem (e~o)	<i>dəḥel</i>	<i>dəḥol</i>	<i>dāḥel</i>	to be afraid
<i>G</i> -stem (o~o)	<i>šəkob</i>	<i>šəkob</i>	<i>šākeb</i>	to lie down
<i>tG</i> -stem	<i>epseq</i>	<i>epseq</i>	<i>mepseq</i>	to be cut off
<i>D</i> -stem	<i>kammer</i>	<i>kammer</i>	<i>əmkammer</i>	to (re)turn
<i>tD</i> -stem	<i>kammar</i>	<i>kammar</i>	<i>mekammar</i>	to turn back
<i>C</i> -stem	<i>ahreḥ</i>	<i>ahreḥ</i>	<i>mahreḥ</i>	to destroy
<i>tC</i> -stem	<i>ettar</i>	<i>ettar</i>	<i>mettar</i>	to wake up
<i>Q</i> -stem	<i>bašqer</i>	<i>bašqer</i>	<i>əmbašqer</i>	to know

The principal parts upon which all inflected forms of the verb are built are the perfective base (represented by the third masculine singular form of the perfective), the imperative base (represented by the masculine singular form of the imperative), and the imperfective base (represented by the active participle in the absolute state). In the *G*-stem, the second syllable of the perfective base can have one of three thematic vowels: /a/, /e/, and /o/. Transitive verbs predominantly belong to the first, which is the most common of the three, whereas the latter two typically characterize intransitives and stative verbs. Transitive verbs also commonly yield a passive participle, which takes the form CəCil-, e.g. *gəṭel* ‘killed (m.sg.)’, f.sg. *gəṭilā* and pl. *gəṭilen*. The *D*-stem passive participle is attested by one form, *əməšabbā* ‘praised,’ which belongs to the III-weak root consonant class. The *C*-stem passive participle is also attested by a single III-weak form, *məḥbā* ‘kept.’

5.2. Inflected forms of the verb

Tab. 41.8: Personal Suffixes on the Verb

Person	Singular Perfective	Imperative	Imperfective	Plural Perfective	Imperative	Imperfective
3 <i>m</i>	-Ø		-Ø	-yon		-en
3 <i>f</i>	-at		-ā	(-yān)		
2 <i>m</i>	-t	-Ø	-et	-ton	-yon	-etton
2 <i>f</i>	(-it)	-Ø		(-ten)	(-yen)	
1	-it		-nā	-ni		-enni

The inflected forms of the verbs are produced by adding personal suffixes to the principal parts. The forms given in parentheses were cited by Macuch (1965a, 1989, and 1993), who noted that they were infrequently found and not consistently used. The feminine plural forms were not present at all in the texts collected by Häberl (2009), and it would appear that the paradigm is in the process of being leveled towards the masculine forms. Before personal morphemes beginning with a vowel, the vowel of the syllable immediately preceding the suffix is deleted and the former coda becomes the onset for the new syllable. The addition of the morpheme may also cause the accent to shift, resulting in the reduction of vowels in pretonic syllables noted in 2.4.

Enclitic object suffixes, introduced in 4., also have the same effect upon preceding syllables, affecting the form of the personal morpheme. All third person imperfective forms take the enclitic object marker *-l-* before the object suffix. The final consonant of the third plural personal suffix *-en* regularly assimilates to this enclitic object marker, producing the form *-el(l)-*. Additionally, the second singular and first plural morphemes assume the forms *-āt* and *-nan(n)-* respectively before object suffixes.

5.3. Tense, aspect, mood, and voice

Aspect is as basic to the Neo-Mandaic verbal system as tense; the inflected forms derived from the participle are imperfective, and as such indicate habitual actions, progressive or inchoative actions, and actions in the future from a past or present perspective. The perfective forms are not only preterite but also resultative-stative, which is most apparent from the verbs relating to a change of state, e.g. *meḵtat eštā* ‘she is dead *now*,’ using the perfective of *meṭ ~ moṭ* (*māyet*) ‘to die.’

The indicative is used to make assertions or declarations about situations which the speaker holds to have happened (or, conversely, have not happened), or positions which he maintains to be true. It is also the mood used for questions and other interrogative statements. The perfective, by its very nature, refers to situations that the speaker holds to have happened or not to have happened, and thus pertains to the indicative, apart from explicitly counterfactual conditional clauses, e.g. *agar an lāhwit, lā-attat əl-yanqā* ‘if I hadn’t been there, she wouldn’t have brought (= given birth to) the baby.’ The imperfective, on the other hand, is used to describe situations which are ongoing, have yet to happen, or about which there may exist some uncertainty or doubt. When marked by the morpheme *qə-*, it is used to express the indicative, but when it is not

thus marked, it expresses the subjunctive. The subjunctive is most commonly used to indicate wishes, possibilities, obligations, and any other statements which may be contrary to present fact. As in the other Semitic languages, the subjunctive must be used in the place of the imperative for all negative commands and prohibitions.

In Neo-Mandaic, the relationship of the action or state described by the verb to its arguments can be described by one of three voices: active, middle, and passive. When the action described by the verb is initiated by its grammatical subject, the verb is described as being in the active voice, and the grammatical subject is described as its agent. The *t*-stems introduced above express the middle voice. The agents of verbs in these stems, which are syntactically active and intransitive, experience the results of these actions as if they were also the patient; in many cases, the action of the verb appears to occur on its own. As a result, verbs in these stems are often translated as if they were agentless passives, or reflexive actions that the subject takes on its own behalf, e.g. *ether minni wuṣle* ‘a piece broke off / was broken from it.’ In the passive voice, the grammatical subject of the verb is the recipient of the action described by it, namely the patient. There are two ways of forming the passive voice in Neo-Mandaic: the analytic passive, in which the passive participle (see 5.1.) is combined with the copula (see 6.), and the much more common impersonal passive, in which an impersonal third plural form is used, e.g. *əmaryon* ‘it is said,’ literally ‘they said.’

6. Syntax

Neo-Mandaic preserves the SVO word order of Classical Mandaic, despite its long-standing contact with Persian (which typically follows SOV word order). Topic-fronting, which tends to obscure the word order, is typical of all three languages. Simple sentences consist of a subject, which may be implied in the verb, and a predicate, which is headed by a verb or the copula (see table 41.9). The independent forms of the copula introduce predicate nominal and predicate locative constructions, and the enclitic forms introduce predicate adjectives. Much like other Semitic languages, Neo-Mandaic employs a predicate locative construction to express the notion of possession. In the simple present tense, this construction uses the independent form of the existential particle **et* and the preposition *l-* ‘to/for,’ which takes the enclitic suffixes introduced in table 41.5.

Before *l-*, the existential particle assumes the form *eh-*, yielding the forms *ehli* ‘he has’ (lit. ‘there is for him’), *ehlā* ‘she has,’ and so forth. In tenses other than the simple present, the copular verb *həwā ~ həwi (hāwi)* is used in the place of the existential particle, e.g. *agar pərahā həwāle, turti zabnit* ‘if I had money, I would have bought a cow.’

Compound sentences combine two or more simple sentences with coordinating conjunctions such as *u* ‘and,’ *ammā* ‘but,’ *lo* ‘or,’ and the correlative conjunction *-lo ... -lo* ‘either ... or.’ Complex sentences consist of a main clause and one or more dependent clauses introduced by a relative pronoun, provided that the referent of the antecedent of the clause is definite – if it is indefinite, no relative pronoun is used. The Classical Mandaic relative pronoun *q-* has not survived, having been replaced by *illi*, an Arabic loan that introduces non-restrictive relative clauses, and *ke*, a Persian loan that introdu-

Tab. 41.9: The Copula (Enclitic and Independent Forms)

Person	Singular		Gloss	Plural		Gloss
3 <i>m</i>	<i>šābir-ye</i>	<i>šābir ekti</i>	he is good	<i>šābir-non</i>	<i>šābir ektu</i>	they are good
3 <i>f</i>	<i>šābir-ya</i>	<i>šābir ektā</i>	she is good	—	—	—
2 <i>m</i>	<i>šābir-yāt</i>	<i>šābir ektāk</i>	you are good	—	<i>šābir ektākōn</i>	you are good
2 <i>f</i>	—	<i>šābir ektek</i>	you are good	—	—	—
1	<i>šābir-nā</i>	<i>šābir ekte</i>	I am good	—	<i>šābir ektan</i>	we are good

ces restrictive relative clauses, both of which appear immediately following the antecedent of the clause. The antecedents of restrictive relative clauses are marked with the restrictive morpheme *-i*, which resembles the indefinite morpheme in form but not function, e.g. *ezgit dukkāni ke hāzitu awwāl* ‘I went to the places which I saw before.’ If the antecedent is the object of the relative clause, it will be represented within the relative clause by a resumptive relative pronoun, as in the example above (*hāzitu* ‘I saw them’).

7. Conclusion

The ensemble of the features described above suggest that the grammar of Neo-Mandaic is remarkably conservative in comparison with that of Classical Mandaic, and that most of the features that distinguish the former from the latter (in particular, the restructuring of the nominal morphology and the verbal system) are the result of developments already attested in Classical and Postclassical Mandaic. Unlike the other Neo-Aramaic dialects (apart from Western Neo-Aramaic), Neo-Mandaic alone preserves the old Semitic suffix conjugation (the Neo-Mandaic perfective). Apart from the imperative forms, the prefix conjugation (the Classical Mandaic imperfect) has largely been replaced by the Neo-Mandaic imperfective, a process which had begun already in Classical Mandaic. Even the lexicon preserves the vocabulary of Classical Mandaic to a large degree; in a list of 207 of the most common terms in Neo-Mandaic collected by Häberl (2009, 39–44), over 85 % were also attested in the classical language, the remaining 15 % deriving primarily from Arabic and Persian. As the latest stage of a classical Aramaic dialect with a long and fairly continuous history of attestation, Neo-Mandaic represents an excellent source of data for the typology of the Aramaic dialects, as well as the historical and comparative study of the Semitic languages in general.

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42. Language Contact between Aramaic Dialects and Iranian

1. Historical background
2. Direct loans
3. Loan translations
4. Structural loans
5. References

Abstract

Protracted contact between speakers of Aramaic and of Iranian languages goes back to the middle of the 1st millenium B.C. and they have continued, without any notable interruptions, until today. The Neo-Aramaic dialects evolved under a strong influence of Persian and in particular of Kurdish, with which they share a common territory. Persian and Kurdish impact is discernible in phonology and morphology but the strongest influence is felt in the lexicon where in some parts of speech loans from Iranian constitute more than 50 % of the vocabulary, and in the verbal system which was completely reshaped according to the Indo-European model.

1. Historical background

Contact between speakers of Aramaic and of Iranian languages or, to be more precise, of Persian and Kurdish, has a very long history. Already under the Achaemenid rulers of Persia (550–330 B.C.), Aramaic served as the language of diplomacy and Aramaic speakers were in charge of the archives of the empire. As Old Persian had no native writing system, documents in Persian chanceries were dictated in Persian to a scribe who wrote it in Aramaic. These were then read at their destination in Persian or in another language of the empire (Polotsky 1932, 273 ff.). It has also been suggested that Aramaic had an impact on the style of Old Persian inscriptions. Later, at some point in the 3rd century B.C., Aramaic ideograms began to be used in Old Persian inscriptions and became the common means of writing Middle Persian and the source of certain Aramaic loans in that language. However, the reverse impact, of Middle Persian on Aramaic, was much stronger and was the cause not only of lexical loans but also, and above all, of far reaching and crucial changes in the future structure of Neo-Aramaic.

Less is known about parallel early contacts with speakers of Kurdish but it has been established that Christianity spread very fast among speakers of Persian and Kurdish during the first centuries of the common era, and although the Arab conquest would later cause massive defections to Islam, local traditions still refer to Christian clerics and martyrs of Kurdish origin (Nikitine 1922, 1 ff.). It should be emphasized that at that time Old Syriac was the only official and working language of the Eastern church and it is probable that Kurdish Christians who did not convert to Islam were gradually

assimilated into the Semitic speaking community. This, combined with mixed marriages – either by consent or by abduction – and centuries of cohabitation of Kurdish Muslims with Aramaic speaking Christians and Jews (id, p.10 note 1, Chyet 1995, 222 ff.) explains the amazingly high numbers of direct Kurdish loans and loan translations in all the Neo-Aramaic dialects. More recent and more easily identifiable than the structural loans mentioned above are the direct loans which have affected all the domains of Neo-Aramaic from phonology, to lexicon, morphology and syntax.

2. Direct loans

Of Persian and Kurdish, the latter had the most substantial direct impact on Neo-Aramaic, in particular in the domain of lexicon, whereas loans in opposite order, from Aramaic to Kurdish, are relatively few (Chyet 1997, 283 ff.). Neo-Aramaic is characterized by an almost unlimited capacity to absorb foreign elements both as such, without any change in their form, or by adapting them, partly or fully, to Neo-Aramaic morphology.

2.1. Phonology and phonetics

Following massive lexical borrowing from Iranian three palatal consonants entered the phonemic system of Neo-Aramaic: the voiceless and voiced palato-alveolar affricates *č*, *ğ* and the palato-alveolar fricative *ž*. The first two are very frequent, often forming quadriliteral roots, the last one much less so and is found in loans from Kurdish only, e.g. Christian Urmi *dižmin* ‘enemy’ from Kurdish *dijmin* and not from Persian دشمن. The following pairs illustrate the phonemic status of *č*, *ğ* and *ž*: Christian Urmi *caculta* ‘handful’ – *kakulta* ‘tuft’; Christian Urmi *çulle* ‘clothes’ – *gulle* ‘bullets’; Christian Urmi *kəžžə* ‘redhead’ – *kəllə* ‘buffalo’, etc. In the Jewish Koy Sanjaq dialect the phonemes *č* and *ğ* are pronounced by certain speakers as the alveo-palatals *č* [ts] and *ğ* [dz] similar to the neighbouring Kurdish dialects of Bingird and Piždar (MacKenzie 1961, 25). Elsewhere, as in Christian Sirdārid and Christian Urmi, dialects spoken in Iranian Azerbaijan, it is the velar plosives *k* and *g* which tend to be fully palatalized as *č* and *ğ* either under Turkish Azeri influence (Rahmati/Buğday 1998, 1) or as a general Persian characteristic, whereas original *č* and *ğ* shift forward and are pronounced as *č* and *ğ*.

Regarding the stops, rules of spirantization, very similar to those of *bgdkft* in Old Syriac, played an important role in differentiating between Iranian languages at their most ancient stages and later between Persian and Kurdish, in particular by the shift, in the latter of spirantized *t* and *d* to the glides *h/y/ə*, or their full elimination (Darmesteter 1883, 1. 44–47, 54–70; Asatrian/Livshits 1994, 84; MacKenzie 1961, 2–3, 8). Neo-Aramaic dialects contain what appears to be the effects of this areal phenomenon in some cases of the elimination of spirantized *d* in all the Neo-Aramaic dialects (proof of the antiquity of this process), e.g. *xə* ‘one’ from Old Syriac *ḥad*, *qamaya* ‘first’ from Old Syriac *qadməyā*, etc. As to more recent changes in the pronunciation of these two consonants we may compare Kurdish Sorani of Sulemaniyya *çî* ‘fabric’ and *Xuwa* ‘God’, parallel to *çît* and *Xweda* in Kurdish Kurmanci, with Christian Salamas spoken

to the north of Lake Urmi, where a similar process has massively affected spirantized *t*, e.g. Christian Salamas *biya* ‘house’ against Jewish Zaxo *bēsa*, Christian Salamas *susawayx* – Christian Urmi *susəvəti*, Christian Salamas *malkuva* ‘kingdom’ – Christian Urmi *malkutə*, etc.

Another peculiar feature of historical spirantized *t* and *d*, restricted to the Jewish dialects of Azerbaijan and central Kurdistan only, consists of their shift to *l* (often dark *l*), e.g. Jewish Azerbaijan *bela* ‘house’ – Christian Urmi *betə*, Jewish Arbel *ila* – Jewish Zaxo *’īza* ‘hand’, etc. This unusual phenomenon has a long history in Iranian (Nikitine 1934, 305 ff.) and similar transformation is still attested in the coterritorial Kurdish Sorani Mukri dialect where Kurdish Kurmanci *Xweda* ‘God’ is pronounced as *Xole*, Kurdish Kurmanci *kilit* ‘key’ as *kilil*, etc. (Socin 1898–1901, 257; Kapeliuk 1997, 537–542).

As for the hard, or emphatic, pronunciation of certain words as phonologically opposed to soft, or unmarked, in the Neo-Aramaic dialects, this is mainly due to the presence of an ancient emphatic consonant and of a few others such as ʿ (‘ayin), dark *l* or *r*, e.g. Christian Urmi *tarpa* ‘leaf’ – *tərdə* ‘let her crumble (bread)’, Christian Urmi *amra* ‘wool’ – *əmrə* ‘let her say’, etc. In historical terms what is peculiar in this process is the fact that the hard pronunciation spreads over all the word, including the vowels. It may certainly be compared to what is known as ‘aynation’ or ‘aynisation’ in Kurdish Kurmanci grammar (Blau/Barak 1999, 21) or ‘synharmonism’ for other languages of the region (Younansardaroud 2001, 19–63). This phenomenon may be considered a case of Aramaic influence on Kurdish (as it is not attested in Persian) or *vice versa*, or of Turkish influence on both (Garbell 1964, 94–99).

In the domain of stress the Neo-Aramaic dialects have adopted the Kurdish/Persian rule that in the vocative and imperative the stress is placed on the first syllable of the word, e.g. Christian Urmi *sógulij* ‘my dear!’; Christian Sirdārid *şáxlippun* ‘change! (pl.)’, etc. The Jewish dialects of central Kurdistan have also borrowed the Kurdish pattern of stressing nouns on the last syllable, contrary to the more general tendency of Neo-Aramaic to put the stress on the penultimate syllable.

2.2. Lexicon and morphology

The Neo-Aramaic dialects, Christian and Jewish alike, are replete with words borrowed from the neighboring languages, namely Arabic, Turkish, Persian and, first and foremost, Kurdish. Even the majority of loans from Arabic, especially outside Arabic speaking areas, and many of the Turkish and Persian loanwords, have entered Neo-Aramaic not directly but via Kurdish (Garbell 1965, 159–160). A recent statistical and semantic study on Kurdish interference is available for the Jewish Sulemaniyya and Halabja dialect (Khan 2004, 8–14, 443–459) which shows an incredibly high percentage of Kurdish loans in that dialect, namely: 67% of nouns, 48% of adjectives, 53 % of particles and 15 % of verbs. This state of affairs is by no means unique to this dialect and a similar count yielded comparable percentages in Jewish Azerbaijan (Garbell 1965, 161–162).

2.3. Nouns and adjectives

Semantically the nouns which entered the Neo-Aramaic lexicon, morphologically unchanged or provided with the Aramaic nominal ending *-a*, belong to everyday vocabu-

lary, referring to matters such as the house and its contents, kitchen implements and containers, kinds of food, agricultural and dairy products, domestic and wild animals and insects, clothes, textiles, jewellery, and the like. Although to a lesser degree, even such basic semantic categories as family members and body parts are not free from Kurdish interference, for instance in Jewish Sulemaniyya and Halabja ‘the mother’ is *da’a-ka*, *da’a-ke*, and *dāye* in Jewish Zaxo, from Kurdish Kurmanci and Kurdish Sorani *dê*, *da* or *da-yik*; ‘grandchild’ is *nawaga* in Jewish Sulemaniyya and Halabja and *nəvigə* in Christian Urmi from Kurdish Kurmanci *nevî* with the Kurdish Kurmanci suffix of endearment *-ig*; ‘body, corpse’ is *laša* in Jewish Sulemaniyya and Halabja and *lašša* in Jewish Zaxo, from Kurdish *laş*, etc. The semantic categories in which the loans are the most frequent are: the fauna (66 %), the house and kitchen with their contents (54 %), clothes (68 %) and textiles (77 %). The last three items doubtless reflect the occupational status of the Jewish speakers of Neo-Aramaic who often acted as merchants, shopkeepers, peddlars or artisans for their Kurdish neighbours (Sabar 1988, 89–95, 98–101).

Loans from Persian, less frequent than those from Kurdish, cover similar semantic fields with the difference that in areas under Persian rule they also include some military, educational and administrative terms, e.g. Christian Urmi *gunakar* ‘guilty’ from گناهکار; Christian Urmi *çirə* ‘pension, allocation’ as in *xala çirə* ‘to receive (lit. to eat) a pension’ from Persian جیره خواردن; Christian Sirdārid *karnama* ‘school certificate’ from Persian کارنامه, and the like.

Borrowed Kurdish adjectives often comprise bodily defects and colours and, contrary to original Aramaic adjectives, are uninflected for gender and number, e.g. Christian Urmi *gora azad* ‘free/brave man’, *bəxtə azad* ‘free/brave woman’, *nəši azad* ‘free/brave people’ from Kurdish Sorani *azad* and Kurdish Kurmanci *aza/azad*. The same applies to adjectives of Persian origin: Christian Urmi *zərgər hunnərbənd* ‘a skillful goldsmith’, *zərgəri hunnərbənd* ‘skillful goldsmiths’.

2.4. Grammatical elements

Among borrowed grammatical elements are several prepositions, e.g. Kurdish *bê* ‘without’ – Christian Urmi *behəd* ‘infinitely’, as well as Kurdish/Persian suffixes attached both to loans and original Aramaic words, e.g. the gentilic infix in Christian Urmi *Urmi-ž-nəjə* ‘an Urmian’; the diminutive suffixes *-kalke*, *-ik*, *-ig* e.g.: Jewish Zaxo *rā* (Hebrew) ‘bad’ – *rā’ike* ‘little evil person (f.)’, Christian Urmi *səvə* ‘old man, grandfather’ – *səvikkə* ‘little old man’, Christian Urmi *zilə* ‘reed’ – *zilikkə* ‘straw’; the Kurdish Sorani suffix *-min* of ordinal numbers in the Jewish dialects of central Kurdistan and Azerbaijan, e.g. Jewish Arbel *ič’amin* ‘9th’; *-xana* for marking a place, e.g. Christian Urmi *aşpazxana* ‘kitchen’ from Persian آشپزخانه (Kurdish Kurmanci *aşxane*), etc. Especially significant are three loans with syntactical consequences: the definite article *-akā* (cf 4.) borrowed from Kurdish Sorani and found in the Jewish dialects of central Kurdistan: Jewish Koy Sanjaq *kalo* ‘bride’ – *kalo’ake* ‘the bride’, Jewish Sulemaniyya and Halabja *gorake* ‘the man’; the Persian/Kurdish Sorani relative particle *ka* which under the form *ga-*, *ka-* or *ki-* is used in some dialects instead or together with Aramaic *d*, e.g. Jewish Azerbaijan *o bratit ki midjawalu* ‘the daughter whom they had brought’;

and the double form of Neo-Aramaic verb negation, e.g. Christian Urmi *lə* for the past tenses, subjunctive and imperative and *le* for the present and the future, parallel to Kurdish Kurmanci *ne* for all the tenses and moods and *na* for the present.

2.5. Verbs

In the relatively few Neo-Aramaic verbs borrowed from Kurdish or Persian the consonantal framework of the loans is usually patterned into three or four root consonants to adapt them to Neo-Aramaic morphology, e.g. Jewish Azerbaijan *bxiš-le* 'he forgave' from Kurdish Sorani *bexšîn*/ Kurdish Kurmanci *bexşandîn*; Jewish Azerbaijan *firmun* 'order!' (imperative sg.) from Kurdish Kurmanci *farman kirin*/ Persian *فرمودن*. More often these are denominal verbs derived from Kurdish or Persian nouns, e.g. Jewish Zaxo *mčukkik-le* 'he put on arms' from Kurdish *çek* 'weapons' and Christian Urmi *cukbin-ni* ditto from *çekban* 'military' with the Persian suffix *بان* denoting professions; Christian Urmi *cungilli* 'he was curved, he bent' from Kurdish Kurmanci *çengel* 'hook'; Jewish Zaxo, Christian Alqosh *ğgira ʿille* 'he was angry with someone' probably from Kurdish Kurmanci *cegar*, Kurdish Sorani *cerg*, Persian *جگر* 'liver' as the seat of bad feelings, etc. Verbs have also been integrated as compound verbs following loan translations.

3. Loan translations

Loan translations are formed by literally translating phrasal units from the source language into the recipient tongue. In Neo-Aramaic these are mainly compound verbs formed according to an Iranian pattern, from a nominal component, mostly as direct object, contributing the meaning, and a common verb – the supporting verb – which provides the inflection. This is the easiest means of incorporating borrowed verbal lexemes into the Neo-Aramaic lexicon and allows verbs to bypass the constraints of complicated Neo-Aramaic verb morphology. There are in all about two dozen, semantically almost empty supporting verbs, literally translated from Kurdish/Persian. As in Kurdish/Persian there are in Neo-Aramaic huge quantities of compound verbs and they represent a prominent areal feature whose origin is to be sought in Iranian. Only for the supporting verb *mxəjə* 'to hit' from Persian *زدن*, Kurdish Kurmanci *lê xistin*, Kurdish Sorani *lêdan* nearly 200 compound verbs have been registered in Christian Urmi (Kapeliuk 2002, 363, 366–369, 375). Some other frequently used supporting verbs which have their parallels in Kurdish/Persian are, for instance, in Christian Urmi: *vədə* 'to do', *təjə* 'to come', *xala* 'to eat', *drəjə* 'to pour, put, scatter', *dvəqə* 'to hold, catch', *grəžə* 'to pull', *vəjə* 'to be, become', *jəvə* 'to give', *npələ* 'to fall' and a few more. The supporting verb is not always identical in the source and in the recipient languages, but as its semantic contribution to the final result is restricted, such changes are of little importance.

As for the nominal component it is either in Aramaic, e.g. Christian Urmi *xala zuzi* 'to embezzle money', Christian Urmi *dvəqə nətə* 'to listen', Jewish Zaxo *drəja ʿəna* 'to pay attention, to covet', or remains in its borrowed Iranian form, e.g. *vədə surgun* 'to

banish' from Kurdish Kurmanci *sirgûn kirin*, Christian Urmi *m̄xəḇ çəpər* 'to fence' from Kurdish Kurmanci *çeper kirin*, Christian Urmi *grəṣə şiklā* 'to take a photograph' from Kurdish Kurmanci *şikil kişandin* or Persian صورت کشیدن, Christian Urmi *vəḇə nījst* 'to vanish' from Persian نیست شدن etc. In the government of the transitive compound verbs is found an interesting construction which is an exact calque of Kurdish. If the verb governs, in addition to the incorporated object, a dative object the latter can be introduced by a preposition e.g. Christian Urmi *cunki d goran əhə izin jivəli qəṭən* 'since our husband allowed it to us (lit. this permission gave-it to us)'; but in accordance with Kurdish Kurmanci the dative complement may be rendered by a possessive pronoun attached to the nominal component of the compound verb, e.g. Christian Urmi *çuvvab-e levə madduru* 'he wasn't answering them (lit. answer-their he wasn't returning-it)' as in Kurdish Kurmanci: *alîkarîya min bike* 'help me! (lit. help-my do!)'.

4. Structural loans

The impressive number of direct borrowings and loan translations from Iranian in Neo-Aramaic are of little weight compared with the revolution caused in it by Iranian structural interference. By 'structural interference' is meant changes which have deeply affected grammatical categories of the recipient language to the point of completely changing some of its sub-systems and upsetting its typological setup (Krotkoff 1982, 63–64). The structural loans may consist of concrete elements but more often they penetrate the original material of the recipient language causing its adaptation to novel categories. Thus, after the Old Syriac suffix *-ā* attached to nouns in the *status emphaticus* had lost, already in Middle Aramaic, its determining power (Nöldeke 1904, 48) and became just a formal mark of nominals, the defining system in Neo-Aramaic was reshaped according to the Persian/Kurdish pattern (Kapeliuk 2004, 187–189). In the latter the definite noun is formally unmarked and is opposed to the marked indefinite which carries the indefinite article: Kurdish Kurmanci *-(y)ek*, Kurdish Sorani *-(y)êk/ê*, Persian *yek*, *-i*. In Neo-Aramaic as well the old definite form *-ā* lost its status as the marked term, and a new element – the indefinite article *xə* – became the marked term of the pair, contrary to general Semitic usage. Consequently, in the nominative and with prepositions, the bare form without *xə* functions both as definite singular and as generic, while special strategies are adopted to express the definite status of a direct object. At the same time, just as in Persian, the demonstrative pronoun became sporadically used as an anaphoric definite article. Moreover, in the areas where Kurdish Sorani, which employs the definite article *-aká*, is spoken, the latter has been borrowed by the Jewish dialects (cf 2.4.) as a case of concrete structural loan. Another interesting feature in the domain of nouns is the attribution of feminine gender to original Semitic masculine nouns in conformity with the gender of words with similar meaning in Kurdish. Neither Kurdish Sorani nor Persian have grammatical gender but Kurdish Kurmanci has preserved the distinction between masculine and feminine and it happens that in Neo-Aramaic dialects spoken on Kurdish Kurmanci territory, originally masculine Semitic nouns are converted into the feminine, e.g. Christian Urmi *m̄ṭra* (f) 'rain' as in Kurdish Kurmanci *baran* (f) and not as in Old Syriac *m̄ṭrā* (m); Jewish Koy Sanjaq *səḥər* (f) 'sorcery', Kurdish Kurmanci *sêr* (f) from Arabic *siḥr* (m); Jewish Azer-

baijan *siddur* (f) from Hebrew ‘prayer book’ (m) as in Kurdish Kurmanci *kitêb* ‘book’ (f) etc. In Jewish Azerbaijan, for instance, 66.66 % lexemes agree in their gender with Kurdish Kurmanci.

Another Neo-Aramaic innovation with far reaching structural consequences was the introduction, in the positive and negative present tense, of a mandatory copula into all nominal sentences, thus forsaking one of the most characteristic peculiarities of Semitic sentence structure. No other Semitic language (with the exception of modern Ethio-Semitic and some peripheral Arabic dialects) has developed a fully inflected copula paradigm functioning independently or, in suppletion with the verb *vəja* ‘to be’, in compound tenses. Thus in Christian Urmi: positive copula 3 m sg: *ijli*, neg. cop. *leli*, verb ‘to be’ *vəja* parallel to Kurdish Kurmanci *-e*, *nine* and *bûn*, Kurdish Sorani *-a*, *niya* and *bûn*, Persian *است*, *نیست* and *بودن*. These elements and several prefixes made it possible for Neo-Aramaic to shape its verbal system following basic Iranian categories.

4.1. Verbal system

In all Neo-Aramaic dialects the old Aramaic verbal system formed of the two inflected basic forms such as Old Syriac *qatal/neqtol* was replaced, probably at a very early stage, by a system fashioned faithfully after the Iranian model (Pennacchiotti 1988; Kapeliuk 1996; Chyet 1995) and not differing greatly from verbal systems of Indo-European languages such as English or French. The prominent categories of the Iranian verbal system were cast into historical nominal forms of the Neo-Aramaic verb and from their combination with prefixes and auxiliaries, again according more or less to the Iranian model, there emerged a tense system typologically completely different from its Semitic ancestor. There is no space to review here all the parallelisms and differences between the complicated verbal systems of Persian/Kurdish and the still more complicated verbal system of Neo-Aramaic, but some prominent features are outlined:

Both Kurdish and Persian distinguish two verbal stems: the present stem and the past stem. The latter split in its turn into two: (a) the preterite and (b) the past participle, e.g. Kurdish Kurmanci present stem: ‘to kill’ *kuj-*/ past stem: (a) preterite *kuşt-*, past stem: (b) past participle *kuştî*; Kurdish Sorani ‘to eat’ *xo-*/ (a) *xward*, (b) *xwardû*; Persian ‘to strike’ *زن* / (a) *زد*, (b) *زده*. The present stem appears in the present tenses, and in the present subjunctive and imperative; the past stem under its (a) form is used in the preterite and the imperfect and as (b) in the present perfect, pluperfect, past subjunctive and past conditional. In a similar vein Neo-Aramaic uses one basic form – *pətax* – for the present, the future, the present subjunctive and the conditional and a second one, split into two: (a) *pətax-* for the preterite (and past preterite in some dialects), and (b) *pətaxə* for all the remaining past tenses and moods. Together with prefixes and the copula, or the verb *vəja* ‘to be, to become’, as auxiliaries, again emulating the Iranian model, several verbal categories unusual for a Semitic language are created, for instance in Christian Urmi: subjunctive *pətax*, past subjunctive *-pətax-və*, perfect subjunctive *həvi pətaxə*, conditional *bit pətax-və*, past conditional *bit-həvi-və pətaxə* and even a *temps surcomposé*, with the auxiliary itself in a compound tense (as in familiar French *j’ai eu mangé*): *vijj-ili pətaxə* reminiscent of the double compound past in Persian: *خریده است* ‘he had bought’.

The most notable difference between the two systems consists in the presence, in many Neo-Aramaic dialects, of an additional basic verb form, namely the infinitive preceded by the preposition *bi-*: Christian Urmi *bi-ptaxə* ‘while opening’, which acts as a present gerund and stands in opposition to the perfect participle *ptijxə* in compound tenses and renders the durative and iterative aspects. In Iranian, on the other hand, these categories are expressed by means of the prefix of the present proposed to the present or past stems. Thus, in Christian Urmi: *bi-ptax-ili* ‘he is opening’ or *bi-ptax-ivə* ‘he was opening’ but in Kurdish Kurmanci *di-kev-îye* ‘he is falling’, Kurdish Sorani *(d)a-xward* ‘he was eating, Persian میزد and است میزد ‘he was striking’, etc. However, note that in Kurdish Kurmanci the infinitive with the circumposition of location *bi ... de* is found quite often in circumstantial subordinate clauses as a kind of present gerund, exactly as in Christian Urmi, e.g. Kurdish Kurmanci: *bi girîn-ê de* ‘while crying’, but it has not penetrated the tense system. On the other hand, a progressive tense composed of the infinitive in a locative case and the copula is found in some Iranian dialects belonging to the Tati group spoken in North West Iran (Yar-Shater 1969, 225).

4.2. Ergative construction

There is no doubt that the most original Iranian structural contribution to Neo-Aramaic is the ergative construction represented by the preterite *ptix-li*. It was already used sporadically in Old Aramaic and in some branches of Middle Aramaic, and is present without exception in all Neo-Aramaic dialects. Already present in sporadic cases in Old Persian, it became the usual way of relating past events in Middle Persian and although it disappeared in modern Persian, it is well preserved both in Kurdish Sorani and in Kurdish Kurmanci, in all the tenses and moods formed from the past stems of transitive verbs. The construction has been discussed extensively in the literature (Hopkins 1989; Pennacchietti 1988; Kapeliuk 1996, 65–68 and the bibliography adduced there) and should be considered a major typological anomaly in a Semitic language.

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43. Aramaic-Arabic Language Contact

1. The history of Arabic-Aramaic language contact
2. Phonology
3. Morphology
4. Syntax
5. Lexicon
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Abstract

This section describes the mutual linguistic influence Aramaic and Arabic have had on each other, presenting examples to illustrate the subsequent developments at different levels from a diachronic perspective.

1. The history of Arabic-Aramaic language contact

Aramaic and Arabic share a long common history. When the name of ‘Gindibu, the Arab’ was set in stone in the mid-9th century B.C. in an inscription commemorating the Assyrian king Šalmanassar’s victories in Syria, he became the first Arab to be mentioned in the historical record, in an environment in which Aramaeans had been present for at least two centuries (Retsö 2003, 126). In much later periods, when Arabian dynasties founded polities such as Hatra, Edessa, Palmyra or Petra, they frequently ruled over mixed populations which included Aramaic-speaking communities. Aramaic was also the medium of written communication. In pre-Islamic times, Arab tribes had already expanded into territory in the Fertile Crescent, initiating further and more intense language contact. The Muslim conquest in the 7th century A.D. and the subsequent Arabization under the Umayyad administration of Caliph ‘Abd al-Malik drastically altered the relationship between the two languages. Aramaic ceded its status as a prestige language to Arabic and in the following centuries Aramaic’s importance as a spoken language would steadily dwindle. Written varieties associated with Jewish, Samaritan, Christian and Mandaic religions gave Aramaic status as a *lingua sacra* in these minority communities (see ch. 31, ch. 32, ch. 33, ch. 35, ch. 36 and ch. 37).

The switch from Aramaic to Arabic was probably facilitated by the close relationship between the languages (Jastrow 2001, 615). The extent to which Aramaic contributed to the rise of Arabic vernaculars is part of an age-old debate in Semitic linguistics. Distinct Aramaic traits are already visible, for example, in early South-Palestinian Christian-Arabic texts of the first millennium (cf. Blau 1966–1967, 628 [index]). Although Islamization and Arabization are by and large both part of the same transformation, one was not always accompanied by the other. Many Arabic-speaking communities kept their traditional religion, and even today there are Aramaic-speaking Muslims in Baḥʿa and Ġubb ʿAdīn (Syria). As substratum isoglosses with Aramaic features increase in Arabic speaking areas which surround Aramaic ‘islands’, becoming most intense the nearer to the Aramaic ‘kernel’, this suggests that the switch from Aramaic to Arabic came about by a gradual shrinking of Aramaic islands, at least in rural environments (Arnold/Behnstedt 1993, 91–92; Jastrow 2001, 617). The main region of Aramaic-Arabic contact is in the Fertile Crescent, but recent archaeological, historical and linguistic research has shown that Aramaean cultural and linguistic influence reached far along the coast of the Arabo-Persian Gulf (Healey/Bin Seray 1999–2000) and exerted its influence on the Arabic there (Holes 2002; 2006).

2. Phonology

2.1. From Aramaic to Arabic

The well-known merger of non-emphatic inter-dental fricatives with plosives (*t*, *t* > *t*; *d*, *d* > *d*), found both in post-Old-Aramaic and Neo-Arabic is probably not due to language contact but to an independent parallel development, as it is present also in Arabic varieties that have had no contact with Aramaic (e.g. Cairene Arabic, see ch. 54). Another proposed substratum phenomenon is the representation of **ā* as *ā* or *ō* in Lebanese dialects, present already in Canaanite (cf. Hebrew *šālōš* ‘three’ vs. Arabic *talāt*) and still in Western Neo-Aramaic (cf. *eḷlat*, fem. *ṭlōṭa* ‘three’). Fleisch (1963) dismissed this suggestion on grounds that *ā/ō* occurs only when conditioned by adjacent consonants and is complementary to *ā/ē*. However Arnold/Behnstedt (1993, 67 f.) demonstrated that cases of unconditioned *ō* do exist (e.g. *lōn* ‘tongue’), so that an assumption of Aramaic substratum influence is reasonable. Elision of unstressed **a* and shortening of pretonic long vowels, although also present in Arabic dialects spoken far from the area of Aramaic influence, might have at least been supported by the Aramaic substratum in the Qalamūn-region (Arnold/Behnstedt 1993, 69–73).

2.2. From Arabic to Aramaic

It is difficult to find Arabic influence on the phonology of Aramaic varieties in pre-modern times. The Neo-Aramaic dialects, however, have borrowed several loan-phonemes from Arabic. Usually, these were incorporated along with loanwords. Already in Jewish NENA manuscripts of the 17th century, studied by Sabar (1984, 203–5), the following borrowed consonants are attested: ‘ (in *saʿāde* ‘happiness’, inherited *‘ being

represented by *ʾ), *ġ* (in *ġāfilīn* ‘fools’, inherited **ġ* being represented by *ʿ > ʾ), *f* (in *safāre* ‘travels’, inherited **p/p̄* being represented by *p*), *ḥ* (in *ḥāl* ‘condition’, inherited **ḥ* being represented by *ḥ* [IPA x]). A somewhat different situation is described by Arnold (2008a, 186 f.) for Western Neo-Aramaic: While most plosives in Arabic loans are treated as in native Aramaic words (e.g. Arab. *tamām* > NWA *čamam* ‘completely’), this Aramaization does not work with *ž* [ʒ] and *ḏ* [IPA ʔ]: Arab. *žayš* (Standard Arab. *ġayš*) > *žayša* ‘army’, *ḏarf* ‘skin bag for butter’ (cf. Classical Arab. *zarf* ‘receptacle’) > *ḏarfa*.

As the inventory of Neo-Aramaic vowels is larger than that of Arabic, the integration of Arabic vowels does not pose problems and in most dialects does not result in loan-vowels.

Arabic influence on Aramaic phonology may also affect phonotactic rules, as in the following case: The assimilation of *n* to a following consonant is a very old phenomenon in North-West Semitic (see ch. 18). Younger speakers of Western Neo-Aramaic try to avoid the assimilation if *n* is present in other derivations of the same root, cf.: *yinhuč* ‘he should come out’ instead of *yihhuč*, the *n* being reconstructed from forms like *nōheč* ‘he comes out’ (Arnold 2008a, 187).

3. Morphology

3.1. From Aramaic to Arabic

Although morphology in general is less prone to borrowing, already in Classical Arabic a derivational suffix *-ūt* is attested, that is apparently imported from Aramaic via loan-words such as *malakūt* < *malḵūtā* ‘kingdom’ (Wright 1896–1898, 166 A).

In modern dialects, a case of possible influence is the replacement of the Classical Arabic *m* in the 3rd person masc. plural pronouns (*hum(u)* / *-hulim(u)*) by *n* in many Arabic dialects (e.g. Aleppo *hinnen* ‘they’), which may have been triggered by Aramaic forms like *hennōn* ‘they’, as already suggested by Brockelmann (1908, 310). Diem (1971, 43–44) considers the masc. *n*-pronouns as a result of analogous levelling with fem. pronouns (cf. Class. Ar. *hunna* ‘they (f.)’). Further counter-arguments include the fact that masc. *n*-pronouns are also found in dialects that had no direct contact with Aramaic, but the discussion is still open (Owens 2006, 244 f.).

3.2. From Arabic to Aramaic

Correll (1978, 153) attributes the preservation of the two old Semitic tenses, the perfect and imperfect, in Western Neo-Aramaic to Arabic influence. Although this assumption cannot be proven, it does seem likely when these dialects are compared with Turoyo and the NENA dialects which have had less influence from Arabic, but rather from Iranian languages (see ch. 42). Here the old tenses are lost.

Together with Arabic loan words, nominal patterns are also borrowed, e.g. Ma'lūla *makčūba* ‘letter’ < Arabic *maktūb* with the nominal pattern *maf'ūl* (passive participle), that is not originally found in Aramaic. The question of whether loan patterns become

productive and are used with Aramaic roots or borrowed roots to form new lexemes is presently unanswered. A similar example is the borrowing of Arabic stem patterns with Aramaic inflection in NENA, e.g. Qaraqosh *mastaʿmliwa* ‘they used to use’ (Khan 2002, 130).

4. Syntax

4.1. From Aramaic to Arabic

Although Diem (1979) is unwilling to assume widespread substratum influence on the Arabic vernaculars, some clear cases of Aramaic syntactical influence on Arabic dialects may nevertheless be adduced:

A rather widespread Aramaism in modern Arabic dialects is the periphrasis of the direct object, using a clitic pronoun and the datival preposition *l(i)-* (Diem 1979, 47–49, 55–56 and Contini 1999, 104–111); cf. e.g. Syriac *Herodes kaḏ ḥzāy l-Īšōʿ ḥdī tāḥ* ‘When Herod saw Jesus (lit. saw-him to-Jesus), he was very glad.’ (Luke 23:8) and Baghdadi Arabic *dazzha l-uḥta li-l-wlāya* ‘He sent his sister to town (lit.: he-sent-her for-sister-his)’ (Malaika 1963, 63). The same probably applies to the genitival periphrasis, cf. Syriac *breh d-malkā* ‘the son of the king (lit. son-his of-king)’ and Lebanese Arabic *ʿammu le-flān* ‘somebody’s uncle (lit.: uncle-his for-somebody)’.

Müller-Kessler (2003) has argued that the Iraqi Arabic particle of existence *ʿaku* (negated *māku*) is a survival of a particle like Babylonian Talmudic Aramaic *ʿykʿ* or Mandaean *eka* (different spellings), cf. *ʿykʿ gbrʿ byhwdʿy* ‘there is a man among the Jews’ (B.T. Baba Mešia 86a) and Baghdadi Arabic *ʿaku ḥamsīn dīnār ib-ḡēbi* ‘There’s fifty dinars in my pocket.’

4.2. From Arabic to Aramaic

Arabic influence on the syntax of Neo-Aramaic (cf. Arnold 2008a, 192f.) is evident especially in Western Neo-Aramaic, dialects of which have developed under intense and prolonged Arabic influence. Among the many examples mentioned by Correll (1978, 150–153) are the following:

- (a) The loss of gender distinction in the plural in Baḥʿa Aramaic.
- (b) Elative constructions (e.g. Maʿlūla *hačč aqtar minni* ‘you’re stronger than I am’ (Correll 1978, 24)
- (c) Constructions of reciprocity (e.g. Baḥʿa *ittqin maḥyill baʿḏinn* ‘they began to hit each other’ (Correll 1978, 34; cf. Arabic *baʿḏ*)
- (d) Relative clauses without relative pronouns after indefinite nouns (e.g. Maʿlūla *ana ḡabrōna niḥqer* ‘I am a poor man (lit.: a man that is poor)’ (Correll 1978, 118)
- (e) Circumstantial clauses (e.g. Baḥʿa *hinn w-marriqin ... išcaḥ rōʿya* ‘they found, while they were riding, a shepherd’ (Correll 1978, 127)

5. Lexicon

5.1. From Aramaic to Arabic

Aramaic-Arabic language contact is most apparent in the area of lexicon (Retsö 2006). Aramaic loanwords had already penetrated Arabic and its Ancient North Arabian (see ch. 44) predecessors in pre-Islamic times in large numbers. For example, the Liḥyanite word *ʿhrt* ‘descendants’ was identified by Sima (1999, 107) as a loan from Aramaic. Items of material culture that were adopted from the Aramaeophone Fertile Crescent into Arabia, such as building typology, foodstuffs and textiles were accompanied by the relevant terms (Fraenkel 1886). Needless to say, in many cases the words were only transmitted via Aramaic and were originally from Akkadian (Krebernik 2008), Persian (Ciancaglini 2008, esp. 269–70 [index]) or Greek.

In late Antiquity, monotheism spread in the Arabian peninsula and with it Jewish and Christian concepts and terms, e.g. *ʿumma* ‘people, (religious) community’ (< Aram. *ʿummā*, *ʿummīā* ‘people’ < Hebr. *ʿummā* ‘people, tribe’) or *ṣalāh* ‘prayer’ (< *šlōtā* ‘id.’) were imported. Many Aramaic lexemes in this category are attested in the Koran (Jeffery 1938) and in the Life of the Prophet by Ibn Hišām (Hebbo 1984).

After the Muslim conquest, Aramaic-Arabic contact increased and many Aramaic loans are found in both poetic and prosaic compositions. During the ‘Translation Movement’ of the 8th–10th centuries, many philosophical, scientific and medical texts were translated from Greek to Arabic. Quite often the translators were Christians, and especially in the beginning translations were made via a Syriac intermediary translation. This process was another route by which Aramaic loanwords and loan meanings were integrated into Classical Arabic.

In modern Arabic dialects of Syria, Palestine, Iraq and the North-Western Gulf coast, many words of Aramaic origin are found. Among these are many old words that are nevertheless unattested in written Arabic (Feghali 1918; Contini 1999, 111–116; Jastrow 2001; Mansoor 2002; Holes 2006, 31–32).

Many place names in originally Aramaic-speaking areas remain in Arabic (cf. for Northern Jordan al-Maʿani 1992 and for Lebanon Wild 1973).

5.2. From Arabic to Aramaic

In older varieties of Aramaic, like Old (see ch. 27) or Imperial Aramaic (see ch. 28), Arabic loanwords are absent. The situation changed dramatically when Middle-Aramaic varieties became the written languages of polities such as Palmyra, the Nabatean empire, or the state of Hatra. The populations of these caravan-states had a large portion of Arab descent. O’Connor (1986) identified 15 Arabic loanwords in Nabatean Aramaic in the categories of architecture, social and legal vocabulary and even a negation *ʿyr* ‘other than’ (< **ḡayr*). The frequency of Arabic loans is not uniform and depends on the provenance and age of the texts (Greenfield 1992). Arabic loans in Palmyrene Aramaic were collected by Maraqtan (1995). Needless to say, in Palmyrene, Nabataean, and Hatraean Aramaic inscriptions many Arabic personal names occur. In Hatra, nearly all personal names formed from only one word have an Arabic etymology (Abbadi 1983, xxv).

In modern Aramaic dialects, Arabic loanwords are extremely frequent. In Western Neo-Aramaic, the contact was direct, at least from the Omayyad period onwards. In NENA - dialects that are spoken partly in an Iranian milieu, many Arabic loans are transmitted through other languages.

Arabic loans in Neo-Aramaic are not restricted to vocabulary of Arabic-Islamic civilisation, state and politics: e.g. Ma'lūla *inčifōḏča* (< *intifāḏa*), but reach far into the realm of everyday vocabulary, cf. the following examples from Ṭuroyo: 'šāra 'hint' < Arabic 'išāra or *malqaṭ* 'tongs' < Arabic *milqaṭ* (for more examples see Jastrow 1993, 200–213 and 236 f.).

In addition, even verbs are quite frequently borrowed from Arabic, cf. the following examples from Ma'lūla: *aḏaḵ* 'he tasted' (< *dāq*), *inḵal* (Impf. *yinḵal*) 'he transported' (< *naqala*), *ḡarreb* 'he tried' (< *ḡarrab*, cf. Standard Arabic *ḡarraba*), etc. (Arnold 2002, 7 f.). NENA dialects have also borrowed Arabic verbs. Verbal roots are adapted to Aramaic stem patterns and inflection, e.g. *fhəmlə* 'he understood', *mufhəmlə* 'he caused to understand' (G. Khan, personal communication).

6. Writing system

6.1. From Aramaic to Arabic

Epigraphic evidence shows the writing system of Classical Arabic was developed from that of Nabatean Aramaic, however the 'abḡad-order of the alphabet (an order of the Arabic alphabet based on the Aramaic alphabet that is used as numerals) was probably only borrowed in Islamic times (McDonald 1974). Along with the adoption of the Aramaic writing system, several elements of Aramaic orthography were also borrowed. In fact, most irregularities of Classical Arabic orthography can be explained by its Aramaic background (Spitaler 1998, 190–205, 351–369), e.g.:

- (1) 'ana (pers. pronoun, 1st person sg.) is spelled with 'alif (<'>) in the second syllable (أنا); cf. Aramaic 'enā <'n>.
- (2) The numeral *mī'atun* '100' has an apparently superfluous 'alif in Classical orthography (مائة vs. modern مئة); cf. Aramaic *mā* <m> (Diem 1980, 102).
- (3) The noun *ṣalātun* '(ritual) prayer' is spelled with <w> at least in Koranic orthography (صلاة). This may be explained as a spelling copied from its Aramaic etymon *ṣlōtā* <slwt> 'prayer'. The spelling with <w> was extended by analogy to other nouns of the same pattern, like *naḡātun* (نجوة) 'deliverance' that is not an Aramaic loan.
- (4) Many Arabic masculine names are spelled with <w> at the end in Aramaic (esp. Nabatean) orthography, perhaps representing the nominative ending –u (Diem 1981, 336–342), e.g. *klbw*, 'mrw, m'nw, etc. In the case of 'Amr, this <w> is retained (عمرو), to distinguish 'Amr from the name 'Umar (عمر) in unvocalized script.

For the introduction of diacritical points and vowel signs in Early Islamic times, Syriac models cannot be excluded.

6.2. From Arabic to Aramaic

As all Aramaic writing systems (Syriac, Talmudic, Christian Palestinian, and Mandaean) were fully developed before Arabic writing became influential, Arabic has not influenced Aramaic writing systems.

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VI. The Semitic Languages and Dialects IV: Languages of the Arabian Peninsula

44. Ancient North Arabian

1. North Arabia: the geographical setting
2. Discovery of the Ancient North Arabian inscriptions and recent research progress in the field:
3. The Ancient North Arabian epigraphical groups and the problem of classification and nomenclature
4. Pre-Islamic North Arabia as a speech community
5. The ANA scripts within their Semitic context and the problem of origins
6. The Ancient North Arabian Dialects, their historical setting and linguistic peculiarities
7. References

Abstract

This chapter introduces the main epigraphical groups that dominated in North Arabia roughly between the 8th century B.C. and the 3rd–4th centuries A.D. Certain topics are addressed briefly, i.e. the discovery and recent research progress in the field of Ancient North Arabian inscriptions, the question of their classification and nomenclature, pre-Islamic Arabia as a speech community, and the script of the Ancient North Arabian inscriptions and its relationship with the Ancient South Arabian script, including the main theories regarding its derivation and origins. The main epigraphical groups, Taymanitic, Dumatic, Dadanitic, Hismaic, Thamudic B, C, D and Safaitic are presented. An overview on the structure of the inscriptions in the light of the epigraphical evidence is given.

1. North Arabia: the geographical setting

The Arabian Peninsula (see Figure 44.1) is bordered by three seas, and no clear line can be drawn from the North as a sign of demarcation. It consists of a great plateau, which is mainly covered with limestone and sandstone. The central plateau of the Arabian Peninsula slopes towards the Gulf. Its internal basin consists of alternating steppe and desert, i.e. the Nafūd desert and al-Rub‘ al-Ḥālī. Only South West Arabia is fertile, i.e. Yemen, because the coastal mountains intercept the moist southwest summer monsoon.

North Arabia is located in between two major and great powers of the Ancient Near East: Mesopotamia and Egypt. The region enjoyed a strategic and commercial position, which forced the great powers to consider seriously the inhabitants of this region in their policies. In North Arabia, several oases are scattered; they played an



Fig. 44.1: Map of Arabia (from Macdonald 2000)

important role in commercial activities, especially for the caravans coming from South Arabia, for which they provided food, water and rest. It is difficult to draw an accurate, detailed historical picture of Arabia before Islam, as the archaeological work in it, especially in its central parts, is not that rich. Consequently, scholars of the history of Arabia lay great weight on the inscriptions discovered as surface finds in the various regions, written documents of other cultures, e.g. the Egyptian, Greek, Persian, Roman sources, and the later Arabic Islamic tradition. An excellent survey on the history and culture of North Arabia in the first and second millenniums B.C. is given by Macdonald (1995b), who tried to explore the main sources of the history of the North Arabian tribes during this period and their settlement centers. Reference should also be made to Hoyland (2001) for a general view on the cultural history of Arabia.

2. Discovery of the Ancient North Arabian inscriptions and recent research progress in the field

The discovery of the Ancient North Arabian (*hereinafter* ANA) inscriptions at the end of the 19th century ushered in a new era for the history of Ancient Arabian culture and languages (see Bowersock 1996 and Beckingham 1976 for the history of the exploration of Northern Arabia). Arabian inscriptions of different affiliations found over wide geographical areas in North Arabia were one of the major sources for understanding its cultural history before Islam. Although the history of research on ANA lies beyond the scope of this contribution, however, one may mention that the last three decades have seen the main outlines of the cultural history of Arabia in general become clearer. The increase of epigraphical and archaeological surveys and the technological development, which is implemented for documentation purposes, made it possible for scholars to formulate new theories and ideas which highlighted obscured issues and opened questions in the domain. One may mention here Michael C.A. Macdonald, who has made essential contributions to the field. The present synopsis acquired its basic information and data from several studies published recently. Macdonald's studies on the linguistic map of Arabia (2000a) and on the linguistic features of Ancient North Arabian inscriptions (2004) can be considered as major improvements in the field. Moreover, his studies on the issue of literacy in Ancient North Arabia (e.g. 2005) shed light on the issue of writing among the inhabitants of North Arabia before Islam.

3. The Ancient North Arabian epigraphical groups and the problem of classification and nomenclature

Arabia hosted a literate culture beginning approximately from the 10th century B.C. In the South certain languages are known through a huge epigraphic heritage called Ancient South Arabian (*hereinafter* ASA), which covered modern Yemen and Oman. It comprises Sabaic (with internal dialects), Qatabanic, Minaic (or Maḏābic), and Ḥaḍramitic (see ch. 63). Based on genetic shared innovations, ASA was placed under the South Western Semitic group of Central Semitic (see e.g. Faber 1997). As the verbal and syntactical systems in ANA are still not clear, any conclusions regarding its linguistic affiliation remain ambiguous. Therefore, this chapter uses the label 'South Semitic' for ASA as well as ANA not in terms of their genetic affiliation, but of its geographic connotation.

According to the traditional classification of Ancient North Arabian epigraphical groups the designations Thamudic, Liḥyanite, Safaitic and Ḥasā'itic were given (e.g. Müller 1982), despite the fact that these designations do not rely on linguistic grounds derived from the inscriptions themselves. *Thamudic*, was given because of the occurrence of the tribal name *ṯmd* in some inscriptions, and is accordingly used to denote a widespread epigraphical type found in the northern parts of Saudi Arabia and Southern Jordan, with particular concentration in *Madā'in Ṣālīḥ*, *Ḥā'il*, *al-Ġawf*, *al-ʿUlā*, and *Tabūk* and extensions to the southern parts of the Arabian Peninsula. The texts have

been roughly dated to a period extending from the 8th century B.C. to the 3rd century A.D. The second label, the *Liḥyānite* (including *Dedanite*), was given because the king of *Liḥyān* was mentioned in these inscriptions (*mlk lḥyn*). They are found mainly in the *al-ʿUlā* valley, Dedan, and Taymāʾ and have been roughly dated between the 6th century B.C. and the 1st century B.C. Reference should be made to the latest survey on the chronology by Farès-Drappeau (2005, 113 ff.). The third, the *Safaitic*, which constitute the largest group among the others, is the most extensive in terms of the huge number of inscriptions. It is spread throughout the volcanic desert of North Arabia. The designation Safaitic is derived from the geographic name *Ṣafā* which lies to the South-East of Damascus. According to some scanty historical indications derived from the texts themselves, they cover the period between the 1st century B.C. and the 4th century A.D. (see Macdonald 1992b). The fourth group, *Ḥasaitic*, relates to the *Al-Iḥsā* (*Al-Ḥasā*) region in northeastern Arabia at the sites of *al-Qaṭīf* and *Tāḡ*. These are written in South Arabian script but their language is North Arabian. Some attempts have been made to create new linguistic designations for the above-mentioned groups.

The above-mentioned labels and designations were the subject of an extensive and sensational paper of Macdonald (2000a), who directly touched the problem of the classification of the ANA epigraphical types and made a significant development in modifying the traditional classification of F. Winnett (1937) and Winnett (1970) of the so-called Thamudic A, B, C, D and E. His unprecedented classification is based on the form of script and some, although scanty, morphological and syntactical features gleaned from the inscriptions. As a result, Macdonald excluded the A and E types, calling the first 'Taymānitic' and the second 'Ḥismāic'. Both have distinguishing characteristics of the script, and dialect, and require a new name indicating the region where the texts are spread. The other categories, B, C, and D, maintained their old labels as hitherto undefined epigraphical categories, and are considered as *Restklassenbildung*, owing this designation to Knauf (1981). Furthermore, Macdonald has created a new umbrella called 'Oasis North Arabian' under which the inscriptions found in Taymāʾ and its vicinity, Dedan and Dūma (modern *al-Ğawf*), can be placed. The term 'Dadanitic' was suggested by Macdonald as a new label for the formerly 'Liḥyanite' and 'Dedanite' inscriptions. As a result, we now have the labels Taymanitic, Dadanitic and Dūmatic. Inscriptions written on seals, pottery, bricks, etc, from various parts of Mesopotamia and associated with the Arabian communities settled in Babylonia, and others connected with Syria and Transjordan, were labeled by Macdonald as 'dispersed Oasis North Arabian inscriptions', because they represent imports rather than the products of a native form of literacy and they are not indigenous to the places where they have been found. Concerning the Safaitic inscriptions, the name is maintained in Macdonald's linguistic map and considered as a misnomer, although it has nothing to do with the authors of the texts. The label 'Ḥasāitic' was maintained in Macdonald's classification. Their linguistic affiliation is still disputed as the texts comprise a small number of funerary inscriptions. The term 'Old Arabic' refers to texts from pre-Islamic times and distinguished by the use of ʾl- as a definite article (see Macdonald (2008). The Islamic periods witnessed later varieties of Arabic: Middle, Classical, Modern Standard and Spoken Arabic dialects.

It is worth mentioning that the described classification is not rigid in terms of the geographical distribution of the epigraphical groups. For example, one of the longest Ḥismaic inscriptions of rich cultural contents is not found in the Ḥisma region, but in

an area called the Urayniba-West near Mādabā in central Jordan (Graf/Zwettler 2004), which does not belong to the Hisma desert at all. ANA inscriptions are also found in northern Jordan, in areas far from their regions, e.g. ANA inscription from the Garaš (Gerasa) area (Knauf 1981) and from *al-Ḥuṣun* near Irbid in Northern Jordan (Hayajneh 2009c). Moreover, an extensive study conducted by the present author (Hayajneh, forthcoming–a) of the ANA inscriptions from the Taymā' area has revealed that this area witnessed other types of ANA inscriptions, e.g. Thamudic B, C, D, Dedanitic and Hismaic.

4. Pre-Islamic North Arabia as a speech community

As writing mirrors language, it provides us with clear evidence of linguistic change in gross outline. Although the linguistic changes that occur in the lifetime of a single speaker remain largely unnoticed, written records, like inscriptions, from over a longer period attract linguistic historians, as they constitute the most valuable source of information for the diachronic stages of a language. Pre-Islamic North Arabia can be considered as a speech community in which different Ancient North Arabian dialects and other languages have existed and sometimes overlaid each other, as the linguistic distribution within a social or geographical space is usually described in terms of speech community or as a social group. It can be either mono- or multi-lingual, held together by the frequency of social interaction patterns and could be separated from the surrounding areas by weaknesses in communication lines, and such an area may consist of small groups bound together by face-to-face contact or may cover large regions. The northern parts of the Arabian Peninsula are distinguished by the absence of strong geographical barriers, which cause dialectal differences and demarcations, such as mountains, valleys, rivers, or seas, that weaken the linguistic exchange. In other words, the communication and the exchange of linguistic innovations was not difficult. Such a situation will definitely cause more similarities than differences, and thus North Arabia can be considered as a linguistic geographic unity and as one speech community, containing several dialects. I would also argue that the region during the epoch which covers the first millennium B.C. and the first few centuries A.D., can be considered as a 'linguistic area', as we are dealing in this region with several linguistic levels or strata of Arabian languages/dialects attested epigraphically, spread over a wide region belonging to one origin.

5. The ANA scripts within their Semitic context and the problem of origins

While language is a natural product of humankind, script is one of man's intentional inventions. Writing became the means of historical documentation, as it is one of the basic development requirements of cities and civilized centers. Before the advent of the modern linguistic discipline, called 'language planning', it is known that languages developed in ancient times without deliberate interventions of the speakers, while

scripts underwent changes, modifications and adaptations in the passage of time and civilizations. The Ancient Near Eastern script system has been the subject of huge amount of articles and monographs that have contributed, though not conclusively, to a better understanding of the development of the scripts used to graphically transmit tens of ANE languages (see Daniels/Bright [eds.] 1996 for theoretical backgrounds on the rise and development of different writing systems in the world). The writing systems of the two great civilizations, the logo-consonantal hieroglyphic system of Egypt and the logo-syllabic of Mesopotamia, are becoming clearer than that of Arabia. Among scholars of Ancient Near Eastern Studies there is a common agreement that most of the Semitic scripts used in the Levant can be traced back to the Phoenician script, which is based on the Proto-Canaanite script (e.g. Cross 1989). The latter can comprise the Proto-Sinaitic inscriptions of the 15th century B.C. and seems to have developed from the hieroglyphic script system by giving an Egyptian hieroglyphic representation a name from the Semitic lexical stock. Here one may refer to Naveh (1982) and Healey (1990) for a general overview on the general theories regarding the derivation of the Semitic scripts and their types. The invented system subsequently spread over the Canaanite region in the Levant, but with the presupposition that local modifications and additions took place. Although scholars are trying to reach a common consensus regarding the basic lines of the internal derivations of the Semitic scripts used in the Levant in the first millennium B.C., i.e. from the Proto-Canaanite script, the problem of the origins of the South Semitic scripts (ASA and ANA) remains in need of investigation. In their derivation, it could also be argued that South Semitic script variants did not solely have the Proto-Canaanite *Vorlage*, but also others that are hitherto unknown. Proto-Canaanite script has letter signs that are not attested in the later Canaanite script systems, but appear to be used in the South Semitic scripts. The ASA letter signs for *l* and *m* are attested on pottery sherds in the Kamid-el-Loz inscriptions from Lebanon (1400 B.C.), which can partially furnish the proof of a 'direct' connection with the South Semitic script (see Röllig/Mansfeld 1970). One may not exclude a conclusion that several script systems have migrated from the Levant or been adopted to/in Arabia, but with the passage of time, each type known to us from Arabia underwent its own internal changes and modifications. Mendenhall (1984; 1993) presented a different theory, that South Arabian scripts can be traced back to an earlier date in the Levant, i.e. to the Byblos syllabic inscriptions of the Late Bronze Age and advocated that the Byblos syllabic inscriptions are Old Canaanite and ANA might have been derived from an Iron Age script version.

Other scholars (Lundin 1987; Hayajneh/Tropper 1997) have argued that part of the solution of the origins of the South Semitic scripts can be found in traces in the Ugaritic consonantal cuneiform script, given the fact that the ABC alphabetic order, known as *hlhm*-order, in Ugaritic, is akin to that of ASA ABC order. According to this assumption, each Ugaritic letter sign is based on a linear form, in which the 'Winkelhaken' stands for a circle and the 'Keil' for a shaft. Such a linear form, which results from that rule, can be considered as a representative of a letterform that existed in the Middle Bronze Age in the Levant, and each of these might have a counterpart in the South Semitic scripts (see Röllig/Mansfeld 1970 for a similar argument). In other words, the linear form is based with all likelihood on letterforms that were known in the Levant. This theory enhances the assumption presented by Röllig/Mansfeld (1970, 270) that the cuneiform script of Ugarit existed beside a letter-based script system.

A further theory on the origins of the South Semitic scripts, which has become known in the last two decades, attempts to identify the origin of the Alphabetic *hlhm*-order and the South Semitic, especially ASA, and Northwest Semitic letterforms in Ancient Egyptian and the cursive Hieratic script. According to Kammerzell (2001), the basic characteristics of the Egyptian and Hieratic script are similar to the phonetic order of the South Semitic scripts. It seems that the letter forms as well as the *hlhm*-order are based on a fixed ABC-sequence of the Egyptian one-consonantal-sign ('Einkonsonantenzeichen'), which existed as early as the second millennium B.C. In addition, not only were the script principle and the letterforms adopted, but also, in many cases, the phonetic values and the ABC-sequence of the graphemes. The adaptation therefore progressed from Egyptian to Semitic and not vice versa. Although ANA script and letter forms are not tested in Kammerzell's study, preliminary study of some ANA letterforms shows that a certain formal affinity with Ancient Egyptian and Hieratic script did exist. Tackling this issue is, however, beyond the scope of the present contribution.

Due to the formal similarities between the ASA and ANA scripts, scholars have tended to state that the latter was derived from the former. However, as the chronological framework of ANA texts is still vague and a matter of discussion, this argument is unable to gain support. Although it is true that certain ANA scripts, for example the Taymanitic, Dedanitic and Dumatic scripts, show, at a first glance, some formal similarities with the ASA script, it is important to note that that superficial and formal similarities are not sufficient to draw solid conclusions. The geometric and symmetric shape of the ASA script does not necessarily indicate the archaism of the script. In addition, certain graphical signs in the ANA have no counterparts in the ASA scripts, e.g. the sign for *ḏ* in ASA is different to that used in Thamudic (C, D), Ḥismāic, Safaitic and Dadanitic (see ANA script chart, Figure 44.2). The sign for *f* in ASA is similar to its counterpart in Taymānitic and Dadanitic, but different from the sign used in Thamudic C, D, Safaitic and Ḥismāic. Any argument which advocates the supposition of direct and complete derivation of the ANA script from ASA should not be taken as uncontested but should rely on strong evidence. Moreover, the scripts of the ANA groups are internally different and variable among themselves. Each of the epigraphical groups mentioned above represents a cultural realm, which is, with all likelihood, distinguished by 'locally developed' graphical peculiarities.

Conclusion: By adoption and/or developing their script systems, the Southern Semites appear to have had more than one script *Vorlage* from which to derive their own scripts and that the derivation/adoption process was not restricted to a particular period of time but was an evolutionary one, coinciding with the constant cultural contacts between Arabia and the Levant.

6. The Ancient North Arabian Dialects, their historical setting and linguistic peculiarities

6.1. Taymanitic

As mentioned above briefly, the label 'Taymanitic' refers to the name of an oasis, Taymā', and its vicinity, an area located in northwestern Saudi Arabia between Yaṭrib

[illegible]

mentioned, along with Saba', in the Akkadian texts of Tiglath-Pileser III (744–727 B.C.) of Assyria, in a list of tribes, oases and peoples which attempted to placate the Assyrian king after the revolt of Šamsī, the queen of the Arabs. Biblical sources mention the oasis in the context of the events of the 6th century B.C. as a vital caravan station (Is 21:14; Jer 25:23; Job 6:19) and in connection with Tema 'a son of Ishmael' (Gen 25:15; 1 Chron 1:30). Parr (1997), Macdonald (2000d), and Buhl/[Bosworth] (2000) gave intensive brief introductions to this locality, and reference can be made to Eden/Bawden (1989) for extensive information. The last Babylonian king, Nabonidus, made Taymā' his official capital city at the end of his rule between 552 and 542 B.C., for hitherto unclear reasons (al-Sa'īd 2000, Hayajneh 2001a, 2001b and Müller/al-Said 2002), but earlier relationships with Babylon are known to the scholarly community (see Livingstone 1989). The archaeological and epigraphical evidence that resulted from the visits and work of different scholars since the end of the 18th century (such as Ch. Doughty, Ch. Huber, J. Euting, A. Jaussen R. Savignac, F. V. Winnett W. L. Reed, P. Parr and others), have accumulated a significant knowledge about this site. In recent years, the Saudi Department of Antiquities has undertaken excavations on the site in cooperation with the German Archaeological Institute in Berlin and King Saud University (see Eichmann et al. 2006).

A great deal of epigraphical material (both Aramaic and ANA Taymanitic) was revealed in the town and its adjacent areas. The corpus of the Taymanitic inscriptions (see the example in Figure 44.3) has rapidly increased in the past two decades. The intensive epigraphical surveys of the Saudi scholar Khalid Eskoubi (Ḥālid M. Askūbī) in the area South-West of Taymā' (Eskoubi 1999 and 2007) yielded a rich corpus of epigraphical material which will significantly contribute to a better understanding of the cultural background of Taymā' and its vicinity. On the basis of the epigraphical evidence, the inhabitants of Taymā' and its vicinity seem to have spoken an Ancient North Arabian dialect and wrote in a script affiliated to the other well-known ANA scripts. Taymanitic can be considered, beyond doubt, as a separate tongue with a distinct dialect and/or script. This argument is further confirmed by the report of the regent of Carchemish Yariris in the eighth century B.C., who erected an inscription in which he claimed to know twelve languages and four scripts: (hieroglyphic) Luwian, Phoenicio-Aramaic, Cuneiform and Taymanitic (see Livingstone 1995). The language of the inscriptions shows general linguistic and graphical features that distinguishes it from other ANA dialects, e.g. the usage of the introductory particle *lm*, *b*, and *bn* for genealogies, the possible existence of a third not-emphatic unvoiced sibilant *s*³ (Macdonald 1991), the usage of one letter form for both phonemes, *ḏ* and *z*, the usage of an asterisk-like sign for *t* and application of word-dividers (see also Macdonald/King 2000).

The inscriptions vary in length and contents and manifest certain structural and formulaic types. A sole personal name, sometimes without an introductory particle may represent an independent text (e.g. Eskoubi-A 8: *Zbd* '(by) *Zbd*'). The majority of the texts begin with the typical Taymanitic introductory particle *lm* or *l* 'by' followed by the author's name and his patronymic, separated by *b* as an abbreviated form of *bn* 'son of', e.g. Eskoubi-A 28: *l Zbd* 'by *Zbd*' and Eskoubi-A 12: *lm S¹d b Šby* 'by *S¹d* son of *Šby*'. Some examples show that the introductory particle is not used, even in a textual context with a multitude of PNs, e.g. Eskoubi-A 4: *Šmnt b Gs¹m* 'Šmntn son of *Gs¹m*'. The chain of names is followed in some cases by sentence extensions that ex-

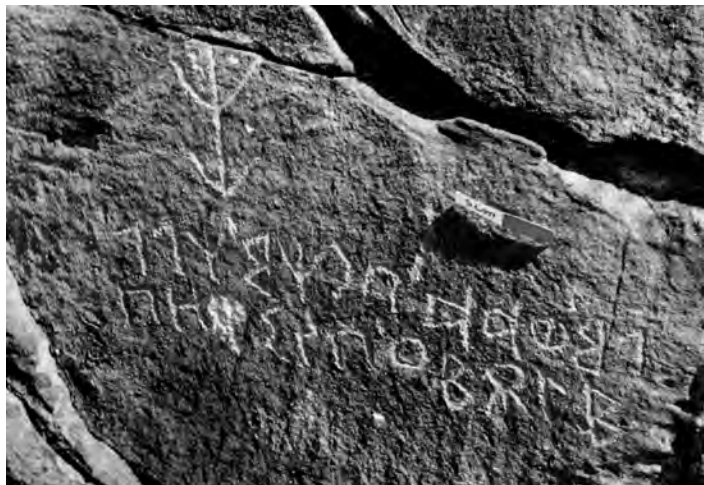


Fig. 44.3: Taymanitic inscription from Northwest Taymāʾ:

1) *lm wdd / b rḥm / ḥll /*

2) *b zy s²nʾ / ʾm ṣlm*

1) (Written) by/for *Wdd* son of *Rḥm*. He camped

2) during this (?) hostility/enmity (or: during (the time) of hostility/enmity) in the year of *Ṣlm*
(For comments, see Hayajneh 2009b, 84 ff.)

press a verbal sentence, e.g. Eskoubi-A 20^{**}: *lm Flt ḥll b Qdr ʾhr ḥḥwl* ‘by *Flt* and he settled/arrived in *Qdr* at the end of the year’ (Hayajneh, forthcoming-c), or Eskoubi-A 23: *Yfʿ b Bnmt fʿl nk* ‘*Yfʿ* son of *Bnmt* and he had performed sexual intercourse’. Other ANA texts from Taymāʾ are initiated by a vocative particle *h* ‘Oh’ followed by a divine name, verb, preposition and a PN, e.g. Eskoubi-A 66^{*} (most probably Taymanite): *h Rd sʾby Rfʾ* ‘Oh *Rd(w)* curse *Rfʾ*’, taking into account that the word *sʾby* indicates an imperative form (f.) attributed to the Goddess *Rd(w)*, as the structure and context of the text may also suggest. No literature or sufficient historical information can be gleaned, but certain echoes of the war of *Ddn* (*b ḏr Ddn* ‘in/during the war with *Ddn*’) are evident in a number of texts. In addition, the occurrence of the name of Nabonidus represents one of the most important historical indications which this

type of texts might provide, as they give indirectly an exact date for the inscriptions. Texts of emotional contents are attested, e.g. Eskoubi-A 89*: *lm B'ttr b 'l w s'lqm dd* 'by B'ttr son of 'l and he became sick of love', In few texts, the divine name *Šlm* is mentioned in contexts that strongly suggest a sort of antipathy of the settlers of south-east Taymā' toward him (Hayajneh 2009b). The lexicon of the Taymanitic inscriptions is not that rich; some words occur in restricted contexts, e.g. *hll* 'to settle' in several Taymanitic inscriptions (Hayajneh 2009b, 84f.), especially in connection with the place name *ddn* 'Dādān', *hyr* 'prosperity' (Eskoubi-A 58), *s'by* 'curse!' (Eskoubi-A 66). Within the region where Taymanitic texts are widely strewn, other scattered ANA types are attested, with concentration of Thamudic B and the presence of some Thamudic C and D, Dadanitic and Ḥismāic texts. ASA inscription as well as Aramaic graffiti are also encountered in this collection (some of these inscriptions were reread and verified by Hayajneh: forthcoming-a).

6.2. Dumatic

Historically, Dūma is attested in the Old Testament as Dūmâ and as ^{URU}A-du-um-ma-tu or ^{URU}A-du-mu-u in the Assyrian annals. The place is identified with a large oasis

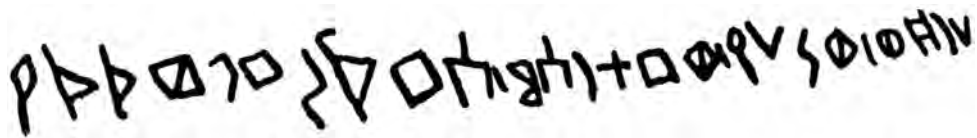


Fig. 44.4: Dumatic inscription:

ARNA-Dumatic 23: *h Rḏw w Nhy w 'trs'lm s'l'dn 'l wddy* 'Oh Rḏw and Nhy and help me in the matter of my love' (see Winnett 1970, 80)

known in the Arabic sources of the Middle Ages as Dūmat al-Ğandal (= modern Al-Jawf). It is located in the southern fringes of Wādī al-Sirḥān on the trade caravan route coming from southern Arabia, thus explaining its importance to the Neo-Assyrians who were very much interested in gaining control of the frankincense trade in the mid-1st millennium. Despite the mention of kings, it has been argued that Dūma was the cult center of the Qedarite nomadic confederation, which seems to have been ruled exclusively by queens, who acted, according to Macdonald, as priestesses of the cult of Dūma. Assyrian annals describe the Qedarite confederation as the 'confederation of Atarsamin'. The latter deity is attested in the epigraphy of Dūma and seems to have been worshipped in it, in addition to Rḏy and Nhy which are also mentioned by the Assyrians in the forms *Ruldaiu* and *Nuhai* as Dumatic deities (see Macdonald 2000c). No secure clues regarding the dating of the texts are available, although Macdonald (2004, 490) assumes that they may refer to the middle of the 1st millennium B.C. Dūmatic inscriptions, according to the latest nomenclature by Macdonald (2000a), are very few (see Winnett 1970, 80), but represent a discrete script variant of ANA. The inscription ARNA-Dumatic 23 (see Figure 44.4) *h Rḏw w Nhy w 'trs'lm s'l'dn 'l wddy* 'Oh Rḏw and Nhy and 'trs'lm help me in the matter of my love' shows the usage of the

vocative particle *h-* ‘Oh!’, the assimilation of *n* which is evident in the deity name *‘trs’m* (for *‘trs’mn*), as well as a possible imperative form in *s’^ld-ny* ‘help me’, which is attached to the pronominal suffix of the first person singular *-ny*, and the attachment of pronominal suffix *-y* to the noun *wdd* ‘love’.

6.3. Dadanitic

Dadanitic inscriptions (see the example in Figure 44.5) refer to the toponym Dēdān, mentioned in the Old Testament as a designation for one of the largest oases in north-west Arabia (Gen 10:7; Gen 25:3). Now known as Khirbet al-Khurayba, the oasis lies three kilometers to the north of al-‘Ulā. The name Da/edān has been a subject of some studies, e.g. Albright (1953) who studied its ethnic and geographic connotations. For pronunciation variants of the name, Sima (2000) concluded, after testing the occurrence of the name in the Old Testament, the Ancient South and North Arabian epigraphical languages, the Akkadian sources and its occurrence in the Arabic tradition, that the ancient name of al-‘Ulā was, as the Akkadian sources may indicate, Dadan or Dadān. This vocalization coincides with the rendering in the Vetus Latina, the Vulgata and the onomasticon of Eusebius. Moreover, the Liḥyanite evidence may suggest that a vocalization with *-ay-* in the closed syllable can be excluded. It is connected in biblical genealogies with Raamah son of Cush (Gen 10:7; 1 Chr 1:9) and Yokshan son of Abraham and Keturah (Gen 25:3; 1 Chr 1:32). Its distinguishing topography, irrigated fields and palm groves made it an ideal caravan center on the route between South Arabia and the Fertile Crescent. Its architectural remains, sculpture and ceramics suggest a highly sophisticated culture. The Kingdom of Dedan was succeeded by Liḥyan, and seems to have had links to Edom, as the Edomite deity Qōs appears in a number of theophoric names affiliated with the oasis. Both Graf (1992) and Macdonald (2000b) have produced brief surveys on this site and its cultural history.

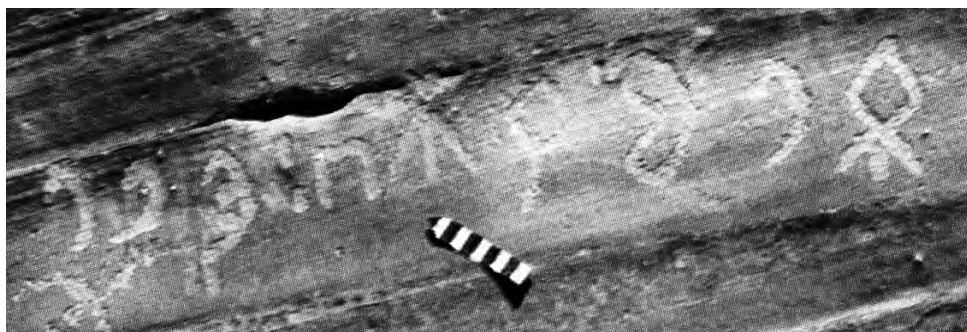


Fig. 44.5: Dadanitic graffiti from the region of Taymā’:

Eskoubi-A 154: *šlmyhb / ʔll* ‘*šlmyhb* has offered (a sacrifice)’ (Reading and translation amended by Hani Hayajneh)

A distinct ANA alphabet has been used in the oasis to represent its own language. Most of the inscriptions are monumental in nature, in addition to hundreds of Dadan-

itic graffiti spread around the main settlement. Inscriptions are found in al-ʿUlā or nearby Madāʾin Šālīḥ and in the distant Jabal Thadra, 85 km northwest of al-Khuryaba, and from Midian and the region of al-ʿAqaba. The date of the inscriptions as well as the chronology of the whole settlement is still a matter of dispute among scholars (see Al-Ansary 1970 and 1999 and Farès-Drappeau 2005), as the inscriptions give no secure testimony in this regard. A proposed period for the site is between the 6th century B.C. and the 1st century A.D. (see Macdonald 2004, 492)

Dedanitic inscriptions are composed in a formulaic structure: PN + PN followed by the verb *hʒll* ‘sacrifice’. This action is usually taken to satisfy the god *Dḡbt*. The closing phrase is underlined by the expression *frdh w s^ldh* ‘and he satisfied him and assisted him’, i.e. as a result of the sacrifice, *dḡbt* granted the author ‘satisfaction and assistance’. Some inscriptions contain designations that seem to point to activities and occupations, but one should keep in mind that the exact meaning of some of these is still not decided, such as *h-šnʿ* ‘artisan’ e.g. *Dʿth/hšnʿ/nḥt/hšlm* (JS 74) ‘Dʿth the artisan has sculpted the inscription’, *ʾgy* ‘to make provision for, attended to’, *ʾfy* ‘to pay, to fulfill’, *bny* ‘build’, *nḍr* ‘to consecrate’, *fʿl* ‘to make’, *šlm* ‘inscription, statue’, *nfs^l* ‘funerary monument’, *nḥl* ‘palm grove’, *tbrt* ‘ruined (agricultural land)’. Titles of a cultic nature are evident from the inscriptions, e.g. *sʿlh/t*, which probably means ‘prophet, messenger’, in the light of Aramaic *šlh* ‘messenger, envoy’, *qymh* ‘administrator’, *ʾfkl* ‘priest’, *qsʿm* ‘oracle priest’, e.g. *fhd/hqsʿm* ‘Fhd the oracle priest’. Cultic places are attested, e.g. *bt-dʿly* ‘exalted house’ and *bt* ‘temple’, *ʾrbʿw* ‘cultic construction’. Designations of funerary monuments are also present, e.g. *kḥf* ‘tomb’, *mḥbr* ‘tomb, sepulchral chamber’, *kfr* ‘tomb, sepulchre’, *qbr* ‘tomb’, and *ḥls^l* ‘tomb’. Several divine names occur in the Dadanitic inscriptions, e.g. *Lh*, *D-ḡbt*, as principal deities in the Dadanite pantheon, and others: *Ḥrg*, *Wd*, *Hn-ktb*, *Ktby*, *Hn-ʿzy*, *Bʿls^lmn*, *Lt*, and *Šlmn*. Other divine names occur as a component of personal names, as *ʾl* (*ʿdrʿl*), *Bʿl* (*Ntn-bʿl*), *Dd* (*Ntndd*), *Ḡt* (*bd-ḡt*), *Mnt* (*bd-mnt*), *s²ms^l* (*tymšms^l*). Farès-Drappeau (2005) conducted an intensive study of the Dadanitic inscriptions, and provides a good inventory of the words and personal names occurred in them.

6.4. Ḥismaic

This epigraphical type (see the example in Figure 44.6) is named after the *Ḥisma* desert. As shown by the late Geraldine King (1991), the ANA from the *Ḥisma* region in southern Jordan (Wādī Ramm in particular) and parts of Northwestern Saudi Arabia, is distinct and can be, according to Macdonald, removed from the Thamudic rubric (see Macdonald/King 2000). The designation Tabūkī Thamudic is no longer accepted. Others have suggested the designation ‘South Safaitic’ (Knauf (1983) enhanced by Voigt (1986)). Further to what has previously been mentioned regarding this epigraphical type and in addition to the developments made with respect to the designation of ANA epigraphical types, the present author would consider the area over which the Ḥismaic inscriptions are spread as a linguistic border between the Safaitic inscriptions to the north and the other ANA dialects of the southern Ḥisma region, as Ḥismaic comprise graphical, lexical, phonological and stylistic peculiarities that are known in it and absent from the northern and southern ANA dialects. A linguistic feature exists in two or more parts of the region but those parts are separated from one another

by an area in which a different, or opposing feature, occurs. The common features distinguishing Hismaic from other ANA inscriptions are as follows: the grapheme t is known in other ANA dialects to convey the phoneme [t], however, in Hismaic it represents the phoneme [g]. In the same way, the grapheme used in Thamudic B and Safaitic to denote the phoneme [d], is used in Hismaic to represent the phoneme [t], while there are instances where the concentric circle is used to convey the phoneme [d]. As in other ANA dialects, the *lām auctoris* *l-* is used to introduce the texts and, unlike the neighboring Safaitic inscriptions, long genealogies are rare (see Figure 44.6). A high percentage of the texts contain expressions on love and sexual braggadocio and refer-

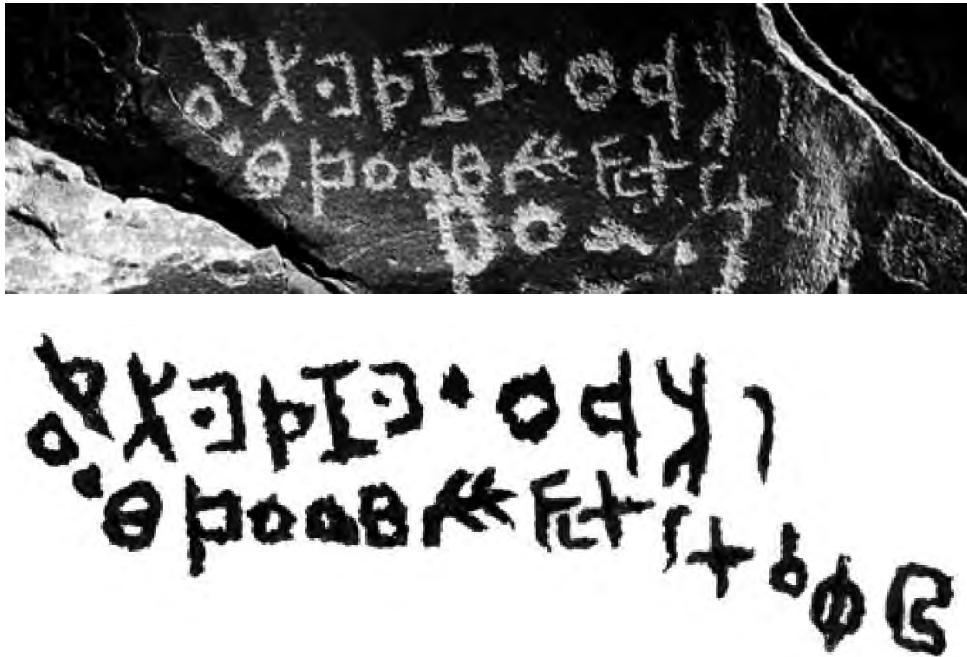


Fig. 44.6: Hismaic inscription from Southern Jordan:

L 'd'n bn zd bn 'd'n w d'c w dkt lt Yqm 'By 'd'n son of Zd son of M'd'n and he invoked and may Lt remember *Yqm*' (for commentary see Hayajneh 2009, 211f.)

ences to hunting. Rock drawings accompanying the texts are widely spread and enhanced. An excellent survey on the contents and formulaic structure of the Hismaic texts (see the example in Figure 44.6) was provided by King (1990, 87–126) using inscriptions from *Wādī Judayyid* in southern Jordan. She classified them into certain categories:

- (1) Texts of simple authorship: *l* + PN; texts of the form *w* PN *hṭṭ* 'and PN is [the] inscriber', which is used to express the authorship of the accompanying drawings; texts introduced by *w l* and *w*, e.g. *w l Mqtl bn Bkr*; texts without introductory particle; texts of the form *'n* PN 'and I am PN'.
- (2) The authorship of drawings: texts of the form *l* PN, where subjects are mentioned in the drawings as *bkr* 'young male camel', *bkrṭ* 'young female camel', *klb* 'dog',

- e.g. KJA 69 *l mty bkrt* 'by *Mty* is [the] young female camel' or KJB 70 *l Mgny bn Hn h w'l* 'by *Mgny* son of *Hn* is the ibex', or texts of the form *l PN w PN htt* and *w PN htt*, e.g. KJA 132: *l Kmy bn Tmlh w Kmy ht(t)* 'by *Kmy* son of *Tmlh*; and *Kmy* is [the] inscriber'; texts beginning with *w l* and *w*, as in KJB 59 *w l S²sr htt bkrt w gml* 'and by *S²sr* is the drawing of a young female camel and a male camel'.
- (3) prayers among the texts, with an invocation using *dkr* 'remember', e.g. KJA 36: *l Ydr bn 'bd ... w dkrt lt 's²y'n* 'By *Ydr* son of 'bd ... and may *lt* remember our companions', invocation using *d'*, e.g. *w d' ds²r Ldr* 'and may *Ds²r* call *Ldr*', invocation of the form *h + Divine Name + l PN*, as in KJA 14: *h ds²ry s¹d* 'Oh *Ds²ry* [grant ?] to 'd', invocations using *s¹m'*, as in TIJ 312: *s¹m' Ds²ry fš* 'may *Ds²ry* hear *Fš*'.
- (4) Curses using the verb *l'n* 'curse', KJA 105 *wdd Qn gmt [w] l'n Ds² (r)y l'n qn* '*Qn* loved a young woman, and may *Ds²ry* curse the curser of *Qn*'.
- (5) Expressions of emotions, e.g. TIJ 297: *rbt 'rt b Whd w Mtr htt* '*Whd* feels much madness (or vice), and *Mtr* is [the] inscriber', TIJ 295: *wdd Mr'lh glmt* '*Mr'lh* loved a young woman'.

The inscriptions provide some indications to date their period to between the 1st centuries B.C./A.D. (see Macdonald (2004, 492).

6.5. Thamudic B

Inscriptions of this type (see the example in Figure 44.7) are concentrated in Nağd and the area between Madā'in Šālīḥ and Taymā', in addition to other examples discovered in areas such as Yemen, Egypt, the Negev, Jordan and Syria. Their brevity and vague nature create more questions than answers as to the authors of these inscriptions, their origins and society. They do not provide any historical information, literature or other clues as to the culture of the authors. With the exception of /z/, the phonological value of the rest of the graphemes is fairly well established. The grapheme *h* is used as a definite article as well as a vocative particle (see Macdonald/King 2000, 438). Like other ANA texts from the region, the texts follow a rigid formulaic structure. The common introductory particle used in these inscriptions is *nm* 'by', with a rare occurrence of *l*. It introduces PNs, e.g. Eskoubi-A 41* *nm Zbd'l* 'by *Zbd'l*'. Some texts begin with an invocation for divinities worshipped in the region and requests for assistance and help, e.g. Eskoubi-A 43 *h Rđw s¹dn 'l 'šm* 'Oh *Rđw* help me against 'šm', vengeance, e.g. Eskoubi-A 30** *h Rđw nqm nm* '[...] 'Oh *Rđw* avenge. By '[...]', victory, e.g. Eskoubi-A 103** *h Rđ nšr nm dbn* 'Oh *Rđ* (give) victory. By *Dbn*'. Deities may be asked for favour, e.g. Eskoubi-A 98** *b Rđw 'z bn Bhmt* '(may) 'z son of *Bhmt* be (entrusted) by *Rđw*', or offered gratitude, e.g. Eskoubi-B 175** *h Rđw bk 'n rf't* 'Oh *Rđw* by you I was healed'. Other divinities are invoked in the context of emotions, acknowledgments, and to show their power and might, for example the divine name *Nhy*, e.g. Eskoubi-B 178** *b Nhy h s¹rr* 'by (the power of) *Nhy* is the happiness', Eskoubi-B 208** *b Nhy 'qrw 'bl* 'By (the power of) *Nhy* they slaughtered the camel'. Other divine name are attested, as 'lh *dhwn*, e.g. Eskoubi-A 136** *h 'lh Dhwn 'tmy s¹r 'm'hl q't 'l 'mn* 'Oh 'lh *Dhwn*, complete the pleasure of 'm'hl (f.), who is from the tribe of 'mn', 'trs¹m, e.g. Eskoubi-A 171** *h 'trs¹m 'tm nm Hds¹* 'Oh 'trsm complete (the

pleasure). By *Ḥds^l*, *’lh ’btr*, e.g. Eskoubi-A 190 1) *b’lh ’btr gzzt* 2) *nm ḥltt* ‘by (the power of) *’lh ’btr* (I) sheared off (the wool of sheep). By *Ḥltt*, the goddess *’lt*, as in the text Eskoubi-A 284** *h ’lt s^l dn l ḏrk* ‘Oh *Allāt* give me assistance for your war!’, *khl*, as in the text Eskoubi-A 308** *h khl s^l d Qmy* ‘*l s^l r ḥlt ’bh K*[b(?)]] ‘Oh *Khl* help *Qmy* against the poverty (?), which has befallen his father *K*[b]’. Some texts indicate the authorship of an accompanying drawing of a camel, e.g. Eskoubi-A 106** 1) *l Ḡttt* 2) *h gml* ‘By *Ḡtt* the/this camel’, or Eskoubi-A 242** *l ’mtdn h khf* ‘For *’mtdn* this tomb/cave (?)’.



Fig. 44.7: Thamudic B inscription from the region of Taymā’:

- 1) *b’lh ’btr gzzt* 2) *nm Ḥltt* ‘by (the power of) *’lh ’btr* (I) sheared off (the wool of sheep). By *ḥltt*’ (Eskoubi-A 190, see Eskoubi 1999: 265; reading and translation amended by Hani Hayajneh)

An important rock drawing which probably accompanies a text of the Thamudic B type, showing a chariot dragged by a horse, was published recently by Eskoubi (2007, 444–445). I would read the text beneath the drawing as follows: Eskoubi-B 251** *l yd’t rs’m ḥyw l Ns^l d* ‘By Yd’t, who drew the animal for *Ns^l d* (?)’ or ‘By Yd’t is the drawing of the animal. By *Ns^l d*’, while the text Eskoubi-B 251 in front of the horse is read as *l ’ll* ‘By *’ll*’. The appearance of the chariot brings to mind the Babylonian and Persians presence in the area, as the armies of these empires used chariots of this type. This may provide a clue as to the dating of Thamudic B texts. Such chariots are also attested in the rock drawings accompanying ANA texts from other places in North Arabia.

6.6. Thamudic C

The number of texts of this type has increased in the last two decades. Although most of the graphemes used in the script are deciphered, the identification of the phonetic values of some of them, i.e. for those of *ḡ*, *ṣ*, *ḏ*, *t* and *z*, is still under debate. The majority of the texts of this type are declarations of love. It is impossible to draw any historical or cultural conclusions as to the authors and their life. They lack any information on the daily life, rituals or any other practices (see Macdonald/King 2000).

The texts usually start with the word *wdd* ‘love; loved; greet, greeting’ (Hayajneh, forthcoming-b) followed by the particle *f* and a PN, e.g. Eskoubi-A* 45 *wdd f S’rk* ‘Greeting/Love of *S’rk*’ and sometimes use a patronymic. In other texts this formula is followed by the independent pronoun of the first person singular, *’n*, e.g. Eskoubi-A 205** *wdd Ḥrm w ’n Hn* ‘Greeting/Love (to) *Ḥrm*, and I am *Hn*’. Tsafir (1996) has

tried to analyze the formulaic structure of the syntactical context in which the word *wdd* occurs. His survey showed that the word was used in more than forty different formulae. This divergence does not allow us to apply one translation to all contexts in which the word *wdd* occurs, especially with the accompanying *f*^o, which is at the same time difficult to understand as a preposition (i.e. as in the Arabic preposition *fī* 'in'). Other texts begin with the conjunction *w* 'and', followed by the pronoun *zn* or *zt*, that functions in this context as a demonstrative pronoun 'this'. The formula continues with *l* 'for, by' and a PN. The name of the person designated by this pronoun is not mentioned in the text. The phrase following it is resumed by the conjunction *w* 'and', the independent pronoun 'n 'I' and a PN, i.e. *w + zn + l + PN + w + Independent pronoun 'n + PN*. The demonstrative pronouns *zn* and *zt* could indicate here the inscription itself (or another object which is not mentioned in the text). The *lām* in this case could be a preposition and have a possessive function or be understood as a *lām auctoris* with the meaning 'by'. On this basis, we may understand the following texts in two ways: e.g. (Inscription no. 136, see al-Dyēb 2000) *w zn l Gblt w 'n K'b* a) 'and this (inscription) is for/belongs to *Gblt*, and I am *K'b*', and less probably b) 'and this (inscription (was written)) by *Gblt*, and I am *K'b*'; and *w zt l \$lb w 'n K'b* (Inscription no. 14, see al-Dyēb 2000) a) 'and this (inscription) is for/belongs to *\$lb*, and I am *K'b*' and less probably b) 'and this (f.) (inscription (was written)) by *\$lb*, and I am *K'b*'. One problem which should be considered here is whether or not the gender of the noun intended by both demonstrative forms *zn* and *zt*, which could mean the 'inscription' itself, was discernible by the writers/authors of the texts. A further formula *w + 'n + PN* is attested without the preceding phrase *w + zn/t* ..., e.g. *w 'n K'b* (Inscription no. 146, see al-Dyēb 2000) 'and I am *K'b*'.

6.7. Thamudic D

According to the latest observations regarding this epigraphical group (see the example in Figure 44.8), the phonetic value of some graphical signs are hitherto not convincingly established, e.g. for *d*, *z*, *s*, and *z*. Concentric circles can represent *d*. The *s*² is written in as a circle with rays. This epigraphical type is characterized by the usage of the introductory particle *zn*, which functions here as a demonstrative followed by a sole PN, e.g. Eskoubi-46* *zn Rs²d* 'this is *Rs²d*', or by a PN and its patronymic, e.g. Eskoubi-B 110 *zn 'nkt bn Ḥdn* 'This is 'nkt son of *Ḥdn*'. In some cases the text ends with a verb/nominal form followed by a PN, e.g. *zn Ḡnm 's²q Ḡwlt* Eskoubi-A** 32+33 'This is *Ḡnm* loved/the lover of *Ḡwlt*'.

6.8. Hasaitic

The Hasaitic corpus constitutes 39 inscriptions, collected, read and verified by the late A. Sima (2002) and previously by Potts (1984a). The label 'Hasaitic' is derived from the name of the northeastern region of Saudi Arabia *al-Ḥasā* or *Li-Ḥsā*. Inscriptions have been found particularly in Tāḡ - al-Hinna in the North, al-Qaṭīf - Ra's Tannūra in the Northeast, 'Ayn Gāwān in the East, and in 'Abqayq in the South, in addition to

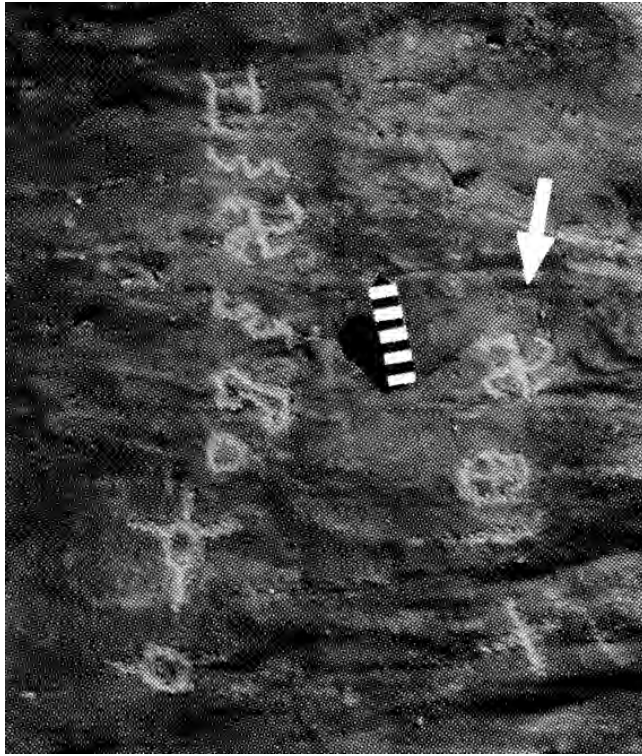


Figure 44.8: Thamudic D inscription from the region of Taymā’:

Eskoubi-A** 32+33: *zn Ġnm ‘s²q Ġwlt* ‘This is *Ġnm* loved/the lover of *Ġwlt*’
(Reading and translation amended by Hani Hayajneh)

an inscription found in Uruk in southern Mesopotamia, (a historical survey on North Eastern Arabia before Islam is given by Potts 1984b). There are no indications as to how the authors of these inscriptions designated their language, their land and themselves, as the inscriptions hitherto known are very few and do not divulge sufficient information. Although the name of the region is attested in the Arabic tradition, its pre-Islamic name is hitherto unknown and the texts provide no suggestions. Because of the lack of internal and external dating clues, the precise dating of the inscriptions is problematic. The dating of the inscriptions to the Seleucid epoch (3rd–2nd century B.C.) is still questionable. The inscriptions are funerary, with the introductory word implemented *wgr/wqbr* or *nfs¹/wqbr*, followed by a PN, patronymic and one or two family affiliations. No deities are mentioned in the texts. However, two instances could be understood as divine names: *yḡš* which is preceded by the word *’fkl* ‘priest’ HI 22, 1–2 *’fkl Yḡs²* ‘the priest of *Yḡš*’, and in a questionable, insecure case where the name *’zf* in the following context occurs HI 27, 5) *’fkl/’zf* 6) [.../d](’l) 7) [...]. Although the following features are known sporadically from other ANA inscriptions, they are particularly concentrated in the Hasaitic inscriptions. Our knowledge of the grammar is based on this small corpus, which is insufficient to draw convincing conclusions regard-

ing the precise linguistic classification of this type. However, although it is true that the script employed in these texts is South Arabian, on the basis of some linguistic information gleaned from the texts themselves, as argued earlier, there is no doubt that the inscriptions represent a particular linguistic genre which is close to North Arabian and not to a peripheral form of Sabaic. Although some general linguistic characteristics, such as the usage of the relative pronoun singular *f. dʔt*, the preservation of the diphthongs (e.g. *ʔwsʰhnʔlt*, *tymmntʔ*), and the non-assimilation of *n* with the following consonant, are found sporadically in other ANA and ASA texts, they appear frequently in the Hasaitic texts (see Sima 2002, 168).

6.9. Safaitic

The term Safaitic is derived from the name of a basaltic area known as aṣ-Ṣafā, south east of Damascus. This designation has no cultural implications. Because of a lack of systematic archaeological work in the region, the history of the basaltic desert, over which the Safaitic inscriptions are spread, is still unclear. The history of research on the Safaitic inscriptions (see the examples in Figure 44.9 and Figure 44.10) dates back to 1857, when the first inscription was discovered. A good survey on the contents of the Safaitic inscriptions is provided by Macdonald (1992b, 1994). On the basis of some indications gleaned from the inscriptions, one may conclude that they cover a period between the 1st century B.C and the 4th century A.D. It can be deduced that they refer to people of a nomadic culture. They contain self-expressions of the author, his name and what he was feeling, prayers, emotions, and events of which he was aware, in addition to rock-drawings that accompany most of the inscriptions. The texts do not contain communication, messages, history or literature, although some scholars have tried to explore the meaning of the contents of such inscriptions to understand the Pre-Islamic Arabic literature (see Petráček 1964, 1968; Eksell 2002). The are built in a formulaic structure (see Petráček 1973 and Voigt 1980), which begins with the *lām auctoris* *l* + the name of the author and his genealogy which varies in length (from short to long genealogies that reach in some cases 18 names), followed by *dʔl*, or *ʔl*, as an indication of tribal affiliation to the following tribal name, e.g. *Gr*, *hzy*, *ʔwd*, *mskt*, *Yzr*. The texts contain words indicating seasonal migrations, e.g. *ʔsʔrq* ‘go eastward’, *dʔ* ‘to spend the autumn’ (Macdonald 1992b), *wgm* ‘to grieve’, *ndm* ‘to regret’, *tsʔwq* ‘to long for’. Names of neighboring nations, as *mdy* ‘Medes’, *yhd* ‘Jews’, *Nbt* ‘Nabataeans’, *Rm* ‘Romans’, *Yzr* ‘Iturians’, and places, such as *Sʕ* (= *Sʕ* in Southern Syria) (Macdonald 2003) are mentioned. Some events that happened in the region found their way into the inscriptions, e.g. the occurrence of the name *Grfʕ* (= Agrippa) (Macdonald 1995a). Although Christianity lies within the same chronological framework of the Safaitic inscriptions, no traces of it are hitherto known of it from them. Safaitic texts contain some indications as to the nomadic nature of the authors of the texts as pastoralists migrating with their herds, both of camels, sheep and goats, e.g. *rʕy* ‘to pasture’, and activities related to this existence, such as *gzz* ‘conduct a raid’. Safaitic inscriptions are usually accompanied by rock drawings of various images which convey messages that are in many cases incomprehensible. A good survey on the rock drawings has been conducted by Ababneh (2005), showing the richness of the Safaitic rock art, which varied between human figures in abstract forms represented in the context of

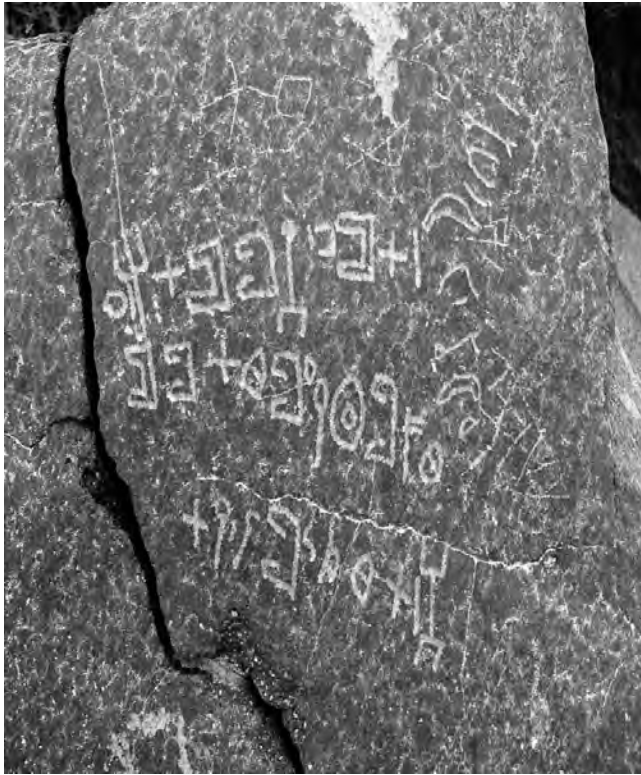


Fig. 44.9: Two Safaitic inscriptions from the Northeastern Jordanian desert (*new*):

- a) Boustrophedon Safaitic inscription written in square script: *L tm bn šrmt d l 'mrt w r'y drk w 'lt w dšr ġnyt* 'By *Tm* son of *Šrmt* of the tribe '*mrt* and he pastured *Drk* (place name!). Oh *Lt* and *Dšr* (grant) wealth'. Note the usage of a concentric shape of *d*, which occurs rarely in Safaitic inscriptions, and the writing of the Nabataean deity with the initial *d* not *ḏ*. (Reading and translation by Hani Hayajneh)
- b) Safaitic Inscription running vertically written in pin-pointed script: *l 's'lm bn šm'n* 'By '*s'lm* son of *šm'n*' (Reading and translation by Hani Hayajneh)

scenes of daily life, animal figures, that constitute the majority, and vary in kind and usage, house animals, such as male and female camels, horses, donkeys, cows and bulls. Wild animals are also depicted, e.g. lions, hyena, panthers, including drawings of gazelles, oryx-antelopes, goats, giraffes and ostriches. Religious symbols comprise a further category of accompanying rock drawings, such as representations of the sun disk, which are related to certain divine names, and tribal symbols for different tribes (*wu-sūm*). Scenes of hunting, wars, dance and music, and erotic representations are also attested. In her study, Eksell (2002) concluded that the restrictive choice of motifs indicates a magico-sacral design and that the pictures belong to an ancient, deeply rooted tradition of rock art which remained unchanged, and that some traces of this tradition penetrated pre-Islamic Arabic poetry.

Certain linguistic features characterize Safaitic inscriptions: on the graphical and phonological level, the s^3 is not known, n assimilates in certain lexemes, e.g. *bt* for *bnt* 'daughter', *tʒr* for *intaʒara* 'he was on look-out, he waited' and final $-t$, which equals the *tā' marbūʿa* in Arabic writing, is written plainly. In addition, the final $-y$ in some words, as *sʿmy* 'sky', indicates the closing $-ā$ (as in Arabic *samāʾ*), and usage of the relative pronoun *q* and the vocative particle *h-* (see Müller (1980 and 1982) for elucidation).

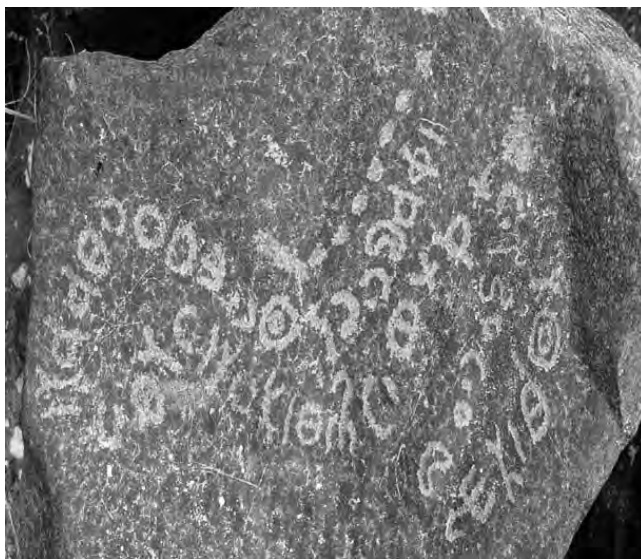


Fig. 44.10: Safaitic inscription in round script from the Northeastern Jordanian desert (*new*):

Seven dots are visible above the text, which is read as: *l Qdmt bn Bgq bn Hgg bn Wdd'l bn Whb'l bn 'lwq bn Wldt bn Gfr bn 'm q'l Wq* 'By *Qdmt* son of *Bgq* son of *Hgg* son of *Wdd'l* son of *Whb'l* son of *'lwq* son of *Wldt* son of *Gfr* son of *'m* of the tribe *Wq*' (Reading and translation by Hani Hayajneh). Note the usage of a concentric shape of *q*, which occurs rarely in Safaitic inscriptions.

Sigla and signs:

* Sigla of inscriptions marked with one star indicates that the original reading of Eskoubi has been amended or modified by Hani Hayajneh.

** Sigla marked with two stars indicates that the reading original of Eskoubi as well as the translation have been amended by Hani Hayajneh.

ARNA-Dumatic Winnett (1970)

Eskoubi-A ANA inscriptions in Eskoubi (1999)

Eskoubi-B ANA inscriptions in Eskoubi (2007)

HI Hasaitic inscriptions in Sima (2002)

KJA, KJB, KJC Hismaic inscriptions in King (1990)

TIJ Hismaic inscriptions published by Harding/Littmann (1952) and cited by King (1990)

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45. Classical Arabic

1. Definition
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Abstract

This chapter provides an overview on the salient grammatical features of the Classical Arabic language (i.e. the fuṣḥā in Arabic terminology).

1. Definition

The term ‘Classical Arabic’ is used with at least two slightly different meanings. It may designate the language used for writing and sometimes formal speech in the modern Arab world which is also employed in Islamic countries in varying degrees, as opposed to the spoken varieties in the Arab countries. In Arabic this language is nowadays often labelled *al-luġa al-fuṣḥā*, ‘the pure language’. This is obviously an evaluating term connected with the traditional view that ‘Classical Arabic’ is ‘correct’ and the vernaculars are in some way corrupted versions of it. The western term ‘classical’ even has similar connotations. Another definition of Classical Arabic takes its starting point in a more explicitly normativistic implication of the term: Classical Arabic is then defined as the rules established by the medieval Arab grammarians in Iraq in the 9th and 10th centuries, thus an explicit system of grammatical rules to be followed by anyone who writes or delivers speech in formal contexts. According to the first, wider definition, Classical Arabic is represented by the earliest corpus of poetry from Arabia, ascribed

to poets living in the 6th century CE and onwards, the language of the Qurʾān, most of the vast corpus of medieval literature in Arabic, and the modern literary language, Modern Standard Arabic, MSA, nowadays the official language of 18 states from the Atlantic to the Arabian sea, and also the second official language in a few others such as Israel, Djibouti and Eritrea.

The language of this corpus is not unified. There are several features in the Qurʾān and other early texts which deviate from the later grammatical norm. The MSA has developed a lot of features, especially in syntax, phraseology and above all vocabulary not found in the earlier stages of the language. Finally, in the medieval corpus there is a voluminous body of texts which exhibit a varying degree of interference from other forms of Arabic of a structure similar to the modern vernaculars. This variety, called Middle Arabic, shows that the difference between a 'Classical' language and a spoken one which is evident today has been extant at least since the earliest centuries of Islam. Although the opposition between the two definitions is not absolute it is recommended to have the distinction in mind, reserving the term 'Classical' for the explicit system of rules established by the grammarians. Strictly speaking, Classical Arabic is then a variant within the Arabiyya, actually a selection of features from it by the grammarians established as the norm, a kind of linguistic *šarīʿa*. The subject of this survey will be the Classical system. The language of the whole corpus could be called by another designation. In German literature the term *Hocharabisch* 'High-Arabic' is nowadays often found. A more neutral term conforming to Arabic usage would be *Arabiyya* which will be used in this survey. This term thus covers all the varieties from the ancient poetry to the modern standard.

There remains the task of giving a proper linguistic definition of the Arabiyya. Even if the entire corpus of texts shows more variation than what is allowed by the grammatical rulings of the grammarians, it is nonetheless possible to establish some criteria defining the Arabiyya, distinguishing it from the spoken varieties.

An important characteristic of the Arabiyya/Classical Arabic/Modern Standard Arabic is that it is not the mother tongue of anyone. Furthermore, its structure differs considerably from all spoken varieties in the modern Arab countries and is comparable to the difference between modern Icelandic on the one hand, and the modern Scandinavian languages on the other. This situation creates a linguistic situation, a diglossia, in most Arabic speaking countries with two linguistic poles: the Classical norm and the vernacular. The exceptions are marginal, the most important one being Malta, where the vernacular is also the base for the written language and the Arabiyya remains incomprehensible. The diglossic situation has lasted at least since the beginning of the Islamic period and possibly even longer. The period in which the diglossia originated is a hotly debated issue (Versteegh 1997, 37–52, 93–113). The variant called Middle Arabic is the result of interference between two linguistic systems: that of the Arabiyya and that of the vernaculars in the Middle Ages. Similar interference phenomena are frequent even today in both written and spoken texts, showing that the present-day diglossia has existed for a long time.

Classical Arabic, or more properly the Arabiyya according to the wide definition, is thus a large complex with considerable variation represented by the language of the old poetry, the Qurʾān, the Classical norm, and Modern Standard Arabic. Its common features are the morphological structure, basic syntactic patterns and a basic vocabulary.

2. Writing

Classical Arabic is written with an alphabet ultimately derived from the Nabataean variety of the Aramaic script. There is also a considerable corpus of texts produced by Christian and Jewish writers in the Middle Ages written in Syriac and Hebrew script. The Classical Arabic script contains 28 graphemes originally representing the same number of consonantal phonemes. To this is added the indication of three basic vowel phonemes by diacritical marks. There is also a sign marking absence of vowels and lengthening/doubling of consonants. One of the consonantal signs, however, (the *'alif*) does not have any consonantal value, which led to the introduction of a special diacritic sign for the phoneme originally written by *'alif*. Certain suffixes for case and mood are marked by special diacritical signs and are thus not written in the consonantal orthography. All these diacritical signs are, however, sparingly used and are mostly found in editions of classical texts, mainly poetry, modern books for children and above all in the editions of the Qur'ān. The latter is, in fact, the prototype for the writing system because of its status as a divinely inspired text and since it is the earliest book (at least the earliest preserved one) where the Arabiyya is written. The Qur'ān was originally written with consonants only but the diacritical signs (for vowels, etc.) were already introduced around the year 700 CE. The Arabiyya/Classical Arabic, including Modern Standard Arabic, is basically written according to Qur'ānic orthography (with some insignificant deviations).

It should be noted that Qur'ānic consonantal orthography does not seem to reflect the Arabiyya system directly as we know it from the later Classical norm. There is thus a discrepancy between the consonantal orthography and the phonemic and morphological structure of the Arabiyya which has its origins in the Qur'ānic orthography and whose origin is still unknown (Diem, 1979; 1980; 1981). We shall in this sketch describe the Arabiyya according to its own morphology and will not pay attention to orthographical idiosyncrasies.

3. Phonology

The fact that the Arabiyya is not a spoken language means that the phonology to a certain extent is dependent upon the phonology of the modern vernaculars and traditional reading of the Qur'ān. The vocalic and consonantal phonemes nevertheless have a more or less unified realization in the modern Arabic countries with only a few regional variations. The orthoepy is considered to be represented by the recitation of the Qur'ān, a highly developed art preserving some archaic features. One of the original 28 phonemes represented by the script (*d*) has not survived in the orthoepy.

3.1. Consonantal phonemes: survey

/b/ bilabial voiced stop

/w/ bilabial voiced glide

/f/ labiodental unvoiced fricative

/m/	bilabial nasal
/t̪/	interdental unvoiced fricative
/d̪/	interdental voiced fricative
/d̪/	interdental voiced pharyngalized fricative or: dental-alveolar voiced pharyngalized stop
/t/	dental-alveolar unvoiced stop
/d/	dental-alveolar voiced stop
/t̪/	dental-alveolar unvoiced pharyngalized stop
/n/	dental-alveolar nasal
/r/	dental-alveolar voiced tap/trill
/l/	dental-alveolar voiced lateral
/s/	dental-alveolar unvoiced fricative
/z/	dental-alveolar voiced fricative
/ʃ/	dental-alveolar unvoiced pharyngalized fricative
/ʃ/	dental-alveolar unvoiced fricative
/ʒ/	palato-alveolar voiced affricate
/j/	palato-alveolar voiced glide
/k/	palatal unvoiced stop
/ħ/	velar unvoiced fricative
/q/	velar unvoiced stop
/ɡ/	postvelar or uvular voiced fricative
/h/	laryngeal unvoiced fricative
/ʕ/	laryngeal voiced fricative
/ʔ/	laryngeal voice/unvoiced stop
/h/	laryngeal unvoiced glide

3.2. Comments

/ʔ/ This phoneme is the only one which no longer has a separate sign in the consonantal script. Instead it is marked by a diacritical sign.

/ʒ/ This phoneme should, according to the orthoepy, be articulated as a dental-alveolar affricate, like English /j/ in 'joy'. Historically, it was a /g/, i.e. a palatal voiced stop and this realisation is heard in some dialects in Egypt and South Arabia. In the Egyptian MSA [g] is the normal and accepted realisation.

/ʔ/, /h/ /ʕ/, /ħ/. According to the traditional descriptions of these phonemes, the two first are laryngeals, articulated by the vocal cords in the larynx (Cantineau 1960, 73; Mitchell 1990, 55; Watson 2002, 13, 18). The two latter are pharyngeals, i.e. articulated by a constriction of the pharynx. This view, which ultimately goes back to medieval Arab grammarians, is still the current opinion present in all textbooks. There are weighty objections to this view and modern phonetic studies indicate that they are all articulated in the larynx (Kästner 1981, 46–58, 69–75; al-Ani 1970, 62–64; Denz 1982, 60).

/t̪/, /ʃ/, /d̪/. These are traditionally labelled 'emphatics'. According to the orthoepy the first two should be articulated as an unvoiced dental stop and an unvoiced dental fricative respectively, with a widening of the pharynx. The third phoneme historically

represents two different phonemes which have coalesced in almost all spoken forms of Arabic. The script, however, still distinguishes between them with two different graphemes <ḍ> and <ḏ>. Medieval grammarians as well as some modern survivals indicate that <ḍ> represented a kind of pharyngalized lateral which in non-Arabic script is rendered <ld>, cf. the Spanish borrowing *alcalde*, ‘mayor’ from Arabic *ʿalqādī* ‘judge’. /ḏ/ was most likely a voiced pharyngalized interdental: [ð̠]. Both may today be articulated as a correspondingly pharyngalized *d* or a pharyngalized voiced interdental, thus [ḍ] or [ð̠]. Many speakers/readers who do not have interdentals in their dialect, however, realize <ḏ> as [z], thus re-establishing an opposition between <ḍ> and <ḏ>.

3.3. Vowels: survey

/i/ closed fronted unrounded

/a/ open fronted unrounded

/u/ closed backed rounded

3.4. Comments

The vowel phonemes exhibit considerable variation in their concrete realization which can be classified as a fronted or backed variant. The Arabic terms are *ʿimāla* and *tafḥīm* respectively. This is most audible with /a/ but occurs with the two others as well. Traditionally this is said to be a conditioned variation resulting from an assimilation process generated by the presence of one of the three/four ‘emphatic’ consonants. The backing/pharyngalisation of /a/ may also be heard in connection with /ḥ/, /ʿ/, /r/, /ġ/, and /q/.

The traditional analysis of the variation in vowel realisation is thus that it is dependent on consonantal environment. It seems that this view is to some extent based upon the script. The present pronunciation is, however, strongly influenced by the spoken variety of individual speakers. In most dialects the pharyngalisation is a suprasegmental phenomenon, extending over series of segments (phonemes and syllables) and from a synchronic viewpoint it can be doubted whether the presence of an ‘emphatic’ consonant is the primary factor. From a purely phonetic viewpoint the system looks quite similar to the synharmonic system in, e.g., Finno-Ugrian, Turkish or in some Neo-Aramaic languages, where there are full series of vowels and consonants with backed and fronted variants with phonemic value. The Arabic writing system probably reflects a quite different phonetic structure in which the ‘emphatics’ had a distinct phonetic feature which, however, did not affect the vowels. It has been suggested that the consonantal signs <ṭ>, <ṣ>, <ṭ̣>, <q> and perhaps even <ḍ> originally represent ejectives, thus a feature in the consonantal phoneme which does not affect the surrounding vowels. The diachronic relationship between this phonology and the Arabic script on the one hand, and the documented phonology of actually spoken Arabic, including the Qurʾānic recitation, however, remains unclear.

3.5. Quantity

There is a clear phonemic opposition between short and long vowels and consonants:

<i>katab-a</i>	‘he wrote’
<i>ka:tab-a</i>	‘he corresponded’
<i>kat:ab-a</i>	‘he made (someone) write’
<i>ġana:n</i>	‘heart’
<i>ġan:a:n</i>	‘gardener’

A strictly phonemic description should see the long variants as the realisation of two identical phonemes in sequence, thus /*kataba*/, /*kaataba*/, /*kattaba*/, /*ġanaan*/, /*ġannaan*/, etc.

3.6. Syllable and word structure

The syllable/word structure of the Arabiyya reflects a system where the utterance, not the separate word, was the basic phonetic unit of the speech act. An utterance can be made up of one word (or even one section of a word) but in a natural language the utterance usually constitutes a clause. Within an utterance the Arabiyya allows the following types of syllables:

CV
CVV
CVC
CVVC

The first syllable is classified as short, the others as long.

This system has several consequences. The first one is that an utterance cannot begin with a vowel or two consonants (unlike in many Arabic dialects), only with one consonant plus a vowel. Furthermore, an utterance can never end with two consonants. Within an utterance there can never occur consonant clusters with more than two consonants. To this is added that the Arabiyya did not tolerate a CV syllable at the end of an utterance.

In the word morphology, however, there are several cases when a word begins with two consonants. Furthermore, several grammatical suffixes consist of or end in a short vowel. There is thus a discrepancy between paradigmatic morphology and the phonetic rules of the utterance. An analysis of the interaction between the two may thus take the structure of individual words as the starting point, and then formulate rules how to integrate words in utterances, or start with the utterance and then derive the isolated words from it. The handling of this discrepancy is partly covered by phonetic and partly by morphological rules. Thus, if a word beginning with two consonants occurs at the beginning of an utterance, an auxiliary syllable of the structure /ʔ/ + V is prefixed. E.g. the definite article is a prefixed /l/ which thus in all cases creates an initial cluster of two consonants. /l-bayt-/ ‘the house’ thus has to be realized as /ʔa-l-bayt-/ in utterance-initial position.

When a word ending in a consonant is followed by a word beginning with two the resulting three-consonant cluster is resolved by the insertion of an anaptyctic vowel

after the first consonant. A syllable-boundary can thus run between two initial consonants in an individual word. A sentence composed of the following words (# = word-boundary):

ḥaraḡū # min # lmasġidi # lkabīri ('they went out # from # the mosque # the big')

should be realised as:

[ḥaraḡūminalmasġidilkabīri]

Finally, if a word ending in a short vowel stands at the end of an utterance the short vowel is usually not realized but deleted. The word/utterance thus in this case ends in a single consonant. The last word of the sentence above, *lkabīri*, should thus be read [kabīr]. This deletion affects several grammatical suffixes consisting of a short vowel only but also a few others (the case-endings in state III, see 4.3.4). The Arabiyya tradition knows different other ways of handling this, all of which are found in the classical poetry.

It should be noted that Qur'ānic consonantal orthography (and consequently the classical and modern orthography) seems to take the isolated word as the base. The diacritical vowel system, on the contrary, renders the morphology according to context, even in initial and final position. There is thus a discrepancy between pronunciation and orthography in all forms of Arabic written with the classical Arabic script. The opposition between words in initial, final or internal utterance position is described as a contrast between pausal and context forms. There is a tendency in the literature to see this as a purely phonetic phenomenon. There are, however, weighty grounds to analyse it in morphological terms. Pausal phenomena are well known from many Arabic dialects as well as from Biblical Hebrew. These are definitely due to phonological processes. The pause-context system in the Arabiyya on the other hand, seems to reflect, at least partly, morphological variation. The historical background is, however, still not fully explained.

3.7. Accent

In the pronunciation of the Arabiyya today the accent patterns of the dialects are often applied. The accent systems of the dialects are multifarious. An important distinction is between dialects with expiratory accent, i.e. stress, e.g. the Syro-Palestinian ones, and those with a tonal accent, pitch, e.g. Cairene. The orthoepy contains a traditional system which is recommended and sometimes taught in schools – with varying success. According to the orthoepic rules accent should never fall on the last syllable, the ultima, of the context form of a word. Instead the last long (CVV or CVC) preultima syllable carries the accent/stress. If no such syllable exists the accent/stress should be on the first syllable:

<i>kátaba</i>	'he wrote'
<i>kátabat</i>	'she wrote'
<i>kátabu:</i>	'they wrote'
<i>katabú:hu</i>	'they wrote it'
<i>'alká:tibu</i>	'the writer'

The original accent system of the Arabiyya is not known for certain. The morphology of the Arabiyya is never affected by accent which indicates an original pitch accent: the accented syllable was pronounced with a higher tone.

4. Morphology

4.1. General

The description of the morphology of the Arabiyya is based on the tradition of the medieval grammarians of seeing a word as derived from a root consisting of consonants. The vocabulary is divided into three groups: nouns, consisting of substantives, adjectives and numerals, verbs, and particles, i.e. some prepositions, conjunctions and also the independent pronouns. Verbs are consistently analysed as based on roots of three or sometimes four consonants. Most nouns are from three or four consonants but a small group only has two. The reason for including substantives, adjectives and numerals in one category is that they have the same declination system. The particles fall outside this system. The concrete words are generated by the distribution of vowels between the consonants according to various more or less well-defined patterns, but often also by affixes: suffixes, prefixes and infixes. The medieval grammarians have established a consistent system of derivational patterns for nouns and verbs using the sequence of the three consonants F-ʿ-L (actually the root consonants of the verb ‘to do’) as a matrix. F thus stands for the first consonants of a root, C₁, ʿ for the second, C₂, and L for the third, C₃. The dictionaries are usually organized according to roots. In order to find a concrete word one has to be able to make the morphological analysis to find the consonantal root and then identify the pattern according to which a word is formed.

The analysis according to roots is partly artificial since there are many words and word-forms which do not show three (or four) root consonants. According to the traditional system the root consonants W and Y are considered ‘weak’, i.e. they may disappear and be replaced by vowels in certain patterns. Roots are thus divided into ‘strong’ and ‘weak’ depending on if they contain a ‘weak’ root consonant. The distinction between strong and weak roots is essential in the description of the morphology of verbs and nouns.

4.2. Pronoun

4.2.1. Personal pronouns

The suffixed pronouns are used (1) as subject markers, (2) possessive pronouns, (3) as pronominal objects. In both cases they are suffixed to nouns in state II (see below), certain particles introducing main or subordinate clauses, and verbs. The differentiation in the 1 person singular is between possessive (-ī) and object (-nī). The variation between -u- and -i- in some suffixes is due to the preceding phoneme. If it is /i/ or /y/ it takes the -i- form.

Tab. 45.1: Personal pronouns, independent and suffixed

Sing.		
3 m.	<i>huwa</i>	<i>-hu/-hi</i>
3 f.	<i>hiya</i>	<i>-hā</i>
2 m.	<i>ʾanta</i>	<i>-ka</i>
2 f.	<i>ʾanti</i>	<i>-ki</i>
1 c.	<i>ʾanā</i>	<i>-ī/nī</i>
Plur.		
3 m.	<i>hum</i>	<i>-hum/-him</i>
3 f.	<i>hunna</i>	<i>-hunna/-hinna</i>
2 m.	<i>ʾantum</i>	<i>-kum</i>
2 f.	<i>ʾatunna</i>	<i>-kunna</i>
1 c.	<i>nahnu</i>	<i>-nā</i>
Dual		
3 m/f.	<i>humā</i>	<i>-humā/-himā</i>
2 mf.	<i>ʾantumā</i>	<i>-kumā</i>

4.2.2. Demonstrative pronouns

The demonstratives show different shapes over the centuries but the ones mentioned in Tab. 45.2 are the most common.

Tab. 45.2: Demonstrative pronouns

Close deixis		
Sing.	Masc. <i>hāḏā</i>	Fem. <i>hāḏihi</i>
Dual	<i>hāḏāni</i>	<i>hātāni</i>
Plur.c.	<i>hāʾulāʾi</i>	
Far deixis		
Sing.	Masc. <i>ḏālika</i>	Fem. <i>tilka</i>
Dual	(rarely used)	
Plur.c.	<i>ʾulāʾika</i>	

4.2.3. The definite article

The definite article is originally a deictic indicator, still visible in expressions like *ʾal-yawm-a* ‘today’ i.e. ‘this day’. The article is a morpheme prefixed to a noun. The morpheme is realised as // before the first consonant of the noun unless this consonant is an apical (stop, fricative, nasal). In that case it is realised as the corresponding apical. This variation is usually explained as a case of regressive assimilation, although it should be observed that /ǧ/ does not belong to the apicals even if its articulation in the orthoepy makes it a member of that group. In all cases the prefixed article creates a two-consonant cluster or a long consonant which must be handled according to the rules outlined above (3.6). In initial utterance position an extra syllable must be formed /ʾa/ + {DEF.ART}. If the following noun begins with a two consonant cluster

an anaptyctic vowel must be inserted between the article and the cluster. An anomaly is that the /ʔa/ syllable is pronounced in these cases when in utterance initial position even if, according to the strict phonological system, it is unnecessary.

ʔa-l-bayt-	‘the house’
ʔa-t-tīn-	‘the figtree’
ʔa-t-tūm-	‘the garlic’
ʔa-t-tālib-	‘the student’
ʔa-d-dīn-	‘the religion’
ʔa-d-dīʔb-	‘the wolf’
ʔa-d-darb-	‘the beat’
ʔa-z-zill-	‘the shade’
ʔa-s-salām-	‘the peace’
ʔa-š-šams-	‘the sun’
ʔa-š-šawm-	‘the fasting’
ʔa-z-zayt-	‘the olives’
ʔa-n-nawm-	‘the sleep’
ʔa-l-i-sm-	‘the name’

4.2.4. The relative particle

The equivalent of the attributive clause (= the relative clause) to a definite head noun is introduced by a demonstrative particle agreeing with the head noun:

Table 45.3: Relative particles

Sing.	Masc.	Fem.
	ʔal-la-dī	ʔal-la-tī
Dual n.	ʔal-la-dāni	ʔal-la-tāni
	ʔal-la-dayni	ʔal-la-tayni
Plur.	ʔal-la-dīna	ʔal-lātī

The first element is the definite article. It should be observed that only the dual has case distinctions.

4.2.5. Interrogative pronouns

<i>mā</i>	‘what’
<i>man</i>	‘who’

4.3. Nouns

4.3.1. Formation of nouns

Nouns are formed either according to certain vowel patterns or by vowel patterns plus prefixes. Unaffixed nouns from strong roots may have the following structure (- indicates the addition of grammatical suffixes):

$C_1VC_2VC_3-$
 $C_1VVC_2VC_3-$
 $C_1VC_2VVC_3-$
 $C_1VC_2C_2VC_3-$
 $C_1VC_2C_2VVC_3-$

Nouns from strong roots with affixes:

$mVC_1C_2VC_3-$
 $mVC_1C_2VVC_3-$
 $tVC_1C_2VC_3-$
 $'VC_1C_2VC_3-$

The latter two patterns are rare in Arabic. The patterns applied to weak roots are basically the same with modifications according to rules of handling weak consonants. Many nominal patterns with or without affixes are linked to semantic classes or grammatical categories. Thus, for example, the pattern $C_1aC_2iC_3$, *fa'il-* is characteristic of many primary adjectives like *kabīr-* 'big; old'. Several patterns are grammaticalised as plurals or verbal nouns.

Among the nouns with affixes, the *m*-prefix is often an indicator of at least two distinct semantic classes. Words with *mi-* usually mean instruments: *miftāḥ-* 'key' (from *ftḥ* 'open'), whereas *ma-* means 'place': *maṭbaḥ-* 'kitchen' (from *ṭbḥ* 'cook').

4.3.2. Nominal inflection

Nouns are inflected according to number, case and state. Nouns are also classified into two grammatical genders, masculine and feminine, which means that adjectives almost always, and substantives usually but not always, are marked for feminine which thus is part of the inflection system. Case, state and gender when occurring are marked by suffixes, number by suffixes or by changing of the nominal pattern. Numbers have three inflections: singular, dual and plural. Cases also have three inflections, conventionally called nominative, genitive and accusative since their function is to a considerable extent the same as in European languages with case inflection. The category of state is common to most Semitic languages and even those which do not have it (some moderns ones) show traces of having had the distinction in earlier stages. State distinctions mark the function of a noun in a nominal phrase. Semitic languages show different kinds of state distinctions. The Arabiyya distinguishes three states: state I after the definite article //, the vocative particle *yā*, and the existential negation *lā* 'there is not'; state II when the noun is linked to a following noun equivalent to the genitive construction in European languages, and finally state III which is the independent form of the noun (not determined by the article or a following noun). The different states are marked by variations in the case and number suffixes. Nouns are classified in three declinations depending on the consonantal root of the noun: one strong declination and two weak ones.

4.3.3. Noun-forming suffixes

Apart from the suffixes indicating number Arabic also employs suffixes for forming nouns (substantives and adjectives).

Tab. 45.4: Nominal inflection

		State I	State II	State III a/b
1 decl.	n	<i>C₃-u</i>	<i>C₃-u/ū</i>	<i>C₃-un/-u</i>
	g	<i>C₃-ī</i>	<i>C₃-ī/-ī</i>	<i>C₃-in/-a</i>
	a	<i>C₃-a</i>	<i>C₃-a/-ā</i>	<i>C₃-an/-a</i>
2 decl.	n	<i>C₂-ī</i>	<i>C₂-ī</i>	<i>C₂-in/-in</i>
	g	<i>C₂-ī</i>	<i>C₂-ī</i>	<i>C₂-in/-in</i>
	a	<i>C₂-iya</i>	<i>C₂-iya</i>	<i>C₂-iyan/-iya</i>
3 decl.	n/ g/ a	<i>C₂-ā</i>	<i>C₂-ā</i>	<i>C₂-an/-ā</i>
The suffixes for number (plural, dual) also follow the state distinctions:				
Affix - <i>āt</i> - ('feminine plural')				
	n	<i>-u</i>	<i>-u</i>	<i>-un</i>
	g	<i>-ī</i>	<i>-ī</i>	<i>-in</i>
	a	<i>-ī</i>	<i>-ī</i>	<i>-in</i>
Plural affixes				
	n	<i>-ūna</i>	<i>-ū</i>	<i>-ūna</i>
	g	<i>-īna</i>	<i>-ī</i>	<i>-īna</i>
	a	<i>-īna</i>	<i>-ī</i>	<i>-īna</i>
Dual affixes				
	n	<i>-āni</i>	<i>-ā</i>	<i>-āni</i>
	g	<i>-ayni</i>	<i>-ay</i>	<i>-ayni</i>
	a	<i>-ayni</i>	<i>-ay</i>	<i>-ayni</i>

(1) Suffixes inflected according to the 1st declination:

-*at*-. With substantives it has several functions, at the same time always indicating feminine gender unless the substantive designates a male human. With most adjectives it marks agreement with a feminine head.

-*ā*-. This suffix no longer has a clear semantic or grammatical meaning but may originally have been an indicator of abstract nouns. It occurs in several plurals like *šū'ar-ā* 'poets' (from *šā'ir*-), *ʿaṭibb-ā* 'doctors' (from *ṭabīb*-), etc. With adjectives it marks feminine sg. gender of adjectives whose masculine sg. is of the pattern ^aC₁C₂aC₃-. *ʿaḥmar-* (masc.), *ḥamr-ā* (fem.) 'red'.

-*ān*-. This suffix seems originally to have been a marker of masculine plural (a function it has in Ge'ez) which is still seen in several cases, e.g. *qumš-ān* 'shirts' (from *qamīš*-). It is also used to form adjectives like *sakr-ān* 'drunk', *ta'b-ān* 'tired'.

(2) Suffixes inflected according to the 1st or the 2nd declination:

-*iyy*-. This suffix, the so-called nisbah-suffix, is used to form adjectives designing nationality or origins, like *ʿarab-iyy*-, 'Arab' (from *ʿarab*- 'Arabs' (coll.), *qabal-iyy*- 'tribal' (from *qabīl-at*-, 'tribe'). The suffix is usually declined according to the 1st declination. There are, however, cases where it is treated like nouns of the 2nd declination. Thus *yaman-iyy-un* (1st decl. state III) 'Yemeni' has an alternating form *yamān-in* (2nd decl. state III).

(3) Suffixes inflected according to the 3rd declination:

-ā. This suffix is quite frequently used to form abstract substantives like *dīkr-ā* ‘memory’. It is also found with feminine plural adjectives like *’akbar-* (masc.) *kub-rā* (fem.), or fem. sing. adjectives like *kaslān-* (masc.), *kasl-ā* (fem.).

4.3.4. Diptosity/triptosity

The two alternating forms (a) and (b) of state III of the three declinations are distributed according to rules classifying nouns. Those following IIIa are in traditional western grammar called triptotes, whereas those following IIIb are called diptotes. As is seen from the paradigm the distinction is relevant for all three declinations even if the traditional term triptote versus diptote refers to the presence of three or two case vowels, thus state I only. The triptote class (IIIa) is usually seen as the ‘regular’ and the diptote nouns (IIIb) are singled out by rules. The criteria for diptosity are morphological and semantic.

Diptota according to semantics: all feminine proper names, masculine proper names except those from patterns $C_1vC_2C_3-$, $C_1aC_2aC_3-$, $C_1aC_2iC_3-$ or participles, all proper names of foreign origin.

Diptota according to morphology: all proper names with the suffix *-at-*, all proper names with more than four root consonants, nouns of the patterns $’aC_1C_2aC_3-$, $C_1uC_2aC_3-$, $C_1uC_2āC_3-$, $maC_1C_2aC_3-$; nouns with the vowel pattern *-ā-ā-ī/ī*, nouns with the suffix *-ā’*, *-ā* or *-ān-*.

The category of state is not usually acknowledged for Arabic although it is crucial for the understanding of the nominal declension (Retsö 1984–86). There has been a confusion due to the interpretation of the *-n* of state III as an indefinite article. The general typology of definite/indefinite marking systems together with the factual occurrence of the *tanwīn* shows clearly that this analysis is incorrect.

4.3.5. Pausal forms

Nouns ending with a short vowel lose it when in pausal position in accordance with the general rule not tolerating a CV-syllable in utterance-final position (3.6). The same process takes place with the case suffixes *-VN*. In the strict orthoepy the *-n* is never realized in pausal position. Suffixes *-un* and *-in* of the first declination are elided whereas *-an* is realized as *-ā*. The suffix *-in* of the second declination is realized as *-ī*.

4.3.6. Lexical plural

The plural suffixes *-ū(na)/-ī(na)* are used with a limited group of masculine nouns designating humans. The plural suffix *-āt-* has a wider use both for feminine nouns designating humans and non-humans. Most nouns, however, form their plural by changing their derivational pattern, at times together with affixes: *rağul-* ‘man’ pl. *riğāl-*, *ṭabīb-* ‘doctor’ pl. *’a-ṭibb-ā’*, *kitāb-* ‘book’ pl. *kutub-*, *ḥabar-* ‘tale, piece of news’, pl.

ʾaḥbār-. This system is almost completely lexicalised and the plural forms are in most cases unpredictable. According to the classical grammars there are around 30 different patterns used for the plural (Wright 1896, 199–233).

4.3.7. Adjectives

The morphological means for the inflection of adjectives and substantives are identical, which is the reason for giving them the same designation: nouns, in Arabic *ism*-, plur. *ʾasmāʾ*-. In the use and distribution of them, however, substantives and adjectives follow separate patterns, the form of the adjective basically being dependent on the gender/number category of the substantive it refers to, attributively or predicatively. In Modern Standard Arabic the plurals of non-human substantives are grammatically classified as feminine singular. Plural as a semantic category is consequently found only with substantives designating humans which then are classified as masculine or feminine. An adjective is declinable according to the gender and number of the substantive it refers to. When referring to feminine singulars it usually takes the suffix *-at*-declined according to the strong declension. The adjective should then have two plural forms, one for masculine and one for feminine. Usually the masculine plural is formed by changing derivational patterns like most nouns and the feminine is formed by the suffix *-āt*-:

masc. *kabīr*- pl. *kibār*-
fem. *kabīr-at*- pl. *kabīrāt*-

Some frequent adjective types show a different formation. Adjectives designating colours and corporal characteristics have the following forms:

masc. sg. *ʾaC₁C₂aC₃*-
fem. sg. *C₁aC₂C₃-āʾ*-
comm. plur. *C₁uC₂C₃*-

E.g. *ʾaḥmar*-/ *ḥamrāʾ*-/ *ḥumr*-, ‘red’

An anomaly with these adjectives is that even non-human plurals should have the adjective *C₁uC₂C₃*-, (not *C₁aC₂C₃āʾ*) *buyūtun ḥumrun* ‘red houses’.

Another similar group is

masc. sg. *C₁aC₂C₃-ān*-
fem. sg. *C₁aC₂C₃-ā*
comm. plur. *C₁aC₂āC₃-ā*

E.g. *kaslān*-/ *kaslāl*/ *kasālā*, ‘lazy’

From most adjectives a so-called elative form can be formed. Its original meaning is ‘[the semantic content of the root] to a high degree’. The form is *ʾaC₁C₂aC₃*-:

ʾakbar- from *kabīr*-, ‘very great, big; very old’ or: ‘bigger, older’.

This form is used in different syntactic constructions with varying meanings (see below 6.1.4.). When determined by the definite article it functions as the masculine singular of the superlative. It then receives supplementary forms for masculine plural and feminine singular and plural:

masc. sg. 'al-'akbar-, pl.	'al-akbar-ūna/'al-'akābir-
fem. sg. 'al-kubr-ā, pl.	'al-kubr-ay-āt-'al-kubar-

5. Verbs

5.1. Verbal morphology

The verb in the Arabiyya appears in four basic forms: the two main tenses, traditionally called perfect and imperfect, the so-called *maṣḍar*-form which largely corresponds to the infinitive and the verbal noun in other languages, and two participles, active and passive. The *maṣḍar* and the participles have specific syntactic functions but also a wide use as lexicalized nouns.

The two tenses are conjugated for three persons, two genders (in both the second and third person), and number (singular, dual, and plural). The perfect is conjugated with suffixes only, the imperfect with prefixes marking person and suffixes marking number and gender. To this is added a differentiation of mood: in the Modern Standard Arabic the imperfect has four moods: indicative, jussive, subjunctive, and imperative. In the medieval classical language there is also an 'energetic' mood. The moods are marked by variation in the imperfect suffixes.

The tenses and the nominal forms (*maṣḍar*, participles) are formed from a verbal base with morphological characteristics visible in all of them. In Modern Standard Arabic the verbal base can be formed by derivation from the root in at least ten different ways. In the classical language there are yet another six possible bases. The variation of the verbal base is connected with diathesis: the relationship between the verb and its nominal constituents. The base may indicate intensive, factitive, causative, coreferentiality between subject and object, intransitivisation, stativity, etc. Few verbal roots exploit all possibilities but most verbal roots have at least three or four variants. The bases are in western grammars usually numbered with Roman numbers.

To the diathesis complex also belongs the handling of the passive construction. The object-status of the subject in the passive construction is marked in verbal morphology by a vowel sequence different from that of the active construction.

5.1.1. The verbal bases: survey

Base I is the only one where the vocalisation of the tenses is lexicalised. The characteristic is the vowel before C3, the theme vowel. Verbs with theme vowels *a/u* are usually fientic, verbs with vowels *i/a* or *u/u* stative. There are, however, other combinations. If C₂ and C₃ are laryngals there is a tendency to have *a/a* as theme vowels.

Base I is also characterised by a variegated formation of the *maṣḍar*. The formation is largely lexicalised and has to be learned for each individual verb, like the theme vowels (Wright 1896, 110–115).

Base IV is an anomaly in possessing what looks like two different bases for the two tenses. The imperfect is usually explained by deletion of the prefix 'a-, an explanation which can be questioned.

Tab. 45.5: Verbal bases

base	perfect	imperfect	<i>maṣdar</i>	act. part.	pass part.
I	<i>fāʿvl-</i>	<i>-fʿvl-</i>		<i>fāʿil-</i>	<i>maʿfūl-</i>
II	<i>fāʿʿal-</i>	<i>-fāʿʿil-</i>	<i>tafʿīl-</i>	<i>muʿfāʿʿil-</i>	<i>muʿfāʿʿal-</i>
III	<i>fāʿal-</i>	<i>-fāʿil-</i>	<i>fīʿāl-</i>	<i>muʿfāʿil-</i>	<i>muʿfāʿal-</i>
IV	<i>ʾafʿal-</i>	<i>-fʿil-</i>	<i>ʾifʿāl-</i>	<i>muʿfʿil-</i>	<i>muʿfʿal-</i>
V	<i>tafaʿʿal-</i>	<i>-tafaʿʿal-</i>	<i>tafaʿʿul-</i>	<i>mutafaʿʿil-</i>	<i>mutafaʿʿal-</i>
VI	<i>tafāʿal-</i>	<i>-tafāʿal-</i>	<i>tafāʿul-</i>	<i>mutafāʿil-</i>	<i>mutafāʿal-</i>
VII	<i>nfaʿʿal-</i>	<i>-nfaʿʿil-</i>	<i>nfiʿāl-</i>	<i>munfaʿʿil-</i>	<i>munfaʿʿal-</i>
VIII	<i>ftaʿʿal-</i>	<i>-ftaʿʿil-</i>	<i>fīʿāl-</i>	<i>muʿftaʿʿil-</i>	<i>muʿftaʿʿal-</i>
IX	<i>fʿall-</i>	<i>-fʿall-</i>	<i>fʿilāl-</i>	<i>muʿfʿall-</i>	<i>muʿfʿall-</i>
X	<i>stafʿal-</i>	<i>-stafʿil-</i>	<i>stifʿāl-</i>	<i>mustafʿil-</i>	<i>mustafʿal-</i>

The ordering of the verbal bases according to the traditional system as shown above does not give a clear picture of the derivational relations. It is recommended that a systematic description follow the system used for some other Semitic languages designating at least three basic stems: G (base I), D (base II), and L (base III). The letters indicate a morphological characteristic according to the German terminology:

D = Dopplungsstamm, L = Langstamm, G = Grundstamm. Most other bases can then be described indicating the derivational relationship:

- G = basic stem
- nG = base VII (= G-stem with n-prefix)
- Gt = base VIII (G-stem with t-infix)
- stG = base X (G-stem with st-prefix)

- D = stem with doubled C₂
- tD = base V (D-stem with t-prefix)

- L = stem with a long vowel after C₁
- tL = stem VI (= L-stem with t-prefix)

It is then possible to refer to the D and L-stems as derived and the others as augmented. An advantage with this description is that some other bases can more easily be integrated into the morphological description. For example, verbs formed from roots with four consonants are designated Q, those from reduplicated root R, etc. Such verbs often have an augmented form with t-prefix, thus tQ and tR. To the L-stem also belong verbs with a *w* or *y* before C₂. The derived stems thus form a group (L, Lw, Ly, Q, R) with one characteristic in common, contrasting them with the G-stem, viz. a long first syllable of the base. The D, L, and IV stem all have *-i-* as theme vowel in the imperfect. The augmented forms of the L and D-stems have *-a-*.

Even if this description makes the verbal system more transparent it does not solve all problems. It remains to find a proper designation for base IX although it clearly belongs to the G-group. The one falling outside the system is base IV, which shows affinity both with the G-group and the derived group. The reason for this is the historical background of the formation of base IV.

5.1.2. The finite forms

The imperfect-prefixes of the G-group have *-a-* vowel, those of the derived unaugmented forms, including base IV have *-u-* and the augmented form have *-a-*.

Table 45.6.: Verbal affixes

	Perf.	Impf. ind.	Impf. subj.	Impf. juss.
Sing.				
3 m.	<i>-a</i>	<i>y - u</i>	<i>y - a</i>	<i>y - 0</i>
3 f.	<i>-at</i>	<i>t - u</i>	<i>t - a</i>	<i>t - 0</i>
2 m.	<i>-ta</i>	<i>t - u</i>	<i>t - a</i>	<i>t - 0</i>
2 f.	<i>-ti</i>	<i>t - īna</i>	<i>t - ī</i>	<i>t - ī</i>
1 c.	<i>-tu</i>	<i>' - u</i>	<i>' - a</i>	<i>' - 0</i>
Plur.				
3 m.	<i>-ū</i>	<i>y - ūna</i>	<i>y - ū</i>	<i>y - ū</i>
3 f.	<i>-na</i>	<i>y - na</i>	<i>y - na</i>	<i>y - na</i>
2 m.	<i>-tum</i>	<i>t - ūna</i>	<i>t - ū</i>	<i>t - ū</i>
2 f.	<i>-tunna</i>	<i>t - na</i>	<i>t - na</i>	<i>t - na</i>
1 c.	<i>-nā</i>	<i>n - u</i>	<i>n - a</i>	<i>n - 0</i>
Dual				
3 m.	<i>-ā</i>	<i>y - āni</i>	<i>y - ā</i>	<i>y - ā</i>
3 f.	<i>-atā</i>	<i>t - āni</i>	<i>t - ā</i>	<i>t - ā</i>
2 mf.	<i>-tumā</i>	<i>t - āni</i>	<i>t - ā</i>	<i>t - ā</i>

The non-indicative moods have in common the absence of the *-n* in the suffixes of 2nd person fem. sing. and 2nd and 3rd person masc. plur. and dual. In the jussive and the imperative the 1st consonant C3, is not followed by a short vowel whereas the subjunctive has an *-a*.

The imperative mood is basically the 2nd person jussive without the person-marking prefixes: *ktub*, *ktubī*, *ktubū*, *ktubna*, *ktubā*.

The energetic moods are formed from the jussive by the addition of the suffixes *-an* or *-anna* to C₃ and *-n/-nna* to the *-ī/-ū/-ā* suffixes which are shortened.

The verbal bases in the Arabiyya can thus be divided into two main groups: the G-group and the derived group. It is easy to see that the G-group has features in common: the vocalisation of the imperfect sets it apart. In the same way the derived bases also go together.

5.1.3. Verbs in the passive construction

The verb in the passive construction is in the Arabiyya marked by changing of vowel sequence but preservation of syllable structure. The perfects have *-u-* in all syllables except the last one of the base which has *-i-*. The imperfect has *-u-* in the person-marking prefix, *-a-* in the others:

katab- > *kutib-* 'was written'
šarib- > *šurib-* 'was drunk'
dākar > *dūkir-* 'was memorized'

yaktub- > *yuktab-*
yašrab- > *yušrab-*
yudākir- > *yudākar-*

tasallam- > *tusullim-* ‘was received’
staqbal > *stuqbil-* ‘was received’

yatasallam- > *yutasallam-*
yastaqbil- > *yustaqbal-*

6. Syntax

A basic feature of the syntactic structure of the Arabiyya, like most Semitic languages, is the occurrence of two main clause types: a verbal clause and verbless clause. In the former, a verb may take three kinds of complements: subject, object and adverbial. These terms can be realized as nouns or noun phrases or clauses. The latter consists of two terms: subject and predicate. The subject may be a noun (substantive or adjective), a pronoun or a noun phrase. The predicate may be a noun, a noun phrase or an adverbial phrase indicating location in time or space. According to the classical Arabic grammar the predicate may also consist of a clause. In that case the difference between a verbal and ‘verbless’ clause is mainly that of word order: in the first one the verb comes first, in the second the subject comes first. From a modern linguistic viewpoint it is better to distinguish between verbal and verbless clauses.

6.1. Noun phrase

6.1.1. Classification of nouns: number, gender, determination

Substantives govern the agreement when determined by adjectives or pronouns. As subjects with verbs they govern the verbal agreement. They are semantically classified in different classes according to mass/number, and semantically or contextually classified as definite or indefinite. Gender-classification is partly according to semantic categories, and partly to morphological ones.

Gender. The Arabiyya has two genders, masculine and feminine. In the traditional description, feminine is seen as the marked term. The following nouns are feminine:

- (1) substantives referring to beings of feminine sex.
- (2) substantives referring to certain semantic spheres like parts of the body occurring in pairs, nouns connected with the earth, like the word *’ard-*, ‘earth’ itself, and names of geographical regions and cities. Some terms for tools, names of elements (fire, winds) and some other lexicalised items are likewise feminine.
- (3) substantives denoting inanimate objects or abstract concepts with the suffixes *-at-*, *-ā-*.
- (4) substantives which are plurals of non-humans.
- (5) substantives designating collectives of humans, like names of tribes and peoples or terms for groups of animates like *’askar-* ‘army’, *ḡanam-* ‘small-cattle’, *ḡumhūr-* ‘mass of people’.

6.1.2. Apposition

A noun may modify or specify the meaning of another noun. The modifier/specifier follows the head noun. The following noun(s) may be substantives, adjectives, or de-

monstrative pronouns. The modifier/specifier should agree with the head noun according to case, definition and, if possible, gender and number. The latter occurs only with adjectives and demonstrative pronouns. The appositional adjectives correspond to the attributive construction in most European languages. In the Arabiyya there is no syntactic difference between apposition and attribute. In principle an adjectival and a substantival apposition are replaceable and the choice a matter of style. The adjectival apposition is, however, the dominating.

Substantives:

<i>'al-ḥātamu l-ḥadīdu</i>	'the ring of iron' (lit. 'the ring', 'the iron')
<i>Muḥammadun-i n-nabiyyu</i>	'the Prophet Muhammad'
<i>mawḍi'un qurbun</i>	'a close spot' (lit. 'spot', 'closeness')

Adjectives:

<i>raḡulun ṭawīlun</i>	'a tall man' (lit. 'man', 'tall')
<i>'al-'awlādu ṣ-ṣiḡāru</i>	'the small children'
<i>bintun ḡamīlatun</i>	'a beautiful girl'
<i>'an-niswānu l-ḥakīmātu</i>	'the wise women'
<i>kalbun 'amīnun</i>	'a faithful dog'
<i>kilābun 'amīnatun</i>	'faithful dogs'
<i>'al-mawḍi'u l-qarību</i>	'the close spots'
<i>mawḍi'u qarībatun</i>	'close spots'
<i>'al-qasru l-kabīru</i>	'the big castle'
<i>'al-quṣūru l-kabīratu</i>	'the big castles'
<i>'al-baytu l-'akbaru</i>	'the biggest house'
<i>'al-madīnatu l-kubrā</i>	'the biggest town'
<i>'al-qasru l-'aḥmaru</i>	'the red castle'
<i>'al-quṣūru l-ḥumru</i>	'the red castles'

Demonstrative pronouns:

<i>ḥāḍā/ḍālīka r-raḡulu</i>	'this/that man' (lit. 'this', 'the man')
<i>ḥā'ulā'i'ulā'ika r-riḡālu</i>	'these/those men'
<i>ḥāḍihī/tilka l-fatātu</i>	'this/that girl'
<i>ḥā'ula'i'ulā'ika l-fatayātu</i>	'these/those girls'
<i>ḥāḍā/ḍālīka l-qasru</i>	'this/that castle'
<i>ḥāḍihī/tilka l-quṣūru</i>	'these/those castles'

In the case of the pronouns, the pronouns can also follow the appositioned noun: *'ar-raḡulu ḥāḍā* etc. (lit. 'the man', 'this') although preposed pronoun is the most frequent.

6.1.3. Specification

A noun may have a secondary noun in the accusative case state III as a specifying term. The construction, in Arabic *tamyīz*, is especially used with adjectives which cannot form the elative form, and with measures and materials. It is also the construction with numerals from 11 to 99:

<i>ḥātamun fiḍḍatan</i>	‘a ring of silver’
<i>ʾakṭaru ḡtihādan</i>	‘more diligent’
<i>ʾiṣrūna raḡulan</i>	‘twenty men’

6.1.4. Annexation

Annexation is a more intimate linking of two or more nouns than apposition and specification, even if often the semantic difference between them is not prominent. Annexation is marked by the use of state II for the noun(s) preceding the last term of the syntagm. The last term can be state III, state II with pronominal suffix, or state I (with the definite article, etc.). All terms of the annexation take the genitive case except the first which takes the case demanded by the relationship to the constituents of the clause. The last term of the annexation determines the definiteness/indefiniteness of the whole syntagm. There are basically three cases of annexation: substantive + substantive, adjective + substantive, and substantive + clause.

Substantive + substantive

<i>baytu raḡulin</i>	‘a man’s house’
<i>baytu r-raḡuli</i>	‘the man’s house’
<i>bābu bayti r-raḡuli</i>	‘the door of the man’s house’

An attributive adjective to one of the terms of the annexation must agree in case, gender, number and definiteness with its head but must be placed outside and after the annexation syntagm:

<i>baytu r-raḡuli l-kabīru</i>	‘the man’s big house’
<i>baytu r-raḡuli l-kabīri</i>	‘the old man’s house’
<i>buyūtu r-riḡāli l-kabīratu</i>	‘the men’s big houses’
<i>buyūtu r-riḡāli l-kibāri</i>	‘the old men’s houses’

The noun + noun annexation has a wide use. It corresponds to the genitive construction in European languages. It is also widely used as a means of creating composite words like *sikkatu l-ḥadīdi* ‘railway’ (lit. ‘road of iron’). Furthermore, it is the construction with numerals from three to ten: *ṭalāṭu banātin* ‘three girls’.

The noun + noun syntagm is also widely used for the equivalent of many indefinite pronouns: *kullu yawmin*, ‘every day’, *kullu l-ʾayyāmi* ‘all days’, *nafsu l-yawmi* ‘the same day’, *baʿḍu l-ʾaṣḍiqāʾi* ‘some friends’, *ʾayyu wāḥidin*, ‘anybody’.

adjective + substantive

<i>raḡulun ṭawīlu l-qāmati</i>	‘a man of tall stature’
<i>ʾar-raḡulu ṭ-ṭawīlu l-qāmati</i>	‘the man of tall stature’

The substantive in this construction always takes the definite article. Unlike the preceding construction, in this one the first term may take the definite article if the head noun is definite.

The adjective pattern *ʾafʿal-* plus a noun in the genitive is the equivalent of the superlative: *ʾaḡṣanu ṭālibin* ‘the best student’.

Substantive + clause

The clause annexed to a head noun is usually introduced by a particle *'an* or *mā*:

bi-šarṭi 'an yaqḍama 'amīru l-mu'minīna 'on the condition that the commander of the faithful will come'
'amru mā taḥḍaru 'the case which you avoid'

See further 6.3.3.

6.1.5. Predication

By this is meant the complementation of a noun (or a pronoun) with another noun, which specifies the head according to the context. The head noun can be the subject or the object.

'antum-u l-mu'minīna 'you, as believers'
ḡāḍara 'aqrāna-hu 'amwātan 'he left his opponents dead'

6.1.6. Predicative clause

Unlike the above-mentioned syntagms, predication is a clause which can be an independent sentence or a subordinate clause, consisting of a subject, which can be a noun, a personal, interrogative, or demonstrative pronoun, and a predicate, which can be an adjective (always in state III), a substantive, an adverb or a prepositional phrase. The Arabiyya does not have a verbal copula; the two terms are simply juxtaposed. Only if the predicate is a definite substantive could there be a copula viz. the 3rd person independent pronoun. If the subject is indefinite the predicate usually comes first. The same holds for subjects in interrogative sentences. The predicate clause is not specified for time. In subordinate position it can refer to the present, the past or the future. In independent position it can be marked for time by the use of an auxiliary verb like *kān-*. In that case the nominal predicate should be in the accusative case. The predicate clause can be negated by the particle *mā* or the pseudoverb *lays-a*. With the latter the predicate should be in the accusative case.

6.2. Verb phrase

6.2.1. Tenses

The exact meaning and function of the two finite forms of the verb is still debated and is part of the problems of the verbal systems in Semitic in general. Most descriptions assume that the opposition between the two is aspectual, between perfective and imperfective aspect. The temporal value is then pragmatic, due to contextual factors (Wright I 1896, 51; Cantarino 1974 I, 58 ff.; Blachère/Gaudefroy-Demombynes 1952, 245; Schultz 2004, 12–13; Buckley 2004, 537 f.). The argument given in favour of this assumption is the fact that both 'tenses' can refer to present, past or future. There are,

however, those who give a different analysis, seeing it as a system of relative tenses (Aartun 1963; Denz 1982, 71–72). With some authors the uncertainty is obvious and statements are often vague or contradictory (Ryding 2005, 439–444; Badawi et al. 2004, 362–65). The aspectualists tend to look for a ‘basic’ meaning inherent in the category of ‘perfect’ and ‘imperfect’ not affected by contexts. The ‘temporalists’ see the two categories more as indicating functions in the discourse, marking co-temporality and pre-temporality in relation to a reference point which in its turn can be present, preterite or future. The latter description has the advantage of avoiding the definition problem which always haunts the concept of aspect. According to this analysis ‘tense’ is a deictic category, not based on assumed subjective judgement by the speaker which the concept of aspect ultimately implies. It is worth noticing that the medieval Arabic grammarians were ‘temporalists’. They named the ‘perfect’ *’al-māḍī*, ‘the past’, and opposed it to *’al-mustaqbal*, ‘the future’ (*sa(wfa)*) + ‘imperfect’ indicative) which indicates a tense system. The imperfect was called *’al-muḍāri‘*, ‘the imitating’ which is a morphological characterisation: the ‘imperfect’-suffixes are homonymous to those of the nouns (perhaps also diachronically related). Perhaps also because the varying time reference of the ‘imperfect’ is more salient than that of the ‘perfect’. For Modern Standard Arabic the temporal description seems more practical and it should also be tested for earlier stages of the language (Eisele 2006). The relative tense description appears especially apt in connection with the verbal syntax of subordinate clauses. In most cases the tenses in subordinate clauses are determined by the tense of the governing verb in the main clause. An imperfect in a subordinate clause can thus be a present, preterite or future in relation to the time of the speech act, depending on the tense of the main verb. There are, however, cases where the use of the tenses is difficult to explain by a model of relative tenses (Denz op. cit.).

The imperfect is negated by the particle *lā*, the perfect by the particle *mā*. A negated perfect can also be replaced by *lam* + jussive.

6.2.2. Moods

The subjunctive mood is used in main clauses only as a negated future tense:

lan ’aḏhaba ’ilay-hā ‘I shall not go to her’

In subordinate clauses it is used for non-factual statements (see below 6.3.4).

The jussive mood is used in main clauses after the preterite negation *lam* and *lammā* ‘not yet’, with the negations *lā* as negated imperative, with the particle *li-* as an imperative of the 3rd person, and finally, optionally in a main clause dependent on a conditional subordinate clause (see below 6.3.4). The jussive is also used in the subordinate conditional clause (6.3.4).

6.2.3. The passive construction

The passive construction of the Arabiyya is typologically identical with the one in most European languages. The absence of the subject in its normal place is filled out with the object, the object status of which is marked in the verbal morphology. Contrary to

what is often claimed the Arabiyya knows the agent extension-phrase (Ullmann 1989, 76–84):

<i>subiqtu bihi</i>	‘I was left behind by him’
<i>ʿulqiyat-i l-muḥāḍaratu min qibali l-ʿustādi,</i>	‘the lecture was delivered by the professor’

The morphology of the verb in the passive construction is also employed for subjectless clauses which, unlike the passive construction, can be also formed from intransitive verbs:

<i>ruqīṣat fī l-masāʾi</i>	‘there was dancing in the evening’
<i>kutiba fī l-maktabi</i>	‘there was writing going on in the office’ or: ‘it (some object) was written in the office’

6.2.4. Word order

The Arabiyya has traditionally been seen as a VSO-language, a view which has been confirmed by modern linguistic research (Dahlgren 2009). Unlike what has been assumed, the same holds for several Arabic dialects. It should be noted that the VSO order is valid for the foregrounded, main declarative affirmative and active clause. Nominal constituents (subjects, objects, adverbials, predicates) can be moved to the front of the clause for emphasis, etc. The Arabiyya has several devices for this.

6.2.5. Agreement

Agreement between verb and subject occurs only when the subject is mentioned. A finite verb preceding a not yet mentioned subject as a rule has the 3rd person masc. sing. form which can be classified as a neutral finite form.

6.2.6. Complements: object

The object with transitive verbs in Arabic is marked by the accusative case. There are two main classes of verbs which take two objects in the accusative case. The first is verbs with the meaning ‘to give’, ‘to provide’, ‘to appoint’. To the other belong verbs designating mental activities like ‘consider’, ‘believe’, ‘think’.

<i>qaraʿtu kitāban</i>	‘I read a book’
<i>ʿaʿtā zaydan kitāban</i>	‘He gave Zayd a book’
<i>ḡaʿala Zaydan mudīran</i>	‘he appointed Zayd as director’
<i>zaʿamat zaydan ḥakīman</i>	‘she thought Zayd to be wise’

6.2.7. Complements: adverbials

Adverbial complements are marked by the accusative case. They encompass a large variety of complements which semantically are an attribute to the finite verb. It may

consist of a nominal syntagm denoting time, or more rarely, a place. Furthermore, an adjective. In the latter case the adjective often stands as an apposition/attribute to a verbal noun formed from the verb.

<i>sāfara muddatan ṭawīlatan</i>	‘he travelled for a long time’
<i>’uḥibbuki dā’iman</i>	‘I shall love you forever’
<i>’i-nṣarafa yamīnan</i>	‘he turned to the right’
<i>’i-ḡlisū makānakum</i>	‘remain seated on your place!’
<i>ḡaraba-hu [ḡarban] ṣadīdan</i>	‘he hit him hard’ (lit. a hard hitting)
<i>ḡaraba-hu ḡarbatan ṣadīdatan</i>	‘he gave him a hard hit’

A special kind of adverbial complement is the accusative case of the nominal form of the verb: participle or a verbal noun (*maṣdar*), the so-called *ḥāl*-accusative. The construction may be seen as a nominalisation of a subordinate clause (see below 6.3.4). Its relation to the main verb may be of varying kinds: causal, final, contemporal, etc.

<i>ḡaraḡa ṣadīqī ḡāḡikan</i>	‘my friend went out laughing’
<i>ḡādartu l-madīnata ḡawfan min-hu</i>	‘I left the town because of fear of him’
<i>waqafnā ḡtirāman lahu</i>	‘we stood up in order to honor him’

6.3. Subordinate clauses

Subordinate clauses are clauses that can occupy the place of a nominal constituent of the main independent clause, i.e. subject, object, apposition, annexation and adverbial. In many cases the Arabiyya shows great flexibility in the transformation of subordinate clauses to nominal phrases and vice versa. This is one of the main devices for stylistic variation.

6.3.1. Subject and object clauses

The clause is introduced by the particles *’an* or *’anna*. The latter should be immediately followed by a noun in the accusative case, or alternatively a pronominal suffix. Depending on the governing verb, the verb in the subordinate clause stands in the indicative when stating facts, or the subjunctive when stating expected or wanted conditions.

<i>yasurru-nī ’annaka ḡi’ta</i>	‘(the fact) that you came makes me glad’
<i>yanbaḡī ’an taḡḡara min-a l-fawāḡiṣi</i>	‘it is necessary that you keep away from shameful things’
<i>’a’lamu ’anna-hu yanāmu</i>	‘I know that he is sleeping’
<i>’urīdu ’an yanāma</i>	‘I want him to sleep’

An adjective can function as a nominal constituent in a clause without a head noun, thus as subject, object, annexed noun, or adverbially. The corresponding clause is introduced by the relative marker *’a-l-la-ḡī*, etc., or the pronouns *man* (humans) and *mā* (non-humans). The first marks definite clauses, the others indefinite, even if the distinction is not strictly upheld.

<i>ʿa-l-laḏī ʿalqā l-kalimata ṣaḏīqī</i>	‘the one who gave the speech is my friend’
<i>naʿrifu mā ḥadaṭa laka</i>	‘we know what happened to you’
<i>hāḏā mā ḥadaṭa lī</i>	‘this is what happened to me’
<i>ḥakā lanā kulla mā ḥadaṭa lahu</i>	‘he told us all that had happened to him’
<i>ḥakā lanā ʿammā (= ʿan mā) šāhada hunāka</i>	‘he told us about the things he had seen there’

6.3.2. Appositional clauses (= relative clauses)

The appositional clause has the same syntactic position as the appositional adjective (6.1.2) and functions as the relative clause in European languages. In the subordinate clause the head noun is as a rule referred to by a personal pronoun. Arabic thus does not possess proper relative pronouns. Like the adjective, the clause qualifying a definite head noun must have the definite article. The article is prefixed to a deictic pronoun.

<i>ṭālibatun ḡāʿat min lubnāna</i>	‘a (female) student who came from Lebanon’
<i>ʿa-ṭ-ṭālibatu l-laṭī ḡāʿat min lubnāna</i>	‘the student who came from Lebanon’
<i>ṣaḏīqun qābaltu-hu</i>	‘a friend whom I met’
<i>ʿa-ṣ-ṣaḏīqu l-laḏī qābaltu-hu</i>	‘the friend whom I met’
<i>raḡulun huwa ṣaḏīqī</i>	‘a man who is my friend’
<i>ʿar-r-raḡulu l-laḏī huwa ṣaḏīqī</i>	‘the man who is my friend’

6.3.3. Annexational clauses

Clauses with relative pronouns in 6.3.2. can be annexed to a head noun in state II and are semantically equivalent to appositional clauses to indefinite heads. Clauses are also in the same way annexed to nouns denoting time, which in practice function as temporal conjunctions. Most subordinate temporal clauses are originally formed according to this pattern. Exceptionally, the construction is found with other nouns. Annexational clauses are fairly common, but do not represent any productive pattern and are rather survivals of earlier linguistic stages.

The temporal clauses as a rule have a particle *ʿan* or *mā* as a link between the head noun and the clause proper: *baʿda ʿan* ‘after’, *ʿinda-mā*, *ḥīna-mā* ‘when’, *qabla-mā* ‘before’, *raḡma ʿan*. In a few cases the head noun can occur without link: *munḏu* (ʿan), ‘since’, *raḡma*, ‘in spite of’. The particle *mā* is also documented as a link in pure nominal annexation but is already in the earliest stages of the language a fossil.

<i>šarru man ḥalaqa l-lāhu</i>	‘the most evil that God has created’ (= *aš-šarru l-laḏī ḥalaqa l-lāhu)
<i>kullu mā yataḡayyaru</i>	‘everything that changes’ (= *ʿa-l-kullu l-laḏī yataḡayyaru)

6.3.4. Adverbial clauses

The temporal annexational clauses in 6.3.3 are annexed to a head noun which in its turn stands as an adverbial complement, shown by its accusative form (*hīn-a-*, *qabl-a*, *ba'd-a* etc.). Syntactically, these clauses thus have the same function as subordinate clauses with conjunctions in European languages. To the temporal clauses are added final, causal, concessive, consecutive, and conditional clauses, all marked by introductory particles and, sometimes with distinct tenses and moods. The subjunctive mood is the rule when referring to non-factual statements.

Temporal

Anteriority:

dahabtu 'ilā l-bayti ba'da 'an 'anğaztu š-šugla 'I went home after I had done the work'

Posteriority:

'as'alu šadīqī qabla 'an 'aktuba r-risāla 'I shall ask my friend before I write the letter'

Contemporaneity:

'anğaztu š-šugla baynamā kāna muḥammadun ġā'iban 'I did the work while Muhammad was absent'

Final:

ya'malu li-kay yaḥşula 'alā l-fulūsi 'He works in order to make money'.

Causal:

lam yaktub li-'annahu kāna marīḍan 'He did not write because he has been sick'

Consecutive, factual:

mariḍa ḥattā lā yarġūna-hu 'He is so ill that they have no hope for him'

Non-factual:

'udrus fa-tahfaẓa 'Study so that you may know by heart!'

Conditional

Real condition:

'iḏā qara'ta l-kitāba sawfa tafhamu l-mašākila 'If you read the book you will understand the problems'

Unreal condition:

law qara'ta l-kitāba la-fahimta l-mašākila

'If you had read the book
you would have understood
the problems'

Concessive:

lan 'unġiża l-'amala wa-'in 'amiltu kulla yawmin

'I will not finish the work
even if I work every day'

Circumstantial:

Arabic, like some other Semitic languages has, apart from the specified subordinate clauses, also a non-specified subordinate clause by which the others (or at least most of them) can be replaced. This clause, in Arabic *ġumla ḥāliyya*, 'circumstantial clause', can also be transformed into a noun (participle, *maṣḍar*) in the accusative. There are thus three different ways of handling verbal complements.

The circumstantial clause can stand asyndetically, i.e. without any marking element, or introduced by the particle *wa-* (see also Waltisberg 2009). The particle is obligatory when the clause is verbless, introduced by a pronoun or the particle *qad*. The tense of the circumstantial clause is determined by the governing verb in the main clause. A verbless circumstantial thus has the same time reference as the main clause. An imperfect in the circumstantial indicates contemporaneity with the main clause and may thus have present, preterite or futural meaning. A perfect indicates past tense in relation to the governing verb and is often marked by the particle *qad*.

A sentence like 'Zayd came in [while he was] laughing' can thus be expressed in four different ways:

daḥala zaydun dāḥikan
daḥala zaydun baynamā yaḍḥaku
daḥala zaydun yaḍḥaku
daḥala zaydun wa-hwa yaḍḥaku

Examples of *ḥāl*-clauses with different meanings:

final:

ḥaraġa yanẓuru la'alla markaban ġā'a

'he went out in order to see if a ship
had come'

causal:

'a-lā nuqātilu fī sabīli l-lāhi wa-qad
'uḥriġnā min diyārīnā

'Should we not fight in the path of God
since we have been driven out of our
dwellings?'

7. Concluding remarks

The Arabiyya has traditionally been seen as the most archaic of the Semitic languages and reconstructions of 'Proto-Semitic' often look identical with 'Classical Arabic'.

Modern scholarship has begun to challenge this view. Although there is no doubt that the language contains several archaic elements: the rich consonant inventory, the case- and mood system, the frequent use of circumstantial clauses, and possibly the syllable structure, it has become clear that the Arabiyya shows a high degree of paradigmatic levelling. It is, for example, fairly certain that the case inflection in state II is a secondary feature. Originally state II was without case marking. The consistent marking of verbs in the passive construction with vowel change is a secondary development from morphological devices found in older Semitic languages with a much more limited use. The consistent employment of the dual not only with substantives, but also with adjectives, all finite forms of the verb, and with pronouns is another example. Finally, the tense system is most likely innovative in which the Arabiyya shares many features with Ugaritic, Aramaic and Mishnaic Hebrew. The immense vocabulary found already in the earliest Arabiyya poetry is the result of a long period of interaction between different language forms on the Peninsula. In many of these cases the spoken forms today reflect an earlier stage of linguistic development despite their many innovations.

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46. Arabic as the Language of Islam

1. The Qur'an and Arabic
2. The Qur'an in translation
3. The Arabic language and the message of the Qur'an
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Abstract

The Qur'an, Muslims believe, is the word of God and it was its revelation, commencing in 610 CE that began Muhammad's prophetic mission. According to the Qur'an, all previous prophets used the language of their respective peoples (Qur'an 14:4) and the Islamic scripture, naturally, was revealed in the language of Muhammad and the people of the Arabian Peninsula. The effect of the revelation of the Qur'an on the Arabic language proved to be dramatic, profound and lasting, making it the lingua franca of a great Islamic civilization and the language of Islam to the current day.

1. The Qur'an and Arabic

Within the course of a century the Arab conquests had spread to cover a vast area in Asia, Africa and southern Europe, and it was Islam that took Arabic to these new lands, carried by the Muslim armies and migrants to the Levant, the Fertile Crescent, Egypt, North Africa and Spain, and in the east to Persia and beyond. The Qur'an affirms its connection with Arabic (12:2) but Muhammad is also told that he has been sent to all people to give good news and warning (34:28), and Arabic was eventually to supersede such local languages as Aramaic, Greek, Coptic, Berber and Persian. Naturally this process took some time: Arabic was first used for religious, administrative and political purposes, and in high culture, but later spread to the population at large in the Middle East and North Africa, to become permanently the language of the majority.

It was also Islam, in great part, that provided impetus for the transformation of Arabic from a predominantly spoken language to a language of scholarship transmitted by the written word: the Qur'an was the first book to be written down in Arabic, and as can be seen in the early interest in grammar, phonetics, stylistics and other linguistic disciplines, all Arabic and Islamic scholarship was rooted in the drive to serve the Qur'an. Islam introduced a religious system with branches of religious knowledge, such as qur'anic exegesis (*tafsīr*), study of the prophetic traditions (*ḥadīth*), theology and Islamic law (*fiqh*) and Sufism, all of which also had implications for the use and development of the Arabic language.

Arabic became the language of scholarship in science and philosophy in the 9th century when the 'translation movement' (Gutas 2005) saw concerted work on translations of Greek, Indian, Persian and Chinese, medical, philosophical and scientific texts. This,

in turn, led to the translation of the Arabic sciences into Latin from the 12th century onwards, in Europe. In addition to this, the connection of Arabic with Islam led to a growing movement of Arabic and qur'anic 'Oriental' studies in European institutions of learning, starting in the 17th century, which later reached America.

Wherever Islam went it took Arabic with it, to a greater or lesser extent. When in some cases Islam receded, as from Southern Europe, Arabic receded with it. In Persia, Arabic became dominant as the written language for two or three centuries until Persian was reintroduced as the official language under the Samanids (951–1174) – in fact what we know as 'Persian' today was born from the introduction of Arabic qur'anic terms into Middle Persian (prevalent during the Sassanid period up to the 7th century). During the first few centuries following the conquest of Persia, Muslim scholars from Persia and Central Asia played a major role in the exposition of Arabic grammar, writing numerous works in nearly every field in Arabic and continuing to do so even after Persian became the literary and scholarly language of the eastern regions of the Islamic world. Moreover, it was mostly these scholars, masters of qur'anic Arabic, who introduced so many words and expressions from the Qur'an into Persian. And it was primarily through Persian that Arabic words penetrated into languages of the Indian Subcontinent such as Sindhi, Punjabi, Gujarati, Bengali and Urdu, not to mention Iranian languages such as Kurdish and Pashtun. Even here it was the influence of Islam that maintained the use of Arabic in important areas of Persian language and culture.

Non-Arab Muslims have also made remarkable contributions to the development of Arabic calligraphy, art and architecture and these arts helped to perpetuate the use of Arabic in non-Arab Muslim countries, as can be seen in mosques everywhere. The Arabic script was adopted for many languages within the Islamic world, for example Persian and later Urdu, Punjabi, Turkish, Hausa and Swahili, Malay and Indonesian. Under European influence, Turkey switched to Roman script in 1928, as have other countries including Malaya and Indonesia, but the Arabic language and script has continued to be used for religious studies. In the central lands of the Muslim world, it was Islam that preserved Arabic in the face of European influence: in Egypt, for instance, attempts to replace Arabic with English in school education did not succeed, neither did attempts to replace the Arabic script with Roman letters, nor even those to replace literary Arabic with colloquial dialect, all because of the need to protect of the Qur'an and the Islamic heritage in Arabic.

2. The Qur'an in translation

After receiving the message, the Prophet Muḥammad was naturally preoccupied with conveying it to the Arabs. However, shortly before his death in 622 CE he sent letters in Arabic to rulers of countries neighbouring Arabia (Byzantium, Persia, Egypt and Ethiopia) inviting them to Islam. These letters contained one or two qur'anic verses and it was understood that they would be translated into the language of the recipients. Soon after, the death of the Prophet and with the expansion of the Arab conquests, Islam was carried beyond Arabia at a remarkable speed by the Muslim Arabs, and the various peoples in the conquered lands began, gradually no doubt, to accept the new faith. Becoming a Muslim in itself does not require knowledge of the Qur'an or Arabic,

but it is a requirement of the five daily prayers to recite the first short chapter of the Qur'an (*al-Fātiḥa*) and the question of reading the *Fātiḥa* in prayer was soon to be discussed by the early jurists: Abū Ḥanīfa (b. 81 AH/700 CE), who descended from a Persian family, is reported to have said that Persian Muslims who could not read Arabic could read the *Fātiḥa* in their own language. It is reported that two of his jurist colleagues differed from his view and that eventually he himself came to agree with them. Abū Ḥanīfa and the Ḥanafī scholars (see OIC 1986, 12) who later adopted his view on the permissibility of translation rely for evidence on the Prophet's letters to foreign leaders and on the fact that the Qur'an speaks of its message as being in the earlier scriptures (Qur'an 26:196; 87:18–9), which, they argue, means that Arabic is not an inseparable part of its meaning. The qur'anic verse, 'God does not burden any soul with more than it can bear' (2:86) was also invoked. However aṣ-Ṣāfi'ī (d. 204 AH/820 CE), a Qurayshi Arab, rejected this view, saying that if a Muslim could not read the *Fātiḥa* in Arabic, he should merely glorify God in his own language since the Qur'an was revealed in Arabic, and it was inimitable in Arabic, and if it were translated into any other language, this inimitability would cease (Kāsānī 1910, 112). Mālikī, Ḥanbalī and Zāhirī scholars also held the view that reading translations of the Qur'an in the prayer is inadmissible (see OIC 1986, 14–19). The flexibility and desire to make things easy shown by the Prophet in allowing Arab tribes to read the Qur'an according to their own local pronunciation was clearly not followed by the majority of jurists; in fact they made things difficult. However, although they would not allow translation of the Qur'an *per se*, they allowed the use of translation in the sense of interpreting the meaning or *tafsīr* (qur'anic exegesis) outside the prayer in order to make it easier for people to understand the Qur'an.

The fact that Muslims consider the Qur'an to be the word of God, revealed in Arabic in a style seen from the beginning to be of surpassing quality determined the course of the Arabic language in its connection with Islam. Non-Arab Muslim scholars played a major role in codifying the grammar of the Arabic language, the science of rhetoric and indeed the interpretation of the Qur'an, and it was these people who, no less than the Arabs, vehemently defended the eloquence of the Qur'an and insisted that it could not be translated. Al-Gāḥiẓ (d. 255 AH/869 CE), for example, considered that excellence in poetry was confined to the genius of the Arabs and Arabic-speakers, and that Arabic poetry could not be translated, let alone the Qur'an, which was more difficult and hazardous to translate. The Iḥwān aṣ-Ṣafā, a group of Arab and non-Arab philosophers, theologians and intellectuals who flourished in Basra in the 4th/10th century, again said (1928, 153–71) that no one from any nation, with all their various languages, could translate the Qur'an from Arabic into any other language; the stylistic features of the Qur'an were regarded as being too complex and elusive. The awe in which the eloquence of Qur'an is held has continued to be a crucial factor in the issue of its translation.

Although scholars have held that the Qur'an is untranslatable, whether on the basis that it is the word of God, because it stresses that it is an 'Arabic *qur'an*', or because of the rich stylistic features of the qur'anic language, they were aware that the message of Islam had to be communicated to non-Arabs. This was done orally in the first instance. For example, al-Gāḥiẓ reports that a specific preacher of his time, who was equally eloquent in Arabic and Persian, would sit with Arabs on his right and Persians on his left and first read the verse in Arabic, then explain its meaning for Arabs in

Arabic, and then turn to the Persians and explain its meaning for them in Persian. No one could determine in which language he was more eloquent (OIC 1986, 12). This oral method of explaining the Qur'an was reported in different parts of the Muslim world, in Africa and Asia.

As regards written translations, when the Sāmānid ruler of Persia, Maṣṣūr ibn Nūḥ (r. 961–76 CE) reinstated Persian as the national language, he decided on translating aṭ-Ṭabarī's *tafsīr* (exegesis). A forty-volume copy was brought from Baghdad and he commissioned a large number of scholars to make an abridged translation of about ten volumes into Persian, interwoven line by line with the Arabic text of the Qur'an, setting a tradition that has continued up to the present. Historical reports dating from the fifth and sixth Hijri centuries tell us that there were *tafsīr* translations in the languages of every non-Arab Muslim nation, and that this was the medium of communicating the Qur'an and its teachings. The Andalusian scholar, aṣ-Ṣāṭibī (d. 790/1388) states in his *Muwāfaqāt* (n.d. 64–8), that translation, in the sense of *tafsīr*, was used to make the text accessible to people just as *tafsīr* was used in the Arab lands to make the Qur'an accessible to the masses. Bilingual editions using the system of alternate lines can be seen in many old manuscripts and printed books from Asia, Africa and even Europe in the British Museum and elsewhere. The first printed Turkish translation was published in Istanbul in 1826, entitled *tafsīr al-qur'ān*. Printed translations followed in other Islamic languages, all of them being called *tarğama tafsīriyya* (explanatory translations) and following a format according to which the Arabic texts were printed in a larger font than the *tarğama tafsīriyya*, which were on alternate lines. Even nowadays, in the mosques of London there are copies of the Qur'an printed in Pakistan in the same fashion, with lines in Urdu alternating with the Arabic – although more recently the convention has been to follow the format of facing pages in the two languages, or presenting them in parallel columns, or with the translation surrounding the Arabic text.

Many Muslim countries now insist on Arabic being included with any translation before they allow copies to be circulated for sale: having Arabic in the bilingual editions provides the reference against which any translation is checked and guards the Qur'an itself from adulteration. The fact that it is the Arabic Qur'an that is considered by the faithful to be the word of God, not any translation makes Muslims throughout the world keen to learn at least some of the scripture in Arabic, and it is not unusual for non-native speakers to memorize the whole Qur'an in Arabic, or at least a large amount of it. Since the 20th century there have been international Qur'an recitation competitions held in Malaysia, Indonesia and Iran, to name but a few, in which the Qur'an is recited from memory. In addition to the *Fātiḥa*, which it is obligatory to recite in Arabic, Muslims all over the world perform the rest of their daily prayers (*ṣalāh*) in Arabic, in imitation of the Prophet's example and in keeping with unbroken tradition, even though no jurist seems to have insisted that all the prayer should be in Arabic. This acts as a unifying factor: if a group of ten Muslims come together from differing linguistic backgrounds, sharing no common language, they can all pray together, and any of them is eligible to lead the prayer.

There is one other area in Islamic culture where Qur'anic Arabic is retained - calligraphy. Verses from the Qur'an form the main theme of calligraphy used to adorn mosques and other religious buildings, as well as being used on decorative items to hang in homes and offices. These bring the Qur'anic statements to the attention of

Muslims in many situations: on entering a court of justice, in the parliament, on a marriage certificate, on drinking cups, on lorries, at the airport, as well as in many mosques and schools. Such calligraphic works, written in Arabic and drawn from the Qur'an, keep Arabic visible, beautiful and related to the divine text of the Qur'an. It is the Qur'an that gives the Arabic language this unique position and makes Muslims return to it again and again.

3. The Arabic language and the message of the Qur'an

The effect of the insistence of retaining the Qur'an in Arabic on the communication of its message to non-Arabic speakers is actually not as one might at first expect. Communication is achieved through *tafsīr* of the Qur'an and through the *ḥadīth* (the traditions of the Prophet Muhammad), which confirm what is in the Qur'an, explaining or adding *information* in a way that does not contradict the Qur'an. The corpus of *ḥadīth* literature is much larger than the text of the Qur'an, and is used extensively in *fiqh* (Islamic law) which relies much more on the *ḥadīth* than the Qur'an. It is very striking that with all the discussions that have raged for centuries on the admissibility or possibility of the translation of the Qur'an, no such discussion took place about the *ḥadīth*, the *tafsīr*, the biography of the Prophet (*sīra*), or Islamic history. The great works in Arabic on all these subjects have been translated into other languages and become part of the cultures of Muslims in all their localities. Communication is also achieved by the practice of preaching in mosques and elsewhere in local languages. In Britain's mosques for example, it is true that a sermon is given in Arabic, but additional sermons are given in other languages. *Du'ā'* (supplications) have a special position too. The Prophet left many such *du'ā'* which are regularly repeated and some of which are also learned in Arabic by many non-Arabic native speakers. When one English convert was asked why she made *du'ā'* in Arabic rather than in English, she said, 'The Arabic words are like a magic formula for me, spoken as they were by the Prophet, and nothing can substitute for them, even the translations of these *du'ā'* which are available in the *ḥadīth*.'

For the masses, translation or *tafsīr* is enough, but in every Muslim country there are specialists who are well versed in Arabic. Indeed all advanced studies on the Qur'an are undertaken in Arabic or with the Arabic very much in mind. It is also of crucial importance that the founders of all schools of Islamic law and the authors of the authoritative texts were Arabs who wrote in Arabic. The same applies to the founding figures in Islamic theology and Sufism. Because of this, advanced students and scholars in these subjects must know Arabic to access the sources. When they write in their own languages the Arabic and religious terms and phraseology are retained and thereby familiarity with these is passed on. In Islamic law, for instance, this is seen in everything to do with the 'Pillars of Islam', in sales and Islamic finance, in the laws of personal status, food, drink and clothing, in procedural law and to a certain extent in criminal law and international relations. The Arabic script is still used by speakers of Persian and Urdu (as it used to be by speakers of Malay and Turkish), so those literate in these languages are able to read the Arabic for themselves. Others are now helped by the inclusion, in some translations, of transliteration in Roman script. This is much

sought after and welcomed by many who feel the need to pronounce the Arabic words even if they do not know their meaning, and consider doing so to be a blessing (*baraka*). Many also make special efforts and take courses to enable them to learn to read and recite the Arabic properly.

Communication of the message of the Qur'an is thus achieved by translation, just as it is by the translations of the Bible. As we have seen, translations of the Qur'an into Muslim languages have existed for centuries in the form of *tafsir*, and were certainly found adequate in terms of their communication of the message of the Qur'an. These 'explanatory translations' or 'translations of the meaning' are actually what westerners understand to be simply translations. Indeed, it may be better to aim for an explanatory translation of the meaning. The oddities seen in many English translations, for example, result from excessive literalism and adherence to the syntactical and stylistic peculiarities of the Arabic language and the language of the Qur'an, which is very concise, idiomatic, figurative and elliptical, and the complexity of which does not lend itself to direct translation.

4. Conclusion

Thanks to Islam, today Arabic is the language of nearly 300 million people. Thanks to Islam, in the course of history it became a language of a civilization that produced a rich heritage of knowledge, wisdom and culture. It is used for religious purposes by an estimated 1.5 billion Muslims all over the world. Nor did the insistence on Arabic for the Qur'an and the Muslim daily prayers hinder the spread of Islam or the conveyance of its message. Muslims all over the world cherish Arabic as the language of Islam.

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47. Middle Arabic

1. Preliminary remarks
2. Middle Arabic throughout history
3. References

Abstract

The term Middle Arabic refers to forms of Arabic that are intermediate between the two poles of the diglossia standard Classical Arabic and spoken vernacular Arabic. Such a diglossia has existed throughout the history of Arabic and Middle Arabic is attested from the early Islamic period until modern times. Middle Arabic texts exhibit much variety in the degree to which Classical Arabic features are mixed with those of the vernacular. The target of the writers of such texts is not necessarily Classical Arabic, but rather a mixed form of language consisting of vernacular combined with Classical Arabic elements. This type of mixed language develops into a literary standard in its own right. Middle Arabic is a characteristic of texts written by non-Muslims, but is also found in certain types of texts written by Muslims. Modern formal Arabic speech in the modern period is often a mixed form of language and so can be included in the category of Middle Arabic.

1. Preliminary Remarks

The term Middle Arabic is used to refer to forms of Arabic that are intermediate between the standard of Classical Arabic and spoken vernacular Arabic. These constitute the two poles of a diglossia. Such a diglossia has existed throughout the history of Arabic and examples of Middle Arabic can be found from the early Islamic period down to the present day. The term, therefore, does not refer to a chronologically intermediate period, between the early and the modern, as is the case with terms such as

Middle English or Middle German, but rather is a sociolinguistic phenomenon of all periods relating to diglossia. Some scholars for this reason prefer to designate this type of Arabic as 'mixed Arabic'. Most previous research on Middle Arabic has concentrated on the language of written texts (for detailed bibliographical surveys of the field see Blau (1981) and Lentin (2008a)). Recently, however, there is a tendency to include within the term modern formal spoken Arabic that exhibits a mixture of standard and vernacular features (Lentin/Grand'Henry 2008).

Middle Arabic texts are characterised by a mixture of classical and vernacular elements in phonology, morphology, syntax and lexicon. The relative degree of mixture of these sets of elements varies considerably across the manifold manifestations of Middle Arabic, which has led Hary to refer to the language situation in question as 'multiglossia' (Hary 1992). The degree of mixture depends ultimately on individual writers, but certain factors can be identified that condition the occurrence of a higher proportion of vernacular elements.

The religious community of the writer has some bearing on the language of the writer. Although some Middle Arabic texts were produced by Muslim authors, in general Middle Arabic is a more common phenomenon among Jewish and Christian writers. This is generally explained as due to the fact that in principle Jews and Christians would have been less likely to have received training in writing Classical Arabic and would not have regarded it as so prestigious.

The genre of the text and its intended audience was a determining factor. Among the texts written by Muslims, for example, texts such as private documents, popular stories, historiography and memoirs were more likely to exhibit features of Middle Arabic than literature of a high style. Similar differences are found among Jewish and Christian texts according to genre. The same writer may use different types of Arabic according to the genre. 'Usāma ibn Munqid̲, for example, wrote his memoirs in Middle Arabic with numerous vernacular elements, whereas his works on literature were written in Classical Arabic (Nöldeke 1887; Schen 1972). The Jewish scholar Maimonides used a form of Middle Arabic exhibiting a greater degree of vernacular elements in his letters addressed to private individuals than in his scholarly texts, which were intended for an educated readership.

The period in which the texts were written was also a factor. Although there was variation in the admixture of vernacular elements in all periods according to the aforementioned factors, there was a general tendency for the vernacular elements to be more numerous in later texts. This may be correlated broadly with the diminishing status of Classical Arabic. A particularly clear watershed was the beginning of the Ottoman period, in which Turkish became the language of administration in the Middle East. During this period forms of Middle Arabic with high degrees of vernacular elements came into use. The prestige of Classical Arabic had begun to dwindle already in the late Middle Ages, especially after the destruction of Baghdad by the Mongols in 1258 and this is reflected in a general diminution of Classical Arabic elements in Middle Arabic texts.

One should also take into account that the degree to which texts exhibit Middle Arabic features may vary in the course of scribal transmission, in that scribes may either introduce Middle Arabic elements or correct the language of a text to make it conform closer to Classical Arabic. As a result, the linguistic profile of a single work sometimes differs among the manuscripts.

The region in which a text was written is a further factor. Arabic texts written by Jews in peripheral areas such as Yemen and the Maghreb tend to be more conservative of Classical Arabic elements at later periods (Wagner 2010).

Middle Arabic results in the process whereby the writer or speaker aims at a ‘higher’ form of language than the vernacular but does not uniformly produce the higher form. This tension between the poles of the diglossia is liable to produce not only a mixture of Classical and vernacular elements but also what Blau refers to as pseudo-corrections or pseudo-literary features (Blau 1999a, 28–31; Blau 1970). Blau classifies these into hypercorrections and hypocorrections. A hypercorrection is where the writer/speaker uses a Classical Arabic form in place of a vernacular form in a context where it is not required. Classical Arabic, for example, distinguishes between moods in the plural imperfect (*yaktubūna* indicative vs. *yaktubū* subjunctive/jussive) whereas these have been levelled in vernaculars, in most cases to *yaktubū* for all contexts. If a writer/speaker uses the Classical *-ūna* inflection in a context where even in Classical Arabic *-ū* is required, a hypercorrect form results, e.g. *lam yaktubūna* ‘they did not write’ (Classical Arabic *lam yaktubū*). A hypocorrection is where the writer/speaker attempts to correct a vernacular form but falls short and produces a hybrid form that is not correct in either Classical Arabic or the vernacular. Blau (1999a, 29) cites the example of the form *bāqiyūn* ‘remaining (mpl.)’ which is a hypocorrection of the vernacular form *bāqiyīn*. The form *bāqiyūn* contains the Classical Arabic nominative nominal ending *-ūn* in place of the vernacular ending *-īn*, which has been levelled in all syntactic contexts. The true Classical Arabic form, however, would have been *bāqūn*, with elision of the *yāʾ*, so the form *bāqiyūn* is a hybrid that is only partially correct. Both of these types of phenomena have arisen by the process of substituting a vernacular morpheme with a Classical Arabic morpheme but retaining the syntactic distribution (hypercorrection) or morphological base (hypocorrection) of the vernacular. A lexical restriction is generally operative in this process, in that classicizing morphology tends to be avoided in lexical items that are characteristic of the vernacular (Holes 2008, 210; Mejdell 2008, 362). Such pseudo-literary features can be regarded as forms of literal ‘translation’ of dialect into Classical Arabic (Lentin 1997, 296). It is, indeed, significant to note that similar phenomena appear in literal Arabic translations from another language. In early Judaeo-Arabic Bible translations, for example, the invariable Hebrew relative particle *ʾāšer* is translated by the masculine singular form *ʾallaḏī* irrespective of the syntactic context. This is analogous to the levelled distribution of this particle in many Middle Arabic text by means of a direct substitution of the invariable dialect form of the particle. In such Bible translations the compound Hebrew conjunction *ka-ʾāšer* ‘when’ is translated morpheme by morpheme *ka-llaḏī*, which is a hybrid form that is non-existent in Classical Arabic (Vollandt 2012). Some lexical features of literal translations, in fact, came to be used productively in freely composed Middle Arabic texts (Blau 2008).

A further pseudo-literary feature is where vernacular morphology is used with Classical Arabic syntax. This can be illustrated by examining briefly the syntax of the demonstrative pronouns in Judaeo-Arabic texts from 17th and 18th century Egypt. These texts generally use the typically Egyptian forms of the demonstrative *dā*, *dī*, *dōl*, but they are regularly placed before the noun, rather than after the noun as in the modern Egyptian dialect. In the modern dialect the demonstrative occurs before the noun in a few fossilized expressions, e.g. *dilwaʿti* ‘now’, *ya delḵeba* ‘What a pity!’, which

may suggest that the Judaeo-Arabic texts in question preserve an earlier stage in the development of the syntax in the dialect. In fact the placement of the Egyptian demonstratives after the noun is attested already in medieval Judaeo-Arabic texts. Their occurrence before the noun in the 17th and 18th century texts appears to be a pseudo-literary feature whereby Classical Arabic syntax is used with vernacular morphological forms of the pronouns. This and the presence of the other pseudo-literary features of the types described above mean that one has to be cautious of using Middle Arabic texts as a source for the reconstruction of the history of Arabic dialects. Although there clearly was considerable impact of vernacular Arabic, one must always take into account that features deviating from Classical Arabic could be pseudo-literary features rather than direct reflections of dialectal forms.

When a writer/speaker aims at producing a higher form of language than the vernacular, the target is not necessarily pure Classical Arabic. It may be the case that in some Middle Arabic texts that only exhibit isolated vernacular features a writer has indeed aimed at producing pure Classical Arabic, or at least the developed form of the standard language designated by Fischer (Fischer 1972) as post-Classical Arabic, and has fallen short due to some vernacular interference. In many cases, however, this is unlikely to be the aim of the writer. This is particularly clear with regard to Middle Arabic texts from the Ottoman period with a high proportion of vernacular features. In such texts the target of the writers is clearly not Classical Arabic but rather a lower form consisting of a large proportion of vernacular elements. In such texts the presence of vernacular elements are intentional and are not the result of unplanned interference. Similarly pseudo-literary features in these texts, which, as remarked, are often difficult to distinguish from genuine vernacular features, are not spontaneous failed attempts to 'correct' the language, but rather are planned, fixed elements of the level of the language that the writer is targeting. The Middle Arabic of such texts is not the direct result of a diglossic tension between the high standard of Classical Arabic and the low vernacular, but rather has itself become a standardized form of language. The purpose of targeting a lower level of language in Middle Arabic texts is generally to ensure a wider degree of comprehension, since access to a high variety would be restricted to those with a high level of education.

In some literary contexts vernacular elements are used to achieve an emotional effect on the audience, as is the case in certain types of poetry, such as the *muwaššahah* and *zajal*, or in direct speech in narratives. Such texts containing mixed Classical Arabic and vernacular features are not considered by all scholars as Middle Arabic.

Arabic that exhibits deviations from Classical Arabic due to the impact of the substrate of another language is generally not considered to be Middle Arabic. This applies to Arabic that has been influenced by the spoken language of the writer, such as the levelling of gender distinctions in 3rd person singular pronouns due to contact with Turkish (found, for example, in the texts published in Hinds/Sakkout 1986; Hinds/Ménage 1991), and Arabic in literal translations that imitate the structure of the source languages.

2. Middle Arabic throughout history

After these preliminary remarks regarding the general phenomenon of Middle Arabic and its characteristic features, we shall now survey in more detail the various manifestations of Middle Arabic at different historical periods.

Classical Arabic was a form of language that was standardized by the Arabic grammarians in the 8th and 9th centuries in the process of their description of the language of the Qurʾān, pre-Islamic poetry and early historical and legal traditions. It had not only a written but also an oral and living spoken dimension, in that the grammarians were drawing on oral traditions, including the various *qirāʾāt* of the Qurʾān, and the speech of the Bedouin, who were considered to be speakers of pure Arabic. By the tenth century the Bedouin were no longer regarded as reliable informants and the grammatical description of Classical Arabic became a fixed tradition, which has been passed down the generations as an educational standard up to modern times. Fischer (1972; 2006) classifies the language of the sources from the early Islamic period, including the language of the Qurʾān, as ‘pre-Classical’ or ‘pre-standardized Classical Arabic’, in that they exhibit some features that were not incorporated into the form of language standardized by the grammarians. Some of these features may have been eliminated in the transmission of the texts in the course of standardization, but some survived in the form of these texts that have come down to us, such as the assimilated forms of the 5th and 6th verbal forms in the Qurʾān, e.g. *yadḍakkaru* = *yataḍakkaru*.

Most scholars hold the view that in pre-Islamic Arabia there was already a diglossia consisting of some kind of standardized language used for the oral composition of poetry, often referred to as a ‘poetic koine’, alongside spoken vernacular Arabic (Zwettler 1978; Versteegh 2001, 46–51). At the time of the Islamic conquests various dialectal differences existed among the Arabic speaking tribes of the Arabian peninsula, details of some of which were recorded in the writings of the early grammarians. They largely consisted of differences in vocalic patterns internal to the word and the pronunciation of *hamza*, most of which would be invisible in unvocalized script. The phonological patterns standardized by the grammarians tended to conform to those of the so-called Eastern dialect group more than the Western (or Ḥijāzī) dialect group. Crucially there is no clear evidence for the loss of final short vowels or the levelling of inflectional endings that is one of the most distinctive features of the modern Arabic dialects. The aforementioned literary sources have mostly come down to us in manuscripts written after the period of standardization by the grammarians. Some forms of written Arabic of a documentary nature have, however, survived from the Umayyad period, before the activity of the grammarians. The most important of these are texts written on papyrus from Egypt. These documentary texts, the language of which has been described in detail by Hopkins (1984), can be regarded as our earliest examples of Middle Arabic in that they exhibit numerous deviations from what was to become Classical Arabic. Although the early papyri were written before the period of the grammarians, the form of their language was already constrained by a literary standard. The orthography of Arabic had already been fixed in Arabia at the time of the rise of Islam in the form that is preserved in the traditional spelling of the Qurʾān. This was based on the orthographic principles of Nabatean Aramaic and was developed originally to reflect the Western Ḥijāzī dialect of Arabic, which differed from the Eastern dialect group most conspicuously in the absence of *hamza* in word medial position. When standardizing the pronunciation of Classical Arabic, the grammarians adopted predominantly features of the Eastern Arabian dialects, including the presence of word medial *hamza*, but retained the traditional orthography. As a result the orthography does not correspond exactly to the standardized Classical Arabic pronunciation.

Furthermore, in addition to the heritage of the pre-Islamic literary koine, which was presumably oral in nature, the Arabs had a tradition of writing their language when

they arrived in the conquered territories at the beginning of the Islamic period. There is clear evidence, for example, that the Arabs had a tradition of writing legal documents in Arabia and that they brought this tradition with them to the conquered territories. There is reference to the writing of legal documents in the Qur'ān, e.g. *'idā tadāyantum bi-daynin 'ilā 'ajalin musamman fa-ktubūhu* 'If you take out a loan for a specific period of time, write it down' (2:282). The Arabic legal documents from the Umayyad period that have been discovered among the papyri in Egypt have a formulaic structure that is independent of the Byzantine tradition of Greek legal documents that existed in Egypt at the time of the Islamic conquest and it must have been brought to Egypt by the Arabs (Khan 1994a; Khan 1994b; Khan 2003). Finally at this period there was no doubt a standardizing impact of texts that were to form the basis of Classical Arabic, especially the language of the Qur'ān. Although pre-Islamic poetry and the Qur'ān may not seem *prima facie* to be appropriate models for mundane documents written in prose, it should be noted that such documents contain many formulae of a benedictory nature which have a closer relationship to the language of poetry and Scripture.

The writers of the early papyri, therefore, were targeting some kind of literary standard. This resembled in many respects what was to become Classical Arabic, but this was a pre-Classical standard. Some of the features of this differed from Classical Arabic, or at least it was not so uniformly fixed as Classical Arabic. Not all deviations from Classical Arabic in the texts, therefore, can necessarily be interpreted as falling short of the standard target. This applies, for example, to the numerous cases in the papyri where diacritical points written on a *yā'* reflect the loss of medial *hamza*, e.g. قَائِم *qāyim* (= Classical Arabic قائم *qā'im*) 'rising'. The medial *hamza* is a feature of the Eastern Arabian pronunciation that was later standardized by the grammarians, but this was not necessarily a standard feature in the Umayyad period.

As remarked, there was already dialectal variety in spoken Arabic among the tribes of pre-Islamic Arabia. It is general thought that spoken Arabic underwent considerable changes after the Islamic conquests, although the process and background of these changes are still not fully clear. The papyri reflect a number of deviations from Classical Arabic that are likely to be reflections of the spoken vernacular of the writer. Some of these are continuations of features known to exist in the pre-Islamic dialects, such as the omission of medial *hamza*. Others are features that are not directly attested in the pre-Islamic dialects but are characteristic of the modern spoken dialects.

On the level of phonology, for example, there is evidence of the merger of *qād* and *qā'*. In the papyri the letters alternate, reflecting the collapse of two sounds: واحفظ *wa-hfẓ* 'and keep!' (Classical Arabic واحفظ *wa-hfẓ*), فظله *faḍluhu* 'his bounty' (Classical Arabic فضله *faḍluhu*). The orthography, although conforming to some kind of standard, was not as fixed as it was in Classical Arabic and a certain amount of adaptation to pronunciation occurs. The orthography sometimes reflects, for example, the shortening of final long vowels, as is found in modern dialects, by the use of *tā' marbūṭa* in place of *'alif maqṣūra* and occasionally in place of *alif mamdūda*: أخرى *ukra* (Classical Arabic أخرى *ukrā*) 'other', الاربعة يوم *al-'arbi'a yawm* (= الاربعاء *al-'arbi'ā*) 'Wednesday'.

There are reflections of the levelling of case and mood inflection already in the Umayyad period. This is seen in the occasional spelling of the nominal plural and dual endings -ين (probably pronounced -*īn* and -*ēn*) with the function of both nominative and oblique, e.g. انا سالمين صالحين *innā sālimīn ṣāliḥīn* 'that we are well and in health'. *Tanwīn 'alif* is frequently omitted in all contexts, e.g. ان يجد عليك سبيل *an*

yajid ‘*alayka sabīl* (Classical Arabic *sabilan*) ‘that he should find a way against you’ (direct object), *كثير* *kaṭīr* (Classical Arabic *kaṭīran*) ‘much’ (adverbial). There is leveling of the distinction between indicative and jussive in middle and final weak verbs, e.g. *لم يكن* *lam yakūn* (Classical Arabic *lam yakun*) ‘he was not’, *لم يبني* *lam yabnī* (Classical Arabic *lam yabni*) ‘he did not build’. Imperatives are sometimes spelt with a final long vowel, e.g. *فاشترى* *fa-štārī* ‘so buy!’ (Classical Arabic *fa-štari*). The papyri contain several lexical items that are characteristic of modern spoken dialects and not Classical Arabic, e.g. *لش* *lēš* ‘why’, *التملي* *al-tamallī* ‘always’, *كويس* *kwayyis* ‘good’. The lexicon in general is restricted in scope when compared to the lexical abundance and diversity of Classical Arabic literary texts, which no doubt reflects that the writers were unfamiliar with many lexical items appearing in Classical Arabic source texts that did not occur in their vernacular. Already in the first half of the second century A.H., this motivated Qurʾān commentators to explain the meaning of many lexical items (Versteegh 2001, 59).

The papyri also contain pseudo-literary features, such as the use of the masculine singular form of the Classical Arabic relative pronoun *الذي* *allaḏī* in all syntactic contexts or the Classical Arabic nominal plural and dual endings *-ūna* and *-āni* in oblique syntactic contexts.

Many of these Middle Arabic features are found in documentary texts written by Muslims in later centuries, especially in letters addressed to private individuals. Documents of a public nature, especially those issued by the government chancery such as decrees and documents of appointment, were generally composed in Classical Arabic with a high literary style by trained secretaries. The language of various types of medieval Muslim non-documentary texts that were liable to contain Middle Arabic features, has received some scholarly treatment, such as popular stories (Fleischer 1885, iii; Wehr 1956), historiographical (Schen 1972) and scientific texts (Müller 1884). In some cases the Middle Arabic features of such texts have been edited out in the modern printed editions. This is the case, for example, with many of the early printed editions of the *Arabian Nights*. The original Middle Arabic features of the manuscripts, however, have been preserved in the edition by Muḥsin Maḥdī (Maḥdī 1984). In some cases vocalization in a manuscript for the purpose of recitation reflects a more vernacular profile than the orthography, as is the case, for example, in manuscripts of the *Alexander Romance* studied by Doufikar-Aerts (Doufikar-Aerts 2008).

The Middle Arabic texts from the medieval period that have received the most scholarly attention so far are those written by Christians and Jews.

The earliest known group of Christian Middle Arabic texts were produced by Melkites in South Palestine, which have been preserved mainly in St. Catharine’s Monastery in the Sinai in manuscripts datable to the ninth and tenth centuries. They are mostly translations from Greek and Syriac and many of the deviations from Classical Arabic usage are due to literal rendering of the source text. There are a few, however, that are original Arabic compositions and these reflect a range of Middle Arabic features in orthography and all levels of grammar (Blau 1966). Many of these features have parallels in the papyri, including the features described above. Indeed, a large number of such features are common to Middle Arabic of all periods.

A particularly important manuscript for the research of Christian Middle Arabic is a fragment of a bilingual Greek–Arabic translation of Psalm 77, in which the Arabic is written in Greek transcription. The fragment was discovered in the Umayyad

mosque in Damascus and was first published by Violet (1901). Most scholars have dated the manuscript to the 2nd/8th century, but a paleographical analysis of recently rediscovered photographs suggests a late 3rd/9th or early 4th/10th century date (Mavroudi 2008). Unlike the unvocalized manuscripts in Arabic script, the transcribed Arabic indicates the pronunciation of all the vowels. The transcription reflects many features of vernacular Arabic pronunciation, such as the merger of *dād* and *zā'* (both represented by Greek delta), the omission of final short vowels and the raising of vowels by the process known as *'imāla*, e.g. *faselet* (= Classical Arabic *fa-sālat*), *eleddi* (= Classical Arabic *'allaḏī*). The overall grammatical structure of the language of the text is, however, close to Classical Arabic. The scribe, moreover, has imitated the orthography of written Classical Arabic in some features of the transcription, most noticeably in the representation of the /l/ of the definite article by *lamda* in all contexts, including before 'sun letters', where it is assimilated in pronunciation, e.g. *elrab* (= Classical Arabic *الرّب*), *elnar* (= Classical Arabic *النّار*). The vowel of *hamzat al-waṣl* is retained in transcription, e.g. *fa.ankalebu* (= Classical Arabic *fa-nqalabū* 'and they turned back'). This raises the possibility that Middle Arabic texts written in unvocalized Arabic script conform more to the Classical Arabic standard externally in their written orthography than in the way they were pronounced when read, which is likely to have been considered to be in lesser need to conform with the Classical Arabic standard. An Arabic text datable to the 13th century transcribed into Coptic letters exhibits many of the traits of the Greek transcription of the Violet fragment. It reflects clear traces of vernacular pronunciation such as *'imāla*, but the syntax and a large part of the morphology are Classical Arabic (Blau 1979).

Apart from these isolated cases of transcribed texts, Christian Arabic was in principle written in Arabic script until the late Middle Ages. By the 14th century Christians began to write Arabic in Syriac letters and this type of Arabic, known as Garshūnī, became common in the Ottoman period. It was used by various Christian denominations, including Maronite, Melkites, Jacobites, Nestorians and Chaldaeans. Studies of such texts have revealed a range of the familiar Middle Arabic features. Many Garshūnī works are translations of Syriac and exhibit grammatical features that may have arisen under the influence of the Syriac Vorlage, e.g. the ending *-ūn* in the plural of the imperative and perfect (Kallas 2008, 254).

Christian Arabic texts of all periods frequently contain Arabicized forms of lexical elements borrowed from the literary languages of Christian Scripture, such as Greek and Syriac, or from a substrate spoken language, such as Neo-Aramaic (Kallas 2008, 254) or Coptic (den Heijer 2008, 138).

The use of different scripts to write Arabic reflected a distancing from the standard of Classical Arabic and so can in itself be regarded as a Middle Arabic feature. It resulted in the fact that such Arabic texts became accessible only to the group who wrote them. It is significant that this distancing increased at later periods. In principle the various scripts in question were associated with the language of the sacred texts of the community, which created divisions among the religious communities with regard to the way they wrote Arabic. The use of a different script did not necessarily reflect the fact that the writer was unable to write in Arabic script, but rather reflected that the writer's target audience was his own religious community. When non-Muslims wrote for a Muslim audience they wrote in Arabic script.

The form of non-Muslim Middle Arabic written by Jews, known as Judaeo-Arabic, has been investigated particularly thoroughly in its various manifestations in the Mid-

dle Ages (Blau 1980; 1999a; 2006) and later periods (Hary 1992; 2009; Khan 1991; 1992a; 2006). A description of its diachronic development serves as a representative case study of the various shifting linguistic and socio-linguistic trends in Middle Arabic across time.

The Arabic language was used by Jews in Arabia before the rise of Islam. Some of the pre-Islamic Arabic poets were Jewish, the most famous of whom was al-Samaw'al ibn 'Ādiyā'. The surviving written works of such Jewish poets do not exhibit anything that distinguishes them from the equivalent works of their non-Jewish contemporaries. In the regions conquered by the Arabs during the Islamic conquests the Jewish communities spoke a variety of languages. In the main centres of Jewish authority and learning in Iraq and the Levant Aramaic was their vernacular language. These communities were gradually arabicized. Although the Jews of the urban centres in Iraq appear to have become Arabic-speaking by the 8th century C.E., there is evidence that the Jews in the countryside continued to speak Aramaic at least until the 10th century. Some Jewish communities living in the isolated mountainous areas of Northern Iraq never fully adopted Arabic as a vernacular, and continued to speak Aramaic down to modern times.

During the first three centuries of the Islamic period, the Jews in the Near East used the traditional Rabbinic languages of Hebrew and Aramaic as their written language. The earliest surviving records of Judaeo-Arabic are datable to the 8th or 9th century C.E. They were written in Hebrew script, which became one of the most conspicuous distinctive features of written Judaeo-Arabic. Thereafter Arabic in Hebrew script continued to be used by Jews in Arabic-speaking lands throughout the Middle Ages down to modern times. It is significant to note that some early Judaeo-Arabic texts reflect the influence of vernacular Aramaic (Blau 1999b; Blau/Hopkins 2006), which suggests that Arabic was adopted as a written language when Aramaic was still alive as a vernacular.

Judaeo-Arabic is generally categorized into three chronological periods, which correspond to three major phases in its linguistic development, viz. Early Judaeo-Arabic, Classical Judaeo-Arabic, and Late Judaeo-Arabic.

The term 'Early Judaeo-Arabic' is used to refer to Judaeo-Arabic that was written before the 10th century. This material has come to light only in the last few decades. It consists of private documents on papyrus and some manuscript fragments of literary texts. These texts are datable to at least the 9th century and some possibly earlier.

The period of 'Classical Judaeo-Arabic' began in the 10th century. During this period, Judaeo-Arabic was used in a very wide range of texts. Many of the traditional texts of Judaism were translated into Judaeo-Arabic, including first and foremost the Hebrew Bible, but also other texts such as the Mishnah, Talmud, Midrashim and liturgy. Many new genres of Arabic text were adopted by the Jews from the Muslim cultural environment and adapted to Judaism. This reflected a close rapprochement between the Jews and Muslim culture in the High Middle Ages (approximately 10th–13th centuries C.E.). The 10th century, moreover, was a period when there was a major increase in the use of written books for the transmission of knowledge in the Islamic world in general. Hebrew was still used as a learned language by some Jewish intellectuals, such as the Geonim. It was also used by the leading Jewish poets in the Middle Ages, but many popular verses and songs were composed by Jews in Judaeo-Arabic. During this period the Samaritans began to write Arabic in Samaritan script (Ben-Hayyim 1957, lxxiv–lxxviii).

In the Late Judaeo-Arabic period the range of texts written in Judaeo-Arabic became more restricted and included mainly Bible translations, popular stories and private documents. The printing press gave an impetus to new genres of Late Judaeo-Arabic. In the nineteenth century, for example, Judaeo-Arabic newspapers were produced in several Arabic speaking Jewish communities. Avishur (Avishur 1986, 3) has proposed that the beginning of the Late Judaeo-Arabic period in Iraq should be located in the 13th or 14th centuries after the devastations of the Mongol invasions. In the Jewish communities of Yemen, Classical Judaeo-Arabic texts continued to be copied and read down to modern times and the division between Classical and Late periods of Judaeo-Arabic is not so appropriate.

One of the main distinctive linguistic features of Early Judaeo-Arabic is the orthography with which the Arabic is represented. It is a phonetic spelling representing the way the writers pronounced the language based on the orthographic practices used for Rabbinic Hebrew and Aramaic rather than those of Classical Arabic in Arabic script. This is particularly noticeable in the use of vowel letters, e.g. the defective spelling of long /ā/ (סלם = سلام *salām* 'greeting', עפיה = عافية *āfiyah* 'health') and the plene spelling of short /i/ and /u/ (אלחכמה = الحكمة *al-ḥikmah* 'wisdom'; אילא = إلى *ilā* 'to'; תהרוב = تهرب *tahrub* 'you flee'). The letters *qād* and *zā*, which had no direct equivalent in the Hebrew consonantal inventory, were represented by the letter *dalet*, the nearest phonetic equivalent, e.g. יקבדוה = يقبضه *yaqbiḍuh* 'He will receive it', עדרה = عذرة *izrah* 'admonition'. The *lām* of the definite article was not represented when it was assimilated to the following letter, e.g. אסלם = السلام *al-salām* 'the greeting'. *Tā' marbūṭa* was represented by *taw* when it was pronounced /t/ in a word in an annexation construction, e.g. עיזת אלחיהא = عظة الحياة *izāt al-ḥayāh* 'the admonition of life'. Examples are from Blau (2002, 136–154). The phonetic spelling in the early texts reveals various features of vernacular Arabic pronunciation. The reflections of *'imāla* in the texts are important for tracing the history of this phenomenon. Hopkins (Hopkins 2005) has shown that the orthography reflects an Umlaut type of *'imāla* such as is found in the modern *qaltu* dialects, whereby *ā* is raised by a process of vowel harmony in the environment of a high vowel, e.g. גיהל *jēhil* 'ignorant' (Classical Arabic *jāhil*).

In Classical Judaeo-Arabic, which was used in most Arabic speaking Jewish communities from the 10th to approximately the 15th centuries, the spelling that was used was made to correspond to the orthographic conventions of Classical Arabic. Long vowels were regularly represented by vowel letters whereas short vowels were spelt defectively without vowel letters, e.g. סלם = سلام *salām* 'greeting', אלחכמה = الحكمة *al-ḥikmah* 'wisdom'; תהרוב = تهرب *tahrub* 'you flee'. Long /ā/ was generally spelt defectively in the small set of words where this was the norm in Classical Arabic orthography, e.g. דלך = ذلك *dālika* 'that'. Final long /ā/ was represented by *yod* where Classical Arabic orthography had *'alif maqṣūra* spelt with *yā*, e.g. אילא = إلى *ilā* 'to'. The *lām* of the definite article was regularly represented, including where it was assimilated to the following consonant, e.g. אסלם = السلام *al-salām* [pronounced *assalām*] 'the greeting'. *Tā' marbūṭa* was represented by *heh* in all contexts, including when pronounced /t/ in annexation constructions, e.g. מערפה אלברהאן = معرفة البرهان *ma'rifat al-burhān* 'knowledge of the proof'. The Arabic letters *qād* and *zā* were represented respectively by *ṣade* and *ṣet* with a superscribed dot in imitation of the Arabic alphabet, e.g. יקבדזה = يقبضه *yaqbiḍuh* 'He will receive it', עזזה = عظة *izā* 'admonition'. The Arabic alphabet was not, however, imitated where the sound existed in Hebrew. The Arabic letters *kā*

and *ḡayn*, for example, were represented by Hebrew *kaf* and *gimel*, often with diacritical marks (כּ, גּ) rather than *het* and *ʿayin* with diacritical marks. This is because the pronunciation of the fricative allophones of the Hebrew letters *kaf* and *gimel* corresponded to that of the Arabic letters in question.

The degree of vernacular interference in the language of Classical Judaeo-Arabic texts is disguised somewhat by the orthography of the texts, which did not in principle indicate deviations from the Classical Arabic relating to vowels and syllable structure. Several extant manuscripts datable to the medieval period that are supplied with Hebrew vocalization signs reveal numerous dialectal features that are not apparent in unvocalized texts (Khan 2010). Unless otherwise indicated the following examples are taken from the Genizah manuscript T-S Ar. 8.3: **וְאָנָא עֲבָדְךָ** *wa-ʿana ʿabdak* ‘and I am your servant’ (invariable 2ms. pronominal suffix *-ak*); **עָלֵי עֲבָדְךָ** *alē ʿibēdak* ‘over your servants’ (invariable 2ms. pronominal suffix *-ak* and *ʿimāla* of long */ā/* vowels); **וּבְעֵד מוֹתָהּ** *wa-baʿad mawtu* ‘and after his death’ (invariable 3ms. pronominal suffix *-u*); **חַטֵּי יִפְתָּח עֵינָהּ** *hattē yiftaḥ ʿaynu* ‘until he opens his eye’ (*/i/* in verbal prefix, lack of verbal mood ending, invariable 3ms. pronominal suffix *-u*); **יִנְתַּזֵּר** *yintizir* ‘he waits’ (*/i/* vowels in prefix and verbal base). Even some unambiguously Classical Arabic morphological elements are given a non-standard vocalization, e.g. **אִלְלָדִי** (*ʿillaḏī* = Classical Arabic *ʿalladī*) (Levy 1936, 18). Some of these dialectal features are visible in the orthography of the Early Judaeo-Arabic texts, which indicated some of the short vowels by vowel letters and was, in general, more phonetically based than the orthography of Classical Judaeo-Arabic. As remarked above with regard to the Greek transcription, the fact that the texts conform more to the Classical Arabic standard externally in their written orthography than in the way they were pronounced when read indicates that a lesser need was felt for the pronunciation to conform with the Classical Arabic standard. There is evidence, however, that the reading of the texts reflected by the vocalization signs had as its target a pronunciation that was higher than pure vernacular. This is indicated by the existence of a number of features in the vocalization that appear to be pseudo-corrections. A recurrent feature, for example, is the pronunciation of *hamzat al-waṣl* and the retention of the vowel in an initial syllable after a word ending in a vowel. This vowel is elided not only in dialectal Arabic but also in the standard reading of Classical Arabic, e.g. **פִּי אֶלְחִקְמִיה** *fī ʿal-ḥikmih* ‘in wisdom’ (T-S Ar. 53.12 1v = CA *fī lhikmati*). Another phenomenon that may be considered a pseudo-classical feature is the occurrence of an */a/* vowel in a number of contexts where Classical Arabic has an */i/* without there being any clear dialectal background for the */a/*. It appears that the scribe is aware that Classical Arabic has */a/* in many situations where vernacular dialects have */i/* and in his attempt to give the language an appearance of Classical Arabic substitutes */a/* for */i/* by hypercorrection even where */i/* is the norm in Classical Arabic, e.g. **קֵד אִנְכַּסָּר קַלְבִּי** *qad ʿankasar qalbī* ‘my heart has been broken’ (T-S Ar. 8.3 f.ol. 16v = Classical Arabic *qad inkasara qalbī*). Both of these features are found also in the Greek transcription published by Violet, e.g. *fa.ankalebu* (= Classical Arabic *fa-nqalabū* ‘and they turned back’), which suggests that certain pseudo-correct features of pronunciation had become standardized in the reading of Middle Arabic at this period. Another possibility is that these are not pseudo-corrections that arose in the Middle Ages as a result of an imperfect knowledge of the Classical Arabic standard, but rather vestiges of earlier pre-classical standards of reading Arabic. The pronunciation of the *hamzat al-waṣl*, for example, may be related to the earlier Ḥijāzī

type of pronunciation. This is reflected in the representation of this type of *hamza* by 'alif in the traditional orthography, which, as remarked, is Ḥijāzī in origin.

The unvocalized orthography of Classical Judaeo-Arabic could be read with a variety of different vernacular vocalisms and so many of the regional dialectal differences of the writers were not manifested in the texts. This facilitated its use as a literary koine language across all Arabic speaking Jewish communities. Despite the standardizing tendencies of the orthography, however, some dialectal phonetic processes are occasionally exhibited by the spelling of words in Classical Judaeo-Arabic texts. These relate mainly to changes in syllable structure and the shortening of long vowels. A prosthetic 'aleph, for example, indicates the elision of a short vowel in the following syllable, as in אדראָהם = *idrāhim* = دراهم 'dirhams' and the spelling of the perfect of the 5th and 6th verbal forms אַתפּעל 'itfa'al and אַתפּאַעל 'itfā'al respectively. The shortening of a long vowel in an unstressed syllable is reflected by the occasional omission of a vowel letter, as in אלדנניר *al-dananīr* = الدنانير 'dinars', אלנוואר *al-jawāri* = الجوّارى 'maid servants' (Blau 1999a, 70 ff.).

The deviations from Classical Arabic in medieval Judaeo-Arabic vary from text to text, yet there is a clear increase in the degree of such deviations in both orthography and grammar in the later Middle Ages. A recent diachronic study of the Judaeo-Arabic of Genizah letters by Wagner (2010), for example, has demonstrated that the deviations are greater in letters from the 13th and 14th centuries than in letters from the 11th and 12th centuries. There is a conspicuous shift away from Classical Arabic after the 15th century, which marks the beginning of the variety known as Late Judaeo-Arabic. In most forms of Late Judaeo-Arabic scribes abandoned a rigorous imitation of the orthography of Classical Arabic and, as in the Early Judaeo-Arabic period, employed many of the conventions of spelling that were used for Rabbinic Hebrew and Aramaic. Short /i/ and /u/ vowels were frequently represented with vowel letters, e.g. איבני = *ibnī* 'my son', קולט = קולט *qultu* 'I said'. Where Classical Arabic orthography had 'alif maqṣūra written with yā', the late texts often used the Hebrew vowel letter *heh*, in conformity with Hebrew/Aramaic orthography, e.g. עלה = עלה *alā* 'upon'. Some of the orthographic conventions of Classical Arabic do, however, appear in Late Judaeo-Arabic. These are likely to be vestiges of Classical Judaeo-Arabic usage rather than direct imitations of Classical Arabic. Late Judaeo-Arabic is a diverse corpus of material from different regions and the degree to which such features are found is not uniform across all texts. The following is the situation that is found in texts from 17th and 18th century Egypt. In many of these texts long /ā/ is regularly written with the vowel letter 'aleph, e.g. קאלוּ = קאלוּ *qālū* 'they said', קאעיד = קאעיד *qā'id* '(he is) sitting'. The letter *qād* is generally represented by *ṣade* with an upper diacritic, e.g. יחזר = יחזר *yadhūr* 'He attends'. The *lām* of the definite article is regularly represented, even when it is assimilated to the following consonant in pronunciation, e.g. אל נאס = אל נאס *al-nās* (pronounced *annās*) 'the people', אל רחמאן = אל רחמאן *al-raḥmān* (pronounced *ar-raḥmān*). Late Judaeo-Arabic texts have a much more extensive dialectal base and clearly reflect the regional dialect of the writer. Regional varieties of Late Judaeo-Arabic that have received scholarly attention include Egyptian (Hary 1992; Hary 2009; Khan 1991; Khan 1992b; Khan 2006), Iraqi (Blanc 1964) and Maghrebi (Bar-Asher 2001). The use of a more systematic dialectal base was motivated by the fact that texts in Classical Arabic or Middle Arabic texts with a Classical Arabic base were no longer accessible to the majority of people. Evidence of this is the falling into disuse at this

period of the medieval Bible translation of Saadya Gaon, which had a Classical Arabic base, and its replacement by more vernacular based translations (Hary 1992; Hary 2009). The predominantly phonetic nature of the orthography reflects many details of vernacular vocalism. Sporadic examples of vocalized texts reflect further features of vernacular pronunciation, which are not visible in the orthography. The vocalization, however, still reflects some pseudo-corrections which results from the attempt to avoid a pure vernacular vocalism, such as the pronunciation of *hamzat al-waṣl*, e.g. **הָדָא אֵל כַּאֲפֵר** *hādā elkafer* ‘this disbeliever’ (Ar. 54.63, fol. 1v = Classical Arabic *hāḍa l-kāfir*) (Khan 2010). Although the grammatical structure of Late Judaeo-Arabic has a conspicuous vernacular base, a number of Classical Arabic features are found in the texts. These tend to be taken from a small closed set of items, such as the relative particle, the negative particle and demonstrative pronouns, which are used to raise the register of an otherwise dialectal text. The Classical Arabic forms in general are used as direct substitutions of the corresponding dialect form, retaining the distribution of the dialect form, with the result that inflectional variations of Classical Arabic are levelled, e.g. the Classical Arabic masculine singular relative particle *ʿallaḏī* (vocalized *ʿilladī*) is used in all contexts and the Classical Arabic negative particle *lam* negates all types of verb and also nominal clauses (Khan 1991; Khan 1992a). Some Classical Arabic grammatical features, such as internal passive forms, are restricted to a small set of lexical items (Palva 2008).

A distinctive feature of written Judaeo-Arabic of all periods is the presence of Hebrew and Aramaic words in the language. These are mainly in the field of Rabbinical law and religious tradition. Many were no doubt used in the vernacular Arabic of the writers, as is the case in modern Arabic dialects spoken by Jews. They are often adapted to the morphological structure of Arabic (Blau 1999a, 134 ff.). Hebrew verbs are given Arabic verbal inflection, the derived Hebrew stems being assimilated to the corresponding Arabic stems, e.g. the *hitpaʿel* verb **הִתְאַבֵּל** *hiṭʿabbēl* ‘to mourn’ is adapted as an Arabic 5th form verb **תַּאבֵּל** *taʿabbala*. Hebrew nouns are given Arabic broken plurals, e.g. **פָּסוּק** *pāsūq*, pl. **פַּוּאֲסִיק** *pawāsīq* ‘verse’. There is occasionally some phonological adaptation. A particularly interesting phenomenon is the conversion of Hebrew *šin* into Arabic *sīn*, e.g. **פַּרְשָׁה** *pārāšā* ‘weekly Scripture lesson’ > **פַּרְאֲסָה** *far-āsa*, **שׁוּפָר** (*šōpār*) ‘horn’ > **סַפּוּר** *sāfūr*. In many regions the Arabic dialects spoken by Jewish communities in modern times are different from those spoken by Muslims and Christians. It is likely that this confessional dialectal cleavage has a considerable historical depth and so one should take into account that the vernacular features reflected by Judaeo-Arabic texts from the pre-modern period may be specific to the vernacular of the Jews.

Despite such distinctive features of Judaeo-Arabic, it is clear that the general profile of the pre-modern texts has many features in common with Middle Arabic texts written by Muslims and Christians. Examples of this from the medieval period have been presented above. Recent research has shown that the type of highly dialectal Middle Arabic that was used by Jews in the Ottoman period was widely used also by Muslim and Christian communities. Although the dialectal base differed according to region, most texts exhibit a similar small stock of Classical Arabic substitutional elements, e.g. in the Levant (Lentin 1996; Lentin 1997), in Egypt (Doss 1979; Doss 2008) and the Maghreb (Lentin 2008b). This is found not only to popular stories, which were no doubt originally told orally, and direct speech in narratives, but also written documents

and, to a lesser extent, historiographical texts written by educated writers such as al-Jabartī. After the cultural renaissance of the *Nahḍa* in the late 19th century, this type of Middle Arabic became less widespread, but it continued in certain contexts, especially in documentary texts (Holes 2008). In the 20th century an increasing trend developed, especially in Egypt, to incorporate pure dialectal Arabic into literary texts, especially in theatre plays and in dialogue in narratives. In some cases writers disguised dialectal expressions by word for word substitutions into standard Arabic (Somekh 1993; Rosenbaum 2008, 400), analogously to the pseudo-literary features of Middle Arabic texts.

Educated Arabic speech in the modern period often exhibits a mixture of vernacular and Classical Arabic features and falls in an intermediate position between the two poles of the diglossia. This type of speech, which is sometimes referred to as the ‘third language’, may be classified as Middle Arabic. The relative proportion of vernacular and Classical Arabic features differs from speaker to speaker and according to the social context. Scholars investigating this type of spoken Arabic have proposed categorizing it into a variety of levels. Blanc (Blanc 1960) and Badawi (Badawī 1973), for example, identify five levels whereas Meiseles (Meiseles 1980) proposes to categorize it into four levels. It is recognized, however, that these are points on a continuum (Meiseles 1980, 120). In such speech one finds pseudo-corrections, e.g. the replacement of the glottal stop by /q/ in the speech of Egyptians not only in contexts where original /q/ has shifted to a glottal stop in the spoken dialect but also where the glottal stop is etymological, producing hybrid forms such as *qurqān* (< *qurʿān*) (Versteegh 2001, 116). Another example is the pronunciation of the *hamzat al-waṣl*, as in *hāḍa ʿal-kitāb* ‘this book’, which is reflected in the vocalism of early Middle Arabic texts. As has been remarked above regarding written Middle Arabic, some standard Arabic morphological patterns have entered educated speech only in specific lexical items and so should be considered to be lexical loans, e.g. the internal passive *b-yuqāl* (Diem 1974, 76). In general classicisms tend to be elements from a closed list (Roth 2008, 411).

Unlike in written Middle Arabic texts from earlier periods, the target of speakers of spoken Middle Arabic can be directly verified. It is significant that most speakers have been found to be able to differentiate between standard Arabic forms, dialectal forms and hybrid forms and that in many social contexts they intentionally target intermediate forms of speech rather than the standard form (Mejdell 2008, 361).

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48. Creating a Modern Standard Language from Medieval Tradition: The Nahḍa and the Arabic Academies

1. The *Nahḍa*: literary revival in Egypt and Syria/Lebanon
2. Translation movements
3. The emergence of MSA in the Arabic press
4. Spontaneous creation of a modern Arabic vocabulary
5. Corporate language modernization: the first Arabic academies
6. References

Abstract

The emergence of Modern Standard Arabic (MSA) came out of the social changes in the Arab world during the 19th century. Under Ottoman rule, Arabic had lost its former function as a language of administration as well as its cultural multi-functionality, gained between the 8th and 11th centuries, eventually becoming limited to religious domains. The Nahḍa, the Arabic literary revival, was initiated by a steadily increasing infiltration of

modern Euro-American notions after Napoleon's Egyptian campaign (1798–1801). MSA, its linguistic non-standardized product, was 'pre-modelled' in 19th-century Arabic travel accounts, textbooks, translations and periodicals, which, from the 1820s, were published in printed form. Arabic printing is the technology of the Nahḍa. MSA emerged spontaneously, resulting from a process of individual, non-corporate and pluricentric linguistic creation. Arab journalists played a particularly important role as language modernizers. By the turn of the century, Arabic journalism faced sharp philological criticism. Subsequently, the idea of establishing Arabic Academies to control language modernization from a philological perspective gained momentum.

1. The Nahḍa: literary revival in Egypt and Syria/Lebanon

1.1. The status of Classical Arabic

The Arabic word *nahḍa*, a noun derived from the root n-h-ḍ, literally means 'rise', 'upswing' or 'revival'. In the Arab context, it signifies the literary revival movement under growing Western influence during the 19th century and early decades of the 20th century (Tomiche 1993). Initiated by the social changes following Napoleon's Egyptian campaign (1798–1801), the *Nahḍa* (or the Arab *Renaissance*) aimed to modernize Arabic language, culture and public communication. Egypt, under the reign of Muḥammad 'Alī (reg. 1805–45) and his grandson Ismā'īl (reg. 1863–79), as well as Beirut in the 2nd half of the 19th century, are considered to be the two main centres of the *Nahḍa*.

At the beginning of the 19th century, Classical Literary Arabic (*al-ʿarabīya al-fuṣḥā*), i.e. the standardized variety of Arabic based on pre-Islamic and early Islamic poetry and on the Koran, was functionally limited to religious domains (Fischer 1982). It had lost the multi-functionality of a universal cultural language (the 'Latin of the East') gained between the 8th and 11th centuries. In the Arab provinces of the 19th-century Ottoman Empire, Turkish was used as the language of power and government, although vernacular Arabic was spoken in everyday life and the private sphere. In Egypt, Arabic was able to replace Turkish earlier than in other parts of the Arab world. In 1863, Ismā'īl declared Arabic the sole official language.

1.2. The Arabic printing revolution in the Middle East

Arabic printing is *the* technology of the *Nahḍa* and printed books as well as periodicals are its innovative media. Introduced to the Middle East by Aleppine Greek-Orthodox clerics by the beginning of the 18th century, in the following century Arabic printing would become widely used (Hanebutt-Benz *et al*, eds. 2002). The Egyptian State Press founded by M. 'Alī's command in Bulaq near Cairo in 1819–20 was the first, and for the next hundred years, the most powerful printing centre of the Arab-Islamic world (Riḍwān 1953). The founder of modern Egypt was quick to realize that handwritten texts and verbal commands were inadequate for carrying out his ambitious reform projects. According to Nuṣair (1990), from 1822 to 1900 a total of 10,405 Arabic titles

were printed in Egypt (for each title approx. 1,000 copies), the majority of them, 9,538 titles, post-1850. In the second half of the 19th century, more Arab private printing offices were opened, including the Syrian Press (1857, Beirut), the *Wādī n-Nīl* Press (1866, Cairo), the *Ma'ārif* Press (1867, Beirut), *Al-Ğawā'ib* Press (1870, Istanbul) and the *Muqataf* Press (1884–5, Cairo). Arabic printing also entered and spread across other parts of the Arab world (e.g. 1855 Damascus, 1856 Mosul, 1860 Tunis, 1869 Baghdad, 1881 Khartoum, 1882 Mekka, 1910 Medina).

2. Translation movements

2.1. Organised activities in Egypt

M. 'Alī regarded the translation of European books into Arabic as a state affair. On the ruler's command the Greek-Orthodox Syrian Rufā'īl Zāhūr (1759–1831) translated Machiavelli's *Il Principe* into Arabic [*al-Amīr*, Bulaq 1824–5] (Tāğir 1945, 13 f., Šayyāl 1951, 74–83). Zāhūr also compiled the first modern bilingual dictionary, the *Dizionario italiano e arabolQāmūs iṭālī wa-'arabī* (Bulaq 1822). The early modern translations into Arabic clearly reflect the terminological difficulties of 19th-century Arabic (Šayyāl 1951, 68; 216 f.).

From the 1820–30s newly founded secular schools had to be provided with textbooks. To meet the growing need for translations and translators, M. 'Alī turned to Egyptian Muslims (Tāğir 1945, 42–69). New translators were recruited from the members of the study missions who had been sent, from 1826, to Europe (Heyworth-Dunne 1939). In Italy, and later in France and England, the delegates studied engineering and other applied sciences. Back in Egypt, they were required to reimburse the expenses for their studies by translating European books on scientific-technological subjects (Šayyāl 1951, *Mulḥaq* I and II).

However, mastery of a foreign language does not automatically equate to mastery of translation technique. In 1836 the famous School of Languages (*Madrasat al-Ālsun*) was founded in Cairo in order to improve the quality of future translations (Šayyāl 1951, 38–44). In 1837, the famous Rifā'a Rāfi' aṭ-Ṭaḥṭāwī (1801–73), a former Azharī, became its director after his return from Paris where he had studied French language and culture from 1826–31 (Stowasser 1966; Sawaie 2000). In 1841, a governmental translation office (*Qalam al-Tarğama*) was added to the School of Languages. This closed in 1856, but reopened under Ismā'īl, who continued his grandfather's 'strategic translation policy'. According to Heyworth-Dunne (1940, 349), aṭ-Ṭaḥṭāwī published over 30 translated works, among them important works such as G. B. Depping's *Aperçu historique sur les mœurs et coutumes des nations* (Paris 1826) [*Qalā'id al-mafāḥir fī ġarīb 'awā'id al-awā'il wa-l-awāḥir*, Bulaq 1833], C. Malte-Brun's *Précis de la géographie universelle* (8 vols. + atlas, Paris 1810–29) [*al-Ğuğrafiyā al-'umūmiya*, 3 vols., Bulaq 1838–9] and the *Code Napoléon* (Paris 1804) [*Ta'rib al-qānūn al-madani al-faransawi*, 2 vols., Cairo 1866]. It is said of aṭ-Ṭaḥṭāwī, the luminary of the Egyptian *Nahḍa*, that his approximately 70 disciples and numerous anonymous Egyptian translators translated in the region of 2,000 titles.

2.2. Private Syrian-Lebanese activities

Compared to the Egyptian translation activities, those of the Syrian-Lebanese translators were rather modest. For the period between 1840 and 1920, Khoury (1966, 1968) identified 632 translated titles, 337 of which dealt with religious subjects. Syrian-Lebanese translators, however, received special credit for their translations of Western literature (Pérès 1937–8; Khoury 1966, 161; 1968, 201 ff.; Peled 1979) starting with Defoe's *Robinson Crusoe* (first transl. by [Aḥmad] Fāris aš-Šidyāq in 1834, and, secondly, by Buṭrus al-Bustānī in 1861). In the 1880s, Syrian-Lebanese translators turned their attention to Western novels and short stories temporarily condemned as 'repugnant' or 'unworthy' by the Arab literary elite (Peled 1979, 130). Verne's *A Journey to the Centre of the Earth* [*ar-Riḥla al-ʿilmīya fī qalb al-kura al-arḍīya*, Alexandria 1885; transl. by Iskandar ʿAmmūn (1857–1920)], A. Dumas' *The Three Musketeers* [*al-Fursān aṭ-ṭalāṭa*, Cairo 1888; transl. by Naḡīb Ḥaddād (1867–99)] and Hugo's *The Miserable Ones* [*Riwayāt al-bāʿiṣin*, Tripoli 1911/12, transl. by Gurḡi Yannī (1861–1921) and Samuel Yannī (1865–1914)] were among the first Western novels translated into Arabic.

3. The emergence of MSA in the Arabic press

3.1. The beginnings of Arabic journalism in Egypt

Al-Waqāʿiʿ al-Miṣrīya ('The Egyptian Events'), the first Middle Eastern periodical, appeared on 3rd December 1828. This bilingual Turkish-Arabic state bulletin, printed by the Bulaq Press, would later (under Ismāʿīl) be published in Arabic alone. Its language 'never before used for this kind of writing, was badly deficient, and the unavoidable resort to Turkish, European, and colloquial Arabic terminologies produced awkward texts that were not always readily comprehensible' (Ayalon 1995, 17). Ismāʿīl also encouraged the establishment of scientific journals, for example *Raḍat al-Madāris al-Miṣrīya* ('The Egyptian School Garden', 1870–8). In his reign, Egypt became a direct link in the international flow of information. In 1866, the telegraph was inaugurated and Reuters opened its first office in Alexandria. Henceforth, (Classical) Arabic as a medium of journalism was exposed to a permanent contact with French, English and other modern European languages and thus to an '*Ansturm fremdartiger Begriffe und Vorstellungen auf zahlreichen Gebieten*' (Wehr 1934, 4).

3.2. Syrian-Lebanese contributions to Arabic journalism

On 1st January 1858, the first issue of *Ḥadiqat al-Aḥbār* ('The Garden of News') appeared in Beirut, the first independent newspaper of the Arabic-speaking Middle East. Its founder, Ḥalīl al-Ḥūrī (1836–1907), was well aware of the shortcomings of (Classical) Arabic for reporting on modern topics. Independent Arabic journalism did not, however, blossom in Ottoman Syria but in Egypt under British rule from 1882 until 1922. A particular success story is the newspaper *al-Ahrām*, founded in 1876 by the

Lebanese Taqlā brothers in Alexandria. Thanks to the progress in printing technology, *al-Ahrām* could increase its number of copies from approximately 2,700 in 1892 to 30,000 in 1927–8 (Ayalon 1995, 148 f.). Up to the 1920s, Arabic journalism was dominated by Syrians who had left their native country in search of better professional opportunities in Egypt. Ya'qūb Šarrūf (1852–1927), Fāris Nimr (1856–1951) and Ğurġī Zaydān (1861–1914), the editors of *al-Muqtaṭaf*, *al-Muqattam* and *al-Hilāl*, and many other Syrian journalists set the first modern standards for Literary Arabic.

3.3. Philological criticism of MSA

‘On pourrait dire que c’est le journalisme qui a en quelque sorte créé la langue moderne, presque aussi différente de l’arabe du Coran que l’est le grec moderne du grec ancien’, wrote Washington Serruys (1897, VI), the first European scholar to describe the language of the Arabic press. Modern coinages were widely disseminated by the periodicals and other printed texts. By the turn of the century, however, the language of the Arabic press faced sharp philological criticism from individuals like Ibrāhīm al-Yāziġī (1847–1906) for its (alleged or real) linguistic ‘malformations’. Since the 1880s it has been impossible to imagine public communication in the Arab world without heated debates on the modernization of Arabic (Hūrī ed. 1991; Glaß 2004, II, 435–477).

4. Spontaneous creation of a modern Arabic vocabulary

The rendering of modern Western notions using Classical Arabic became the key issue of the *Nahḍa* (Wild 1982, 54). Hitherto, no systematic attempt has been made to investigate 19th-century Arabic, the ‘pre-model’ of MSA. Available studies focus on aspects of the creation of new political terms (Rebhan 1986, Ayalon 1987). Non-political terminologies have been explored, although with limited scope (Bielawski 1956, Sawā’ī 1999; Sawaie 2000, 73–98). Also lacking are studies of the interference between literary and colloquial Arabic during the period of the *Nahḍa*.

The following linguistic methods have been used to create new vocabulary:

- (1) Borrowing of words from European languages (arabicized, morphologically and/or phonetically): e.g. *al-lībirāl* ‘the Liberals’; *sūsyāl* (or: *sūsyālist*) ‘socialist’; *dīmuqrāṭī* (or *dīmūkrātī* etc.) ‘democratic’; *barlamān* (or *bārlāmāntū*, *barlamīntū* etc.) ‘parliament’; *rībublik* ‘republic’; *ġurnāl*, *kāzīṭa*, *ġazaṭṭa* (etc.) ‘journal/newspaper’; *akadamīya* (*aqadama* etc.) ‘academy’; *tiyātr* ‘theatre’; *ubirā* ‘opera’; *iliktrisīūḥ* ‘electricity’; *uksiġīn* ‘oxygen’; *biyūlūġiyā* ‘biology’; *talīgrāf* ‘telegraph’, *talifūn* ‘telephone’; *ūtūmūbīl* ‘automobile/car’. The bulk of new coinages was based on loanwords from French, Italian and English whereas the number of borrowings from Turkish or Persian was rather limited, e.g. *ūḍ al-lūrḍiya* ‘House of Lords’ and *ūḍat* [*ūṭat*] *at-tiġāra* ‘chamber of commerce’ (*ūḍ/ūḍa/ūṭa* < T) or *qānūnnāmeḥ* ‘code of law’ and *antīkhāna* ‘museum’ (*nāmeḥ*; *hāneḥ* < P).
- (2) Translation of foreign words and phrases: e.g. *dīwān rusul al-‘amālāt* ‘chambre des députés’ (‘chamber of deputies’, ‘parliament’); *al-fitna al-faransāwīya* ‘la Révolution française’ (‘the French revolution’), *ḥizb al-muḍādda* ‘parti de l’opposition’

- (‘opposition party’); *al-qānūn al-muḍādd li-s-sūsiyālist* /~ *li-l-iştirākīyīn* /~ *li-l-iḡti-mā’iyīn* ‘Sozialistengesetz’ (‘Anti-Socialist Laws’ [of 1878]).
- (3) Semantic extension of Classical Arabic words: e.g. *ṣaḥīfa*, *ḡarīda* ‘newspaper’; *maḡalla* ‘journal/magazine’; *la’ib/la’b/li’b* ‘[stage]play’; *sayyāra* ‘automobile/car’, and, to mention but a few examples from the much better investigated political domain, *ṣarī’a* ‘(secular) law’; *amāla* ‘electoral district’; *istibdād* ‘absolutism’; *šu’ūbī* ‘democratic’; *intiḡāb* (or: *iqtirā*) ‘election’; *muḡāfiẓ* ‘conservative’; *ṣayḡ* ‘senator’ and *ḡumhūr/maṣyaḡa* ‘republic’. Arab writers preferred *maṣyaḡa* for ‘republic’ up to the close of the century (Ayalon 1987, 102). *Ḡumhūriya* (= *ḡumhūr* ‘gathering of people’, ‘crowd’, ‘public’ + f. *nisba*-suffix *-iya*), still in use today (e.g. *Ḡumhūriyat Miṣr al-‘Arabīya* ‘Arab Republic of Egypt’), was coined in the 1830s by aṭ-Ṭaḡṭāwī (Ayalon 1987, 103), but took some time to gain popularity. The first modern monolingual Arabic dictionary, *Muḡiṭ al-Muḡiṭ* (Beirut 1869/70), by the famous Lebanese philologist Buṭrus al-Bustānī (1819–83), which he compiled on the base of the widely used Classical dictionary *al-Qāmūs al-Muḡiṭ* by al-Firūzābādī (d. 1415), lacks both *maṣyaḡa* for ‘republic’ and the one-word-noun *ḡumhūriya* for ‘republic’, and instead lists *al-ḡumhūrī* ‘the republican form of government; the republican regime’.
- (4) Paraphrasing of foreign terms/notions: e.g. *al-mamlaka al-muqayyada li-l-‘amal bi-mā fī l-qawānīn* ‘constitutional monarchy’ (i.e. ‘the monarchy which was limited by laws’).

There was first a tendency to coin new terms by arabicization (*ta’rīb*) of foreign words, and then to replace the *mu’arrabāt* by semantically extended or revived Classical Arabic words (e.g. *al-libīrāl* > *al-aḡrār*; *ḡurnāl* > *ḡarīda*, *maḡalla*; *ūtūmūbīl* > *sayyāra*; *bi-yūlūḡiyā* > *ilm al-aḡyā*, *ilm al-ḡayāt*). The analogical method, i.e. coining terms on the base of lexical patterns by derivation (*iṣṭiqāq*), remained restricted, e.g. [*fa’āla*] > *ḡawwāṣa* ‘submarine’, > *darrāḡa* ‘bicycle’, [*mifāl*] > *miḡḡār* ‘microscope’, > *minḡār* ‘telescope’, or [*mafāl*] > *maḡaḡ* ‘museum’, > *maṣraḡ* ‘theatre’.

Although the syntax of Classical Arabic was affected to a lesser degree, the vocabulary and phraseology, in particular, underwent fundamental changes.

5. Corporate language modernization: the first Arabic academies

5.1. Precursors

Towards the end of the 19th century, several clubs came into existence by private initiative under the names of *maḡma’* (pl. *maḡāmī’*) and *nadī* (pl. *nawādī*), for example *al-Maḡma’ al-Luḡawī al-‘Arabī* (the ‘Arabic Language Academy’), established by M. Tawfiq al-Bakrī (1870–1933) in 1892–3, and *Nādī Dār al-‘Ulūm* (the ‘Club of the House of Sciences’). In addition to questions of literature, club members also discussed linguistic problems (Waardenburg 1986, 1090). The Arabic press, e.g. *al-Muqtaṭaf*, supported these activities by publishing various contributions to the debates (Glaß 2004, II, 460–466). These corporations were, however, short-lived and did not bear lasting fruit.

5.2. The Damascus Academy

The (re-)introduction of Arabic as the official language of Syria after the breakdown of the Ottoman Empire led to the foundation of the first Arabic language academy in 1919 in Damascus (from 1958: *Mağma' al-Luğa al-ʿArabīya bi-Dimašq*). It was modelled after the Académie Française (Hamzaoui 1965; Sawaie 2007, 635–637). Well-known linguistic scholars such as M. Kurd ʿAlī (1876–1953), ʿAbd al-Qādir al-Mağribī (1868–1956) and Muṣṭafā aš-Šihābī (1893–1968) held the position of president of the Academy. Since 1921, it has published a journal, which still appears under the title: *Mağallat Mağma' al-Luğa al-ʿArabīya bi-Dimašq/Revue de l'Académie arabe de Damas (RAAD)*. As set out in its constitution of May 1928, the Academy's main tasks are the preservation of the purity (*faṣāḥa*) and the integrity (*salāma*) of the Arabic language, i.e. to protect against foreign and dialectal influence, and to support its adaptation to the requirements of modern communication. The Damascus Academy has also campaigned against common and widespread linguistic errors in the Arabic press. Lists correcting errors were published in the Academy's journal (Sawaie 2007, 636), and these academic proposals did on occasion raise the ire of journalists and other practitioners of the written language.

5.3. The Cairo Academy

On the initiative of King Fuʿād I, the Royal Arabic Academy (*Mağma' al-Luğa al-ʿArabīya al-Malakī*), also modelled after the Académie Française (al-Ḥamzāwī 1988), was founded in Cairo on 13th December 1932. In addition to scholars from Arab countries, famous European orientalisks were also appointed members, among them A. Fischer (1865–1949), H.A.R. Gibb (1895–1971) and L. Massignon (1883–1962) (Waardenburg 1986, 1092). Article 2 of its statute says of the goals: The Academy preserves the integrity of the Arabic language (*salāmat al-ʿarabīya*) and adjusts it to the requirements of modern times. Article 1 of the statute explicitly mentions dialect studies as a main working goal (al-Ḥamzāwī 1988, 51 f.). Since 1935, the Cairo Academy has regularly published its journal *Mağallat Mağma' al-Luğa al-ʿArabīya*. The Academy has diligently dedicated itself to the task of coining scientific and cultural terms through the mechanisms of *ištiqāq* (derivation), *mağāz* (extending the word meaning by using it in a wider, figurative sense), *naḥt* (word composition), *naql* (translation) and *taʿrīb* (arabicization), and the publishing of these terms in dictionaries, glossaries etc. By the mid-20th century, the Academy had coined over 12,000 neologisms, most of which concerned medicine (3,400), jurisprudence, economics and statistics (2,950), mathematics (1,700), biology (1,000), chemistry/physics (750) and geology (500) (Krahl 1967, 11). It should be noted, however, that these great efforts have borne little in the way of practical results. Purism, firm refusal of loanwords and even rejection of already 'naturalized' neologisms has meant that few of the Academy's coinages are accepted. Artificial proposals such as *ğammāz* ('swift-footed [ass]') for *trām* 'tramway' (Versteegh 2004, 181) or *aš-šāṭir wa-l-mašṭūr wa-l-kamāḥ bainahumā* for 'sandwich' (Krahl 1967, 11) were ignored by the Arabic-speaking community. Among the major publications of the Cairo Academy are two completed dictionaries: *Mu'ğam Alfāz al-Qurʿān*

(3 vols, Cairo 1953) and *al-Muḡam al-Wasīṭ* (2 vols, Cairo 1960–61). The Arabic Academy of Baghdad (*al-Maḡmaʿ al-ʿIlmī ʿIrāqī*), founded in 1947 and the recently (in 1976) established Jordanian Academy are here mentioned without detailed discussion of their activities, as the establishment of these institutions falls beyond the time frame of this article.

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49. Modern Standard Arabic

1. Introduction
2. Definitions of MSA
3. The MSA spectrum
4. Oral MSA variation
5. Diglossia
6. The Badawi continuum theory
7. References

Abstract

This article discusses the status of modern standard Arabic (MSA) as the written norm in the Arab world today and includes the following sections: Introduction, Definition of MSA, the MSA spectrum, Oral MSA variation, Diglossia, and the Badawi continuum theory.

1. Introduction

The Arab world today is characterized by a high degree of linguistic and cultural cohesion based on several factors, one of the most powerful being the shared heritage and tradition of the Arabic language and its literary legacy. Modern Standard Arabic (MSA) is the direct descendant of Classical Arabic (CA) and is the official written

language of all Arab countries, from North Africa to the Arabian Gulf. Within MSA, syntax and style range from complex and erudite forms of discourse in learned usage to more streamlined expression in the journalistic, broadcasting, and advertising genres.

There are substantial stylistic and lexical differences between CA, the literary language of previous eras, and MSA. But in Arabic, both CA and MSA are referred to as *al-luġa al-fuṣḥā*, or simply, *al-fuṣḥā*, which means “the most eloquent (language),” thus merging the two diachronically different variants into one semantic category. Badawi (1985) has proposed a distinction between what he calls *fuṣḥā al-turāṭ* (of heritage) (CA), and *fuṣḥā al-ʿaṣr* (of the modern era) (MSA), the former being considered the oldest and most eloquent form of Arabic and the latter its contemporary realization. Haeri uses the term “contemporary Classical Arabic” for Modern Standard Arabic, and “old classical Arabic” for classical Arabic. These terms have the advantage of incorporating the term “classical Arabic” in both, so that their diachronic relationship is clearer (Haeri 2003, 24). CA and MSA differ little in terms of basic rules of morphology and syntax, but do differ in terms of style and lexical usage, because they embody literature of many different genres and vastly different times, ranging from the earliest days of Islam and even the pre-Islamic era up to the present. Despite the very real differences, the considerable degree of similarity between CA and MSA gives continuity to the literary and Islamic liturgical tradition.

The modern period of written Arabic dates approximately from the end of the eighteenth century, when the Arab world was drawn into closer ties with Europe, especially England and France, and when western cultural norms began to penetrate and influence Arab social, cultural, and educational values. The closer relationship with Europe resulted in higher education opportunities abroad for chosen segments of the populations of Egypt, North Africa and the Levant, and led to the ultimate impact and dissemination of western literary styles and conventions among the Arab literati along with the revival and development of the written Arabic language in a modern context. During the nineteenth century, efforts toward universal education resulted in increased numbers of educational establishments in the Arab world, higher levels of literacy among the general population, and the appeal of daily news through journalism, thus providing an increasing reading audience for the daily written word.

MSA is now the written norm for all Arab countries as well as the major medium of communication for public speaking and broadcasting. It not only serves as the vehicle for current forms of literature, but also as a resource language for communication between literate Arabs from geographically distant parts of the Arab world. A sound knowledge of MSA is a mark of prestige, education and social standing; the learning of MSA by children helps reduce the effect of vernacular differences and initiates Arab children into their literary heritage as well as the historical tradition. MSA aids in articulating the connections between Arab countries and creating a shared present as well as a shared past. Education in the Arab countries universally reinforces the teaching and maintenance of MSA as the single, coherent standard written language. Contemporary reference grammars of modern standard Arabic include Ryding 2005a, Badawi/Carter/Gully 2004, and Kouloughli 1994.

2. Definitions of MSA

There is no comprehensive, explicit, or firm definition of MSA, but it is generally accepted to cover the full range of written Arabic designed for a public audience, in

written news media, modern literature, and creative and expository prose of all genres. Each of these fields has sub-fields and styles of its own, and it is all considered MSA. However, the widest exposure to the general public comes through the media, and “media Arabic” has come to be identified as a prestige standard of communication for everyday Arabic. Particularly in multi-dialectal, far-flung, diglossic societies, the news reaches everywhere and serves as a centripetal force for fostering a common, educated mesolect shared by Arabic speakers throughout the Middle East and North Africa. The term “mesolect” (middle level of language) correlates through analogy with the technical linguistic terms “basilect” (lower or colloquial form of speech) and “acrolect” (higher or prestige level of language).

Vincent Monteil’s classic 1960 work, *L’arabe moderne*, seeks to delineate the features of MSA. He refers to “le néo-arabe” as “l’arabe classique, ou régulier, ou écrit, ou littéral, ou littéraire, sous sa forme moderne” (1960, 25). Thus for him, “modern Arabic” is clearly the updated version of the old classical language. He also states that “on pourrait aussi le traiter d’arabe ‘de presse’, étant donné le rôle déterminant qu’a joué, et que joue encore, dans sa diffusion ... *luḡat al-jarâʾid*” (1960, 27). As Monteil also remarks, “s’il est exact de reconnaître ... que l’arabe moderne ‘se trouve être une langue assez artificielle, une langue plus ou moins fabriquée’ plutôt qu’un ‘usage codifié,’ il faut déclarer ... que ‘c’est une langue vivante,’ et qui ‘correspond à un besoin vital’” (1960, 28).

In his 1972 article, “Towards a definition of modern standard Arabic,” British Arabist Leslie McLoughlin analyzes distinctive features of MSA in a selection of journalistic Arabic and adds a definition of MSA borrowed from M. F. Saʿīd: “that variety of Arabic that is found in contemporary books, newspapers, and magazines, and that is used orally in formal speeches, public lectures, learned debates, religious ceremonials and in news broadcasts over radio and television” (1972, 58).

In a more recent article, Ernest McCarus describes MSA as follows: “Modern Standard Arabic is the high literary form of Arabic that goes back to the literary language of pre-Islamic Arabia; it is learned in schools and is not the day-to-day language of any Arab population. It is used universally in formal writing and speaking, in professional meetings and conferences, in radio and TV news, and on the occasions where the aim is to communicate on specialized topics or with Arabs of different dialectal backgrounds” (2008, 238–239).

As can be seen, general definitions of MSA are often based on contexts of use rather than on its internal grammatical structure, essentially because in the Arabic speech community, the type and level of Arabic to be used is systematically motivated by context. MSA is a broad and complex phenomenon acutely sensitive to and reflective of social processes, behavioral norms, and situational parameters. Most of the variation that occurs within MSA is utterly normal to native speakers, who spontaneously calibrate their linguistic performance and expectations in accordance with context.

3. The MSA spectrum

As mentioned earlier, the literary Arabic spectrum ranges from the classical language of pre-Islamic times to the modern written language in all its forms. A seminal sociolin-

guistic study by Parkinson (1991) confirmed that the label “*fushā*” is a wide-ranging term. Egyptian Arabs’ opinion of whether a particular MSA text read aloud in various ways was *fushā* or not varied substantially, and there were areas of disagreement as to the extent and nature of the text as “*fushā*.” Parkinson concludes: “the problems stem from the fact that it (*fushā*) forms a relatively broad but indeterminate section of a much bigger continuum, and while there is general agreement about the continuum, there is little agreement about where the natural breaks in that continuum lie” (1991, 60–61).

4. Oral MSA variation

Part of the problematics of *fushā* lies in the nature of Arabic script, which does not indicate short vowels, so that reading correctly out loud (as a news broadcaster might do, or someone reading a speech) is a test of both lexical and grammatical knowledge. Word-internal vowels are predictable assuming one recognizes the particular word, but word-final vowels that mark desinential inflection (case-markers on substantives and mood-markers on verbs) can only be known if the reader is fully aware of linguistic structure and the grammatical rules that apply within a phrase, clause, or sentence. Few are those who can readily and accurately inflect all lexical items in any text without substantial preparation. This is why many Arabs, when called upon to read aloud, do not use the fully-inflected level of pronunciation (referred to as “full form”), but use what is usually called “*fushā bilā ʾrāb*,” that is, “*fushā* without desinential inflection,” often referred to in English as “pause form.” Interestingly, reading out loud or speaking MSA without desinential inflections does not apparently affect its communicative power or comprehensibility. The knowledge of MSA case and mood inflection, therefore, has been and is still a rather esoteric linguistic specialty. Haeri 2003 provides an especially insightful discussion of Egyptian attitudes towards *fushā* (39–51).

One could therefore propose a spectrum of oral performance and pronunciation in MSA as follows:

- (1) Using full form with all inflectional markers
- (2) Using semi-full form with partial inflectional marking
- (3) Using pronunciation *bilā ʾrāb* “without desinential inflection”
- (4) Using pronunciation *bilā ʾrāb* with the insertion of familiar colloquial items, e.g., *bi*-prefixed present tense verbs and certain common vernacular function words such as *illi* ‘which.’ This procedure is often referred to as “code mixing” or “code switching.” It is most likely to happen when a person is in a semi-formal discussion or interview and is responding spontaneously rather than reading from a text, as often occurs in television broadcasts. Politicians, diplomats, and other public figures typically pitch their spoken language performance at level 3 or 4. Discourse analysis of this type of code-mixed public performance has been begun by a few Arabic linguists, most notably Eid 2006, but much more research remains to be done on the systematicity and organization of such speech.

Individuals who make their living through broadcast news and other formal broadcast discourse become adept at speaking MSA at the most formal levels, but for the average

person, speaking MSA is extremely difficult, even though comprehension of written and spoken MSA is virtually 100 %. For speaking purposes, a formal or “educated” level of vernacular Arabic based on a colloquial matrix is the most common way of elevating or “leveling” one’s speech, especially in situations where use of a particular colloquial would be impolite or difficult to understand. This spoken variant is usually called “Educated Spoken Arabic” (for a definition and description of educated Arabic, see Ryding 2005b). But for primary discourse purposes, for ordinary day-to-day existence in informal settings and local contexts, Arabic speakers rely on their mother tongues, the colloquial dialects that they have acquired and spoken from infancy.

5. Diglossia

The term “diglossia” was first used in English by Ferguson in his famous article under that title (1959). In French, the term “diglossie” had been used earlier by William Marçais in an article published in 1930, now contained in a collection of his articles published in 1961. Diglossia refers to the fact that Arabs read and write one form of language (MSA), but for everyday spoken communication with each other they speak language variants that are systematically and sometimes dramatically distinct from the written standard and from each other. The spoken vernaculars (or dialects) vary substantially from region to region in the Arab world and their cumulative differences have evolved over centuries of random linguistic drift into regional variants that each have their own recognizable spoken style. Although some geographically close vernaculars are mutually intelligible, those separated by vast distances (such as, for example, Moroccan and Kuwaiti) are normally not, unless the speakers can calibrate and level their spoken language in the direction of the shared literary medium, MSA. These vernaculars have evolved into flexible, vital, and expressive languages that accommodate and express the needs of everyday existence. However, they are not considered suitable for written communication and Arab folk wisdom generally considers dialects as inferior, corrupt, haphazard, and as having “no grammar.”

Despite the fact that these everyday forms of spoken language are dismissed by the Arab public as unsophisticated and crude, and not worth preserving or studying, this attitude has actually encouraged free-form robust growth, with vernaculars able to shift and evolve in their vocabulary, grammar and style, whereas the grammatical rules and structures of the written language remain anchored in the past, very close to what they were in the seventh and eighth centuries, A.D. Therefore, although all varieties of Arabic are related, the gap between the written form and the spoken colloquial variants is considerable.

This linguistic situation has two consequences: it means that educated native speakers of Arabic are in some ways similar to bilinguals in that they have access to at least two (if not more) different modes of expression, depending on context. In addition, educated native speakers of Arabic possess a wide range of comprehension skills that include the ability to interact with speakers of many dialects, and to calibrate their linguistic performance levels according to the formality of a situation and the origins of the interlocutors. This range of competence is, of course, acquired over a long period

of time that includes both formal and informal learning experiences, from the first days of childhood to and through university-level education. For an informative discussion of the competence of an educated native speaker of Arabic, see Wahba 2006.

6. The Badawi continuum theory

El-Said Badawi developed a theory of interrelated language levels for Arabic, published in book form, in 1973 (*Mustawayāt al-‘arabiyya l-mu‘āšara* ‘*Levels of contemporary Arabic*’) and summarized in English in a 1985 article. His analysis of the Arabic linguistic situation portrays language levels as a continuum of overlapping categories of language from the most classical to the most colloquial, identifying 5 levels:

(1) <i>fuṣḥā al-turāt</i>	(Classical Arabic)
(2) <i>fuṣḥā al-‘aṣr</i>	(Modern Standard Arabic)
(3) <i>‘āmmiyyat al- muṭaqqafīn</i>	(Educated or formal spoken Arabic)
(4) <i>‘āmmiyyat al-mutanawwirīn</i>	(Semi-literate spoken Arabic)
(5) <i>‘āmmiyyat al-‘ummiyyīn</i>	(Illiterate spoken Arabic)

As Badawi points out, the levels “are not segregated entities,” (1985, 17) but shade into each other gradually. He identifies level two (MSA) as “mostly written” rather than spoken, and levels two and three as essentially “in complementary distribution” with each other (1985, 19), that is, they function in separate spheres, with some overlap (1985, 19). Although he defines the lower levels of Arabic in terms of the level of education of their speakers, educated Arabs would have access to and use these levels of language in appropriate contexts, as warranted.

The contemporary situation of MSA therefore, is a complex one, with MSA being used in a range of styles for written and formal speaking contexts, but also surrounded by different levels and varieties of spoken language that are the life-blood of everyday existence in the Arab world. The diglossic situation of Arabic, the distance of MSA from spontaneous spoken language use, and the cultural taboo against using vernacular forms of Arabic in writing lead to a situation where MSA plays a consistent and respected role, but where colloquials also play key roles in the Arabic speech community. Moreover, as both spoken and written Arabic continue to develop, spoken mesolects that combine features of MSA and vernacular Arabic are also evolving, due in particular to the omnipresence of spoken media Arabic and closer and more immediate communication between and among different regional Arabic speech communities.

Nonetheless, MSA as the legacy of old Classical Arabic carries the prestige of centuries of sacred and secular literary traditions as well as the very real power of being the language that unites the Arab world.

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50. Arabic Dialects (general article)

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Abstract

This article sketches the historical documentation of Arabic dialects within the different regions. It considers the relationship between ancient and modern Arabic and examines features of modern Arabic dialects as universal tendencies and as the outcome of grammaticalisation. From the evidence it argues for a polygenetic explanation of the development of modern Arabic dialects. The article then considers different classifications of Arabic dialects and finally presents the linguistic typology of Arabic dialects in terms of phonological, morphological and syntactic features.

1. Introduction

Arabic is the official language of eighteen sovereign states stretching from Mauritania in the west to Iraq in the east. It is also spoken in parts of southern Turkey, by the Maronite Christian community in northern Cyprus, and, to the south, in parts of sub-saharan Africa. Further east, Arabic language enclaves are still found in the Balkh region of Afghanistan, parts of Iran, including Khurasan in the east and Khuzistan in the south, and Uzbekistan. Political and economic conditions in many Arab states, as well as a need for migrant labour at various times in western countries, have resulted in permanent emigration over the decades, such that there are now large Arabic-speaking migrant communities in parts of the United States, Britain, Germany, the Netherlands, France, in particular. Estimates suggest a figure of around 250 million speakers of Arabic today. In terms of numbers of speakers and geographical spread, Arabic is one of the most important languages in the world. These reasons combined with the degree of synchronic and diachronic variation attested in the Arabic dialects makes Arabic the most important Semitic language today. As Jastrow (2002) says, for the student of Semitic, Arabic dialects constitute a living language museum, with almost every type

of diachronic development attested in Semitic languages found in one or more dialects of Arabic.

Historically Arabic dialects have developed and diverged as a partial result of two types of movement: a gradual and at times spontaneous sociological movement in terms of lifestyle, resulting in an historical shift from tribal/semi-nomadic society to a settled society with, in many areas, ethnic plurality (Eksell 1995); and small- and large-scale population movements both within and without the Peninsula, effectively since the beginning of time. People from different tribes and sub-tribes were, and continue to be, brought together by religious pilgrimages, trade caravans, the need for new pastures, weekly markets, alliances and, until today, migratory work. This movement has also, as we can see from published lists of non-Arabic loan words (e.g. Prokosch 1983a, 1983b), brought Arabic speakers into linguistic contact with many other languages. With few, if any, exceptions, Arabic dialects, therefore, have never been in a state of total isolation.

2. Geographical areas

Adapting Jastrow's (2002) geographical classifications, the areas in which Arabic is spoken can be divided up into three zones. Zone I is the area where Arabic was spoken before the rise of Islam – the Peninsula, but, following Behnstedt/Woidich (2005) and Holes (2004), excluding the southern regions where South Arabian was spoken; zone II is the vast expanse of territory into which Arabic moved as a result of the Islamic conquests – the southern areas of the Peninsula, the Levant, Egypt, North Africa, Iraq, parts of Iran; and zone III is the geographical peripheries – linguistic enclaves or Sprachinseln situated outside the continuous Arabic language area. Zone II can be further divided into those areas affected by the first waves of the Islamic conquests – the urban areas – and those affected by later waves of Bedouin, which served to arabise the rural areas and the nomads.

The dialects spoken in the Arabian Peninsula are by far the most archaic. The depth of their history can only be guessed. The archaic nature of these dialects can be attributed to the shift in the political and administrative centre of gravity following the Islamic conquests to the new Islamic territories (Jastrow 2002, 348). Isolated from the innovations caused elsewhere by population movement and contact, their ancient features were mostly preserved and innovations which did take place often proceeded isolation from surrounding dialect areas. The zone II and III dialects both have an establishable history. The main academic interest of the zone II dialects, Jastrow's 'colonial Arabic', lies in their shared and non-shared innovations. The geographical peripheries of zone III are of two types – the first includes areas conquered relatively early on during the expansion of the Islamic empire from which Arabs later retreated, leaving behind isolated Sprachinseln. This has left isolated Arabic-speaking communities in present-day Iran, Uzbekistan, Central Anatolia, Khuzistan, Khurasan and Afghanistan, and languages which have developed separately from mainstream Arabic dialects in Malta and Cyprus. In Andalusia, Arabic died out altogether, leaving rich historical documentation of a once-vibrant language. The second type of geographical periphery includes areas which were influenced at a later stage by Arabic, principally

through trade contacts and in some cases through conquest. This activity resulted in new outreach Arabic-speaking communities, particularly in sub-saharan Africa – Chad, Nigeria. Due to the nature by which Arabic came to sub-saharan Africa and due to the language situation in the region, Arabic came to be used principally as a trading lingua-franca and as one language among many in a polyglottal society.

3. The documentation of Arabic dialects

3.1. The Levant

Most documentation has been done on dialects of zone II, with the Levant particularly well served over the years. Early researchers covered the ground fairly evenly, and included the first atlas of Arabic dialects, Bergsträsser's *Sprachatlas von Syrien und Palästina* (1915), the dictionary by Barthélemy *Dictionnaire arabe-français* (1939 – 1955), Bauer's *Das palästinische Arabisch* (1910), and work by Cantineau, *Le dialecte arabe de Palmyre* (2 volumes, 1934) and *Les parlers arabes du Hōrān* (2 volumes, 1940, 1946). Work on Damascene Arabic was initiated by Wehr, whose recordings were later published by Bloch/Grotzfeld (1964), followed by two grammars by Grotzfeld (1964, 1965), and a syntax by Bloch (1965). In 1964, Cowell published a comprehensive grammar of Damascene Arabic, including some of the first detailed syntactic analyses of an Arabic dialect. This was followed by a descriptive grammar by Ambros (1977). In more recent times, work on other Syrian dialects has been conducted by Arnold (1998) on Antiochia, Behnstedt, with studies of Aleppo, Soukhne (1994) and his monumental dialect atlas of the Syrian dialects, *Sprachatlas von Syrien* (1997–2000), and Gralla (2006). Since the latter half of the twentieth century, the dialects of Jordan and Palestinian have been researched by Blanc (1953, 1970), Palva (e.g. 1970, 1984, 1992), Piamenta (1966), Bani Yasin and Owens (1984), Seeger (2009), Rosenhouse (e.g. 1984), Levin (1994), Durand (1996) and Shahin (2000). The most significant descriptive and typological work on Lebanese Arabic was accomplished by Henri Fleisch (1974), who categorised the Lebanon into four dialect areas – north, central north, south and central south. Five monographs exist on the dialects – Féghali (1919) on Kfar 'Abīda, Jiha (1964) on Bišmizzīn, El-Hajjé (1954) on Tripoli, Abu-Haidar (1979) on the dialect of Baskinta, and Naīm-Sanbar (1985a) on the dialect of 'Ayn al-Muraysa. Other studies include Féghali (1928), Naīm-Sanbar (1985b) and Kallas (1995). Some teaching grammars of Lebanese exist, but, most probably as a direct result of the sixteen-year long civil war (1975–1990), less work has been done on Lebanese in recent years than on the Palestinian/Jordanian/Syrian dialects.

3.2. Egypt and Sudan

Egypt was less evenly covered in the early days (cf. Harrell 1962a). Until Woidich and then Behnstedt/Woidich's work dating from the 1970s, Egyptian Arabic was considered synonymous with Cairene Arabic, with publications such as that of Spitta-Bey in 1880 and Vollers (1896). Their work, which culminated in the six volumes of *Die ägyptisch-*

arabischen Dialekte (Behnstedt/Woidich 1985–1999) and covered the Delta, the Nile valley and the oases, revealed a rich and variegated dialect landscape. In addition to Woidich's *magnus opus*, *Das Kairenisch-Arabische: Grammatik* (2006a), the pair have also published articles individually: Behnstedt on the dialect of Alexandria (1980), and Woidich (e.g. 1974, 1989, 1993, 1995) on many aspects of Cairene and other Egyptian, particularly oasis, dialects. In 2007, Drop/Woidich published a comprehensive grammar of the oasis dialect of il-Baḥariyya. Since the second half of the twentieth century, work by other scholars has included Harrell (1957) on the phonology of (mainly) Cairene Arabic, Khalafallah (1969) and Nishio (1994) on dialects of Upper Egypt, de Jong on Fayyūm (de Jong 1996) and, in particular, on Bedouin dialects of the northern Sinai (de Jong 1995, 2000), an area which had been under- or unresearched earlier due to the sensitive political nature of the area. Several sociolinguistic works, mainly on Cairene, have also been conducted by Haeri (1996), Miller (2005), and others. Cairene has also been the subject of a number of generative grammatical studies, including the syntax by Wise (1975) and the phonology by Broselow (1976).

Early work on Sudanese Arabic includes sketches by Worsley (1925), Trimmingham (1946), and Hillelson (1935). Reichmuth (1983) produced a grammar of the Šukriyya, including one of the first reliable studies of the intonation of an Arabic dialect. Abu Manga/Miller (1992) have conducted sociolinguistic studies in Sudan, and Bergman produced a grammar of Sudanese Arabic in 2002. Working with a Sudanese informant in exile, Dickins most recently published a study on the phonematics of Central Sudanese (2007). Among others (e.g. Tosco 1995), Miller (1983, 2002, 2007) has produced several articles on the Sudanese Arabic-based pidgin, Juba Arabic, spoken in the Equatorial province of southern Sudan. Further fieldwork in Sudan since the late 1980s has been hindered practically and morally unworkable by the political and economic situation.

3.3. Mesopotamia

The language situation in Iraq was almost unknown before Blanc's publication on the *Communal dialects of Baghdad* in 1964, in which he described the three main dialects of Jews, Christians and Muslims and outlined the Mesopotamian dialect area with its primary bifurcation into mainly non-Muslim *qəltu* and Muslim *gəlat* dialects. Other publications on Baghdadi dialects include Malaika (1963) on the Muslim dialect, Mansour (1991) on the Jewish dialect, and Abu-Haidar on the Christian dialect (1991). Jastrow's extensive publications on the Anatolian *qəltu* dialects (1973, 1978, 1979, 1981, 2003), the Jewish dialects of Arbil and 'Aqra in northern Iraq (1990) and the Jewish and Muslim varieties of Mosul Arabic (1979), together with recent work by Wittrich (2001) on the dialect of Āzəx, and Abu-Haidar on Rabiṭa (2004) have ensured a far better coverage of the minority dialects of Iraq than of the majority Muslim dialects. The areas Jastrow (2002, 351) lists as still awaiting detailed dialectological research, doubtless of enormous scientific worth, will now have to wait as the country continues at the time of writing to be embroiled in a US-inspired civil war of catastrophic proportions.

3.4. North Africa

Research on the coastal dialects of North Africa and Andalusian Spain began relatively early. These countries were easy to travel to, particularly the coastal regions – neither too far in terms of distance nor, as French colonies, administratively opaque. The very earliest works by Pedro de Alcalá (republished in 1928) on the dialect of Granada go back to the early sixteenth century. Works completed in the late-nineteenth, early-twentieth centuries include those by Kampffmeyer (1903, 1905, 1909, 1913) on Moroccan and Algerian, Marçais on Tlemcen (1902) and Tangiers (1911), Cohen on Jewish Algiers (1912) and Stumme on Tunis (1896). Around the middle of the twentieth century fieldwork in North Africa received new momentum and resulted in publications by a number of, again mainly French, scholars, including Brunet (1931, 1952), Boris (1958), P. Marçais (1956), Pérès (1958) on Algerian, Harrell (1962b, 1966) on Moroccan, Cohen (1964–1975) on Jewish Tunisian, Singer (1958) on Tunisian, and Grand'hénry (1972, 1976) on Algerian. More recent work on Moroccan Arabic includes publications by Heath (1987, 2002), Caubet (1993, 2000), Vicente (2000), Behnstedt/Benabbou (2002) and Behnstedt (2004, 2005). Recent publications on Algerian Arabic include those by Boucherit (2002) and Souag (2005). Recent work on Libyan Arabic includes Owens (1984) on eastern Libyan, Abumdas (1985) on Libyan Arabic phonology, Pereira (2001, 2003) on Tripoli, and Yoda (2005) on the Jewish dialect of Tripoli. Recent publications on Tunisian include Talmoudi (1980), Singer (1980, 1984), and Behnstedt (1998) on the communal dialects of Djerba. The dialect of Ḥassāniyya spoken in Mauritania and Mali, with its historical links to southern Yemen, may prove to be one of the most interesting dialect groups; in recent years we have been fortunate to have publications by Cohen (1963), Taine-Cheikh (1988, 2003), including, in the case of the latter, a multi-volume dictionary, and Heath (2003, 2004), in addition to socio- and ethnolinguistic work by Tauzin (1993). To this section must also be mentioned the important work by Corriente, in particular, on the no longer extant Andalusian Arabic (1977, 1989, 2006).

3.5. The Arabian Peninsula

The Arabian Peninsula has for various political, social and administrative reasons held on to its secrets for far longer than dialects spoken around the Mediterranean. Few significant publications appear to have been produced until the second half of the twentieth century, and even now large areas of the Peninsula remain unknown.

The most important works on Saudi Arabian dialects include Schreiber's description of Makkan (1971), linguistic descriptions by Johnstone (1967), Sieny (1978), Abboud (1979), Ingham (1982, 1994, 2008), sketches by Prochazka (1988a, 1990, 1991) together with his country-wide survey (Prochazka 1988b), and works on the oral narrative by Sowayan (1992) and the most impressive five-volume work of Kurpershoek (1994–2005). In recent years, native speaker researchers have begun to conduct work on the dialects of Asir (Al-Azraqi 1998, Asiri 2007).

European research on Yemeni dialects began in the south in the late nineteenth century with Landberg (1901, 1905–1913). Since then the most significant publications

have included Rossi on the dialect of Ṣanṣā' and his sketches of rural dialects (1938, 1939, 1940), Goitein (1934), the sketch of Yemeni dialects by Diem (1973), from the 1980s until the 2000s the dialect atlases, dialect sketches and glossaries of Behnstedt (e.g. 1985, 1987a, 1987b, 1991, 2006), the syntax of Ṣanṣāni by Watson (1993), the grammar of Ṣanṣāni by Na'im (2009), the grammar of Manāxa by Werbeck (2001), the two-volume dictionary of post-classical Yemeni Arabic by Piamenta (1990–1991), and the monolingual dictionary by al-Iryani (1996). We also have article-length sketches of various dialects, including al-Gades by Goitein (1960), Jiblah by Jastrow (1986), Zabid by Procházka (1987), Ḍhālaṣ and Yāfiṣ by Vanhove (e.g. 1993, 2004), Ġaylḥabbān by Habtour (1988), word stress in Ṣanṣāni by Na'im-Sanbar (1994), Baradduni by Bettini (1985, 1986), Ibb by Watson (2007b), the Tihāma dialect area by Greenman (1979) and Simeone-Senelle et al (1994), and dialects of the Ḥaḍramawt by Al-Saqqaf (e.g. 2006).

The earliest publications on Omani dialects include Reinhardt (1894) and the very sketchy description by Jayakar (1889). In recent years, work has been conducted on various dialects by Brockett (1985), Holes (1989, 1996, 1998), Glover (1988) and Kaplan (2006) and Eades (2009). The Gulf dialects, particularly those of Bahrayn and Kuwait, but also Abu Dhabi, have been treated by Johnstone (1967), Ingham (1982), Procházka (1981), Al-Tajir (1982), Al-Rawi (1990) and Holes (1987, 2001, 2004, 2005).

3.6. Dialect enclaves and sub-saharan Africa

Studies on dialect enclaves have been conducted on Uzbekistan, principally by the Russians Vinnikov (1962, 1969) and Tsereteli (1956), also by Fischer (1961) and Jastrow (1995, 1998, 2005), Khurasan (Seeger 2002), Khuzistan (Ingham 1973, 1976, 1991), and on the dialect of the Maronite community in Cyprus (Borg 1985, 2004). The Arabic dialects of south-east Turkey were studied by Sasse (1971) and, more recently, Procházka (2002). Studies on the relatively recent Arabic dialects in sub-saharan Africa include, in particular, work on Nigeria by Lethem (1920), Kaye (1982–1986) and Owens (1985, 1993a, 1993b, 1998), and Chad by Hagège (1973), Kaye (1976), Roth (1969–72, 1979), Owens (1985), Zeltner/Tourneau (1986) and Jullien de Pommerol (1990, 1999).

In addition to the works mentioned above, there are, of course, the many dialect sketches in the *Encyclopedia of Arabic Language and Linguistics* (2006–2009).

4. Comparative studies of linguistic issues

A number of comparative studies of single linguistic issues within Arabic dialects have been conducted. These include the book-length studies by Fischer (1959) on the demonstratives, Janssens (1972) on word stress, Eksell Harning (1980) on the analytic genitive, Retsö (1983) on the passive, Procházka (1993) on prepositions, Mörrth (1997) on the cardinal numbers from one to ten, Cuvalay-Haak (1997) on the verb, Dahlgren (1998) on word order, and Brustad (2000) on aspects of the syntax of four dialect areas. The comparative studies include a number of articles dealing with phonological issues, including reflexes of *q and the old interdental (Taine-Cheikh 1998), and reflexes of

*ḏ / *ḏ (Al-Wer 2004); particles and grammaticalisation, including Taine-Cheikh (2004a) and Versteegh (2004) on different interrogatives, and Taine-Cheikh (2004b) on future particles; the active participle (Caubet 1991); and the behaviour of relative clauses and genitive constructions (Retsö 2004). Areas that have attracted considerable interest from phoneticians and generative phonologists as well as from dialectologists include phonological emphasis in terms of both its phonetic correlates and the domain of emphasis spread (e.g. Jakobson 1957, Ghazeli 1977, Younes 1993, Davis 1995, Bellem 2007), the articulatory phonetics of ṣayn (e.g. Heselwood 2007), and syllabification and syllable structure (e.g. Fischer 1969, Selkirk 1981, Broselow 1992, Kiparsky 2003, Watson 2007a).

Certain comparative lexical studies have been undertaken, particularly in the dialect atlases of Behnstedt (1985, 1987a, 1997–2000) and Behnstedt/Woidich (1985–1999). A comparative study of unmarked feminine nouns was published by Procházka in 2004. However a lacuna in the literature is a comprehensive study of the distribution of basic lexical items throughout the Arabic world. This is being filled by the lexical dialect atlas WAD project currently being undertaken by Behnstedt/Woidich in collaboration with other researchers (Behnstedt/Woidich 2011). With the additional planned uploading of dialect maps onto the Semitic Sound Archive, this project will give researchers an unprecedented means of appreciating links between different dialects and dialect regions.

5. Introductions to modern Arabic dialects

Introductions to modern Arabic dialects as a whole include the initial chapter of *Handbuch der arabischen Dialekte* edited by Fischer/Jastrow (1980), introductory volumes by Durand (1995) and Abboud-Hagggar (2003), and a number of articles in handbooks or less widely available publications, including Retsö (1992) and Kaye/Rosenhouse (1997).

6. What is distinctive about Arabic?

Arabic shares with most other Semitic languages a rich consonantal system beside an impoverished vocalic system, but is distinct from these languages in its relatively large number of established verbal forms, commonly labelled by Arabists with the Roman numerals I through to X (including XI in North Africa), quantitative distinction in the vowels, and a set of emphatic coronal obstruents which are, in the vast majority of cases (although cf. below) realised as pharyngealised.

Apart from much of the language enclaves and the new zone III area, Arabic dialects enjoy an at least partially diglossic relationship with the Standard language (cf. Boussofara-Omar 2007), a factor which leads to doublets in many dialects, particularly where an original lexeme may be used in an elevated register in one sense and in a household register in another sense. Examples of such doublets include: Bahrayni

ʕarab: *ǧidir* ‘cooking pot’ v. *ǧidar* ‘he was able’; *ytiǧaddam* ‘he comes forward’ v. *yat-qaddam* ‘he is making progress’ (Holes 2005, xxix); Najdi *cān* ‘if’ versus *kān* ‘it was’ (Ingham 1994).

6.1. Arabic before the spread of Islam

The position of Arabic within the Arabian Peninsula in the centuries before Islam cannot be totally known. We have evidence from inscriptions that Arabic was used in some register or other in widely separated areas in the Arabian Peninsula in the centuries before the rise of Islam: the oldest Arabic inscription known to date is that of ʕgl bin Hfʕm in Qaryat al-Faw written in Sabaic script, which probably dates from the end of the first century BC (Macdonald 2000). Other inscriptions written in mixed Arabic and Nabataean or Dadanite suggest a period of multilingualism and almost certainly mutual comprehensibility of Aramaic and Arabic – the Aramaeo-Arabic inscription in Mleiḥa (Mulayḥa) in today’s United Arab Emirates shows that old Arabic was in use in this area at least in the second century AD. Beyond the Peninsula, to the north, east and west, there is evidence of settlement of groups of Arabic speakers, due primarily to ecological and economic reasons: parts of Syria had, for considerable time, been the summer grazing area of nomadic Arab tribes – reference to this seasonal movement is made in the Qurʾān, sūra 106:1–2 *ʾilāfihim riḥlata al-ṣitāʾi wa-l-ṣayfi*. In other areas, including the Bekaa valley and parts of present-day Israel, large groups of Arabs appear to have settled permanently as early as the sixth century. By the mid-seventh century, large groups of Arabic-speaking tribesmen had settled the western edge of Mesopotamia; within Egypt, along the eastern periphery of the Nile valley and into the deserts in the east and northeast, gradual settlement by disparate Arab tribal elements had been taking place over centuries (Holes 2004). Long before the Islamic conquests, there was Arabic contact with Egypt due to movement in search of pastures. Importantly, all these areas – Mesopotamia, Syria and Egypt – were polyglottal on the eve of the Islamic conquests, a factor which would facilitate the introduction of Arabic.

Ancient Arabic, as we know from descriptions of the Arab grammarians, was not a single variety, but had many distinct dialects (Sibawayhi 1982, Rabin 1951, Cadora 1992). This is not disputed. What is disputed, however, is the origin of the modern Arabic dialects. Do all modern Arabic dialects share a single unified ancestor, or do they have many different, but related, ancestors? And if they share a single ancestor, how is this ancestor related to Classical Arabic or to the ʕarabiyya, and are these latter one and the same language? Versteegh (1984) saw the ancient written and spoken language as essentially the same and as the origin of all modern dialects, saying: ‘In my view, the only reasonable conclusion to be drawn on the basis of the evidence of grammatical literature is that, essentially, the colloquial and the literary language of the Arab tribes, both before the conquest and for a long time afterward, were identical’ (Versteegh 1984, 3).

However, the majority of researchers today do not believe that ancient literary and colloquial Arabic was a single, unified language. The Arab grammarians made reference to the spoken language, and in doing so pointed out salient linguistic differences between the tribes and tribal groups, some of which were regarded as acceptable or neutral, others of which were frowned upon. The fact that they were able to make

value judgements that were accepted by other grammarians suggests movement towards a literary koine. Dialect phenomena were given names, such as *ʕanʕanah*, *kaška-šah*, *taltalah*, and *ʕajʕajah* (Rabin 1951) – today's derogatory reference to Yemenis south of the Sumārah pass as *luḡluḡī* by northern speakers because of the former's tendency to pronounce qāf as [q] is reminiscent of the ancient labels. Some of the ancient dialect features are preserved in the Qur'an and the Ḥadīth – e.g. *kaškašah* – the Prophet himself is famously recorded as saying the following, using the m-definite article from Tihāmah: *laysa min am-birri m-šiyām fi m-safar* 'it is not pious to fast while travelling' (cf. Greenman 1979).

7. The relationship between ancient Arabic and the modern dialects

Over the years, the relationship between the ancient and the modern dialects has been essentially viewed in four opposing ways: the dialects of today are considered to be either the descendants of the ancient Arabic described by the Arab grammarians, or descendants of a modern language which already existed in the western cities of Makka and Medina before Islam (Vollers 1906; Holes 2004), or the descendants of a post-Islamic koinised language which already possessed many features of modern Arabic dialects (Fück 1950, Ferguson 1959), or separate descendants of many different dialects (Edzard 1998). Corriente (1975, 1976), on the basis of examining the native grammarians' sources, postulates a central region with tribes speaking ancient Arabic dialects and border regions – Northern Hījāz, Syria and Lower Mesopotamic – where dialects of a modern Arabic type developed through the gradual disuse of functionally low-yielding devices. This modern variety then spread through drift to Yemen, Hījāz and Tihāmah. What many saw to be the relatively unified nature of Arabic dialects, however, probably due to the focus at that time on the colonial zone II dialects around the Mediterranean, lead to arguments in favour of a monogenetic origin at some stage (cf. Fischer 1995). Fück (1950) believed that the modern dialects developed in the military camps through the smoothing away of dialect-specific features from the ancient dialects. For him, this resulted, most particularly, in the loss of the case system and the erasure of mood differences in the verb. Ferguson (1959) saw the ancient language as comprising different dialects and attributed what he saw as the unified nature of all modern dialects to the koinisation supposed to have originated in the military settlements of Egypt and Syria. He was the first to specifically enumerate features which distinguished all modern dialects from Classical Arabic. The fifteen linguistic features which he claimed to be present in all modern dialects, but absent in the language of the poets and the Qur'an are:

- (1) the loss of the dual in the verbs and the pronouns
- (2) the sound shift a > i in prefixes (*taltalah*)
- (3) the merger of IIIw and IIIy verbs
- (4) the analogous treatment of the geminate verbs, which made them indistinguishable
- (5) from form II of the IIIw/y verbs
- (6) the use of li- affixed to verbs for indirect objects

- (7) the loss of polarity in the cardinal numbers 13–19
- (8) the velarisation of /t/ in the cardinal numbers 13–19
- (9) the disappearance of the feminine elative *fuʕlāʔ*
- (10) the adjective plural *fuʕāl < fiʕāl*
- (11) the suffix for denominal adjectives (nisba) *-ī < -iyy*
- (12) the use of the verb *ġāb < ġāʔa bi-* ‘to bring’
- (13) the use of the verb *šāf* instead of *raʔā* ‘to see’
- (14) the use of the indeclinable relative marker *illī*
- (15) the merger of /d/ and /ḏ/

Between them, Cohen (1970), who rejected the monogenetic explanation of the origin of the dialects, and Versteegh (1984), who controversially did not, propose a further twenty features. Versteegh’s hypothesis is founded on a belief that the modern dialects are descended from one uniform linguistic entity – not Ferguson’s military koine, as we saw above, but ‘the essentially uniform language of the Jāhiliyya’ – through a complex process of pidginisation, followed by creolisation and then de-creolisation (Versteegh 1984, 6). The additional features – 16–22 from Cohen, and 23–35 from Versteegh – are given as listed in Versteegh (1984, 20–21).

- (16) the occlusive realisation of the interdental spirants
- (17) the partial or complete disappearance of *-h-* in the pronominal suffix of the 3rd person masc. after consonants
- (18) the loss of the gender distinction in the plural of pronouns and verbs
- (19) the quadrilateral plural patterns *fuʕālil* instead of *f(a)ʕālil*
- (20) the diminutive pattern *f(u)ʕayyal*
- (21) the use of a verbal particle with the imperfect verb to indicate present durative
- (22) the use of an analytical possessive construction
- (23) the loss of the glottal stop
- (24) the reduction of short vowels in open syllables
- (25) the reduction of the opposition /i/–/u/
- (26) the assimilation of the feminine endings *-at, -ā, -āʔ > a*
- (27) the disappearance of the internal passive
- (28) the assimilation of the verbal patterns *faʕula* and *faʕila*
- (29) the tendency to re-analyse biradical nouns as triradical nouns
- (30) the loss of the IVth measure
- (31) the agreement in number between subject and verbal predicate
- (32) the nominal periphrasis of interrogative adverbs
- (33) the word order SVO in place of VSO
- (34) the use of serial verbs
- (35) the tendency to use asyndetic constructions for expressions with modal meaning, such as *lāzim* ‘must’.

In the years following, however, these features have been shown to be at best tendencies in Arabic dialects, since the more dialect data becomes available the more we find these features are not universally shared and the more difficult it becomes to define an entity called modern Arabic colloquial which contrasts wholly with ancient Arabic (Diem 1991, Behnstedt/Woidich 2005). From the above list, Behnstedt/Woidich (2005, 11–20) examine six phonological features, seven morphological features, three syntactic features, the apparent analytic tendency of modern dialects (cf. Holes 2004) and

lexical features. They demonstrate both that at least some dialects fail to exhibit many of these supposed modern Arabic dialect features and that some of these features may have already existed in one or more variety of ancient Arabic, and hence cannot be described as exclusively modern Arabic dialect features. To Behnstedt/Woidich's list, we now know that point 14, the invariable relative pronoun, is not found overall in the Arab world. Recent research by Asiri (2007, 2009) and earlier observations by Prochazka (1988b) point to the use of a gender/number variable relative pronoun in parts of south-western Asir. Thus, in Rijāl Almaṣ, the relative pronoun following a masculine singular head noun is *dā*, following a feminine singular head noun *tā*, following a human plural head noun *wulā* and following an inanimate plural head noun *mā* (Asiri 2007, 2009), as in:

<i>antah rayta m-walad dā šarad</i>	'have you seen the boy who ran away?'
<i>gābalt im-brat tā lisa yasmaʕ</i>	'I met the girl who can't hear'
<i>gābalt im-šuwāl wulā sarag/u m-maḥall</i>	'I met the boys who stole from the shop'
<i>im-maḥāll mā bana/ha</i>	'the houses that he built'

Increasing numbers of researchers suggest a comparison between Classical Arabic and the modern Arabic dialects to be intrinsically flawed, due to the fact that Classical Arabic almost certainly never reflected the linguistic system of the ancient dialects (Eksell 1995, Owens 2006, cf. already Vollers 1906). The difference between the modern dialects and Classical Arabic is not only one of time, but also one of register – the dialects reflect only the spoken language, Classical Arabic essentially only the written language (Eksell 1995). Eksell argues that there is no evidence in the sources for the development of Arabic dialects for either a koine or a pidgin form (Eksell 1995, 64). In some cases, features which apparently occur in all modern dialects may well have never existed in the spoken ancient dialects, or may have already become functionless due to redundancy. Fischer (1995) examines one feature – the dual in pronouns and verbal inflections, the absence of which distinguishes all modern dialects from Classical Arabic. He argues, however, that it may never have existed at all in the ancient Arabic dialects. In verbs and pronouns, the Classical Arabic dual clearly shows a secondary character – in the third person verbal forms, the *-ā* dual ending is attached to the singular form (as in *katabā* 'they m.dual wrote' and *katabatā* 'they f.dual wrote') while in the independent pronouns and the second person verbal forms the *-ā* ending is suffixed to the plural forms (as in *humā* 'they dual', *katabtumā* 'you dual wrote' and *antumā* 'you m.dual') (Fischer 1995, 83). This makes the dual appear to be very much a secondary feature. Fischer assumes that the dual endings in pronominal forms were never actually heard, but rather restricted to 'der Herausbildung einer gehobenen Sprachebene' (Fischer 1995, 83). Should Fischer's hypothesis be correct, we could no longer say that the modern Arabic dialects lost the dual, but rather that the spoken ancient Arabic dialects never possessed it.

Some linguistic changes appear to have been already well underway before the main Islamic conquests. Corriente (1975, 53; 1976, 95) argues, on the basis of evidence from Sībawayhi (vol 1/201), *Kitāb al-Aḡānī*, the Qur'ān and poetry, that agreement of the verb in number with the subject in all positions, as exemplified by *akalūnī l-baraḡīl*, apparently exceptionless in modern dialects was already common in pre-Islamic times among the Bedouin and in other types of ancient Arabic. Corriente (1978) and Brown

(2007) show that *qād* and *qā'* were already in free variation in pre-Islamic times. Diem (1991) addresses the absence of case and mood distinctions and the absence of final vowels or definiteness endings in the modern dialects. He argues that it was not, as traditionally supposed (cf. Fück 1950), the loss of final vowels that lead to the loss of case and mood distinctions, but rather the increasing redundancy of the case system which lead to syntactic change and then to phonetic loss. Papyri dating back to the first half of the first century AH already show an absence of case, indicating that loss of the case system was well advanced before the Islamic conquests, and was thus already a feature of pre-modern Arabic. The choice of the oblique form for the sound masculine plural and dual in, apparently, all dialects can be explained by the fact that the accusative/genitive is far more common than the nominative. Where linguistic forms are generalised, the generalised form is predicted to be that most commonly heard – in this case, the oblique form.

8. Features of modern Arabic dialects as universal tendencies

Many of the tendencies listed above, including those which appear to unify the Arabic dialects, can be attributed either to language universal tendencies or to predictable phonological processes. The loss of interdentalals found in many, but not all, zone II dialects is not peculiar to Arabic – interdentalals are rare in the languages of the world (Maddieson 1984) and often tend to be shifted to dental stops, as in Irish English, or labio-dental fricatives, as in Cockney English. The use of analogy to reduce the number of linguistic forms is attested cross-linguistically, with the more common of two forms being generalised – e.g. IIIw is likely to be reanalysed on analogy to IIIy since IIIw is rare in Arabic and IIIy is the pattern most similar to IIIw. Cluster reduction and syllable contraction in common basic lexemes is attested in all languages – e.g. English *sju*: ‘see you’ (Bybee 2001). The formation of verbs from verb + prepositional phrase, as in *jāb* < *jā'a bi-* ‘to bring’ or from prepositional phrases, as in Şanʿani *baxxar* ‘to make better’ < *bi-xayr* ‘well’, is also attested in other languages. Reanalysis of *t in the numbers between 11–19 as /t/ can be analysed phonologically as /t/ assimilating the pharyngeal element of the following /ʕ/.

9. Features of modern Arabic dialects as grammaticalisation

9.1. Adverbs

Several apparently shared features fall under the category of grammaticalisation – these include the nominal periphrasis of interrogative adverbs (cf. Taine-Cheikh 2004a), verbal preformatives in the imperfect and exponents of the analytical genitive construction. The formation of function words and particles from content words through grammaticalisation is a feature of languages the world over, and affects in particular the formation of high frequency function words (cf. Woidich 1995). The definite article in many languages, including Arabic (Voigt 1998), has developed

through the grammaticalisation of demonstratives – elements which are phonologically larger and syntactically more independent than the article. Similarly, adverbs are commonly formed by grammaticalisation: in the case of Arabic, very few words in the Classical language have a purely adverbial function – in most cases, the dependent case is used to indicate adverbialness (Watson 2006). Adverbs are frequently and repeatedly used in spoken language and therefore the requirements of communication are likely to result in innovation. Words or phrases relating to time or place or manner or degree/amount are semantically bleached, often phonologically reduced, and become restricted in use. The English adverbs, *today* and *tomorrow*, are derived ultimately from semantic bleaching and phonological contraction of ‘this day’ and ‘this morrow’. Semantic bleaching without phonological reduction frequently results in doublets – as a content word, the form has one sense, and as an adverb another. In German, *morgen* has both the sense of ‘morning’ and the adverbial sense ‘tomorrow’; in standard Arabic *al-yawm(a)* has both the sense of ‘the day [acc.]’ and the adverbial sense of ‘today’. And grammaticalisation is not a pejorative of modern languages. The grammaticalised form of /ayyu šay’in/ in the sense of ‘what’ was also known to have been in use since early times, and is recorded variously as *ayš*, *ayšin* and *ayši* in *Kitāb al-Aḡānī* (Corriente 1975, 53). We also see grammaticalisation of *ywm* and *ym* in Sabaic, which adopted the adverbial sense of ‘when’.

Consider the following table of interrogative pronouns.

Tab. 50.1: Interrogative pronouns in Arabic dialects

	When	Where	Why	How	How many?	How much?
Šanʿānī	ayyahīn	ayn	lilmā	kayf	kam	
Cairene	imta	fēn	lēh	izzāy	kām	
Damascus	ēmta	wēn/fēn	lēš	kīf/šlōn	kamm	addēš
Muslim	yōmte/	wayn	layš/luwayš	šlōn	bayš/šgəd	čəm/
Baghdad	(i)šwakit					škəm/
						šgəd
Mardin	aymat(e)	ayn	layš	ašwan		
Cherchill,	ḏīwqāš	fāyen	ʿalēš/lēš	kifāš/kīš	šḥāl	
Algeria						
Khartoum	mitēn	wēn	lē šnu/lēh	kēf	kam	

Non-interrogative adverbs result from grammaticalization of nouns or adjectives. Forms for ‘now’ resulting from the grammaticalisation of (mainly) noun phrases involving, principally, grammaticalisation of cognates of the time words *sāʿa* ‘hour’, *waqt* ‘time’ and *hīn* ‘time’ are given in table 50.2.

Other adverbs formed through grammaticalisation include quantifiers such as the diminutive noun *šwayyah* ‘small thing’, which in most non-peripheral dialects has now developed the adverbial sense ‘a little’; Cairene *ʿawi*, Yemeni *gawī/qawī* (*qawī ‘strong’), which has the sense of ‘very’ following an adjective, ‘much, a lot’ following a verb; *yōm/yawm* (*yawm ‘day’) has the sense of ‘when’ in many dialects, including the Omani dialect of Khābūra (Brockett 1985, 225), Yemeni Rāziḥūt, Ḥōrān (Cantineau 1946, 409–410) and ʿl-ʿAḡārma (Palva 1976, 52); Khābūra *il-ʿfām* (*al-ʿfām ‘the year’) has the sense of ‘last year’ in adverbial contexts (Brockett 1985, 164); Khartoum *gawām*, Damascene *ʿawām* (*qawām ‘support’) has developed the adverbial sense of ‘immediately’.

Tab. 50.2: ‘Now’ in Arabic dialects

Dialect	Dialect form	Classical cognate
Baghdad	hassa	*hāḍihi s-sāʿa
Khartoum	hassi / hassaʿ	*hāḍihi s-sāʿa
Damascus	hallaʿ	*hāḍā l-waqt
Jerusalem	halʿēt	*hā-l-wuqayt
Şanʿāʾ	ḡalḥin	*hāḍā l-ḥin
Najdi	ha-l-ḥin	*hāḍā l-ḥin
Cairo	dilwaʿti	*hāḍā l-waqt
Algiers	drūk (dərwək)	*hāḍā l-waqt
Rabat	dāba	*iḡā bi-
Tunis	tawwa	*taww-an

9.2. Conjunctions

Further grammaticalisation can take place to produce conjunctions from adverbs and pragmatic particles from conjunctions. Thus, Cairene *aḥsan* has through the shifting of syntactic boundaries acquired in certain contexts the additional conjunctive sense of ‘because’, as in: *ikkallimu f-ḥāga tanya aḥsan il-ḥiṭān laha wdān* ‘talk about something else because the walls have ears’ (Woidich 1995). As a pragmatic device, *aḥsan* has developed the sense of ‘lest; otherwise’, as in: *ibʿid ʿanni aḥsan aʿtaʿlak widānak* ‘get away from me otherwise I’ll cut off your ears’ (ibid, cf. also Woidich 1991). Similarly the relative pronoun *illi* has through grammaticalisation acquired additional conjunctive functions in the sense of ‘that’ or ‘because’ and in the case of *zayy illi* ‘als ob’ (Woidich 1988). The shifting of morphological boundaries can also produce suffixes. This has occurred in the case of Cairene *-ṭāšar* from the teen numerals (e.g. *talattāšar* ‘thirteen’) where /t/ was originally part of the first element (e.g. *talātat*). The remorphologised suffix can now be affixed to non-numeral forms as in *ḥāgaṭāšar* ‘some number between 13 and 19’ (ibid).

9.3. The genitive exponent

With the exception of some Peninsula Bedouin dialects and dialects of south-eastern Turkey (Procházka 2002), Arabic dialects have a genitive exponent which may be used in place of the synthetic genitive construction (*iḍāfah*). In contrast to Versteegh’s (1984) claims, however, work on the analytic genitive by Munzel (1949) and Eksell Harning (1980, cf. Eksell 2006, 2009) demonstrates not that the analytic genitive has replaced the synthetic genitive, but rather that the choice of the analytic over the synthetic genitive, in addition to being commonly restricted to alienable as opposed to inalienable possession, as in: *laḥmi* ‘my flesh’ versus *il-laḥm biṭāʿi* ‘meat that belongs to me [e.g. that I bought]’, may at any one time be due to formal reasons to avoid the complexity and ambiguity of the synthetic genitive, or to stylistic and/or rhythmic factors.

Tab. 50.3: Genitive exponents

Dialect	Dialect form	Pre-grammaticalised cognate
Baghdad	māl	māl 'property; possessions'
Upper Egypt	ihnīn	hana 'thing'
Chad	hana	hana 'thing'
Damascus	tabaʕ	tabaʕ 'property'
Jerusalem	šet	šay' 'thing'
Yemen	ḥagg	ḥagg 'right; property'
Negev	šugl	šugl 'work'
Aleppo, Palmyra	geyy/gī	unknown
Cairo	bitāʕ	bitāʕ 'property'
Oman	māl	māl 'property'
	ḥāl	ḥāl 'state'
Tunis (Jews)	ntāʕ, tāʕ, ta-	matāʕ 'property'
Morocco, north-west	d-, dyal	demonstrative element

The genitive exponents have resulted either from the semantic bleaching and, in some cases, phonological reduction of nouns relating to possession or property, wealth, work, thing, or state, or are etymologically related to relative or demonstrative elements. These latter appear to be restricted to parts of Anatolia and the Maghrib. As early as 1900, Kampffmeyer suggested that the *d*- elements in the Maghrib were ancient. *d*- and *ḍ*- elements in South Arabian function demonstratively, relatively and as a genitive exponent and were introduced, Kampffmeyer proposes, with the immigration of South Arabian tribes in the eleventh century (cf. Eksell Harning 1980). Consider table 50.3 showing a selection of genitive exponents.

9.4. Verbal preformatives

Verbal preformatives are said to be typical of most modern Arabic dialects. While the preformative *bi*- is not attested in Classical Arabic, however, the preformative *sa*- for the future is; thus, while verbal preformatives are common in modern Arabic dialects, they are not the exclusive property of the dialects. The majority of verbal preformatives again result from grammaticalisation. The future prefix in the dialects is the result of various degrees of grammaticalisation of one of six elements (for a table of future particles, see Taine-Cheikh 2004b, 227–233):

- (1) Most commonly verbal forms relating to movement, desire or becoming, including *rāḥ* 'to go' > *raḥ*, *aḥ*, *ḥ*, *ḵ* *bġy* 'to wish' > *b*-;
- (2) A prepositional phrase (*bi-widd* > *bidd*);
- (3) A cognate of *hattā* 'until' in the case of Maltese *sa* and Anatolian *tā* / *ta* / *dā* possibly (Taine-Cheikh 2004a);
- (4) The adverb for 'now' in some dialects, including Baghdad and the Karaites of Ḥit (Khan 1997, 92);
- (5) A form of the verb *kān*: the imperfect in Algiers (Boucherit 2006); the active participle in Bukhara.

- (6) The verbal inflectional marker of the verb *šā* 'to want' in the case of dialects of Jabal Rāziḥ in Yemen; thus, *šūk* 'I want' > *šūk asīr* 'I want to go' > *k-asīr* 'I will go' (Diem 1973).

The continuous/habitual verbal preformatives result either from grammaticalisation or from direct inheritance. Thus, reflexes of *d-* and *ḏ-* found in Modern South Arabian (Mehri) in the sense of present continuous appear in some modern Yemeni dialects, in some cases with the additional sense of future or imminent future, including as-Suwādiyya, Yarīm, Uṣāb, al-Qāṣida, Radāf and Baynūn (Diem 1973, Behnstedt 1985). The most common verbal particle *bi-* (also *bayn-* in parts of Yemen and for the first person in Ṣanʿā) is almost certainly related etymologically to *bayn* (or *baynamā*) in the sense of 'in' or 'while' (Fischer/Jastrow 1980, 75). Other present continuous particles which probably at one time had the sense of 'in' include *fā-* and *hā-* prefixed to the active participle in the Yemeni dialect of Rāziḥī, as in *him hā-gāwlīn* 'they are saying', and to an imperfect verb in a dialect spoken to the south of this area, as in *fā-yisrah* 'er geht jetzt' (Behnstedt 2006, 922, cf. also 1426). The grammaticalisation of a preposition with the etymological sense of 'in' or 'while' to express the present continuous is also attested in languages totally unrelated to Arabic, as we see in the now frozen or obsolete English 'a' coming and 'a' going' and colloquial German *ich bin beim Lesen, beim Kochen* 'I am reading, cooking'.

In various dialects, present continuous particles are also etymologically related to expressions involving being, doing and sitting (cf. Fischer/Jastrow 1980), as listed below:

- (1) Being: *kū* (< *ykūn*) in Anatolian and *kā-* and *ta-* (< *kā'in*) in Moroccan and Algerian;
- (2) Sitting: *qāṣid*, *gāṣid*, *ḡāṣid*, *qa-*, *da-* in dialects of Iraq, Sudan and Jewish Tunisian;
- (3) Doing: *ṣammāl*, *ṣam-* in Greater Syria and many dialects of Egypt;

10. Evidence for a polygenetic explanation

The more work is conducted on Arabic dialects, the more differences we see, on the one hand, and the more connections between various central and outer regions become apparent, on the other. That Arabic dialects emerged and continue to emerge from a heterogeneous dialect landscape can be seen by comparing lexical, syntactic and morphological features across the Arab world, features which reflect temporary and permanent population movements. The comprehensive work of Behnstedt/Woidich (2005) provides maps illustrating shared lexemes or roots between Yemen and Morocco, on the one hand, and Syria and Morocco, on the other. Reflexes of *ḡibh* 'Bienenstock' are attested in Yemen and Morocco. Reflexes of *√ḏmd* for 'yoke' are attested in Yemen, Morocco and Fayyūm. These lexical correspondences reflect population movement and population contact: Yemeni (and Syrian) tribes fought in the Islamic conquests in the west, and Yemeni tribes grazed their flocks in Fayyūm in the spring. Reflexes of *√ḡyr* in the sense of 'only; just; but' are attested in Yemen, Morocco and the Modern South Arabian language, Mehri.

Historical links are also reflected morphologically, reflecting particularly starkly links between Yemen and Southern Arabia and the western Maghrib: the *s*-causative,

recorded for some of the epigraphic South Arabian languages (Beeston 1984), remains a feature of Ḥassāniyya in Mauritania (Taine-Cheikh 2003), and in at least one lexicalised example, in the Yemeni dialect of Ibb (Watson 2007b, 22). Reflexes of the *l*-less relative pronoun *dī* are attested in parts of Yemen, Modern South Arabian and Morocco (cf. Rabin 1951, 84). Rāziḥīt is probably unique in Yemen for having the genitive exponent *hanī* – other dialects have reflexes of *hagg* (cf. table 50.2) – an exponent also attested in slightly different form in Upper Egypt and Nigeria. Lexical and morphological similarities between Central Sudanese and Makkan are seen as resulting from long-term contacts – perhaps through religious pilgrimage.

Phonological processes may also be shared across distances and languages – Corriente (1989) sees the occasional total assimilation of the coronal /n/ to a following consonant in Andalusian Arabic texts as evidence for connections between Epigraphic South Arabian, where (at least in the case of Sabaic) nasal assimilation became an increasingly common process, and Andalusia. Toll (1983, 11) also notes a few instances of /n/ assimilation to obstruents in the Ḥijāzi dialect of Ghāmid: assimilation to /x/, /ʃ/ and /t/ apparently involving the preposition /min/ ‘from’, and assimilation to /z/ in the word **manzal* [mazzal] ‘house’. Before labials and velars, /n/ assimilates in place only (e.g. [jambiya] ‘dagger’, [zumbil] ‘basket’, [muṇ kull] ‘of all’). Productive total assimilation of /n/ is still attested in the Yemeni variety of Rāziḥīt adding strength to Corriente’s hypothesis (Watson, Glover Stalls, Al-Razihi et al. 2006).

11. The classification of dialects

In this section, I consider the extent to which Arabic dialects can be, and have traditionally been, classified – in terms of geography, lifestyle, and religious and sectarian affiliation.

11.1. Geographical classification

Geographically, dialects have traditionally been classified broadly into a western group in the Maghrib and an eastern group in the Orient (Marçais 1977). The dialects of the Maghrib are marked most obviously by iambic as opposed to trochaic word stress, such that *katāb* ‘he wrote’ is stressed on the final syllable, often with elision of the (unstressed) initial vowel (> *ktab*, *ktəb*), in the western dialects. With the exception of Ḥaḍramawt and Dhofār (Janssens 1972, 45–46) and some Bedouin dialects, eastern dialects exhibit trochaic word stress, giving forms such as *kātab* ‘he wrote’. In some North African dialects (cf. Abumdas 1985 for Libyan), word stress is at least partially phonemic with nominal disyllabic forms being stressed on the initial syllable, verbal forms of the same pattern on the final syllable. Phonemic stress is also attested in some eastern Bedouin dialects (Rosenhouse 2006). Through the Andalusian scribes’ consistent habit of marking stressed syllables it appears that word stress was also phonemic in Andalusian (Corriente 2006).

There are also a number of tendencies that mark western from eastern dialects: western dialects tend to show more advanced syllable types through less epenthesis

and more syncope of open syllables, while eastern dialects exhibit one of two types of epenthesis (Kiparsky 2003). As a result, western dialects are predicted to have fewer short vowels phonemically than the eastern dialects – two in some dialects, with either a collapse in distinction between the front vowels /a/ and /i/, or the high vowels /i/ and /u/, a single short vowel, /ə/, in others (cf. Fischer/Jastrow 1980). This is, however, only a tendency, and both western dialects are found with three short vowels (e.g. Muslim Tunis) and eastern dialects with two short vowels (e.g. north Mesopotamia) (cf. Fischer/Jastrow 1980). Other phonological characteristics which tend to be associated with western dialects include the instability of syllable structures, the affrication of /t/, as in *ʔiktʕib* ‘she writes’, and the palatalisation and neutralisation of sibilants such that *s/ *š > /š/ and *z/ *ž > /ž/.

One of the most salient morphological features which distinguishes western from eastern dialects is the *n*- first singular imperfect prefix with the plural expressed by the suffixation of *-u*, to give *niktib* ‘I write’ ~ *niktibu* ‘we write’. Morphologically, the Maghrib is also marked by use of verbal form XI, *fʕāl* (e.g. *smānt* ‘I became fat’, where eastern dialects variously use either the IX form, *ifʕāl*, as in Cairene, or the II form, *faʕʕāl*, as in Šanʕāni, and by productive diminutive formation, with Ḥassāniyya showing fully productive diminutivation of both derived and non-derived verbs, as in: *ekeyteb/yekeyteb* ‘écrire d’une petite écriture minable’, *meylles/imeylles* ‘rendre un peu lisse’, diminutive of *melles/imelles* ‘rendre lisse’ (Taine-Cheikh 1988, 107, cf. Singer 1980). Syntactically salient in the western pre-Hilali dialects is the indefinite construction involving (in some dialects, a contraction of) *wāḥid* + definite article, as in: *wāḥd aṛ-rājāl* or *ḥa-r-rājāl* ‘a man’ (Marçais 1977, 176).

The west–east boundary, however, is not as sharp as it may once have seemed. Large-scale movements of Bedouin from the west at various times in history (cf. Woidich 1993, Behnstedt/Woidich 2005) have ensured that the Egyptian dialects of the western delta and the oases (in particular, Woidich 1993) exhibit a mix of western and eastern characteristics resulting in no fully recognisable border between the Maghrib and the Mashriq (contrary to Versteegh’s assertion 2001, 134). Alongside typical western features such as the *niktib* ‘I write’ ~ *niktibu* ‘we write’ paradigm in the western Egyptian Delta (Behnstedt/Woidich 2005, 103) and the oases of il-Baḥariyya and Farafra, affrication of /t/ in the oasis dialects, the *il*- verbal prefix (in place of eastern *it*-) in Farafra and south of Xarga, and final stress, a significant number of characteristics are of eastern or, in the case of the oasis dialects, more specifically northern middle Egyptian, type (e.g. the *bukara*-syndrome). Also, in contrast to the Maghribian iambic stress, final stress is attested irrespective of syllable type in the oasis dialects and only fails to target certain suffixes (cf. Woidich 2006b).

11.2. Lifestyle classification

Dialects of groups that have only recently become sedentarised or that are still semi-nomadic show typological similarities across large distances. Thus the major classificatory division of dialects in the Arab world has traditionally been seen in terms of bedouin versus sedentary – Versteegh (1984), Rosenhouse (1984, 2006), Cadora

(1992), Heath (2002) – with a further split, particularly in the Central Palestine/Jordan area, of the sedentary class into ruralite and urban (Cadora 1992, Holes 2004), where the ruralite dialects are spoken by long-established farming communities in villages.

Generally, it is claimed that Bedouin dialects are more conservative, sedentary dialects more innovative. This is because sedentary communities – particularly urban communities – are more likely to be open to new linguistic forms, to come into contact with people from other communities with whom they have to communicate, and thus avoid the more salient features of their dialect. The following features have commonly been said to distinguish Bedouin from sedentary dialects (e.g. Versteegh 1984, 11–12, cf. Holes 1996, cf. Rosenhouse 2006):

Tab. 50.4: Bedouin – Sedentary features

	Bedouin	Sedentary
*t and *d	Preserved as interdentals	Realised as alveolar stops/ fricatives
*q	Voiced reflex	Voiceless reflex
*g	Affricate/fricative reflex	Plosive reflex
Internal passive	Preserved	Not preserved
*ay and *aw	Preserved	Monophthongised
*a, *i and *u	Preserved	Merging of two vowel phonemes in some dialects
Plural pronouns/ verbal inflections	Gender distinction preserved	No gender distinction
Verb form IV	Preserved	Replaced usu. by form II
Status constructus	Preserved	Replaced by analytic genitive
Nunation	Vestiges remain	Not attested
Word order	VSO	SVO
Syllable structure	Conservative	Advanced

The Bedouin – sedentary split has, however, been shown to be both an oversimplification and of diminishing sociological appropriacy. Holes (1996), in particular, and others (e.g. Ingham 1982; Toll 1983) have shown that while the nomadic – sedentary lifestyle difference may be reflected in a set of certain linguistic features in certain regions, in others it is not. Indeed, the assumption of the Bedouin – sedentary split may have originated as a result of the focus on zone II dialects, where this lifestyle split was better reflected in the linguistic systems.

Firstly, one of the principal lifestyle changes between the time of the Islamic conquests and today is one from a semi-nomadic society to a settled society with ethnic plurality (Eksell 1995), so few tribes continue to live a fully nomadic existence (Holes 1996, Behnstedt/Woidich 2005). The Bedouin – sedentary linguistic distinction can therefore no longer be used in the literal sense. There is, indeed, also a question of terminology – within Arabia the term Bedouin means membership of an established Bedouin tribe, and does not necessarily imply a nomadic lifestyle (Ingham 1982, 32).

Secondly, a term which can to a certain extent be applied to North African, Mesopotamian and Syrio-Jordanian dialects does not have the same validity in the Peninsula: many communities within the peninsula which have been sedentary for millennia maintain extremely conservative forms and share forms with Bedouin groups (Toll 1983): *tanwīn* is attested in many settled dialects, including those spoken in Oman (Holes

1996), and in and to the east of the Yemeni and Saudi Tihama (cf. Greenman 1979, Ingham 1994, Asiri 2006); interdentalals are attested throughout the Peninsula in all but a few port towns – Makka, Jedda, Aden and Hudaida (Fischer/Jastrow 1980, Taine-Cheikh 1998, 20); the apophonic passive is variably productive, and indeed in Oman and Bahrain is more productive among inland sedentary groups than among the Bedouins, particularly the Bedouin coastal dialects (Holes 1998); and the majority of dialects in Oman and Yemen retain feminine gender in the plural pronouns. Even outside the Peninsula many ‘B’ features are attested in S dialects – including the interdentalals in villages of Central Palestine, South Lebanon, Palmyra (Cantineau 1934, 35), Algerian Dellys (Souag 2005) and rural and urban dialects in Iraq (Holes 1996), and affricated reflexes of *kāf* in Palestinian fellāḥ dialects (Palva 1991, 155). These are certainly not recent phenomena: in 1946 Cantineau says of the dialect of Ḥōrān, ‘malgré le genre de vie des paysans ḥōrānais, qui est celui de sédentaires villageois, leur parler n’est en aucune façon un parler de sédentaires’ (Cantineau 1946, 416). In addition, Dahlgren’s (1998) comparative study of word order in Arabic dialects has shown that the use of VSO as opposed to SVO often depends on discourse type, with VSO being far more common in many sedentary, including urban, dialects than previously assumed.

Blanc (1964, note 21) wrote that ‘while all nomads talk ‘nomadic type’ dialects, not all sedentaries talk ‘sedentary type’ dialects’; however, the evidence here suggests that even this is not the case. In some areas, Bedouin dialects exhibit features otherwise described as typical sedentary features – thus, the Bedouin Negev and Sinai dialects have the (sedentary-typical) *b*-imperfect and monophthongs and lack the Bedouin-typical *tanwīn* (Palva 1991, 154–155), and in the Bedouin dialects of large Omani, Bahraini and Kuwaiti coastal areas the apophonic passive is in recession.

Fourthly, and finally, the claim that Bedouin dialect features are more conservative than sedentary features has rightly been challenged by Fischer/Jastrow (1980) and Holes (1996). The notion that Bedouin features are conservative clearly fails to hold when it comes to phonological features: namely, the syncopation of vowels in open syllables; the affrication of velar plosives, which diachronic and synchronic evidence suggests were first affricated in the environment of palatal vocoids; the pharyngealisation of /l/ (cf. Kaye/Rosenhouse 1997); and, one of the few reliable cross-regional features of Bedouin dialects, the *gahawa*-syndrome, a productive phonological process whereby guttural consonants are avoided in syllable-final position.

We can neither say that features associated with Bedouin dialects are universally conservative, nor that one set of features distinguishes Bedouin dialects, or dialects of groups who describe themselves as Bedouin (Rosenhouse 2006), from sedentary dialects. ‘A Bedouin lifestyle in Iraq will be associated with a very different dialect from a Bedouin lifestyle in Chad or Camaroon’ (Owens 2006, 27); however, as discussed above, the features associated with Bedouin or former bedouin lifestyles differ within far smaller areas – between, for example, the inner Peninsula and the coastal edges of the Peninsula. In each case and for each area it is important to recognise the significance and salience of particular contrasts. What is regarded as a bedouin feature in one region may be regarded as a geographical marker in another – for example, the third masculine singular object pronoun, *-u*, is regarded as a ‘bedouin’ feature along the Euphrates, but within Saudi Arabia distinguishes northern Najdi from Central dialects (Ingham 1982, 32).

11.3. Communal classification

A further classification is made between communal dialects in certain parts of the Arab world (Blanc 1964; Holes 1983; 1987, Walters 2006). In Lower Iraq, in particular, parts of the Levant and dialects of the Maghrib which used to have mixed ethnic-religious groups, dialects have differed along ethno-religious lines – Jewish and Muslim, and Jewish, Christian and Muslim. In some areas, sectarian differences are also reflected linguistically: in present-day Bahrain, systematic linguistic differences have been noted between the dialects of the two Muslim sects – the Sunni ʿArab and the Shiʿite Baḥārnah (Holes 1983, 1987). In Djerba in Tunisia, the three religious/sectarian communities – the Jews and the Muslim Malekite and Ibadi communities – have saliently differing linguistic systems (Behnstedt 1998).

Blanc made first reference to the significance of communal dialects in his study of the Druze in 1953, where he refers to linguistic distinctions across ‘religio-ethnic communities’. His later study, *Communal dialects in Baghdad*, published in 1964, has become one of the most important works on Arabic dialectology. Here he argued that the Arabic-speaking world presented a whole spectrum of situations from complete or nearly complete absence of differences between dialects spoken by different religious or ethnic groups to the sharp cleavage seen between Muslim, Jewish and Christian dialects in Lower Iraq and between Muslim and Jewish dialects in Oran and smaller towns near Algiers. The choice of the term ‘communal dialects’ reflected the fact that communities based on different religions lived segregated lives although they may interact in socially prescribed ways. He wrote of three degrees of differentiation: major, intermediate and minor. Major differentiation is said to both:

- a) permeate the whole phonology and grammar of the dialects;
- b) correlate fully with community membership (Blanc 1964, 14).

Minor differentiation is, by contrast, marginal to linguistic structure, may not correlate fully with community membership and tends to fluctuate in usage. In his work on Baghdad, Blanc noted the major division between the *ḡalāt* Muslim dialects, on the one hand, and the non-Muslim – Jewish and Christian – *qāltu* dialects, on the other. The Jewish and Christian dialects differed from each other in systematic ways, but less starkly than both from the Muslim dialects – salient features in Christian Baghdad include the sentence-final copula, a lack of interdental fricatives and *imāla* is (cf. Abu-Haidar 1991).

The communal dialects of the Sunni ʿArab (A) and the Shiʿite Baḥārnah (B) in Bahrain also exhibit major communal differentiation (Holes 1983). Differences permeate the morphology and all levels of the phonology, including the reflexes of phonemes (for example, A dialects, but not B dialects, have interdentals), and syllable structure (A dialects exhibit the *gahawa* syndrome, B dialects do not; sequences of short vowels are avoided in A dialects, but permitted in B dialects).

The studies of Blanc and Holes have additionally shown that where two or more communal groups interact, speech accommodation in public areas will favour the dialect of the dominant group. Thus, as protected minorities, *ḡimmis*, the Jews and Christians of Baghdad would speak their own dialect at home and within their own communities, but accommodate to the Muslim dialect in interaction with Muslims. Similarly, the Shiʿite majority in Bahrain adjust their speech to that of the dominant Sunnis in intergroup interactions.

12. The linguistic typology of Arabic dialects

Linguistically, dialects can be typologised according to phonological, morphological, syntactic and lexical phenomena. Many shared phenomena result from historical or long-term contact, some, though, result from parallel development. A number of phenomena appear to be areal and may be due to substrate or adstrate influence. Here I mention the phenomena which have been considered most significant.

12.1. Phonology

12.1.1. The reflexes of phonemes

Differences in the reflexes of the consonantal phonemes show thread-like patterns throughout the Arab world, suggesting similar origins across, in some cases, huge distances, for similar patterns. Most significant are the reflexes of *qāf and *jīm, the presence or absence of interdental, and the number and reflexes of the sibilants. Within certain geographical areas, the reflex of *kāf, the loss or maintenance of the pharyngeals, and the reflexes of the emphatics are significant.

*qāf has five major reflexes, depending on area and lifestyle: /ʔ/, attested in the major cities of the Levant and Egypt; /k/ or /ḳ/, attested principally in Levantine village dialects, but also in areas of North Africa; /g/, attested in original Bedouin dialects and in much of the Arabian Peninsula; /q/, found in parts of northern Iraq, Oman, Yemen and North Africa; and the affricated /t͡ʃ/ or /d͡z/ of some of the Eastern Arabian dialects. In some Eastern Arabian dialects, [t͡ʃ] or [d͡z] are the front-environment allophones of /g/ where [t͡ʃ] or [t͡ʃ] are the front-environment allophones of /k/ (Johnstone 1963). In a few dialects of Middle Egypt (Manfred Woidich p.c.), and in Yemeni Zabīd (Prochazka 1987), *qāf is realised as a uvular ejective, although for Yemeni Zabīd this appears to more restricted than first assumed (Naīm 2008). For a survey of other reflexes and allophones of *qāf, cf. Edzard (2009).

*jīm has four major reflexes: /ǧ/ in the majority of eastern Bedouin dialects, in rural dialects of the Levant and Mesopotamia, in the majority of dialects in central Yemen, and in some sedentary dialects in Algeria; /g/ in and around Cairo and in the area between Ta'izz and Aden in Yemen; /ʒ/ in the urban Levantine dialects, especially Beirut, Damascus and Jerusalem, and in many Maghribi dialects; and /j/ in southern Mesopotamian *ǧalāt* dialects of Basra and Ahwāz, the Syrian desert, Khuzistan, Ḥaḍramawt, Dhofar and the Gulf. A voiced palatal stop reflex, /j̣/, is attested in parts of the Arabian Peninsula, including parts of the Yemeni western mountain range, Upper Egypt and parts of Sudan. For a survey of other reflexes and allophones, cf. Zabor-ski (2007).

In Bedouin dialects, dialects of Bedouin origin, the rural sedentary dialects of Central Palestine/Jordan, Tunisia and Mesopotamia, and in all but the western coastal city dialects of the Peninsula, interdental form part of the phoneme inventory. In major urban dialects, the cognates of the interdentals are the plosives /t/ and /d/. In several northern Mesopotamian dialects cognates of the interdentals are sibilants, and in southern Anatolian Siirt the cognates of the interdentals are labiodental fricatives (Fischer/Jastrow 1980, 50).

The behaviour of the sibilants is significant in North Africa and in parts of western Saudi Arabia (Behnstedt/Woidich 2005). Whereas most dialects have maintained the plain sibilants /s, z, š/, in several dialects in the Maghrib, in the oases of Egypt and in isolated dialects in the Asir there is no phonological distinction between *s* and *š*, on the one hand, and *z* and *ž*, on the other. Some dialects exhibit only the palatalised sibilant, others only the non-palatalised. Within North Africa and Asir, a number of dialects have an apicalised /š/ where mainstream dialects have either /s/ or /š/.

The reflex of *kāf is significant in the Levant and in parts of the Arabian Peninsula. In the vast majority of dialects it is /k/. In ruralite dialects of the Levant, the reflex /č/ is mainly attested, irrespective of the phonological environment, and in some Peninsula Bedouin dialects, in parts of Jordan and Iraq, the reflex is either /č/ or /ts/ or [č] or [ts] as the front-environment allophone of /k/.

The pharyngeals are present in the majority of mainstream Arabic dialects. The Arabic pidgins and creoles and sub-saharan dialects of Nigeria, Camaroon and Chad, however, exhibit no pharyngeals (Owens 1985, 1993b), rather laryngeals, as in: *hamu* 'heat', *bahalim* 'I dream' and *ni''āl* 'shoes'. The Yemeni Tihāma lacks a voiced pharyngeal. Lexemes which in other dialects are realised with /ʕ/ are realised in the Tihāmī dialects with /ʔ/ (Greenman 1979), within Yemen a particularly salient feature of Tihāmī Arabic. The voiced velar or uvular fricative /g/ is attested in the majority of dialects, but not in certain parts of western and southern Yemen (Diem 1973; Fischer/Jastrow 1980, 106; Vanhove, 2009), where it has been replaced by a velarised laryngeal, or by ʕayn, which in dialects spoken on the edge of the Tihāma may be replaced by hamza.

The reflex of the emphatics is, in the vast majority of modern Arabic dialects, some type and degree of pharyngealisation, a factor which distinguishes (almost) all mainstream Arabic dialects from other Semitic languages. In Saudi Arabian Faifi (Yahya Asiri p.c.) and parts of northern Yemen to the west of Ṣaḍdah, the reflex of *šād and, in fewer cases, *ḍād is an affricate (or reverse affricate), as in: *stayfin* 'summer' and *mast/yamist* 'to suck', *čafaʕ* 'cow pat' and *čiris* 'molar' (Behnstedt 1987b; cf. also Steiner 1982).

12.1.2. Pausal phenomena

Arabic dialects show an array of pausal phenomena, phenomena which appear to be restricted to particular areas. While dialects in many different regions are reported to exhibit a degree of devoicing in pre-pausal position, devoicing in certain regions is variously accompanied by glottalisation or aspiration (Watson/Asiri 2008). Dialects in central Yemen and up into Asir exhibit pre-pausal glottalisation, while Cairene exhibits pre-pausal aspiration. Some dialects in Middle Egypt and Antiochia exhibit degrees of pre-glottalisation and devoicing of /ʕ/ and/or of final vowels, but not of other obstruents, as in *simi'h* 'he heard', *bā* 'he sold' (Arnold 1998, Behnstedt/Woidich 2005). Glottalisation of both pre-pausal vowels and consonants is also attested in some zone III dialects, including Nigerian Arabic, as in: /mārag/ > *mārak* 'he went out' and /waṣalna mafā/ > *waṣalna mafāʔ* 'we reached Mafa' (Owens 1993a, 22).

Dialects of the Levant exhibit diphthongisation of final long high vowels in pause, a feature also attested in some Egyptian oasis dialects (Woidich 2006b) and central

Yemeni dialects (Jastrow 1984, Werbeck 2001). The following examples are from Ṣanʿāni: /iftaḥū/ > *iftaḥaw* or *iftaḥow* ‘open m.pl.’ and /antī/ > *antej* or *antaj* ‘you f.s.’ A particularly salient feature of many Levantine dialects, also attested in central Egyptian oasis dialects, is the exaggerated lengthening of final syllables, as in Central Dakhla /ṣabābik/ > [ṣibabiyyik] in men’s speech, [ṣibabayyik] in women’s speech, /ṣarīs/ > [ṣariyyis] / [ṣarayyis] (Woidich 2006b).

Many dialects of the western Yemeni mountain range exhibit nasalization of final high vowels – of /ū/ and /ī/, in some dialects, of only /ī/, in others, as in Jiblah *wallī* ‘he went’ (Fischer/Jastrow 1980, 111; cf. also Watson 2007b). Most of these dialects exhibit at least limited glottalisation in pause of consonants. In dialects of the Central Daxla oasis, final /a/ is nasalized and may also be raised and diphthongised, as in [sum:mēi] ‘Lolch (bot.)’, [sum:hā] ‘ihr Gift’ and [sum:rhi] ‘ihr Gift’ (Woidich 2006b); nasalisation of /a/ also attested in dialects in Antiochia (Arnold 1998). In Farafra, nasalisation is due to the loss of final /n/, as in /sākin/ > [ʃēki] (Woidich 2006b). In Farafra, Daxla and Antiochia, in contrast to dialects in Yemen, nasalisation is no longer restricted to pre-pausal position and is often (as observed in the above example) attested within the word.

12.1.3. Syllabification patterns

In terms of syllabification, dialects can be classified according to whether, and if so, where, the epenthetic vowel is inserted when three consonants are brought together through morphological concatenation or phonological process. A typical case of the former would be where a perfect verb in the first singular inflection takes a consonant-initial suffix, as in the possible form: *simiʃt+kum* ‘I heard you m.pl.’ Dialects have one of three choices: an epenthetic vowel is inserted between the second and the third consonant – *simiʃtikum*; an epenthetic vowel is inserted between the first and the second consonant – *simiʃitkum*; or no epenthesis takes place – *simiʃtkum*. Kiparsky (2003) has named these dialect types CV-, VC-, C-dialects respectively (Kiparsky 2003; Watson 2007a). In CV-dialects, epenthesis occurs to the right of the second consonant, as in Cairene /ʔult-lu/ ʔultilu ‘I/you m.s. told him’. In VC-dialects, epenthesis occurs to the left of the second consonant, as in Iraqi /gilt-la/ gilila. In C-dialects, no epenthesis takes place. Thus, *qaltlu* ‘I/you m.s. told him’ surfaces in Moroccan Arabic with a three consonant cluster.

The C-dialects are clustered around the western Maghrib, the CV-dialects in parts of Egypt and the Peninsula, and the VC-dialects in the eastern regions of the Maghrib, the Levant and Mesopotamia, parts of Egypt and parts of the Peninsula. Sudanese dialects (Shukriyya, Central Urban Sudanese) prominently display both VC- and CV-epenthesis patterns, which can probably be attributed to the different origins of the Arabs who conquered the area. Some dialects, such as Libyan Tripoli (Pereira p.c.), exhibit epenthesis in certain morphological environments, but not in others – thus /xubz+na/ is most likely to be realised as *xubzna* ‘our bread’ and /bint+na/ as *bintna* ‘our daughter’, but in final position consonant clusters may be broken up by epenthesis, thus: *ma-tkalləmt-əʃ* or *ma-tkalləmt-š* ‘I didn’t speak’, *xub^ez* or *xubz* ‘bread’.

12.1.4. Syllabification phenomena

Syllable-related phenomena that are often cited in the characterisation of dialects include the *gahawa*-syndrome, attested in many Bedouin dialects and dialects of Bedouin origin (Rosenhouse 2006, 262), and the *bukara*-syndrome (de Jong 2006), a feature of Middle Egyptian and Bedouin Sinai dialects.

In dialects which exhibit the *gahawa*-syndrome, guttural consonants may not occur in the syllable coda and are hence resyllabified through epenthesis as the onset of an inserted syllable, as in:

0 > a/ h_C....

In a number of dialects, the inserted vowel is stressed and the (unstressed) vowel of the initial syllable may be deleted (examples from Fischer/Jastrow 1980, 109):

**gahwah* > **gaháwah* > *gháwah*

**aḥmar* > **aḥámar* > *hámar*

The *bukara*-syndrome has a good phonetic motivation, since the tap /r/ cannot be pronounced without at least a fleeting preceding vowel. This syndrome, however, is phonological rather than phonetic since it involves insertion of a full vowel before /r/.

0 > V/...C_rV

The epenthesised vowel assimilates the quality of the vowel following /r/, as in the following examples from de Jong (2006):

**bukra* > *bukara* 'tomorrow'

**ḥamra* > *ḥamara* 'red' (Middle Egyptian)

**yigrib* > *yigirib* 'he comes near'

**bakraj* > *bakaraj* 'coffee pot' (Sinai)

12.2. Morphology

Most dialects have a two-way gender distinction – masculine and feminine. Nouns show gender, with the unmarked gender being masculine. In most dialects, adjectives inflect for gender to agree with a head noun or a noun subject. Gender distinction in the plural personal pronouns is attested in all regions, most particularly, but not exclusively, in dialects of Bedouin origin. Where gender distinctions are exhibited in the plural pronouns, masculine is most commonly expressed with /m/ or /u/, and feminine by /n/. Thus, Afghanistan has *hintu* 'you m.pl.' and *hintin* 'you f.pl.', *dukław* 'they m.' and *dukłan* 'they f.' (Ingham 2006), Upper Egyptian Bṣ̣ēri has *humṃa* 'they m.' beside *hinna* 'they f.', and Ṣanṣāni has *antū* 'you m.pl.' and *antayn* 'you f.pl.', *hum* 'they m.' and *hin* 'they f.'.

Some dialects which distinguish gender in the plural personal pronouns also distinguish gender in the plural demonstrative pronouns, with feminine tending to be expressed either by (pre-)final /n/ or by the mid front vowel /ē/. Thus, the rural *gālāt* dialects have *haḍōl(a)* 'these m.' beside *haḍinni* 'these f.' in Kwayriš, *haḍann* in Šāwi, whereas the urban *gālāt* dialects only have a gender-indifferent form *haḍōl* or *ḍōl*

‘these’; Yemeni Jiblah has *hādum* ‘these m.’ and *hādēn* ‘these f.’ (cp. the gender-indifferent *hāḍawlā* or *ḍawlā* in Ṣanṣāni); and Egyptian il-Biṣrāt has *dōl(a)* ‘these m.’ and *dēl(a)* ‘these f.’ (cp. Cairene gender-indifferent *dōl*).

In some western Yemeni dialects, the first person singular pronoun has two gender-differentiating forms, even, in the case of the Yemeni Tihāma, in some dialects which do not distinguish gender in the plural second and third persons. In these dialects, *ana* or *anā* refers to first masculine, and *anī* to first feminine (Behnstedt/Woidich 2005, 171).

12.3. Syntax

There are a number of ways in which dialects can be typologised syntactically. Here I focus on word order patterns, the copula, and the indefinite article. The syntactic features considered here pattern regionally – and, in some cases at least, are clearly attributable to substrate or adstrate influence.

12.3.1. Word order

The position of the verb in most mainstream Arabic dialects is either first or second position, giving rise to VSO or SVO patterns (Dahlgren 1998). In the dialects of Afghanistan, Uzbekistan and Khorasan, through the influence of neighbouring languages, however, the verb occurs in final position, to give SOV patterns. In Sicilian, although the most frequently attested patterns are VSO and SVO, some examples of SOV are attested through the influence of Turkish (Procházka 2006). Examples of SOV structures in Afghanistan, Uzbekistan and Khorasan are given below:

Afghanistan

šīryiyya li-xōja šāfu ‘Šīrwiyya saw Khōja’
sīmurğ li-dūk sağīr šāftu ‘the phoenix saw that child’ (Ingham 2006)

Uzbekistan

sowiyan šuglu kullu qōlu ‘he told the whole affair which he had done’
fat ādami šuk-mebīʿ kon ‘lit: one man wood-seller there was’ (Jastrow 1995)

Khorasan

aḥne fiğ-ğidīm mālḍār kunne ‘wir waren vor langer Zeit Hirten’ (Seeger 2002)

In most Arabic dialects, the demonstrative may be postponed for stylistic or rhythmic reasons; thus, Ṣanṣāni *al-bint tayyih* ‘that girl’ contrasts stylistically with *tayyi l-bint* ‘that girl’; in the dialects of the Nile valley through to Sudan, and in the Ḥaḍramawt, however, in the unmarked case the demonstrative follows the noun, as in Cairene: *il-bēt da* ‘this house’, *is-sitti di* ‘this woman’, *il-ḥagāt di* ‘these things’ and *ir-riggāla dōl* ‘these men’; Sudanese: *az-zōl da* ‘this man’, *al-bitt di* ‘this girl’, *fī ʿīdak di* ‘in your m. hand’; Ḥaḍramawt: *el-bēt ḍā* ‘this house’ (cf. Fischer 1959). For dialects of the Nile valley, this word order pattern has been attributed to the syntax of the substrate language, in this case Coptic (Bishai 1962). Post-position of the demonstrative in dialects of the Ḥaḍramawt can probably also be attributed to influence of the adstrate Modern

South Arabian languages, where the unmarked order is noun – demonstrative, as in the following examples from the eastern Yemeni dialect of Mehri spoken in Jōdāb:

<i>nāšhōt dīmāh</i>	‘this bat’
<i>šōwar dīkmāh</i>	‘that stone’
<i>tīwi dākm</i>	‘that meat’
<i>grēf lyākmāh</i>	‘those rooms’

12.3.2. The copula

The majority of dialects construct nominal sentences without a copula, a feature of Arabic that has attracted particular attention from generative syntacticians since the 1970s (cf. the article on the copula in *EALL*). The *qaltu* dialects, and dialects of Afghanistan, Khorasan and Christian Baghdad, however, are marked by the presence of a copula. This is almost certainly due to influence from the neighbouring languages – Persian, Turkish and Kurdish – all of which are marked by a final copula. In the majority of the dialects, the copula follows the predicate, as in the following examples from Khorasan (Seeger 2002):

<i>(uhū) mašgūl hū</i>	‘er arbeit’
<i>(inte) mašgūl haṭṭi</i>	‘du f. arbeitest’
<i>(intu) miṭalmān haṭṭīn</i>	‘ihr f. seid Muslime’

In Christian Baghdadi, the copula is optional and often serves to emphasise the predicate (Abu-Haidar 1991, 122):

<i>həyyi ḥəlwi</i> or <i>həyyi ḥəlwi yāha</i>	‘she is (indeed) pretty’
<i>ənta šātəg</i> or <i>ənta šātīg yāk</i>	‘you m.s. are (indeed) clever’

In the Anatolian dialect of Siirt, the copula precedes the predicate, as in: *ūwe fə-l-bayt* ‘he is in the house’ (Jastrow 2006). In a number of dialects, the copula is cliticised to the predicate, as in Mardin *fə-l-bayt-we* ‘is in the house’ (Jastrow 2006), Afghanistan *ismak iš-wa* ‘what is your m. name?’ and *ana afgōn-inni* ‘I am Afghani’ (Ingham 2006) and Uzbekistan *hint mīn-inak* ‘who are you?’.

12.3.3. The indefinite article

The indefinite article is a feature of the western Maghribi dialects, on the one hand, and Mesopotamian and Uzbekistan dialects, on the other (Edzard 2006). In Morocco, Algeria, Mauritania and some Libyan Bedouin dialects, the indefinite article takes the form of a reflex of *wāḥid* + definite article (cf. above), as in: *ḥa-l-mṛa* ‘a woman’. In Cypriot Arabic, *éxen/éxe* functions as the indefinite article (Borg 1985, 2004), and in many eastern dialects, *wāḥid* can be used before an indefinite (usually animate) noun in the sense of ‘a certain’ or ‘one’, particularly in story narratives; in these latter cases, however, the reflex of *wāḥid* is more noun-like, less grammaticalised and does not have the same distribution as the indefinite article in the Maghribi dialects. Marçais (1977, 163) attributes the robustness of this syntactic construction in the Maghrib to the pres-

ence of a similar syntactic construction – indefinite article + definite article + noun – in Berber.

The indefinite article in Mesopotamia and Uzbekistan, described by Blanc (1964) as the ‘characteristic Mesopotamian ‘indefinite marker’’, is etymologically related to *fard* and realised as *farəd* in Muslim Baghdad, *fağad* in Jewish Baghdad and *fağəd* in Christian Baghdad, with the phonologically reduced form *fadd* in all dialects. It tends to have the sense of ‘one’ or ‘a particular’ and in some contexts ‘some’, as in the following examples from Christian Baghdad (Abu-Haidar 1991, 111–112):

<i>fağəd gəğğāl</i>	‘one man, a particular man’
<i>fağəd bənət</i>	‘a specific girl’
<i>fad waqət</i>	‘sometime’
<i>fad yōm</i>	‘some day’

The reflex *fat* is attested in Uzbekistan, as in: *fat ādami šuk-mebīʿ kon* ‘lit: one man wood-seller there was’ (Jastrow 1995, 100). Blanc (1964, 119) sees the indefinite article construction ‘one’ + noun as an areal feature, which is also attested in neighbouring Semitic and non-Semitic languages: Turkish *bir*, Persian *ye(k)* and North East Neo-Aramaic *xa*.

13. Conclusion

The Arabic dialects of today almost definitely had a number of different ancestors, and have been shaped by the interaction over millennia of varieties of Arabic with adstrate and substrate languages. A comparison of dialect material across widely geographically separated areas shows both long-distance effects due to population movement and local effects due to interaction with the original local languages. Examples of the former include Andalusia and Ḥassāniyya exhibiting South Arabian influence, and shared basic lexical items between dialects of the Maghrib and either Syrian or Yemeni dialects. Examples of the latter include the use of a copula suffix in dialects spoken in Afghanistan, Khorasan and parts of Anatolia, a feature not attested in standard Arabic but characteristic of the other languages of the region. And the more dialects come to light, the more variety becomes apparent, rendering comparative reconstruction impossible (Miller 1986, 56) and leaving us rather with more or less isolated linking threads and jigsaw-like patterns.

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51. Dialects of the Arabian Peninsula

1. Preface
2. Phonology
3. Morphology
4. Conclusion
5. References

Abstract

*This article examines some of the key phonological and morphological features exhibited by Arabic dialects of the Arabian Peninsula. These include features exclusive to the Peninsula – such as the k-perfect attested in dialects of the western Yemeni mountain range, and the nasal definite article, and features also attested to a greater or lesser extent outside the Peninsula. Recent research on Peninsula dialects has challenged traditional statements made about Arabic dialectology, including claims about the Bedouin–sedentary dichotomy, the lateral *ḏ, and the lack of distinction between *ḏ and *ḏ̣.*

1. Preface

The Arabian Peninsula, taken to include Saudi Arabia, Yemen, Oman, the United Arab Emirates, Bahrain, Qatar and Kuwait, has an area of circa 3 million square kilometres and an estimated population (2000 figures, HG) of 47,890,000.

Old Arabic developed in the north and to the north of the Peninsula. Through seasonal migration, trade and later the Islamic conquests, it lived alongside and then gradually replaced the ancient North and South Arabian languages. It continues to live alongside, and threaten, the Modern South Arabian languages and the Šihhī dialect group in the south. In some relatively isolated areas in the south-west, so many features of the ancient languages remain that it may as yet be premature to describe the varieties spoken here as Arabic. Education and urbanisation, however, are increasingly taking their toll, with the more dialect salient features being edged out in favour of more acceptable koine features.

Historically, the Peninsula can be viewed in terms of five main areas: first, a large northern and central core, arabicised since before and relatively shortly after the rise of Islam; secondly, the south-west that clung to the pre-Arabic regional languages at least until the tenth century CE; thirdly, areas in the south that were subject to arabicisation within recent history (e.g. Mukalla to Qishn in Yemen); fourthly, areas in Yemen, Oman and the Musandam Peninsula where non-Arabic languages continue to exist and complete arabisation has not yet taken place; and fifthly, the Gulf states where migrant labour has resulted in Arab speakers becoming the minority and the subsequent development, among the majority, of a Hindi/Urdu-based Arabic pidgin (Smart 1990).

Linguistically the Peninsula can be divided into four main areas: the north, including central and north-eastern areas, the Hijaz, the south-west, and the south. Dialects from

all areas, but particularly northern dialects and dialects of Bedouin origin, exhibit conservative Arabic morpho-syntactic features, including the internal passive, reflexes of Classical Arabic **qad*, *tanwīn*, a distinction between final *-a* and *-ah*, vocalic endings in the perfect, *-in* and *-ūn* imperfect endings in 2f.s. and plural forms, and the form IV verb, *affal*. Bedouin and northern dialects tend to exhibit innovative phonology, particularly in terms of stress and syllabification. Dialects of Hijaz, the south-west and, to a lesser extent, the south, exhibit a more conservative phonology and lexis, with south-western dialects, in particular, displaying a variety of South Arabian features, including the nasal definite article, the *-t* feminine nominal ending in all states, the *d*-based relative pronoun, and the 2f.s. enclitic *-iṣ*.

2. Phonology

2.1. Consonants

2.1.1. Interdentals

Outside the Peninsula, the presence of interdentals is a reasonably strong diagnostic of Bedouin dialects. Within the Peninsula, however, where systems with interdentals are the norm, this is not the case. From data available, the absence of interdentals appears limited to the (port) city dialects of al-Ḥudayda and Aden in Yemen, Makka and Jidda in Saudi Arabia, al-Qaṭīf in eastern Saudi Arabia, and the Shi'ite dialects of Bahrain (cf. Taine-Cheikh 1998). In these dialects, the reflexes of **ḍ* and **ḍ̥* are their corresponding plosives /d/ and /d̥/; the reflex of **ṭ* is /f/ in Bahrain (Holes 2005) and al-Qaṭīf (Prochazka 1990), and a plosive reflex /t/ in the city dialects.

2.1.2. Reflexes of **q*, **j*, **ʕ*, **ġ*

The key phonological distinction between Bedouin and sedentary dialects in the north of the Peninsula and outside is their reflex of **q*: Bedouin dialects have a voiced reflex, /g/ or /ġ/, occasionally /g/, and sedentary dialects a voiceless reflex – /k/ in Bahrain and /k/ or /q/ in Oman. In the west, however, where a voiced reflex of **q* is attested in areas which have been settled for hundreds of years, including the Asir, Makka, Jidda, village dialects of Hijaz (Toll 1983), and the Central Yemeni plateau, this is not the case.

The reflex of **j* is /g/ in Aden, the Ḥugariyya and some sedentary Omani dialects (Holes 1996), a voiced palatal plosive, /ɟ/, in the ʕAnizah and Šammar dialects of Najd and the western Yemeni mountain range, a voiced affricate /dʒ/ in large parts of Yemen and Asir, and in some Gulf dialects, including rural Shi'ite Bahraini (Holes 2006); the palatal glide reflex, /j/, is considered a sedentary feature in Kuwait, but elsewhere generally seen as a southern feature (Ingham 1982), attested in southern Najd, parts of southern Hijaz (Prochazka 1988a), Sunni Bahrain (Holes 2005), and the sedentary dialects of Kuwait (Johnstone 1967) and Oman.

The voiced pharyngeal fricative /ʕ/ is attested in the majority of Peninsula dialects, but is absent from dialects of, and adjoining, the Yemeni Tihāma (Greenman 1979, Behnstedt 1985). Possibly a South Semitic feature (Retsö 2000), *ǧ has merged with *ʕ (which in certain areas merged with the glottal stop) in many western Yemeni dialects and in Yāfiʕ, to the north-east of Aden (Vanhove 1995). In Kuwait and Bahrain, *ǧ may be variously realised as [q], [g], [ǧ] (Holes 2007a).

2.1.3. Reflexes of *k

The reflex of *k is most commonly /k/. In Rijāl Almaʕ in Asir, *k is realised as a voiceless post-palatal fricative in all environments, e.g. *maṣṣaḥ* ‘Makka’, *ṣiṭāb* ‘book’. In Jabal Akhdar in Oman and Shiʿite dialects of Bahrain, where *q has the reflex /k/, *k is realised as an affricate (Taine-Cheikh 1998).

2.1.4. Phonological emphasis

Pharyngealisation is the main correlate of emphasis throughout the Peninsula; however, variations are observed in more remote dialects – in some dialects either side of the northern Yemen–Saudi border, the correlate of emphasis in non-plosives is affrication or abfrication: *š has the reflex /st/ in Bādiyit Rāziḥ, Bani Minabbih (Behnstedt 1987) and Faiḥi, and *ḍ a lateralised /tʃ/ reflex in Rāziḥit (Watson/Glover Stalls/Al-Razihi 2006). Prochazka (1987) has described the plosive emphatics *ṭ (and *q) of Zabīd as post-glottalised (/tʰ/ and /kʰ/), and the fricatives as pharyngealised. Recent work by Nāim (2008), however, has shown post-glottalisation in this dialect to be both irregular and restricted to *q.

Bedouin dialects in all regions exhibit a wider set of emphatic phonemes than sedentary dialects, with emphatic labials /m̥, b̥/ (sometimes /f/) and /l̥/, particularly in the environment of /g/ and the guttural fricatives /ǧ, x, ɣ/ (e.g. Behnstedt 1991).

In some Najdi dialects, emphasis may be morpheme-linked, as in the m.pl. pronouns in Rwaili and Ḥāyil: *-(h)am̥* ‘them m.’, *intam̥* ‘you m.pl.’, *-kam̥* ‘your m.pl.’, the feminine inflexional endings in Ḥāyil and al-Qaṣīm: *ḥziṃeh* ‘she tied’, *yḥalḥin* ‘they f. milked’ (Prochazka 1988a), and, in many dialects (including Central Yemen), the distal demonstrative *ḥāḍāk* ‘that m.’ and locative *ḥāṇāk* ‘there’.

A few south-western dialects distinguish between *ḍ and *ḍ̥, a distinction recently argued to be universally lacking in modern Arabic dialects (al-Wer 2004): in Jabal Yazīdi in southern Yemen, *ḍ has the reflex /ḍ/ and *ḍ̥ the reflex /ḍ̥/ (Vanhove 1995); Banī ʕAbādīl in northern Yemen has a voiceless reflex of *ḍ̥ and a voiced reflex of *ḍ̥, as in: *ṭamā* ‘to become thirsty’ versus *ḍayfin* ‘guest’ (Behnstedt 1987); and various dialects of the Saudi Tihama have a lateral sonorant reflex of *ḍ̥ and a fricative reflex of *ḍ̥ (Al-Azraqi/Watson 2010). A lateral or lateralised reflex of *ḍ̥ is attested in more areas than previously assumed (cf. Versteegh 2006): a lateral (af)fricative or sonorant reflex is recorded for isolated dialects of Asir (Y. Asiri p.c.), the Saudi Tihāma (Al-Azraqi/Watson 2010), the Yemeni Tihāma (Greenman 1979), Gaylḥabbān (Habtour 1988) and Rāziḥit (Watson/Glover Stalls/Al-Razihi 2006). Future research in western Saudi Arabia and northern Yemen is expected to reveal further varieties both which distinguish between *ḍ̥ and *ḍ̥, and which exhibit lateral reflexes of *ḍ̥.

2.2. Vowels

Peninsula dialects have three short vowel phonemes – /a/, /u/, /i/. In northern and eastern Najd, however, *i* and *u* are positional variants in non-final position (Ingham 1982); similarly in Najd and Bedouin Gulf dialects, *a* and *i* are positional variants in stems, with *a* occurring in CVC syllables and in the context of gutturals or apical sonorants, and *i* in CV syllables, as in: *kitab* ~ *ktibat* ‘he/she wrote’ (Holes 2006). The vocalic length distinction is fully functional. A few dialects in Hijaz and Central Yemen have the three long vowel – two diphthong system, although the most common system has five long vowels plus lexically and/or positionally determined diphthongs. In most northern dialects, the Tihāma and Hijaz, diphthongs are restricted to final position, as in Abha: *ʾinsaw* ‘forget pl.’ but *tinsōn* ‘you pl. forget’ (Prochazka 1988a), and Kuwaiti: *gālaw* ‘they said’ but *gālōli* ‘they told me’ (Holes 2007b).

2.3. Palatalisation of velar plosives

The affrication of /k/ and /g/ in the environment of front vowels originated in Central Arabia and spread north into the Syro-Mesopotamian desert and east to the Gulf coast (Ingham 2009). This typical Bedouin feature is also attested in a few sedentary dialects in southern Hijaz (Prochazka 1988b). Central Arabia is marked by affrication to [č] and [ǧ], while the peripheral areas exhibit [č̣] and [ǧ̣], or [č̣] and [j̣] in the Gulf dialects (Ingham 1982).

2.4. Syllable structure

2.4.1. Syllable types

The Peninsula includes dialects which are highly conservative in their syllable structure – mainly in the west and south-west – alongside innovative dialects in the south, more so the northern and central Bedouin dialects, which exhibit several syllable types. Syllabically conservative dialects have three syllable types, of which superheavy syllables are restricted to word-final position.

Tab. 51.1: Syllable types

	open	closed	doubly closed
light	CV	---	---
heavy	CVV	CVC	---
superheavy	---	CVVC	CVCC

In most Peninsula dialects, a restriction on CV syllables results in word-internal CVVC syllables in derived environments, thus Ibb and Jiblah, otherwise highly conservative in syllable structure, syncope /i/ in suffixed active participles to give: /kātib + ih/ > *kātibih* ‘writing f.s.’, /kātib + īn/ > *kātibīn* ‘writing m.pl.’

Dialects differ as to the type of consonant clusters permitted in word-final position. Central Yemeni dialects allow -CCC if the final consonant is -š of the negative suffix, as in San'ani: *ma bsartš* 'I/you m.s. didn't see'. Dialects in the western Yemeni mountain range and Aden allow final -CC clusters irrespective of the sonority curve, as in Jiblah: *'akl* 'food', *jubn* 'cheese'. Dialects in regions throughout the Peninsula, including the Tihāma, Hijaz, Najd and the Gulf allow -C_iC_{ii} clusters iff C_{ii} is less sonorous than C_i, as in: *kalb* 'dog', but *baḥar* 'sea' (Makka), *šilč* 'chewing gum', but *dihin* 'oil, fat' (Sunni Bahrain, Holes 2005).

Due to a restriction on CV syllables, initial clusters are attested in dialects of northern and central Arabia, the Tihāma, the Yemeni central plateau, Oman, and Sunni Bahrain dialects. Examples include: *xšab* 'wood', *škmih* 'party for parturient' (San'ani); *smūč* 'fishes', *drisat* 'she studied' (Sunni Bahrain, Holes 2006).

Dialect groups differ in the treatment of strings of three light syllables: in Bedouin dialects of all regions, the vowel of the initial syllable is elided, to give CCVCV(C), as in Najd: /nišad + at/ > *nšidat* 'she asked' (Ingham 1982), and Oman: *ylasit* ~ *ylisat* 'she sat' (Holes 2008); in southern sedentary dialects, the vowel of the medial syllable is elided, to give CVCCV(C), as in Oman: /galas + it/ > *galsit* ~ *galsat* (Holes 2008); and in many south-western dialects, no elision takes place, to allow CVCVCV(C), as in San'ani: /simiṣ + at/ > *simiṣat*.

2.4.2. The *gahawa* syndrome

The *gahawa* syndrome (Blanc 1970), motivated by a restriction on gutturals in the syllable coda, is associated with dialects of Bedouin origin (de Jong 2007). Within the Peninsula, it is a feature of Bedouin Hijazi (Al-Mozainy 1981) and the predominantly Bedouin northern group, but is also attested in sedentary dialects of the Najd. Combined with a restriction on sequences of CV syllables, the *gahawa* syndrome results in initial CCV- in many dialects, as in Abū Ḍabī *jšari* (< jašri) 'dog' (Johnstone 1967) and Kuwaiti *nxala* (< naxla) 'palm-tree' (Holes 2007b). The *gahawa* syndrome occurs irregularly in Omani Bedouin dialects (Holes 2008), but is otherwise lacking in the south-western and southern dialect groups.

2.5. Word stress

Dialects can be grouped as to whether they exhibit trochaic stress, whereby a CVCVC sequence takes initial stress, as in: *'katab*, or iambic stress, whereby CVCVC takes final stress, as in: *ka'tab*. Both trochaic and iambic stress systems are attested in the Peninsula. The southern dialects of Ḥaḍramawt and Oman exhibit iambic stress, as in: *ḥa'bal* 'pregnancy', *g'tal* 'he killed', although the identity of the vowel may be crucial – in Ristāq the initial syllable in CVCVC patterns is stressed when the vowel is low, as in: *'katab* but not when the initial vowel is high, as in: *g'tal* 'he killed' (Jastrow 1980).

The majority of Peninsula dialects exhibit trochaic stress, for which the basic stress rules are:

1. Stress final CVCC or CVVC – e.g. *midarri'sin* 'teachers m.', *ka'tabt* 'I/you m.s. wrote';

2. Otherwise stress the right-most CVC or CVV – e.g. '*madrasa* 'school', '*ʿabṣar* 'he saw';
3. Otherwise stress the antepenultimate syllable or the initial syllable in a disyllabic word – e.g. '*giri* 'he read', '*ragaba* 'neck'.

Morphological and phonological factors further complicate these rules. For some western and south-western dialects, the 3f.s. perfect ending *-at-* is stressed in suffixed forms, as in Makkan: *gata'latu* 'she killed him', but '*ragabatu* 'his neck' (Ingham 1971). The definite article and VII and VIII prefixes in the unmarked perfect are stressed according to rule 2 in many northern Bedouin, Bedouin Hijazi and some sedentary southern Hijazi dialects, as in: '*al-walad* 'the boy' and '*inkasar* 'it m. was broken' (Prochazka 1988a, Ingham 2008). In these dialects, however, the penultimate syllable in ('in)CVCVCV(C) sequences is stressed, with syncope of the antepenultimate vowel (2.4.1.), as in: '*saḥab* 'he pulled', *s'ḥabat* 'she pulled', '*ink'sarat* 'she was broken' (Al-Mozainy 1981). Rule 1 is flouted in two types of case: in certain south-western dialects on suffixation of *-C* when stress remains on the stem, as in Abha and Rufaidah: /'šāfat + k/ > 'šāfatk (Prochazka 1988a); and in dialects of different regions when syllables ending in a long vowel or a geminate retract stress from a final CVVC syllable, as in San'ani: '*xaṭṭāf* 'clasp, buckle', '*šābūn* 'soap' (Na'im-Sanbar 1994), and Eastern Arabian: *y'sawwun* < **y'saw* 'wūn, *y'sūfun* < **y'sū* 'fūn (Johnstone 1967).

3. Morphology

Dialects of the Peninsula vary in the number of distinctions within, and realisation of, the morphological categories person, number, gender, distance and definiteness.

3.1. Personal pronouns

For urban dialects, dialects of the Tihāma and Asir, eastern Saudi Arabia, and some Gulf dialects, there is no gender distinction in the plural personal pronouns.

Dialects that distinguish gender in the plural pronouns include those of non-Tihāma Yemen, Bedouin Hijaz, Oman, Qatar, Buraimi, central and northern Arabia. In table 51.2., data for Makka is from Abu-Mansour (2008), for Central Najd from Ingham (2008):

Tab. 51.2: Plural personal pronouns

Person/gender	Dialect	Central Najd		Makkan	
		indep.	dep.	indep.	dep.
2m		antum	-kum	intu	-kum
2f		antin	-ċin		
3m		hum	-hum	humma	-hum
3f		hin	-hin		

A few dialects distinguish gender in the first person typically giving *ana* or *anā* 'I m.' versus *ani* or *anī* 'I f.'. These include dialects which distinguish gender in the plural pronouns, but also dialects which do not, including Bahraini Shi'ite village dialects (Holes 2005), and dialects of the Yemeni Tihāma. These latter distinguish gender in both dependent and independent forms of the pronoun, to give masc. *-na*, fem. *-ni*, pl. *-hna* (Greenman 1979).

3.1.1. *kaškaška* and *kaskasa*

Kaskasa and *kaškaška*, the realisation of the 2f.s. object pronoun as *-is* or *-iĉ*, or a palatalised variant of *k – *-iš* or *-iĉ* – are widespread features in the Peninsula. *Kaskasa* appears from the data available to be restricted to dialects of the centre or north of the Peninsula (Al-Azraqi 2007). The variant *-iĉ* is attested in a scattering of Yemeni dialects (Behnstedt 1985), but is concentrated in those dialects in the west, east and northeast of the Peninsula that also exhibit affrication of /k/ in palatalising environments (1.3.2), as in Hijazi Bal-Qarn: *bintiĉ* 'your f.s. daughter', *ĉilt* 'I ate' (Prochazka 1991). In dialects of Yemen, Asir, southern Najd, Oman, al-Hasa and the ʕAjmān of Kuwait, the 2f.s. object pronoun *-iš* occurs without generalised palatalisation of /k/. In urban Shi'ite dialects of Bahrain, palatalisation of /k/ results in [č], but the 2f.s. object pronoun is realised as /š/, as in the village dialects (Holes 2005). Here the *-š* or *-iš* reflex of the 2f.s. pronoun is not due to palatalisation, but must be interpreted as a remnant from South Arabian also shared with Ethio-Semitic (cf. Holes 1991).

3.1.2. The *k*-perfect

One morphological feature exclusive to the Peninsula, more particularly to Yemen, is the *k*-perfect whereby the 1p.s. and 2p. perfect endings take *-k* rather than *-t* of dialects elsewhere. A feature of Ancient and Modern South Arabian, the *k*-perfect is found at intervals along the western mountain range, disappearing at Ḍālaʕ and re-emerging at its southern-most point in Yāfiʕ (Vanhove 1995). Most, if not all, *k*-dialects distinguish gender in plural personal pronouns. Interestingly, the *k*-perfect is not attested in dialects for which the definite article is *m*- (cf. 3.2.2.) (Behnstedt 2007). Independent pronouns and perfect suffixes for Ibb are given in table 51.3.

3.2. Demonstrative pronouns

Demonstrative pronouns are categorised for number, gender and distance. For the majority of dialects, including many of those that distinguish gender in the plural personal pronouns, masculine/feminine gender is distinguished in singular demonstratives only, as in Kuwaiti (Holes 2007b) (Tab. 51.4).

Gender distinction in plural demonstratives is typically associated with Bedouin dialects. In addition to central and northern Najd, however, much of the sedentary

Tab. 51.3: Ibb personal pronouns

	ind. pron.	perf. suff.	<i>katab</i> 'to write'
3ms	hū	-0	katab
3fs	hī	-ah/-ih	katabah
2ms	inta	-k	katabk
2fs	intī	-kī	katabkī
1ms	anā	-k	katubk
1fs	anī		
3mp	hum	-ū	katabū
3fp	han	-ēn	katabēn
2mp	intū	-kū	katabkū
2fp	intēn	-kan	katabkan
1cp	iḥnā	-nā	katabnā

Tab. 51.4: Kuwaiti demonstratives

distance	proximal		distal	
number/gender	masculine	feminine	masculine	feminine
singular	(hā)ḍa	(hā)ḍī	(hā)ḍāk	(hā)ḍīč
plural	(hā)ḍōl		(hā)ḍōlāk	

Yemeni western mountain range distinguishes gender in the demonstratives (Behnstedt 1985). Table 51.5. gives examples from Ibb (cf. Watson 2007):

Tab. 51.5: Ibb demonstratives

Distance	proximal		distal	
number/gender	masculine	feminine	masculine	feminine
Singular	hāḍā	hāḍī	hāḍāk	hāḍīk
Plural	hāḍo?	hāḍēn	hāḍōk	hāḍēnk

Distance is generally a two-way distinction – proximal versus distal. In a scattering of dialects in the Yemeni western mountain range, middle distance is attested in the singular, used particularly in folktales and narratives. Thus, Ibb *hāḍkih* 'this f. there' and *hāḍkah* 'that m. there' contrast with distal *hāḍīk* and *hāḍāk* and proximal *hāḍī* and *hāḍā*.

3.3. Nominal morphology

3.3.1. The *-inn-* infix

The *-inn-* infix binding active participles with an enclitic pronoun when they have verbal force, as in: *šāyfinnah* 'having m. seen it', *ana maṣṭinnak* 'I've given (it) to you'

(Holes 1996), is a southern and south-eastern feature, attested in Oman, south-eastern Yemen and Shi'ite Bahrain, but also found beyond the Peninsula in Uzbekistan and Afghanistan.

3.3.2. *Tanwīn*

Outside the Peninsula, the *-Vn* ending on indefinite nominals, as in *bintin zēna* 'a beautiful girl', is a typical Bedouin feature (Rosenhouse 2006). Within the Peninsula, *tanwīn* cuts across the Bedouin/sedentary divide, being attested in the northern, south-western and southern groups, including the Tihāma, northern and central Arabia, Bahrain and Oman. In some Tihāma dialects, indefinite masculine and plural nouns take *-u* without final /n/ (Greenman 1979); in Bal Qarn and Rijāl Almaṣ, *-in* and *-u* show some complementarity: while *-in* occurs phrase-medially and may occur phrase-finally, *-u* is restricted to phrase-final position (Prochazka 1988b, Asiri 2009).

3.3.3. Definiteness

The definite article is (v)l- in most dialects of the Peninsula. In some Yemeni mountain dialects, definiteness is expressed by gemination of the initial consonant, as in Dhi Sufal: *bēt* ~ *ib-bēt* 'a/the house'. A nasal definite article *n-* is attested in some northern Yemeni dialects, and the non-assimilating *m-* article in parts of northern Yemen, the Yemeni and Saudi Tihāma, and southern Yemen (Behnstedt 2007). The nasal definite article does not appear to go beyond the boundaries of historical Yemen.

The clausal definite article, usually described as the relative pronoun, is *allaḏī* or a reduced form thereof *allī* ~ *alli* or *illī* ~ *illi* in the majority of Peninsula dialects. *bu* is attested in sedentary Oman; *ḏ*-based relative pronouns, usually associated with the Maghrib but here a remnant of South Arabian, are attested in parts of Asir, southern Hijaz (Prochazka 1988b) and the Yemeni western mountain range (Behnstedt 1985). It had long been maintained that modern Arabic dialects lacked number/gender distinctions in the relative pronoun. Recent research (Prochazka 1988b; Asiri 2007, 2009), however, shows at least one dialect in Asir distinguishes number and gender, with forms startlingly similar to those of late-Sabaeen (cf. Stein 2003, 150).

Tab. 51.6: Rijāl Almaṣ relative pronouns

number/gender	masc.	fem.	inanimate
Singular	ḏā	tā	---
Plural	wulā		mā

4. Conclusion

Several of the more salient phonological and morphological features attested in the Peninsula are shared with one or more contiguous or non-contiguous dialect regions

outside the Peninsula – affrication of /k/ and /g/, the *gahawa* syndrome, the *q*-based relative pronoun, *tanwīn*, and the infix *-inn-*. Of features bound to the Peninsula, some cover relatively large areas, such as *kaškaša* of the south and south-west, and some are more locally restricted, such as the lateral reflex of **q* of Yemen and Asir, and the *k*-perfect of Yemen.

Dialects of the Peninsula are still relatively poorly understood. The discoveries made to date, however, suggest that further fieldwork is likely to reveal features which are unique to the Peninsula as well as others which are in principle already known, but whose deployment in Peninsula dialects is particularly interesting and may shed new light on Arabic dialectology more generally. As discussed here, research in the south-west, in particular, has uncovered features thought not to exist in Arabic dialects. Similarly, studies on Peninsula dialects have highlighted a need to reanalyse the Bedouin – sedentary dichotomy (e.g. Holes 1996): while almost all dialects of Bedouin origin lack ‘sedentary’ features, a predominance of traditional ‘Bedouin’ features are shared by dialects of established settled communities – *tanwīn*, the voiced **q*, gender/number distinction in pronouns, the internal passive, and even affrication of /k/ and /g/ and the *gahawa* syndrome. At our present state of knowledge, the most robust Bedouin diagnostics appear to relate to phonological emphasis and prosody. Further research is required in order to establish the degree to which features are based on region or lifestyle.

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52. Arabic Dialects of Mesopotamia

1. Introduction
2. State of research and classification
3. The main characteristic features of Mesopotamian Arabic
4. References

Abstract

The following article deals with the modern Arabic dialects spoken in the area of Mesopotamia, from Khuzestan/Iran in the south until eastern Anatolia/Turkey in the north. In addition to research history and classification it offers a short description of the most characteristic features and innovations of these dialects.

1. Introduction

The Arabic dialects of Mesopotamia form one of the five main groups into which the modern Arabic dialects have traditionally been classified; the other four groups are Syro-Palestinian, the dialects of the Arabian Peninsula, Egyptian and Sudanese, and the dialects of North-Africa.

The Mesopotamian group comprises the Arabic dialects spoken in Iraq, north-eastern Syria, south-eastern Turkey, and Iranian Khuzestan. We might also include the isolated Arabic dialects spoken in Central Asia (Uzbekistan, Afghanistan and Khorasan in Iran) in the Mesopotamian group, because they originated in southern Iraq and share many features with the Mesopotamian dialects.

Mesopotamian Arabic forms the eastern edge of the Arabic language area. It is in direct contact with Persian to the east and with Kurdish and Turkish to the northeast and north. In the northern areas there are some Neo-Aramaic enclaves, as the NENA-dialects in the province of Mossul/Iraq and Turoyo in the provinces of Mardin and Şırnak/Turkey. Some of the Arabic dialects of Anatolia (e.g. Hasköy, Diyarbakır) have been cut off from the Arabic-speaking world for a long time and exist as language islands within Kurdish speaking areas.

The term Mesopotamian Arabic goes back to Haim Blanc, who first defined Mesopotamian Arabic as a generic term for all dialects spoken in this area in his monograph *Communal Dialects in Baghdad* (Cambridge, Massachusetts 1964). At the same time he ascertained that the dialects of Mesopotamia belong to two different types of Arabic. Blanc (1964) gives a clear description of the two types of Arabic spoken in this area. According to the equivalent for OA *qultu* “I said” in the two dialect types he introduced the terms *qəltu* and *gilit* dialects, respectively. These terms show two of the most characteristic features of the dialect type it denotes: the *qəltu* dialects preserve the OA *q as an unvoiced uvular stop /q/ while in the *gilit* dialects it is realised as a voiced velar stop /g/ in the majority of cases; and in the *qəltu* dialects the inflectional suffix of the 1.sg. perfect is *-tu*, as opposed to *-it* in the *gilit* dialects.

Blanc discovered that all dialects spoken by non-Muslims in this area are of *qəltu*-type while only sedentary Muslims in the northern part of the area (i.e.: north of the line between Fallūğa on the Euphrates and Samarra on the Tigris) speak this type of dialect. Muslims of Bedouin origin all speak dialects of the *gilit*-type as well as the sedentary Muslims of the southern cities (see Table 52.1).

Tab. 52.1: Geographic distribution of the *qəltu* and *gilit* dialects (Blanc 1964, 6)

	Muslim		Non-Muslim
	non-sedentary	sedentary	
Lower Iraq	<i>gilit</i>	<i>gilit</i>	<i>qəltu</i>
Upper Iraq	<i>gilit</i>	<i>qəltu</i>	<i>qəltu</i>
Anatolia	<i>gilit</i>	<i>qəltu</i>	<i>qəltu</i>

The *qəltu* dialects represent an older stage of Arabic; they most likely go back to the Iraqi vernacular of the Abbasid period. On the other hand, the *gilit* dialects are of Bedouin origin spoken by a population that migrated relatively recently to this region, at least after the invasion by the Mongols in 1258 and 1400. Most probably the bedouinization of the Iraqi urban dialects took place only during the Ottoman Empire. Through the sedentarization of the nomadic and semi-nomadic population of Iraq and Syria during the second half of the 20th century this process has continued to the present day, only slowed down by the influence of MSA, which is forced by the literacy policy and mass media in the Arab countries.

Since the whole Jewish population left the area (Turkey in 1930s, Iraq in 1950–51 and Syria in 1990ies,) and the Christian communities have been decimated due to persecution, particularly in Turkey, and the wars in Iraq, the *qəltu* speaking areas as well as the number of *qəltu* speakers have decreased significantly. So, after the Jews, in Turkey almost all Christian speakers have left the country. In addition after the fall of the regime of Saddam Hussein more than half of the Christian *qəltu* speakers left, or were forced to leave, Iraq.

2. State of research and classification

After Blanc’s research Otto Jastrow was the one who explored the majority of the *qəltu* dialects. In his general view of the *qəltu* dialect landscape in Jastrow (1978) and (1981) he laid the foundation for further study of this dialect group. With Jastrow’s numerous publications (Daragözü 1973; Mossul 1979, 1989; Tikrit 1983; ‘Aqra and Arbil 1990, Kinderib 2003, 2005 and many other papers) and those of other researchers (Khan 1997: Jewish Hit; Behnstedt 1992: Syrian qəltu dialects; Talay 1999, 2003: Khaw-ētna; and 2001, 2002: Hasköy; Abu-Haidar 1991: Christian Baghdadi; Mansour 1990: Jewish Baghdadi; Wittrich 2001: Azəx; Grigore 2007: Mardin; Lahdo 2009: Təllo) we now have a relatively clear picture of the *qəltu* dialects. Thus, according to Jastrow (upto 2006) the *qəltu* dialects can be classified into the following main four groups:

I Anatolian group, II Tigris group, III Euphrates group and III Kurdistan group (see Table 52.2 for a detailed overview).

The *gilit* dialects have been less investigated. Because of the difficult political situation in Iraq, but also in Iran, large parts of the *gilit* speaking areas have still not been explored linguistically. While the Muslim dialect of Baghdad have been well documented since the beginning of the 20th century (Clarity et al. 1964; Erwin 1963; Malaika 1963; Massignon 1914; McCarthy/Raffouli 1964–1965; Oussani 1901; Woodhead/Beene 1967; etc.), there is a lack of research on other dialects of this region. Apart from the studies of Denz on Kwayriš (1971), Salonnen on Širqāt (1980), there is almost no information on other *gilit* dialects. The same is true about the southern Iraqi dialects; we must be content with a unpublished PhD thesis on the dialect of Basra (Mahdi 1985). Neither the dialects of Bedouin tribes nor the rural or urban dialects of the south have yet been described linguistically. Therefore our knowledge of the *gilit* dialects of Iraq remains limited to information in the above-mentioned publications. Thanks to Ingham (1997, Pp. 1–51; 2007) the research situation on the dialects spoken in Khuzestan is slightly better. The existing material on *gilit* dialects allows a division of the *gilit* branch into three dialect groups: I northern Mesopotamian, II central Iraqi, and III southern Iraqi and Khuzestan. Regarding the distribution of the *gilit* dialects of the sedentarized Bedouins in Iraq, we may assume a similar situation to that of the Bedouin dialects in Syria (see Behnstedt 1997). This is because similar and in many cases the same *gilit*-speaking tribes live on both sides of the border.

Here, we have to clarify that to the south, but also the west of the area, the *gilit* dialects have no clear language boundary. There they gradually blend into the north-eastern Arabian dialects and to the Bedouin dialects of the Syrian Desert.

Tab. 52.2: Dialect classification of Mesopotamian Arabic (Jastrow 2006, Ingham 2006)

a) *Qəltu* dialects

I. Anatolian group

1. Mardin dialects: Mardin town, Mardin villages and plain of Mardin, Kosa and Mḥal-lami (Muslim), Āzəx (Christian), Nusaybin and Cizre (Jews)
2. Siirt dialects: Siirt town, and Siirt villages
3. Diyarbakır dialects: Diyarbakır town (Christians, Jews), Diyarbakır villages (Christians), Siverek, Çermik and Urfa (Jews)
4. Kozluk-Sason-Mus dialects: Kozluk, Sason, Muş (Hasköy)

II. Tigris group

1. Mossul and surrounding villages (Bəḥzāni, Baʿšīqa, ʿAyn Səfne)
2. Tikrit and surroundings
3. Baghdad and southern Iraq (Jews and Christians only)

III. Euphrates group

1. Khawētna (Syria, Iraq, Turkey)
2. Dēr izZōr
3. ʿĀna (Iraq) and ʿAlbu Kmāl (Syria)
4. Hīt (Iraq)

IV. Kurdistan group (Jews only)

1. Northern Kurdistan: Səndōr, ʿAqra, Arbil, Šōš
2. Southern Kurdistan: Kirkuk, Tūz Khurmātu, Khānaqīn

b) *Gilit* dialects

- I. Northern Mesopotamian group
 - 1. Syrian *Šāwī* dialects (including cities like Urfa and Raqqa)
 - 2. Rural dialects of northern and central Iraq
- II. Central Iraqi group
 - 1. Muslim Baghdadi
 - 2. Sunni area around Baghdad
- III. Southern Iraqi and Khuzestan group
 - 1. Urban dialects (*haḡar*)
 - 2. Rural dialects (*‘arab*)
 - 3. Marshland dialects

3. The main characteristic features of Mesopotamian Arabic

3.1. In phonology

3.1.1. Consonant phonemes

The Mesopotamian dialects bear a relatively conservative consonantal system. In addition to the inherited consonantal inventory Mesopotamian Arabic has introduced the phonemes /č/, /g/, /p/, and /v/ which are to be found not only in loans from Turkish, Kurdish, Persian and English, but also in inherited lexemes due to the different rules of sound shift in particular regions.

The interdental fricatives /t̪/, /d̪/ and /ɖ/ are preserved in all *gilit* dialects and in the majority of the *qəltu* dialects:

Tab. 52.3: Interdental fricatives 1

<i>Qəltu</i> Mardin	Khawētna	<i>Gilit</i> M. Baghdad	Basra	
<i>baʿaṭ</i>	<i>baʿaṭ</i>	<i>baʿaṭ</i>	<i>baʿaṭ</i>	he sent
<i>hāḡa</i>	<i>hāḡa</i>	<i>hāḡa</i>	<i>hāḡa</i>	this (m.)
<i>bayḡ</i>	<i>bēḡ</i>	<i>bēḡ</i>	<i>bēḡ</i>	eggs

But in some *qəltu* dialects reflexes of the original interdentals are dental stops (/t, d, ɖ/), labio-dental fricatives (/f, v, ɸ/) or sibilants (/s, z, ʒ/) respectively:

Tab. 52.4: Interdental fricatives 2

Ch. Baghdad	Tillo (Siirt)	Āzəx (Mardin)	
<i>baʿat</i>	<i>baʿaf</i>	<i>baʿas</i>	he sent
<i>hāda</i>	<i>āva</i>	<i>hāza</i>	this (m.)
<i>bēḡ</i>	<i>bayv</i>	<i>bayz</i>	eggs

The opposite is true regarding the occurrence of OA /q/ which is preserved in almost all *qəltu* but shifted to /g/ (*gālub* “heart”) and in fronted environments further to /ǧ/ (*ǧarya* “village”) in *gilit* dialects. In urban *gilit* dialects /q/ is either preserved or has been reintroduced in many words (M. Baghdad: *qarya* “village”, *qira* “to read”). Due to the high influence of Bedouin dialects the shift *q > /g/ occurs also in the *qəltu* dialects, particularly in the Euphrates group (Khawētna: *garāyab* “relatives”). In the Siirt dialects of Anatolian Arabic *q > /ʔ/ is also attested (e.g. Tillo, Lahdo p. 51: *fī ha*” *Ṣtanbūl, fī ha*” *Təllo əṣṣ a’ūl* “what do I say concerning Istanbul, concerning Tillo?”). In Šāwi *gilit* dialects *ǧ shifted to /q/, *qanam* “sheep”, *qarīb* “foreign” (vs. *ǧirīb* < OA *qarīb* “near”). This caused the emergence of /ǧ/ for /q/ in MSA loans (*ǧalam* “pencil, pen”, *taǧālid* “traditions”) in these dialects, which seems to be a hypercorrect formation. Parallel to the treatment of /q/, in the *gilit* dialects OA *k is affricated to /č/ in fronted environments (*čān* “he was”, *čitif* “shoulder blade”, *dīč* “cock”).

OA /ǧ/ has been preserved as a voiced affricate in Mesopotamian Arabic, but in the southern *gilit* group it is represented by /ž/ in the Marshland dialects (‘Amāra: *wīžih* “face”, *dyāža* “chicken”) and by /y/ in the other dialects (Shaṭṭ al-‘Arab: *wayih* “face”, *dyāy* “chicken”).

In the Tigris group of *qəltu* dialects OA *r invariably shifted to /ǧ/ and merged with the inherited voiced velar fricative /ǧ/, e.g. J. Baghdad: *šwīǧəb* (< *šawārib*) “moustaches”, *aǧb’a* (< *arba’a*) “four”.

3.1.2. Vowels and diphthongs

In all Mesopotamian dialects the vowel inventory includes five long vowel phonemes. Besides the inherited /ī/, /ā/ and /ū/ there are also the phonemes /ē/ and /ō/, which can generally be attributed to monophthongization of *aw to /ō/ and *ay to /ē/ respectively. In some *qəltu* dialects [ē] and [ō] result from lowering of /ī/ and /ū/ in emphatic environments (Jewish Arbīl: *daqēq* (< *daqīq*) “flour”, *xəyōt* (< *xuyūt*) “threads”, Tillo: *malēh* (< *malīh*) “good”, *ydōr* (< *yadūr*) “he travels around”). In addition /ō/ and /ē/ are to be found in loans from non-Arabic languages, as in words such as *čōl* “desert” and *mēz* “table”.

Another source for /ē/ is Imāla, a conditioned raising of /ā/ > [ē] in the vicinity of /i/ or /ī/. This feature is attested in all *qəltu* dialects but is lacking in the *gilit* dialects, e.g. Mardin: *ǧēmā* “mosque”, *rēkəb* “riding (active participle m.sg.)” vs. Basra: *yāmī* (~*ǧāmī*), *rākib*. In some dialects e.g. Mossul and J. Baghdad, the Imāla reaches /ī/ (*ǧīmā*, *rīkəb*). Word-final Imāla occurs in *qəltu* dialects (/a/ > [e], [i]) but to a certain degree also in *gilit*-dialects (/a/ > [ä], [e]).

The OA diphthongs *ay and *aw have been monophthongized to /ē/ and /ō/ in the majority of dialects. Only in Anatolian Arabic and in some other Jewish dialects in Iraq have they been preserved.

There are only two short vowels /a/ and /ə/ in the *qəltu* dialects. While /a/ is the continuation of OA *a, /ə/ is a reflex of the other two OA short vowels *i and *u: *əbən* (< *ibn*) “son”, *axət* (< *uxt*) “sister”. The *gilit* dialects by contrast have a system of three short vowels: /a/, /i/, /u/. However these vowels are not always distributed in the same way as their old counterparts. A new distribution of /u/ and /i/ took place in Baghdad according to the phonetic environments: In the vicinity of “u-colouring consonants” (back, emphatic, labial) both vowels appear as /u/ and in vicinity of “i-colouring consonants” they appear as /i/. In addition in many *gilit* dialects stressed /a/ in an open initial syllable has been split to /u/ and /i/ depending on the phonetic environment, e.g. in Basra: *šubaǧ* (< *šabaǧ*) “he painted”, *ǧurab* (< *ǧarab*) “he hit”, and *ǧirag* (< *ǧariq*) “he sank”, *simač* (< *samak*) “fish”.

3.1.3. Syllable structure

The Bedouin *gahāwa*-syndrome (de Jong 2006) is widespread in rural *gilit* dialects but is not usual in Baghdad or the other urban centres: rural *bḥara* “lake”, *bḡaḷa* “female mule” contrast with sedentary *baḥra*, *baḡla*.

Consonant clusters in word-final position are unusual outside of Anatolia. So, in a -vC¹C² syllable an anaptyctic vowel (*qəltu*: /ə/, and *gilit*: /i/ or /u/ according to the phonetic environment) is inserted between C¹ and C². Word-internal clusters with more than two consonants i.e. C¹C²C³ are handled differently by various dialects. The *qəltu* dialects generally epenthesise between C²C³ and *gilit* dialects epenthesise between C¹C²: Mossul: *yəktəbūn* “they write”, *yəḍrəbūn* “they hit” contrasts with M. Baghdad *yikītbūn*, *yūḍurbūn*.

3.2. Morphological features

3.2.1. Pronouns

3.2.1.1. Independent pronouns

The independent personal pronouns have similar forms in the whole Mesopotamian area. For the 1. sg. *āni* is very common in *gilit* dialects and *ana* in *qəltu* dialects. In all *gilit* dialects except for Baghdad gender distinction is exhibited in second and third person plural pronouns. A characteristic feature of the Anatolian dialects is that the second and third person common plurals are formed with -n- as in the Syrian urban dialects. All other dialects have -m- in the masculine and common forms:

Tab. 52.5: Independent personal pronouns

	Qəltu Mardin	Khawētna	Gilit M. Baghdad	Basra
3.m.sg.	<i>hūwe</i>	<i>hūwa</i>	<i>huwwa</i>	<i>ihwa, huwwa</i>
3.f.sg.	<i>hīye</i>	<i>hīya</i>	<i>hiyya</i>	<i>ihya, hiyya</i>
3.m/c.pl.	<i>hənnə</i>	<i>həmma</i>	<i>humma</i>	<i>uhma, huḡḡma</i>
3.f.pl.	--	--	<i>(hinna)</i>	<i>ihna, hinna</i>
2.m.sg	<i>ənt</i>	<i>ənta</i>	<i>inta</i>	<i>inta</i>
2.f.sg	<i>ənti</i>	<i>ənti</i>	<i>inti</i>	<i>inti</i>
2.m/c.pl.	<i>əntən</i>	<i>əntəm</i>	<i>intu</i>	<i>intum, intu</i>
2.f.pl.	--	--	<i>(intan)</i>	<i>intan</i>
1.sg.	<i>ana</i>	<i>ana</i>	<i>āni</i>	<i>āna, āni</i>
1.pl.	<i>nəḥne</i>	<i>əḥna</i>	<i>iḥna</i>	<i>iḥna</i>

3.2.1.2. The pronominal suffixes

The pronominal suffixes are affixed to nouns as possessive suffixes and to verbs as object suffixes. The following paradigms occur in Mardin as an Anatolian dialect, in Mossul as an Iraqi *qəltu* dialect, and in M. Baghdad as a *gilit* dialects (post-consonantal, and post-vocalic):

Tab. 52.6: Pronominal suffixes

	Qəltu Mardin	Mossul	Gilit M. Baghdad
3.m.sg.	-u, -hu	-u, -nu	-a, - ^ʔ (v = vowel-final)
3.f.sg.	-a, -wa, -ya	-a, -ha	-ha
3.m/c.pl.	-ən, -wən	-əm, həm	-hum
3.f.pl.	--	--	(-hin)
2.m.sg.	-ək, -k	-ak, -k	-ak, -k
2.f.sg.	-ki	-ki	-iĉ, -ĉ
2.m/c.pl.	-kən	-kəm	-kum
2.f.pl.	--	--	(-ĉin)
1.sg.	-i, -ya	-i, -ya	-i, -ya
1.pl.	-na	-na	-na

3.2.1.3. Copula

The *qəltu* dialects, particularly those of Anatolia, use a copula in nominal sentences. In Mardin it has followings forms: 3.m.sg. -we, 3.f.sg. -ye, 3.c.pl. -ənnel-nne, 2.m.sg. -ənta, 2.f.sg. -ənti, 2.c.pl. -əntən, 1.c.sg. -ana, 1.c.pl. -nəhne. For instance: *hāda abūwa-we* “this is her father”. In Ch. Baghdad the copula consists of *yā-* + pronominal suffix: *əntəm maʿzūmīn yā-kəm ʿəddna* “you are invited to our house”.

3.2.2. Indefinite marker

The Iraqi dialects are characterized by the indefinite marker *fad* which outside of Iraq is only attested in Central Asian Arabic: *fad yōm marṛ ʿalēna fad qābiṭ* “one day a certain officer came to us”. In Hasköy (Anatolia) indefiniteness is generally marked by *-ma* suffixed to the noun: *ifī maṛa-ma w rağəl-ma* “there was a woman and a man”.

3.2.3. Genitive marker

The genitive marker in Iraq is *māl*, *mālat* (*qaṣir māl iṛ-ṛaʿīs* “a castle of the president”). In Anatolia particles like *ḏīl*, *ḏēl*, *lē(l)* and *l-* are common. There are some other genitive markers in Mesopotamian Arabic, for instance Khawētna *gī*, *gīt*, pl. *giyāt*, Jewish ʿAqra *lūt*, pl. *lāt*.

3.2.4. Nouns

While in the *qəltu* dialects the noun patterns do not differ from those in other sedentary dialects, *gilit* noun patterns have experienced changes due to the *gahawa*-syndrome in the rural dialects. In addition, the elision of short vowels in open syllables and the shift of stressed /a/ to /i/, /u/ according to the phonetic environment caused changes of the old patterns (*maṭar* > *muṭar*, “rain”, *samak* > *simač* “fish”).

The realisation of the feminine ending /-a/ depends on the rules for word-final Imāla. In *gilit* dialects /-a/ has the allophones [ä], [e] and in *qəltu* dialects the allophones [a] after back and emphatic phonemes and in front environments [e] and [i].

3.2.5 Verb

3.2.5.1. Derivation

There are two patterns of form I verbs perfect and imperfect in the *qəltu* dialects, perfect: *fəʕal* (< *faʕil*, *faʕul*) and *faʕal*; imperfect: *yəfʕal* and *yəfʕal*. In *gilit* dialects, however, due to the redistribution of the short vowels there is only one pattern with predictable vowel variation in perfect: *fʷal* (*v* = /i/ or /u/ according the phonetic environment) as opposed to two patterns in imperfect: *yvʕʷl* (*yurkuḏ* “he runs”, *yigʕsil* “he washes”) and *yifʕal* (*yifham* “he understands”).

From the OA system all derived forms are present in Mesopotamian Arabic, although the form IV exists only in *gilit* rural dialects. In *qəltu* dialects and *gilit* urban dialects form IV has survived only in fossilized forms.

The internal passive exists only in traces in the *gilit* rural dialects; otherwise it has been abandoned entirely. Today the passive is expressed only by form VII. In rural *gilit* dialects but also in Euphrates *qəltu* dialects the imperfect base vowel is /a/ in forms VII and VIII. In addition, the initial syllable is stressed in these forms: VII *yínfaʕil* and VIII *yíftaʕil*, against *yənfəʕal* and *yəftəʕal* in the majority of the *qəltu* dialects.

3.2.5.2. Inflection

The verb inflections of the perfect and imperfect *qəltu* dialects (and M. Baghdad) have no genus distinction in plural. All other *gilit* dialects distinguish masculine and feminine forms, as is the case with the pronouns (3.2.1.1. and 3.2.1.2.). The following two tables contain the paradigm of form I imperfect and perfect of the strong verb in different dialects:

Table 52.7: Imperfect inflection

	<i>Qəltu</i> Mardin	J. Baghdad	<i>Gilit</i> M. Baghdad	Šāwi
3.m.sg.	<i>yəḏrəb</i>	<i>yəktəb</i>	<i>yiktīb</i>	<i>yuḏrub</i>
3.f.sg.	<i>təḏrəb</i>	<i>təktəb</i>	<i>tiktīb</i>	<i>tuḏrub</i>
3.m/c.pl.	<i>yəḏrəbūn</i>	<i>yəktəbōn</i>	<i>yikītbūn</i>	<i>yuḏurbūn</i>
3.f.pl.	---	---	<i>(yikītbān)</i>	<i>yúḏurbīn</i>
2.m.sg.	<i>təḏrəb</i>	<i>təktəb</i>	<i>tiktīb</i>	<i>tuḏrub</i>
2.f.sg.	<i>təḏrəbīn</i>	<i>tkətbēn</i>	<i>tikītbīn</i>	<i>tuḏurbīn</i>
2.m/c.pl.	<i>təḏrəbūn</i>	<i>tkətbōn</i>	<i>tikītbūn</i>	<i>tuḏurbūn</i>
2.f.pl.	---	---	<i>(tikītbān)</i>	<i>túḏurbīn</i>
1.sg.	<i>aḏrəb</i>	<i>aktəb</i>	<i>aktīb</i>	<i>aḏrub</i>
1.pl.	<i>nəḏrəb</i>	<i>nəktəb</i>	<i>niktīb</i>	<i>nuḏrub</i>

Table 52.8: Perfect inflection

	<i>Qəltu</i> Mardin	J. Baghdad	<i>Gilit</i> M. Baghdad	Šāwi
3.m.sg.	<i>ḡarab</i>	<i>katab</i>	<i>kitab</i>	<i>ḡurab</i>
3.f.sg.	<i>ḡarabət</i>	<i>katbət</i>	<i>kitbat</i>	<i>ḡrubat</i>
3.m/c.pl.	<i>ḡarabu</i>	<i>katbu</i>	<i>kitbaw</i>	<i>ḡrubam</i>
3.f.pl.	---	---	(<i>kitban</i>)	<i>ḡruban</i>
2.m.sg.	<i>ḡarabt</i>	<i>ktabt</i>	<i>kitābit</i>	<i>ḡarābit</i>
2.f.sg.	<i>ḡarabti</i>	<i>ktabti</i>	<i>kitabti</i>	<i>ḡarabti</i>
2.m/c.pl.	<i>ḡarabtən</i>	<i>ktabtəm</i>	<i>kitabtu</i>	<i>ḡarabtu</i>
2.f.pl.	---	---	(<i>kitabtan</i>)	<i>ḡarabtin</i>
1.sg.	<i>ḡarabtu</i>	<i>ktabtu</i>	<i>kitābit</i>	<i>ḡarābit</i>
1.pl.	<i>ḡarabna</i>	<i>ktabna</i>	<i>kitabna</i>	<i>ḡarabna</i>

3.2.5.3. Verbal modifiers

With the prefixed modifier *ku-* the imperfect expresses the present tense in the Anatolian and Kurdistan group of *qəltu* dialects. The Euphrates group has the present tense marker *qē'id* (< *qā'id*) and the Tigris group has *qa-* (< *qā'id*) with gemination of the following consonant. As corresponding particles *gā'id* and in M. Baghdad *da-* are common in the *gilit* dialects.

In the northern *qəltu* dialects the future is expressed by the modifier *ta-* ~ *tə-*, *də-* (Qāmišli: *ta-tiḡi* “you (m.sg.) will come”, *tanəbqa hawne* “we will remain here”). In the *gilit* dialects *rāh* (and Tigris *qəltu*: *ḡāh*) is used for the same purpose.

The habitual past is expressed by *kān* (*gilit*: *čān*) + imperfect, in the Anatolian dialects the modifier *ka-* occurs (Kinderib: *ka-yḡībūn* “they used to bring”).

While the perfective aspect is expressed by the active participle + perfect in the *gilit* dialects, the *qəltu* dialects use the modifiers *kū-* ~ *kūt-* (Anatolia) *kū-* (J. 'Aqra), *kən-* (Mossul), *kəl-* (Mardin, Siirt) + perfect (Mardin: *kəl-rāh* “he has gone”).

3.3. Lexicon

The most important lexical link between the Mesopotamian dialects is the great number of borrowings from Ottoman Turkish and Persian, e.g. *čākūč* “hammer”, *ḡunṭa* ~ *čanṭa* “suitcase”, *qāt* ~ *qāt* “suit”, *qappūt* “coat”, *qišla* ~ *qəžla* “(military) barracks”, *čādər* “tent”, *kēḡaluḡ* ~ *gēḡalək* “nightgown”, *parda* “curtain”, *xōš* “good”, *mēz* ~ *māša* “table”, *čāydān* “teapot”, *čāyxāna* “Tea house”, *šāmdān* ~ *šam'adān* “candlestick” and many other lexemes with the Turkish suffix *-či* ~ *-ḡi* for occupational terms, like *pōšta* “post office”, *pōštači* ~ *pōštaḡi* “postman”, *qəndara* “shoe”, *qəndarči* “shoemaker”, etc.

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53. Dialects of the Levant

1. Preface
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Abstract

This chapter gives an overview of the linguistic situation in the Levant (including Syria, Lebanon, Palestine, Jordan and Cyprus), discussing the variety of dialects (both Bedouin and Sedentary types) spoken across this vast area. Special emphasis is given to phonology and morphology; particular syntactic structures are also discussed according to the literature available.

1. Preface

The dialects of the Levant include a large variety of dialects spoken across a vast area covering Syria, Lebanon, Palestine, Jordan and Cyprus. In the literature these dialects

have been classified under various labels, such as ‘Great Syria’, (in connection with *bilād al-šām* ‘Damascus region’), ‘Syrien und Palästina’ (Bergsträsser 1915), and ‘Syro-lebanopalestinian dialects’ (Cantineau 1939). Cypriot Arabic has been studied as a residual Arabic dialect in its current functioning (Roth 1979, 2002) and from a historical and comparative perspective (Borg 1985, 2004). The English term ‘Levant’, derived from the French *Levant*, meaning ‘east, orient’, is the name historically given to the region east of the Mediterranean Basin, bordered by Greece, Turkey, Cyprus, Egypt and Libya – land which from ancient times has formed a major trade route. The term ‘Levant’ (*al-mašriq* in Arabic, with its western counterpart *al-mağrib*), refers to the eastern part of the Arab world. Although the classification is based on geography, the sub-grouping of these dialects is further supported by their sharing of a number of common phonological, morphological and lexical features that are distinct from dialects found to the west or in the Arabian Peninsula. As for Cyprus, approximately 110 km west of the Syrian coast, its link to the region dates back mainly to the 12th century and the establishment of a Christian community on the island. Cypriot vernacular Arabic has experienced an independent linguistic evolution due to extended contact with Cypriot Greek, as also occurred in other peripheral Arabic dialects in contact with foreign languages. Cypriot Arabic has, however, retained an areal ‘stamp’ testifying to its affiliation within the Arabic ‘*Sprachraum*’ (Borg 2004). Depending on the feature under discussion, Cypriot Arabic has been considered part of the Eastern branch of Arabic (Boustani 1953, Fischer/Jastrow 1980, Roth 1977), or as an areal hybrid (with affiliations to south-east Anatolian traits and with Sedentary Arabic dialects of Syria and Mesopotamia, Borg 1985, 2004). Cypriot Arabic survived as a spoken language for eight centuries. It is currently an endangered language spoken by no more than a thousand people, mainly from the older generation.

Dialects of the Levant are generally grouped into Bedouin and Sedentary categories, with two major sub-divisions: Sedentary dialects are subdivided into rural~urban, and Bedouin dialects into nomadic~semi-nomadic. Cantineau (1937) divided the Bedouin dialects of the Levant into sub-groups that correspond to three main types: 1) the Syro-Mesopotamian group, or ‘petits nomades’ (semi-nomadic), shares some features with Syrian Sedentary dialects (e.g. affrication of /ğ/; strong *imāla* at the end of the word *-ā* > *-e*; reduction of diphthongs). These dialects may have constituted a transitional group between north Arabic dialects and Syro-Mesopotamian dialects, represented today by the rural Sedentary type attested in Horan (south-west Syria), Jordan and the Palestinian territories. 2) the Shammar group of the Mesopotamian and Syrian deserts which shares features with the semi-nomadic type found in Syria and Jordan. 3) the *ṣanaze* group which has left traces in the Sedentary Syrian dialects of the Palmyra and *Soukhne* oases. Thus, the Bedouin~Sedentary split is not entirely distinct or absolute. Cantineau (1936) has already noted the Bedouin influence on Sedentary dialects on both lexical and morphological levels (e.g. the pronominal system of Palmyra’s dialect; the final *-in -ūn* of the imperfect in the dialect of *Soukhne*). Nevertheless, Bedouin dialects share a number of common features and are generally more conservative than the Sedentary dialects. Nowadays, the settlement of nomads in many regions – in northern Israel, no Bedouin communities lead a nomadic life (Talmon 2002) – has led to intensive contact between the two groups. Unfortunately, updated information on the effects of this contact is lacking. Consequently, the term ‘Bedouin dialects’ refers here, in many instances, to ‘historical’ Bedouin dialects. As for the Sedentary dialects, these

have been categorised into two types: rural and urban. The urban type has two sub-groups based on morphological and phonological features, notably the reflexes of *q, *k and the interdental (2.1.1., 2.1.2.). Sedentary dialects, especially the urban type, are better documented, but up-to-date linguistic information for these dialects is also lacking.

2. Phonology

The Sedentary eastern dialects contain approximately 35 phonemes, depending on the expansion of emphasis, the preservation of the interdentals and the enlargement or the reduction of the vowel system within each sub-group. Cypriot Arabic has only 23 phonemes – much less than any of the other Sedentary Levantine dialects: the pharyngeal *ʕ and the velar *ġ merged into /ʕ/, which itself shows instability in the speech of the younger generation; *ħ and *x merged into /x/, and *k and *q into /k/. Cypriot Arabic lacks voice correlation in plosives and has combined the historical emphatics with their plain counterparts /s/, /t/ /d/ (Roth 2004, Borg 2006).

2.1. Consonants

2.1.1. Interdentals

At the beginning of the last century the rural, *fellāhī*, Palestinian dialects were characterised by the presence of interdentals. Nowadays, this feature, considered as common to both the ‘rural’ Sedentary and the ‘Bedouin’ dialects, is more or less stable depending on the sub-area and the generations concerned. The situation is actually very complex: in the Jerusalem area, apart from in the speech of the older generation, interdentals have survived in some rural villages but have developed into their plosive counterpart in other villages in close vicinity (Naïm 1999). The same situation is found in northern Israel: interdentals are attested in rural villages, apart from in the coastal area which constitutes a sub-area with plosive reflexes (Talmon 2002). In Galilee, few villages show a split between generations (Behnstedt/Woidich 2005). In Lebanon, interdentals are preserved among the Shiite community, in the south of the country (Fleisch 1974) as well as in the speech of the Druze communities of Mount-Lebanon, South Lebanon, the Horan mountain in the contiguous Syrian area, and in Horan (Cantineau 1946). In general, the speech of the younger generation tends to align with the urban dialects, where interdentals match their corresponding plosives /t/, /d/ /d/. Sibilant reflexes of the interdentals /s/, /z/, /z/ are attested in northeast Syria, at *Dērīk* on the Iraqi border (Behnstedt 1997, M. 1). They are sporadically attested in the other dialects, notably in borrowed words from literary Arabic, Turkish or from Arabic via Turkish (Naïm 1985). Interdentals are, however, retained in Bedouin dialects of northern Israel (Talmon 2002) as well as in Gaza (de Jong 2000), Jordan (Palva 1976) and the Syrian desert (Cantineau 1934, Behnstedt 1997). In general these dialects show /d/ as a reflex of *d and *ḏ. In Cypriot Arabic, /t/ and /d/ are attested. The voiced /d/, which diachronically represents /d/, /ḏ/ and /d/, shows a specific lexical distribution.

2.1.2. Reflexes of *q

In most Sedentary dialects, reflexes of *q are voiceless /q/, /k/ and /ʔ/. /ʔ/ is found in the major cities: e.g. Beirut, Tripoli, Damascus, Aleppo, Amman, Jerusalem and Haifa. An emphatic /q/ is attested in West Beirut in the speech of the oldest urban communities, the Sunni and the Protestants (Naïm-Sanbar 1985). /q/ is less widespread in Lebanon than /ʔ/: it is found in the speech of the Druze community and is asserted as a linguistic identity (El-Zein 1981). /q/ is widely spread in north-west Syria, in the dialect of Palmyra, as well as in the south in the *Swēda* region (Cantineau 1934, Behnstedt 1997, M. 9). Rural dialects have /q/, /k/ and /k/ for *q, which may function as allophones, depending on the village or sub-area. The situation is highly variable among the central Palestinian dialects: some villages have /k/ with two allophones [q] and [k] (backed velar), whereas others have unconditioned reflexes /q/, /k/ and /k/ within the same area. /ʔ/ coexists with /q/ in some villages, with a post-glottalized allophone [qʔ] (Naïm 1999). A variation /ʔ~/q/ is also observed in some Syrian and Lebanese villages, where it corresponds to gender distinction or generational division (Behnstedt and Woidich 2005). In Galilee, the coastal area shows /ʔ/ whereas in the mountainous Galilee we find /q/ (Talmon 2002).

Historically, the voiced reflexes of *q, *g, *dʒ and *ǧ characterize the Bedouin dialects. These reflexes function as allophones of /g/ in most Bedouin Levant dialects: [ǧ] is found in the contiguity of front vowels in Bedouin dialects of the Syrian desert as well as in the *al-Balqāʾ* district of Jordan (Palva 1976); [dʒ] is found in north-east Syria (the *Shammar* tribe's sector) (Behnstedt 1997, M.9); in the Palmyra area, nomadic speech has three allophones, [dʒ], [ǧ] and [ʒ], near front vowels (Cantineau 1937). Some villages in east and northeast Syria show a lexical distribution between /q/ and /g/. The voiced reflex /g/ is found in all positions in a well-delimited rural sub-area of south Syria, in the dialect of Horan (Cantineau 1946) and in Gaza (de Jong 2000). Some rural villages of non-Bedouin origin in the southern part of northern Israel also have /g/, (Talmon 2002). Therefore nowadays, the historical division of Sedentary~Bedouin dialects on the basis of the voiced~unvoiced reflexes of *q is not as absolute.

2.1.3. Reflexes of *k

Reflexes of *k establish a division within the Sedentary dialects: the rural type shares the palatalization of *k > č with the Bedouin dialects, whereas the urban type has /k/. In Bedouin dialects, the affrication is nevertheless conditioned, it occurs in the contiguity of front vowels. This long-established situation (Bergsträsser 1915, Cantineau 1939) is nowadays almost unchanged, at least in most Bedouin dialects of Syria and Jordan where [č] is conditioned (Palva 1976). In northeast Syria, in the *Shammar* tribe's sector, the conditioned affricate is alveolar [č] and not palatal. Some Sedentary dialects in south and east Syria have a lexical distribution of /k/ and /č/ (Behnstedt 1997, M.15). In Deir Ezzor, the presence of /č/ has been attributed to proximity with Bedouin dialects (Jastrow 1978). Conditioned [č] is attested in the rural dialect of Horan (Cantineau 1946). This feature distinguishes it from the rural central Palestinian dialects where unconditioned /č/ is asserted as a linguistic identity. However, the current linguistic situation in these dialects seems unstable, at least in the discourse of the younger

generation, where /k/ is progressively replacing /č/. A gradual evolution towards an urban type is taking place, due to the provision of schooling and to intensive contact with urban dialects favoured by internal immigration (notably from Hebron) (Naïm 1999). In northern Israel, a glottal /ʔ/ reflex of *k has been reported in Acre and some rural communities between Acre and Nazareth (Talmon 2002).

2.1.4. Reflex of *ǰ

In rural and Bedouin dialects, the reflex of *ǰ is almost always affricated /ʒ/, /č/ or /c/, whereas in urban dialects, both the continuous /ʒ/ and the affricated /ʒ/ are attested, depending on the city in question: Damascus has /ʒ/ but Aleppo /ʒ/. The continuous /ʒ/ is widespread in the coastal area from north Syria to south Lebanon (Behnstedt 1997, M. 3) and in Kormakiti. /ʒ/ is found in Syrian, Palestinian and Jordanian Bedouin dialects, as well as in Gaza. In some Bedouin dialects of Jordan, the reflex of *ǰ is a palatal /y/ (Cantineau 1936) and the *Shammar* dialects have a palatalized and fronted /dʲ/ (Rosenhouse 2006). The dialect of Palmyra is characterized by a voiceless affricated /č/ as a reflex of *ǰ, but according to Cantineau, /ʒ/ is attested in the lexicon. The dialect of the oases of *Soukhne* also has a voiceless affrication, but it is alveolar /c/. The situation in the central Palestinian rural dialects is unstable: in the same sub-area (south-east Jerusalem), the dialect of *Sawāhir al-šarqiyyah* has /ʒ/ but that of *Sawāhir al-ġarbiyyah*, located a few kilometres from there exhibits /ʒ/. In rural villages north-east of Jerusalem, /ʒ/ is still attested in the discourse of the older generation, but /ʒ/ appears in the younger generation's speech (Naïm 1999).

2.1.5 Emphatics

In both Sedentary and Bedouin dialects, emphasis has expanded, creating new emphatics /b/, /m/, /l/, /r/ and /w/ in contrast with classical Arabic. They are not all productive and mostly have a low level of distinctiveness. In some dialects, /w/ and /l/ are always emphatic (Cantineau 1946, Behnstedt 1997, M. 17). Dialects differ in the degree of the emphasis spread within the word and in the chain. In Bedouin dialects (as well as some Sedentary dialects), pharyngalization affects almost all the front consonants from labials to dentals. This may be morpheme-linked: *hūwa* 'he', *həmma* 'they' m.pl., *hēdiy* 'this' f.sg. (Cantineau 1937). In the dialect of Palmyra, emphasis spread affects all the consonants except non-emphatic dentals, alveolars and pre-palatals (Cantineau 1934). The dialect of Beirut is characterized by its remarkable ability to spread pharyngalization (progressively and regressively) on the syntagmatic level (Naïm-Sanbar 1985). Depending on the dialect, pharyngalization may be stopped by specific phonemes, high vowels, diphthongs and sibilants, or by affixes. Sociolinguistic factors, gender, university education and plurilinguism, may influence the degree of pharyngalization (Naïm 2006).

2.2. Vowels

Bedouin Levantine Arabic dialects, as well as the majority of Sedentary dialects (with some exceptions such as the dialect of *Kfar 'Abida*), are of a 'differential' type, i.e. /a/

is maintained in CV syllables whereas **i* and **u* are dropped (except in borrowings from standard Arabic). In some dialects (Beirut, Tripoli, Damascus, Aleppo, Jordan, Gaza) the distinction */i/*~*/u/* is rare (restricted to final unstressed syllables), with */a/*~*/ə/* prevailing; in Palestinian northern rural dialects, the distinction is */i/*~*/a/* (Shahin 2008). In contrast, Cypriot Arabic maintains the distinction */a/*~*/i/*~*/u/* in stressed syllables but with an extensive shift of tonic */a/* > */i/* (Borg 2006).

All Levantine dialects have preserved the long vowel distinction */ī/*~*/ū/*~*/ā/*. A large number of Bedouin and Sedentary dialects have reduced the diphthongs to */ē/*, */ō/*, */ā/*, in all contexts, depending on the contiguous consonant (Palva 1976), or in specific syllable patterns and syllable positions (closed, open or final). Certain dialects have merged **ay* and **aw* in */ā/*; some have */ā/* for **ay*, others */ā/* for **aw* and others show a lexical distribution of diphthongs (Behnstedt 2005, 1997, T. 31). Long vowels are shortened in open unstressed syllables, in Bedouin and Sedentary dialects. In Bedouin dialects, */-ī/* and */-ū/* are often diphthongized in perfect endings of the 2nd and the 3rd mpl. (*któbo* ‘they have written’) and in independent pronouns (*ʔónte* ‘you f.’) (Cantineau 1936). In Cypriot Arabic the length opposition in vowels is lost; diphthongs are retained but occasionally yield */e/* and */o/*.

2.2.1. *Imāla*

Vowel shift or *Imāla* may be medial or final, and either vocally or consonantly conditioned. Few dialects have a vocally conditioned *imāla*, i.e. in the historical presence of fronted high vowels */i/*, */ī/* (e.g. Cyprus, Aleppo, Bdāda). The majority of eastern Sedentary and Bedouin dialects have a consonantly conditioned *imāla*, i.e. in the proximity of front consonants. Depending on the dialect, */ā/* is more or less fronted and raised, pronounced */ē/* (Beirut, Damascus, Syrian coast) or */ī/* (e.g. the Shiite community in South Lebanon, Soukhne). Some Sedentary dialects have no medial *imāla* (Yafa, Horân) but a strong final one. *Imāla* of short */a/* seems irregular, subject to a lexical distribution as in the speech of the Lebanese Muslim communities where it occurs more often with the numerals *wēhid* ‘one’ and *ʔawwil* ‘first’. In contrast, Bedouin dialects have almost no medial *imāla* (Cantineau 1936, de Jong 2000). Final *imāla* is attested in many Sedentary dialects (Lebanon, Syria, Palestine) and in certain Syrian and Palestinian Bedouin dialects (de Jong 2000, Cantineau 1936, Palva 1976): e.g. *rök-āḡne* ‘we have run’, *xšabe* ‘piece of wood’ (Cantineau 1936). In some dialects, *imāla* of */-at/* occurs only in pause (Gaza), although in others it is regular in non-emphatic or backed consonantal contexts (Behnstedt 1997, M. 43–62). In general the dialects that have medial *imāla* also have final *imāla*.

2.3. Syllable structure

Syllable types are common to Bedouin and Sedentary eastern dialects: light Cv, heavy Cṽ, CvC, and superheavy CṽC, CvCC, the last one only occurring in word-final position. In Sedentary dialects, word-initial clusters CC- are allowed; depending on the dialect, they vary freely with vC epenthetic forms, e.g. *ḥmār/iḥmār* (Palestinian, Shahin 2008). Three initial clusters rarely occur, as in *btʔaṭīh* ‘you give to him’ (Shahin 2008). Word-internal -CC- sequences may occur but continuous velars and pharyngals do not follow one another. Word-internal -CCC- sequences are generally dislocated in Bed-

ouin dialects, as in *yič^{et}būn* ‘they write’ (Cantineau 1936); in Sedentary dialects they may occur if the third consonant is compatible with the second (as in two consonant clusters), e.g. *tamski* ‘you hold’, *bardʔān* ‘oranges’ (Cowell 2005); when disjoined the prothetic vowel is placed between C₁ and C₂, e.g. *yisiknu/yisknu* ‘they live in ...’ (Naïm-Sanbar 1985). In final position -CC clusters are generally disjoined in pause, e.g. *sabʔt* ‘Saturday’ (Naïm-Sanbar 1985). Three consonant clusters never occur in final position. Cypriot Arabic has acquired a phonotactic constraint through contact with Greek: stop + stop > fricative + stop, e.g. *xtuft* ‘I wrote’ and has an unsystematic rule of postnasal epenthesis, e.g. *šimps* ‘sun’, *intsan* ‘man’ (Borg 2006).

Bedouin dialects are characterised by the *gahawa* syndrome (Blanc 1970). This feature is found in almost all eastern Bedouin (nomadic) dialects (Jordan, Palestine and Syrian), e.g. *nʕaḡe* ‘ewe’ (*naʕḡat*) (Cantineau 1936, Palva 1976). It is not attested in the dialect of Gaza (de Jong 2000).

2.4. Word stress

In both Bedouin and Sedentary dialects, word stress is linked to syllable quantity. It is underlined by a main rule: the ultimate syllable is stressed if it is superheavy -CVC, -CvCC, otherwise stress falls on the first heavy syllable, CvC, Cṽ, starting from the right, and in absence of a heavy syllable, it falls on the antepenultimate or the initial in disyllabic words. Despite certain specificities (e.g. fixed accentual patterns in nominal schemes; initial syllable stress in phonological words with a verbal nucleus even in the context of heavy syllables closer to the final), Cypriot Arabic reflects the same eastern Arabic stress rules although it has lost the historical length contrast, e.g. *kislān* ‘lazy’ **kaslān*, *xāḍer* ‘present’ **hāḍir* (Borg 1985). Some irregularities are found: the fall of the (h-) from the 3rd suffix in certain Sedentary dialects involves the stressing of a penultimate or final shortened syllable, e.g. *ḍarāba* ‘he hit her’ (< *ḍarāb-(h)a*) 2), *kat-abi* ‘you wrote it’ (< *katabī-(h)*) (Naïm-Sanbar 1985); in addition, certain dialects have a stressed short penultimate syllable in words corresponding to the imperfective of forms VII and VIII or to adjectives and nouns of the corresponding participial forms, e.g. *baʕfāker* ‘I think’, *maxtālef* ‘different’ (Cowell 2005). Bedouin dialects show irregularities too, e.g. *zāmanhom* ‘their time’, *abdāwi* ‘Bedouin’ (Palva 1976); some irregularities are connected to the *gahāwa* syndrome, e.g. *ḡahāla* ‘welcome’, shared by all the nomadic dialects of the Syrian desert. Bedouin eastern dialects vary as to the possibility of stressing the article when the word has only short syllables, as in *āl-ḡanam* (Cantineau 1936), *ḡāl-yadam* ‘funeral meal’ (Palva 1976). Sedentary dialects never stress proclitic particles (e.g. articles, demonstratives, prepositions) but the negative particles, *lā*, *mā*, may be stressed in certain Sedentary dialects as well as in Cypriot Arabic. In general, stress has a negative effect on the vowel length which is shortened when not stressed, as in *tleṭīn* ‘thirteen’ (Naïm-Sanbar 1985).

3. Morphology

3.1. Personal pronouns

In Sedentary dialects, gender distinction is restricted to singular pronouns. Final *imāla* ([-e] and [-i]) is observed in certain Sedentary and Bedouin dialects in the 1st person

Tab. 53.1: Personal pronouns

Dialects		Bedouin dialects			Sedentary dialects		
Independent pronouns		Suffixed pronouns			Independent pronouns		Suffixed pronouns
		possessive/ preposi- tional pronoun suffixed to cs.	possessive/ prepositional pronoun suffixed to vowel.	object pronoun suffixed to a verb			following a cs. follow- ing a vowel.
1s	<i>ʔāna, ʔana, ʔāni, ʔāney</i>	-i	-i, -y, -ya, -ye, -yi	-ni, -an, -n, -nan	1s	<i>ʔana, ʔani, ʔane</i>	-i, ay, -ni -yi
2ms	<i>ʔant, ʔant, ʔanta/e</i>	-ak, -k	-k/	-ak, -k	2ms	<i>ʔant, ʔanʔt, ʔanti, ʔantay, ʔante</i>	-ak -k
2fs	<i>ʔanti, ʔanti, ʔantʔi, ʔanteʔ</i>	-eč / -eč	-č / - č	- eč, -č, -eč, č	2fs	<i>ʔanti, ʔantay, ʔante</i>	-ik, -ek, ik -ki
3ms	<i>hūwa, hū, huwwa</i>	-oʰ, -o, -aʰ	-ʰ, -o, -u, -aʰ	-oʰ, -ʰ	3ms	<i>huwwa, huwwi huw-way, huwwē, hū</i>	-u, aw, -o, -u -ø
3fs	<i>hī, hiyya, hiye</i>	-ha, -ah, -aʰ, -eʰ	-ha, -aʰ, -ʰ	-ha, -ʰ, -aʰ	3fs	<i>hiyya/e/i, hiyyay, hī</i>	-ha, -hi, -a, -a -(h)a
1pl	<i>hənnə, hənna, ʔəhne/a</i>	-na, ne			1pl	<i>nəhna/i/e, nəhʔn, ʔəhna, ləhna</i>	-na, -ni, -ne -na, -ni, -ne
2mpl	<i>ʔantom, ʔantom, ʔantoʔ</i>	-kam, -kom	-kam, -kom	-kam, -kom	2pl	<i>ʔantu, ʔantaw</i>	-ku, -kaw -kon, kolum, -kun
2fpl	<i>ʔantan, ʔantan, ʔantten, ʔantʔen</i>	-kan, -ken, -čen	-kan, -ken, -čen	-kan, -ken, -čen			-ku, -kaw -kon, kolum, -kun
3mpl	<i>hum, ham, humme, humma, həmma</i>	-ham, -hom	-ham, -hom	-ham, -hom	3pl	<i>hənnə, hinni/e, hənnay, hənnen, humme/a</i>	-hen, -on, -on, -on, -on, -on, -on, -on, -on, -on
3fpl	<i>hen, hənne, henne</i>	-hen	-hen	-hen			-hen, -on, -on, -on, -on, -on, -on, -on, -on, -on

Tab. 53.2: Personal pronouns: Cypriot Arabic

Independent pronouns		Suffixed pronouns		
		following high V	following /ʔ/ and /a/	following C
1	<i>ana</i>	-i (-ni)	-i (-ni)	-i
2m	<i>int</i>	-k	-k	-ak
2f	<i>inti</i>	-ki	-ki	-ik
3m	<i>uo/o</i>	-x	-x	-u
3f	<i>ie/e</i>	-a	-xa	-a
1pl	<i>naxni</i>	-na	-na	-na
2pl	<i>intu</i>	-kon	-kon	-kon
3pl	<i>innen/enne</i>	-on	-xon	-on

Tab. 53.3: Demonstratives

Dia- lects	Bedouin dialects				Sedentary dialects			
	proximal	feminine	masculine	feminine	proximal	feminine	masculine	feminine
Dis- tance								
Number/ gender	mascu- line	feminine	masculine	feminine	masculine	femi- nine	masculine	femi- nine
sin- gular	<i>hāḡa</i> , <i>hāḡ</i>	<i>hāḡi</i> , <i>hāḡi</i>	<i>hāḡāk</i> , <i>haḡāka</i> , <i>ḡāk</i>	<i>haḡīk</i> , <i>haḡīč</i> , <i>haḡīč</i>	<i>hāḡa</i> , <i>hay/āīēda</i> , <i>hād</i>	<i>hā</i> / <i>ydi</i> , <i>hayy(e)</i>	<i>hay/adāk</i>	<i>hay/ adīk(e)</i>
plural	<i>hāḡōl(e)</i> <i>ḡōla</i>	<i>hāḡa/en</i> , <i>hāḡōle/a</i> , <i>ḡōla</i>	<i>hāḡlāk</i> , <i>hāḡōlāk</i> , <i>haḡōlāk(a)</i>	<i>hāḡōlīč</i> , <i>hāḡe/annīč</i> , <i>hāḡōlāk</i> , <i>haḡōlāk(a)</i>	<i>hay/adōl(e)</i> , <i>haw/adōl(e)</i> , <i>hawde</i> , <i>haw</i> , <i>hadōn</i>		<i>hado/ōlīk</i> , <i>had(o)lāk</i> , <i>hadōk</i> , <i>hudīk</i> , <i>hadānk(e)</i> , <i>hāndanke</i>	<i>hado/ ōlīk</i>

Tab. 53.4: Demonstratives: Cypriot Arabic

Distance	proximal		distal	
number/gender	masculine	feminine	masculine	feminine
singular	<i>aḡa</i>	<i>aḡi</i>	<i>aḡak</i>	<i>aḡīk</i>
plural		<i>allī</i>		<i>allīk</i>

ḡani/ḡane. Some Lebanese dialects (Beirut, Shouf) tend to eliminate the gender distinction in the 2sg, *ḡante* (m/fsg.). Initial /h/ of the 3msg suffix is regularly dropped; that of the 3 fsg and of the plural is dropped after -C but maintained after -v̄. In general, the older generation (60 years and above) tends to maintain the initial *h-*. Cypriot Arabic has lost the initial laryngeal /h/ in the 3rd person pronoun as well as in deictic forms. Among the particular features of this dialect, is the tendency to replace 3pl *innen* with the demonstrative *lallī*, and the existence of reduced forms for the 3rd persons, *o* (3msg), *e* (3fsg), *enne* (3pl), when implemented as a copula in equational constructions.

3.2. Demonstrative pronouns

Gender and distance distinctions are attested in Sedentary and Bedouin dialects. Velarization is characteristic of Bedouin dialects, although it also appears in a few Sedentary dialects. Some Bedouin dialects do not distinguish gender in plural forms (Jordan). Cypriot Arabic also has no gender distinction in the plural (see Tab. 53.3).

3.3. Nominal suffixes: dual and plural

The dual suffix **-ayn* is present in Bedouin and Sedentary dialects, except in Cypriot Arabic where it is absent. Bedouin dialects resort to the dual suffix regardless of the semantic domain of the noun. In a large number of Sedentary dialects, it serves to form the plural with paired body parts (pseudo-dual), e.g. *ḡdēn* ‘two hands, hands’

(Beirut). Plural suffixes **-īn* (m.) and **-āt* (f) are highly productive. In Sedentary dialects, mixed plural, internal + suffix, are frequent, as in *ṭarəḏāt* ‘roads’ (Tripoli); when combined with collectives, it may have an affective value, e.g. *ḏahlēti* ‘my (beloved) parents’. Cypriot Arabic has mixed plurals with Arabic or Greek suffixes, e.g. *-ū(t)kya* (Greek) or *-āt* (Arabic), *pnatū(t)kya* ‘young girls’. Some Arabic words form plurals with the Greek suffix */-s/* (Roth 2004).

3.4. Negation

All eastern dialects have distinct negation particles: *miš*, *mū*, *maw*, *milmay* for noun phrases, individual words, adverbs, or prepositional phrases; *mā*, *(m)a*, *(m)a ... š*, *-š*, *lā*, *lā ... š* for verbal phrases. The presence of the compound verbal negation does not correspond to an absolute division between Bedouin~Rural~Urban dialects. It is totally absent in north Lebanon, Syria (with some exceptions), Cypriot Arabic and in the semi-Nomadic dialect of *əl-ṣağārma* (Jordan). It is attested in central Palestine and in central and southern Lebanon. There are dialects with compound and non-compound particles in variation (Horan, Palmyra, Soukhne); others have a distribution *ma ... š* ~ *-š*, according to perfect~imperfect distinctions: *ma-šuft-iš* ‘I didn’t see’ ~ *bašūf-iš* ‘I don’t see’ (Shahin 2008); the dialect of Gaza allows three possibilities: *mā bihim*, *mā bihim(i)š*, *bihim(i)š* (de Yong 2000). By assimilation, the *mā* particle may lose its initial consonant (Central and northern Lebanon, Syrian coast, Lower Galilee), as in *’a-baṣrif(-š)* ‘I don’t know’ (Palva 2004).

The particle *lā/la* has been reduced to a modal function (*lā* + imperfect) denoting inhibition, forbidding or admonition. In certain dialects it is lengthened (*lā...š*), and it may lose its initial consonant or be dropped under the accent, e.g. *’a-tgūliš*, *tgūliš* ‘don’t say’ (*es-Salt*). In coordinated negation the particle is followed by *wala*, *lā... wala* in all Eastern dialects. The particle *wala* negates a word, e.g. *wala šī* ‘nothing’ (Beirut), *wala nās* ‘nobody’ (semi-nomadic, Palva 1976). In Cypriot Arabic *ma* occurs with a finite verb in the indicative and *la* with the imperative. Another particle, *tala* (*ta* + *la* modal negation), is used with the jussive and in dependent clauses. Alongside these, Cypriot Arabic has mixed particles such as *ma* (Arabic) ... *me* (Greek) ‘not either’, *ma* (Arabic) ... *pkyon* (Greek) ‘no longer’, *ma* (Arabic) ... *ute* (Greek) ‘not even’ (Roth 2004).

The *mā* particle is used to negate a personal pronoun implemented as a copula, e.g. *māni* ‘I am not’ (Tripoli, *əl-ṣağārma* dialect), *manni* (Beirut), *mānal/maniš* (*es-Salt*). *mā* and its compound counterpart are used to negate non-verbal predication: *mā biddiš* ‘I don’t want’ (*es-Salt*, Lebanon), *biddiš* (Galilee), *mā fī* ‘there is not’ (Beirut, Syrian central area), *mā bīš* ‘there is not’ (Palmyra, Soukhne), *mā bīlū/ō/oh* ‘there is not’ (central and north Syrian desert) (Behnstedt 1997, M. 226).

3.5. Verb measures:

The historical distinction between active~deponent~qualitative verbs marked by the thematic vowel of form I, *-a-~i-~u-* (e.g. *ḏaraba* ‘to strike’ ~ *sakira* ‘to get drunk’ ~ *karuma* ‘to become generous’) is no longer present in modern Eastern dialects. It has left traces in certain dialects (Beirut, Chanay, Tripoli), e.g. *talaf* ‘to deteriorate’ ~ *tilif*

‘to be ruined’ (El-Zein 1981); *dəheb* ‘to be wasted’ ~ *dahab* ‘to waste’ (El-Hajjé 1954), *ʔəniʔ* ‘to be convinced’ ~ *ʔanaʔ* ‘to convince’ (Naïm 2006). Sedentary dialects have two main patterns for form I, CaCaC, CəCeC while Bedouin dialects have CaCaC, °CCeC (Cantineau 1936–1937). In general, form II is as productive as form I. and very often bears the same value. form IV is no longer productive in Sedentary dialects, and is often replaced by form II. In Bedouin dialects, the distinction is still found, although its causative function is generally expressed by form II (Palva 1976). Reflexivity is mainly expressed by form V (*t-CvCCvC*), and reciprocity by form VI (*t-CvCvC*). Analytical constructions are also used, in some Sedentary dialects, for the expression of reflexivity and reciprocity by means of specific intensifiers, e.g. *hāl-* followed by a suffix representing the subject for the reflexive, and *baʕd-* followed or not by the plural suffix for the reciprocal (Beirut, Damascus). Form VII (*n*-prefix) is more (Tripoli) or less (Beirut) productive according to the dialect and is mainly used in impersonal constructions. In Bedouin dialects, internal passives may occur, e.g. *kisar* ‘it got broken’ (Galilee) but the passive is mainly expressed by form VII, e.g. *anmasak* ‘it was caught’, form V *tīhakkam* ‘it was treated medically’, or with form VIII *atwagad* ‘it was found’ (Rosenhouse 2006). Cypriot Arabic has the distinctive ability to express factitivity by an auxiliary, *sava* + V, e.g. [...] *te-sai-nna ta-nnakol* ‘[...] to make us eat’ (Arlette Roth p.c.); [...] *ta-sai-x te-peʕe ʕamiʕi* ‘[...] to reduce him to peddling sweet meats’ (Borg 2004).

3.5.1. Indicative

All Sedentary dialects mark the indicative with *b-* (*p^ky* in Cypriot Arabic) prefixed to the imperfect. The situation is less regular in Bedouin dialects: *b-* is attested in Negev, Gaza, the Bethlehem/Dead Sea area and in south Jordan; it is not used in the dialect of əl-ʕaǧārma (Jordan). The *b*-imperfect expresses general and narrative present and, according to the dialect, continuous present (Palestine, Cyprus) and futurity (Palestine, Damascus, Cypriot Arabic only in apodosis). The majority of Syrian and Lebanese dialects have a special marker for concomitance (durative): *ʕam/m*, *ʕamma*, *ʕammāl*, *ʕan*, *ʕa*, *man*, *ma*, which may be combined or not with the *b*-imperfect, depending on phonetic and morphological factors. The future tense is marked by two main particles combined with the imperfect without *b-*: *tta-* (Cypriot) *ta-* (Palestinian), and *raḥl/-a*, *laḥl/-a*, *ḥa* (Lebanese, Palestinian, Syrian); *laḥ*, *laḥa* are typical of Damascus. It can also be marked by *bidd*, *baʕdd-* with the value of an intentional future, especially with the first person (Gaza, Damascus, Beirut).

3.5.2. Imperative and subjunctive

Certain Bedouin dialects have a special use of the imperative in narrative speech: it is employed in foreground narrative content and for audience engagement (Cantineau 1937, Henkin 1998). In Sedentary and Bedouin dialects, the imperfect without *b-* occurs with non-finite verbs, in dependent clauses and as a modal (subjunctive) to express exhortation, suggestion and invocation. In Cypriot Arabic, the subjunctive is marked by */ta-/* or */a-/* (optative) + imperfect (Roth 1979, Borg 2004).

4. Syntax

4.1. Indirect genitive constructions

Both Bedouin and Sedentary eastern dialects display two types of genitive construction: direct and indirect, alongside the construct state. The former is done by suffixation, the latter by means of a specific marker. Dialects differ in the frequency of the indirect construction, which is rare in Bedouin dialects. Within the Sedentary dialects, the indirect construction is less frequent in the rural type. In all dialects, it is bound by semantic constraints, i.e. it is incompatible with inalienable nouns (e.g. kinship terms, body parts, part-whole relations) except for enunciative and pragmatic purposes (specification, focusing through dislocation). Dialects resort to this construction for the syntactic possibilities it offers: definiteness of the leading term (contrary to the construct state); integration of an adjective between the two terms of the annexation structure, as in *farʕ ʔ-falsafe tabaʕ žāmʕatna* ‘our university’s philosophy department’ (Cowell 2005); the possibility of avoiding ambiguity due to polysemy, as in *bint-ik* ‘your daughter’ ~ *l-bint tabʕūtik* ‘your maid’ (Naïm 2008). Genitive markers differ on agreement with the possessed item: certain dialects observe gender and number agreement, some have a fixed form (singular or plural), and others a partial agreement (more often with number and very often unstable). Among the varieties of genitive markers attested in the eastern dialects, *tabaʕ* is the more widespread; alongside its different allomorphs, e.g. *(b)tālē/ūʕ*, *tba/ʕ* (Bedouin), *būʕ* (pl), *bāʕūn* (pl) *tab(a)ʕāt* (pl), *tale(b)ʕūl* (pl), there are specific particles, *geyy* in Bedouin dialects (e.g. *geyyāti* ‘things I own’, Cantinneau 1936), *māl* in Gaza, *šī/ēt*, *šyāt* /šayyūt (pl) in Syria and Palestine and *hnūt* (Syria). In Cypriot Arabic the genitive marker agrees in number and gender in the singular, *tél-* (msg) *šayt-* (fsg), *šāt-* (pl), *p-payt tél-i* ‘my house [m.s.]’ (Roth 2004).

4.1.1. Epexegetic genitive

Alongside the indirect annexation, eastern Arabic dialects as well as Cypriot Arabic have a specific genitive construction marked by the preposition *l-*. It differs from the more regular indirect construction (4.1.) by the absence of the article before the possessed item (y) and the presence of a cataphoric pronoun representing the possessor (x) suffixed to y: Y-SUF(x) + *li/a* + x. This construction has been pointed out as an areal feature and explained by influence of an Aramaic substrate (Barthélémy 1935–1969, Feghali 1928, Borg 2004). Nevertheless, it is also found in Western Arabic dialects (Algeria, Morocco) as well as in the *qəltu* and the Baghdad *gelet* dialects (Eksell Harning 1980). Depending on the dialect, the *l-* construction is restricted to kinship nouns as in Cypriot Arabic, e.g. *yapatu l-yorko* ‘George’s father’ (Borg 2006), or has no semantic constraint, as in Lebanese Arabic where it is now very much alive: *wēn bēt-u la l-mudīr?* ‘Where is the house of the director?’ (Naïm 2009).

4.2. Non-verbal predication

There are very few major syntactic differences between eastern dialects with regard to non-verbal predication. Differences only appear on the nature of the preposition or

the copula used. Equational sentences present the order S + Pt, with a definite subject and an indefinite predicate. Cypriot Arabic differs in that it has two constructions depending on the subject: S + Pt and S + copula + Pt when the subject corresponds to the 3rd person. In this context, it is the contracted free pronoun (cf. 3.1.) which plays the role of a copula. The younger generation shows a tendency to use the second construction whatever the context (Roth 2004). Existential and possessive constructions have the same Pt + S word order with an indefinite subject. In general, Sedentary dialects have the locative *fī(h)* and Bedouin dialects the locative *bōh*, *bū*, *bō* (other variations in Behnstedt 1997, M. 366). Certain Bedouin dialects have both according to singular~plural distribution, as in *fī(h)* 'there is' ~ *bī* 'there are' (Palva 1976). Predicative possession shows no split between Bedouin~Sedentary dialects. Almost all dialects resort to *ʕa/ʔnd-*, *maʕ-*, *ʔal-* to express the concept of 'having'. Divergences may appear on the semantic notions of possession: certain dialects have distinct markers for alienability or spatial proximity (Beirut, Damascus, Jerusalem), and others make no semantic distinctions (Naïm 2004, 2008).

4.3. Direct object marking

Apart from the regular direct object construction governed by a transitive verb, a large number of eastern vernaculars (Lebanese, Syrian, Palestinian and Cypriot) have a construction in which direct government is introduced by the dative preposition *la/li* 'to'. Certain dialects restrict it to animate objects (Borg 2004) and others to human objects: *kānt šūf-o kəll yōm la-ʔahmad* 'I used to see (him) Ahmed every day' (Cowell 2005), while some dialects have no semantic constraint, as in *ʔakalt-a la t-təffēha* 'I ate (it) the apple' (Beirut). As shown in the preceding examples, the object element, obligatorily definite, is cataphorically represented by a pronoun suffixed to the verb, V-SUFF(O) + *la* + O. The construction may have another pattern, more regular in Cypriot Arabic, characterized by the absence of the cataphoric pronoun representing the object, V + I^c + O (definite). These two patterns have been used in variation in all Eastern dialects since before the 9th century (Feghali 1928). Nowadays only Cypriot Arabic retains both patterns in variation, the latter having been totally eliminated in the other vernaculars. As with the epexegetic genitive (cf. 4.1.1.), the object marking construction has been attributed to Syriac influence (Barthélémy 1935–1969, Feghali 1928, Borg 2003). In any case, it is underlain by pragmatic factors and contributes to highlight the object element, in a large number of languages (Naïm 2009).

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54. Dialects of Egypt and Sudan

1. Introduction
2. Phonology
3. Morphology
4. Syntax
5. Lexicon
6. Influence of Egyptian Arabic on Sudanese Arabic
7. References

Abstract

This article focuses on a comparison between Cairene and Central Urban Sudanese Arabic (CUSA) in respect of their historical background, phonology, pronominal and verb morphology, syntax and lexicon, concluding with a consideration on the present-day influence of Cairene Arabic on CUSA.

1. Introduction

By ‘Egyptian Arabic’ is meant here the Arabic dialects spoken by native speakers of Arabic throughout Egypt. By ‘Sudanese Arabic’ is meant the Arabic dialects spoken by native speakers of Arabic throughout Sudan. This therefore excludes the Arabic spoken by many Sudanese who do not have native-speaker command of Arabic. Also excluded is Juba Arabic, an Arabic-based pidgin/creole, widely spoken in South Sudan. This is so different in phonology, grammar and semantics from Sudanese Arabic dialects proper, that it is linguistically a separate language (see Miller 2007; see ch. 61).

1.1. Background to Egyptian Arabic

There were apparently Arabic-speaking Bedouins in the deserts of Eastern Egypt in pre-Islamic times (e.g. Holes 2004, 20). With the Arab conquests, Arabic progressively displaced Coptic, which probably became extinct by 1300 AD (Richter 2006, 495). Egyptian Arabic dialects are standardly of the eastern type, having more in common with the dialects of the Levant than with the dialects of the Maghreb. Some dialects,

e.g. in the Western delta are clearly Maghrebi in type (Woidich 2006a, 3). I will take as my main reference point for Egyptian Arabic the Cairene dialect. The most complete description of this is given by Woidich (2006b). For Egyptian dialects more generally, see Behnstedt/Woidich (1985–1999).

1.2. Background to Sudanese Arabic

There may have been Arabic speaker in Eastern Sudan before the rise of Islam (Hasan 1967, 14–15). By the 10th century Arabs began to penetrate in larger numbers into Sudan, principally from Egypt, where they traded with and eventually Islamized the Christian kingdoms of Nubia.

In this article, the main reference point for Sudanese Arabic will be Central Urban Sudanese Arabic (CUSA) (e.g. Dickins 2007a). CUSA is closely related to the dialects of the Ja'aliyyin tribal grouping, found to the north of Khartoum, and is spoken in Khartoum, and in other urban areas of central Sudan, roughly to the towns of Atbara in the north, Sennar on the Blue Nile, and Kosti on the White Nile (Dickins 2007b).

Reflecting the fact that the major penetration route of Arabic speakers was from Upper Egypt, through Nubia into central Sudan, CUSA is more closely related to Egyptian Arabic – and particularly the Şa'īdī dialects, than to any other non-Sudanese dialects, although there are also Peninsular and North African influences. In Western Sudan, Maghrebi influences are greater.

2. Phonology

2.1. Phonology of Egyptian Arabic

Table 54.1 (adapted from Woidich 2006a, 324) is a consonant phoneme-table for Cairene Arabic ('em.' = emphatic, pl. = plain).

Tab. 54.1: The consonant phonemes of Cairene Arabic

place of articulation	manner of articulation													
	stop		fricative				trill				sonorant			
	voiced		voiceless		voiced		voiceless		pl.		voiced		nasal	
	pl.	em.	pl.	em.	pl.	em.	pl.	em.	pl.	em.	lateral pl.	em.	pl.	em. glide
bilabial	b	ḅ											m	ṡ
labio-dental							f							w
alveolar	d	ḍ	t	ṭ	z	ẓ	s	ṣ	r	ṛ	l	ḷ	n	
post-alveolar							ʃ							
palatal														y
palatal-velar	g		k		ḡ		x							
pharyngeal					ʕ		ḥ							
laryngeal					ʔ		h							

Cairene /g/ standardly corresponds to Standard Arabic /j/. Cairene /ʔ/ corresponds to Standard Arabic /ʔ/ or /q/. Some other dialects of Lower Egypt, and the dialects of Upper Egypt, standardly have /j/ corresponding to Standard Arabic /j/, and /g/ to Standard Arabic /q/.

Table 54.2 shows the vowel system of Cairene Arabic.

Tab. 54.2: Vowels of Cairene Arabic

<i>i. Short vowels</i>		<i>ii. Long vowels</i>	
i	u	ī	ū
(e)	(o)	ē	ō
a		ā	

The phonemes /e/ and /o/ are marginal and “appear only in careful speech as lento-forms and replace /ē/ and /ō/ in unstressed position or before a consonant cluster due to morphonological changes” (Woidich 2006a, 325).

The following types of syllables are found in Egyptian Arabic, where C stands for ‘consonant’, V for ‘(short) vowel’, and VV for ‘long vowel’ (cf. Woidich 2006a, 325):

- (1) CV
- (2) CVC
- (3) CVV
- (4) CVVC
- (5) CVCC
- (6) CVVCC

There are no restrictions on the consonant combinations in consonant clusters.

In Cairene, /i/ and /u/, but not /a/, are elided in open unstressed syllables after short open syllables; thus *širib* ‘he drank’, but *širbat* (elision of second /i/) ‘she drank’ (with fem.sg. pronoun suffix *-at*). After a long open syllable, both /i/ and /a/ are elided: *sāfir* + *-it* > *safrit* ‘she travelled’, *miṭēwal* + *-a* > *miṭiwlā* ‘oblong’ (fem.) (see Woidich 2006a, 325).

No CCC clusters are allowed, even inter-lexically, the non-permitted tri-consontal cluster being avoided by insertion of an *-i*. Thus, instead of *iš-šahr da* ‘this month’, one finds *iš-šahri da*.

2.2. Phonology of Sudanese Arabic

Table 54.3 (adapted from Dickins 2007a, 24) is a consonant phoneme-table for CUSA.

/č/ and /ñ/ are marginal in CUSA (Mustapha 1982, 72). The most common form with /č/ is *kaččan* ‘to detest’, plus verbal noun derivatives *kiččain*, *tikiččin* and *kučna*. Many forms with /č/ have alternatives, typically with /š/ (ibid.).

The phoneme /ñ/ is even more marginal than /č/, the most common form with /ñ/ being *ñaṛra* ‘to growl’ (of a dog). Other forms include *ñāwa* ‘type of cat’, *dullañ* ‘small earthenware pot’; *guluñ* ‘hydrocele (swelling of the testicles)’. Hamid (1984, 10) does not include either /č/ and /ñ/ amongst the phonemes of Central Urban Sudanese.

Tab. 54.3: Consonant phonemes of CUSA

place of articulation	manner of articulation													
	stop		voiceless		fricative		voiceless		trill		sonorant			
	voiced				voiced				voiced					
	pl.	em.	pl.	em.	pl.	em.	pl.	em.	pl.	em.	lateral		nasal	glide
bilabial	b												m	w
labio-dental							f							
alveolar	d	ḏ	t	ṭ	z	ẓ	s	ṣ	r	ṛ	l	ḷ	n	
post-alveolar	j		č				š						ñ	
palatal														y
palatal-velar	g		k		ġ		x							
velar														
pharyngeal					ʕ		ħ							
laryngeal					ʁ		h							

Some dialects of Western Sudan also have the phoneme /ɲ/; e.g. *guṇulēs* ‘fruit of the baobab tree’, *itnaṇṇaṇ* ‘to chatter’, *šiliṇ* ‘five-piastre coin (old denomination)’, *dabaṇa* ‘pot for storing grain’. In dialects which do not have /ɲ/, some of these words have a /n/, e.g. *šilin* ‘five-piastre coin’ or a /ng/, e.g. *dabanga* ‘pot for storing grain’.

Table 57.4 (from Dickins 2007a, 25) provides a standard account of the vowel phoneme-table for CUSA (for an alternative account, see Dickins 2007a).

Tab. 54.4: Vowels of CUSA

<i>i. Short vowels</i>				<i>ii. Long vowels</i>			
i		u		ī		ū	
(e)		(o)		ē		ō	
	a				ā		

Some accounts of CUSA include also /e/ and /o/ as marginal phonemes. For a discussion and reasons for excluding /e/ and /o/ from the phonemes of CUSA, see Dickins (2007a, 54–55). Sudanese Arabic also has a high tone, marked as [↑], which occurs notably in the pronoun suffixes *-i[↑]* and *-ni[↑]* ‘me/my’; thus *rijāli* ‘male’ (adj.) vs. *rijāl-i[↑]* ‘my men’.

The following types of syllables are found in Sudanese Arabic, where C stands for ‘consonant’, V for ‘(short) vowel’, and VV for ‘long vowel’ (Dickins 2007a, 73):

- (1) CV
- (2) CVC
- (3) CVV
- (4) CVVC

- (5) CVCC
- (6) CVVCC

Final consonant clusters are, however, limited to the following types of consonant combinations:

Type 1. One of the sonorants /m/, /n/, /l/ as first consonant in the cluster. In this case, the second consonant is either a stop or a fricative, normally at the same place of articulation. Examples: *jamb* ‘beside’, *asmant* ‘cement, concrete’, *malṭ* ‘stark’ (in *‘iryān malṭ* ‘stark naked’).

Type 2. /f/ or /r/ as first consonant. Where the first consonant is an /f/ this is always followed by /t/ as second consonant. Where the first consonant is an /r/, this may be followed by a stop /b/, /t/, /d/, /ṭ/, /ḍ/, /j/, /k/, /g/, or a fricative /f/, /s/, /z/, or /š/ as second consonant. Examples: *zift* ‘tar’, *hārt* ‘heart’ (in cards), *kurs* ‘course’ (educational).

Type 3. Stop /k/ (and perhaps other phonemes) as first consonant with /s/ (and perhaps other phonemes) as second consonant. An example is *bōks* ‘shared taxi’ (from English ‘box’).

In nouns and adjectives which have final VCVC in their citation form, the final V is normally elidable, and normally predictable as follows:

(a) Final /a/, as in *faḥam* ‘charcoal’ occurs:

- (i) after the pharyngeals /ʕ/ and /ħ/
- (ii) after the laryngeal /h/

(b) Final /u/, as in *‘aḍum* ‘bones’ occurs:

- (i) before final /m/
- (ii) before final /l/ or /ʎ/
- (iii) before final /r/ or /ṛ/
- (iv) before final /ğ/
- (v) after a medial alveolar emphatic and before a final voiced labial stop or voiced alveolar stop:

The medial pre-vowel consonant in all types i.-v. is almost exclusively either:

- (i) a voiced stop;
- (ii) a nasal; or
- (iii) a traditional emphatic: /ḍ/, /ṭ/, or /š/

(c) Final /i/, as in *balif* ‘valve’, occurs whenever the conditions for types 1 and, immediately above, and the conditions for consonant clusters, described earlier, are not met.

There are, however, fairly numerous exceptions to predicted consonant clusters; e.g. *banij* ‘anaesthetic’ where consonant cluster rules would predict *banj* (cf. *bank* ‘bank’). There is one consistent exception to type 1 forms with final /a/: verbal nouns on the *fa‘il* pattern, e.g. *laḥim* ‘[action of] welding’ from *laḥam* ‘to weld’ (a borrowing from Standard Arabic; cf. *laḥam* ‘meat’). There are numerous exceptions to type 2 forms with final /u/, and some exceptions to type 3 forms (cf. Dickins 2011).

There are also numerous words whose citation form has CVCaC, where the final /a/ is not elidable (typically corresponding to *fa'al* forms in Standard Arabic), e.g. *gaḷam* 'pen'.

In addition to the elidable forms discussed above, /i/ and /u/ are typically elided in open unstressed syllables after both short and long open syllables; thus *širib* 'he drank', but *širbat* (elision of second /i/) 'she drank' (with fem.sg. pronoun suffix *-at*). /a/ is not (with the exception of forms described above) typically elided in these contexts.

Consonant clusters may be broken up by inter-consonantal vowel-insertion, as in *faḥam* 'charcoal', *aḍum* 'bones' and *balif* 'valve', described above – also *faḥam-na* 'our charcoal', *aḍum-na* 'bones' and *balif-na* 'our valve'. They may also, however, be broken up by the insertion of an /a/ after the second consonant, as in *faḥma-na* 'our charcoal', *aḍma-na* 'bones' and *balfa-na* 'our valve'. In some cases (probably in imitation of Cairene Arabic), other forms are also possible. Thus, while 'before/prior to' is *gabul*, 'before/prior to us' may be *gabul-na*, *gabla-na*, *gabli-na*.

3. Morphology

3.1. Morphology of Sudanese Arabic

The independent pronouns are as in Table 54.5.

The 2nd and 3rd person f.pl. forms *intan* and *hin* are essentially rural, and only rarely occur in CUSA, *intu* and *hum* standardly being used for both masculine and feminine.

Tab. 54.5: Independent pronouns in CUSA

person/gender/number	singular	plural
1	<i>ana</i>	<i>niḥna</i>
2m	<i>inta</i>	<i>intu</i>
2f	<i>inti</i>	(<i>intan</i>)
3m	<i>hu</i>	<i>hum</i>
3f	<i>hi</i>	(<i>hin</i>)

Other forms for 'you (m.sg.) include *itt* and *itta*, for 'you (f.sg.)' *itti*, for 'he/it (m.sg.)' *huwwa*, for 'she/it (f.sg.)' *hiyya*, for 'we' *aniḥna* and *iḥna*, and for 'they m./common pl.)' *hum* and *hun* (the latter particularly a feature of northern riverain Sudan).

The basic non-independent pronoun forms are as in Table 54.6.

In northern riverain Sudan the 2.m./common.pl suffix is *-kun*, and the 3.m.pl. suffix is *-un/-hun*.

Table 54.6: Non-independent pronouns in CUSA

person/gender/number	singular	plural
1	<i>-i[†]/-ni[†]</i>	<i>-na</i>
2m	<i>-ak/-ka</i>	<i>-kum</i>
2f	<i>-ik/-ki</i>	(<i>-kan</i>)
3m	<i>-u/-hu</i>	<i>-um/-hum</i>
3f	<i>-a/-ha</i>	(<i>-in/-hin</i>)

3.1.1. Verb morphology of Sudanese Arabic

The basic verb morphology of Sudanese Arabic can be summarised in Table 54.7, to be discussed immediately below.

Verb roots in both Sudanese and Egyptian Arabic may be bi-radical, bi-/tri-radical, tri-radical or quadri-radical.

A bi-radical root is one whose phonological realisations always involve two different phonemes. An example is *k-t* as in *katkat* ‘to shiver, tremble’. (Note that there is no form *katta*, or similar, meaning ‘shiver, tremble’ or similar. The root *k-t* always occurs in reduplicated form, and is thus to be distinguished from bi-/tri-radical roots, such as *l-f(f)*, appearing in both non-reduplicated forms, such as *laffa*, and reduplicated forms such as *laflaf*; see below, and for details Dickins 2005.)

A tri-radical is a root whose phonological realisation always involves three different phonemes. An example is *š-ğ-l* (occurring in the words *šuğul* ‘work’, and *ištağal* ‘to work’, for example). A bi-/tri-radical is a root whose phonological realisation sometimes involves two phonemes and sometimes involves three. An example is *l-f(f)* (occurring in *laffa* ‘to turn round’ and *laflaf* ‘to turn round and round’). Bi-/tri-radical roots are indicated by bracketing of the third potential realisable phoneme (the final ‘f’ in the case of the root *l-f(f)*).

A quadri-radical root is a root whose phonological realisation involves four phonemes. (Some traditional quadri-radicals are properly speaking tri-/quadri-radical, but this is ignored here for the sake of simplicity.)

A verb augment is any element which is additional to the root but does not express person, gender, number or tense. CUSA has exclusive augments, which may not occur together with another augment, and combinable augments, which may combine with another augment. Combinable augments have two sub-types, inner-combinable augments, which are closely connected to the root, both formally and semantically, and outer combinable augments which are less closely related to the root.

CUSA has three exclusive augments as follows:

- (1) *-in* prefix (e.g. *inbasat* ‘to become happy’), traditionally termed Measure VII by Western Arabists.
- (2) post-R1 (first root phoneme) *-t-* infix (e.g. *ištağal* ‘to work’), traditionally termed Measure VIII by Western Arabists.
- (3) *ist-* prefix (e.g. *ista‘jab* ‘to be surprised’), traditionally termed Measure X by Western Arabists.

CUSA has numerous inner combinable augments, the most important of which are the following:

- (1) Twin-radical reduplicatives

The twin-radical reduplicative morpheme involves reduplication of two root phonemes and occurs with bi-radicals, bi-/tri-radicals, and tri-radicals in which the first radical is identical to the third radical (e.g. *g-l-g*). It results in a quadriliteral base on the form C1-C2-C1-C2, and occurs in the following contexts:

- (a) With bi-radicals (roots unattested in non-reduplicated form)

A few roots in Sudanese can be analysed as bi-radicals; these always occur together with the twin-radical reduplicative morpheme.

katkat 'to tremble, shiver' (root: *k-t*)

maṣmaṣ 'to rinse out the mouth' (root: *m-ṣ*)

(b) *With doubled roots (bi-/tri-radicals)*

jaṣjaṣ 'to pull backwards and forwards' (root: *j-ṣ-(r)*)

laflaf 'to wrap round and round, go round [and round]' (root: *l-f-(f)*)

(c) *With final-weak roots (bi-/tri-radicals)*

daldal 'to let hang down' (root: *d-l-(y)* 'let down')

lawlaw 'to twist round and round [of a rope]' (root: *l-w-(y)* 'twist')

(d) *With medial-weak roots (bi-/tri-radicals)*

gargar 'to hollow out' (root: *g-w-r* 'hollow')

(e) *With sound tri-radicals having identical R1 and R3*

galgal 'to hassle, not to let rest' (root: *g-l-g* 'disturb')

Twin-radical reduplication typically gives a sense of intensiveness, repetition of the action, and/or distributed action. Distributed action is illustrated by *šamšam* 'to sniff around (here and there)' (root: *š-m-(m)*; cf. Measure I *šamma* 'to smell, sniff').

(2) *Single-radical reduplicatives*

Single-radical reduplicatives occur only with sound and medial weak verbs, and involve repetition of the initial root phoneme in post-R2 position.

gargaš 'to eat bread (or similar) without broth (hence to make a crunching sound)' (root: *g-r-š* 'crush, crunch (up)')

karkaʿ 'to drink with a gulping sound' (root: *k-r-ʿ*)

lōlah 'to wag (tail), move (of leaves, and similar)' (root: *l-w-ḥ*)

ṭōṭah 'to swing, sway' (root: *ṭ-w-ḥ*)

Single-radical root reduplicatives share with twin-radical root reduplicatives the sense of repeated action, but not so strongly the sense of intensive or distributed action.

(3) *a- root prefix: Measure IV*

The a- root prefix plus the root yield what is traditionally known as Measure IV. Measure IV verbs occur in the perfect tense, but not the imperfect, where they have been merged into the Measure 1 *yafʿil* form. They do not occur with medial weak verbs. Measure IV verbs include:

asraʿ 'to hurry'

adda 'to give' (root: *d-d-(y)*)

aḍrab 'to go on strike' (from Standard Arabic)

(4) *m- root prefix*

Examples:

maḡrab 'to get to sunset' (cf. *muḡrib* 'sunset')

maglab 'to play a trick on' (cf. *maglab* 'trick (n.)')

All m- root prefix forms seem to be derived conceptually from a more basic noun.

(5) š- root prefix

šaglab 'to muddle up, get in the wrong order'

(6) Pre-R2 -a- lengthening: Measure III

Pre R2 -a- lengthening plus the root yield what is traditionally known as Measure III. Measure III verbs typically express the following:

Action involving two people with subject as agent and object as patient

gāmaz 'to wink at'
ālaj 'to treat, cure'
šāwar 'to consult'

Reciprocal relationship with discursively foregrounded entity as subject

sāwa 'to be equal to'
bādal 'to exchange'
qārab 'to hit (someone who is hitting you)'

Other

hāwal 'to try'
sāfar 'to travel'
āyan (lē) 'to look (at)'
bārak (lē) 'to congratulate'

(7) Pre-R2 -r,-l,-n- infixes

These typically add an intensive or repetitive sense to that of the root.

šarbak 'to complicate, ensnare, tangle' (root: š-b-k)
ḥankal 'to trip (s.o.) up' (root: ḥ-k-l; *ḥakal* same meaning)
faltah 'to broaden' (root: f-t-ḥ)

(8) R2 doubling: Measure II

R2 doubling yields what is traditionally known as Measure II. This is extremely common, and has a very wide range of meaning correlates, the most important of which are the following:

Same meaning as Measure I

kammal 'to finish (intr.)' (= *kimil*; nb. *kammal* is also used causatively)

Causative of Measure I

The notion of causative covers a range of meanings from genuine causation to permission and enabling.

ḥabbab 'to cause to love' (*ḥabba* 'to love')

Causative of other measures

saffar 'to cause to travel' (*sāfar* 'to travel'; Measure III)

Intensive

gaffal 'to close up [completely] (intr. and tr.)'

Distributive

ḍabbah 'to slaughter (lots of animals)' (*ḍabah* 'to slaughter')

Accusational

sarrag 'to accuse of stealing, accuse of being a thief'

Having a disease/defect

nammal 'to get pins and needles'

ḥawwaṣ 'to go cross-eyed'

Becoming a colour

zarrag 'to turn black; make black' (root *z-r-g*; *azrag* 'black')

xaddar 'to turn brown/green; make brown/green' (root *x-d-r*; *axdar* 'brown/green')

Other

'affan 'to rot' (also causative 'to make rot/rotten')

Measure II forms frequently have more than one sense, a particularly common combination being both intensive and causative; e.g. *kattab* 'to write and write' or, less commonly, 'to cause to write'.

(9) Post-R2 -b,-m,-w- infix

This typically gives a repetitive or intensive sense:

xarbaš 'to scratch (skin)' (also Measure I: *xaraš*)

ṭarbag 'to knock' (root: *ṭ-r-g*)

šarmat 'to become a prostitute; to give (s.o.) over to prostitution; make dry meat [*šarmūt*]' (root: *š-r-ṭ* 'slit')

kajwal 'to cause (s.o.) to walk so that his legs obstruct one another (of paralysing disease, etc.)' (also *kajal*; root *k-j-l*)

(10) -n root suffix

galban 'to change (subtly or deviously)' (*galban al-mawḍū'* 'to shift the subject')

Outer combinable augment: it- root-prefix

An outer combinable augment is combinable with one of the inner combinable augments. The only outer combinable augment which regularly occurs in Central Urban Sudanese is the it- root-prefix morpheme. This occurs:

(i) with a tri-radical (or bi-/tri-radical): to form a quadriliteral base.

(ii) with a quadri-radical, or a tri-radical (or bi-/tri-radical) + inner combinable augment: to form a quinqueliteral base.

A tri-radical (or bi-/tri-radical) + R2 doubling + it- root prefix yields what is traditionally known as Measure V.

A tri-radical (or bi-/tri-radical) + pre-R2 -a- lengthening + it- root prefix yields what is traditionally known as Measure VI.

The it- root prefix morpheme most commonly gives the following senses: passive, reflexive, reciprocal, acting as/pretence.

Passive

The it- root prefix can be used to passivise virtually all transitive verbs with an active (non-relational) meaning.

From Measure I

itla'ab 'to be played'

itfaham 'to be understood'

itgalab 'to be overturned'

Measure V (from Measure II)

itkassar 'to be smashed up'

itgallab 'to be completely overturned'

From Measure IV

it'adda 'to be given' (*al-kitāb da (i)t'adda lēy*[†] 'That book was given to me')

From other measures

iṣōban 'to be washed' (root: ṣ-b-n; cf. *ṣābūn* 'soap')

iddaldal 'to be dangled down'

itmaglab 'to have a trick played on one'

itxarbaš 'to be scratched'

itgalban 'to be subtly changed'

Reflexive

Reflexive uses of the it- root prefix are also common. They shade into passive uses and also into uses where the translation suggests a notion of pure becoming.

From Measure I

itzagga 'to slip into (e.g. a queue)' (root: z-g-(g); *zagga* 'to slip something in (e.g. a paper/name)')

itgaṭa' (*min*) 'to stop (coming to see)' (*gaṭa'* 'to stop (s.o. else)')

Measure V

itḡatta 'to cover oneself (root: ḡ-t-(y))_

itgaṭṭa' 'to become split up into' (root: g-t-')

Measure VI

itḡāwal 'to contract [oneself] to do' (root: g-(w)-l)

iṭ'āhad 'to undertake [= get oneself to undertake], to do'

From other measures

itʿarban (min) ‘to get an advance payment (from)’ (root: ‘-r-b-n)

itḥalḥal (min) ‘to get free of’ (root: ḥ-l-(l))

itōlah ‘to sway (intr.)’

itšaglab ‘to get muddled up’

itgōlab ‘to be turned over slowly’

itšarbak ‘to get complicated’

Reciprocal

Reciprocity subsumes both the notions of activity directed at one another (e.g. *itšākal* ‘to quarrel with one another’) and that of doing things together (e.g. *itnōna* ‘to buzz together’; not necessarily ‘to buzz at one another’).

From Measure I

itlamma ‘to gather together, assemble (with one another)’

Measure V

itwannas ‘to chat (with one another)’ (cf. *wannas* ‘to chat to’)

Measure VI

itšākal ‘to quarrel with one another’

itgābal ‘to meet one another’

iḏḏārab ‘to hit one another’

From other measures

itnōna ‘to buzz around/together [of flies, etc.]’

Acting as/pretence

Measure V

itkabbar ‘to act arrogantly, be arrogant’

Measure VI

itnāsa ‘to pretend to forget’

itgāba ‘to pretend to be an idiot’

itzāhar (bē) ‘to pretend to’

From other measures

itfalham ‘to pretend to knowledge’ (+ tri-radical *f-h-m* + pre-R2 -r-, -l-, -n- infix)

itšaxsan ‘to show off (pretend to be a big personality)’

3.2. Morphology of Egyptian Arabic

The independent pronouns of Cairene are as in Table 54.8.

Tab. 54.8: Independent pronouns in Cairene Arabic

person/gender/number	singular	plural
1	<i>ana</i>	<i>iḥna</i>
2m	<i>inta</i>	<i>intu</i>
2f	<i>inti</i>	
3m	<i>huwwa</i>	<i>humma</i>
3f	<i>hiyya</i>	

The basic non-independent pronoun forms are as in Table 54.9:

Tab. 54.9: Non-independent pronouns in Cairene Arabic

person/gender/number	singular	plural
1	<i>-i/-ya/-ni</i>	<i>-na</i>
2m	<i>-ak/-k</i>	<i>-ku/-uku</i>
2f	<i>-ik/-ki</i>	
3m	<i>-u/-h</i>	<i>-hum/-uhum</i>
3f	<i>-ha/-aha</i>	

3.2.1. Verb morphology of Egyptian Arabic

The basic verb morphology of Egyptian Arabic can be summarised in Table 54.10, to be discussed immediately below.

In the following sections, I will not provide consolidated comments on the semantics of different verb forms in Cairene, as these are the same as for Sudanese and have been commented on in the section on Sudanese above.

Cairene Arabic has two exclusive augments as follows:

- (1) *in-* prefix (e.g. *inbasaṭ* ‘to become happy’: termed Measure VII by Western Arabists)
- (2) post-R1 (first root phoneme) *-t-* infix (e.g. *iṣṭaḡal* ‘to work’: Measure VIII)

Inner combinable augments in Cairene include:

- (1) Twin-radical reduplicatives

karkar ‘to make a gurgling sound’ (root: *k-r*)

laflaf ‘to wrap up’ (root: *l-f-(f)*)

With sound tri-radicals having identical R1 and R3

ʾalʾal ‘to waver, falter’ (root: *ʾ-l-ʾ* ‘disturb’)

(2) Single-radical reduplicatives

Single-radical reduplicatives occur only with sound and medial weak verbs, and involve repetition of the initial root phoneme in post-R2 position.

ʾarʾaš ‘to crunch (food)’ (root: *ʾ-r-š* ‘crush, crunch (up)’)

(3) (3)a- root prefix: Measure IV

Examples:

asraʿ ‘to accelerate’

adda ‘to give’ (root: *d-d-(y)*)

aḍrab ‘to go on strike’ (from Standard Arabic)

(4) m- root prefix

Examples:

markiz ‘to determine the centre’ (cf. *markaz* ‘centre’)

masmar ‘to nail’ (cf. *musmār* ‘nail’)

(5) š- root prefix

Example:

šaʾlab ‘to overturn’

(6) Pre-R2 -a- lengthening: Measure III

Example:

ḍārab ‘to compete with’

(7) Pre-R2 -r,-l,-n- infixes

Example:

šarbak ‘to entangle’ (root: *š-b-k*)

(8) R2 doubling: Measure II

Example:

ʾallab ‘to invert (successively)’

(9) Post-R2 -b,-m,-w- infix

Example:

xalbaṭ ‘to confuse’

(10) -n root suffix

No examples in my data.

Cairene has two outer combinable augments as follows:

(1) it- root prefix

(2) ist- root prefix.

(1) it- root prefix

From Measure I

it'alab 'to be turned over'

Measure V (from Measure II)

it'allab 'to be inverted (successively)'

Measure VI (from Measure III)

iḍḍarab(u) 'to compete with o.a.'

From other measures

iddaldal 'to be dangled down'

it'ar'aš 'to be crunched'

itmarkiz 'to be determined (boundary)'

itša'lib 'to get overthrown'

itšarbak 'to get entangled'

ifatwin 'to act the tough, behave in a bullying manner'

(2) ist- root prefix

Measure XII (from Measure I)

ista'gib 'to be astonished'

From Measure II

istarayyah 'to rest, relax'

4. Syntax

The basic word order in both Egyptian and Sudanese for sentences containing main verbs is S-V-O/Complement. In Cairene Arabic, where the subject is indefinite, the standard word order is V-S-O (Woidich 2006a, 351).

Sudanese Arabic has very few sentences involving V-S-O/Complement. Most of these involve the verb *kān* 'to be'; e.g. *kān ar-rājil da muhandis* 'that man was an

engineer'. A bare indefinite subject in Sudanese normally comes after the verb: *gāmat nār* 'a fire broke out' (cf. Dickins 2007b).

5. Lexicon

Hinds/Badawi (1986) is the standard Arabic-English dictionary of Egyptian Arabic. Egyptian Arabic has a large number of loanwords from Coptic (Vittmann 1991), and smaller numbers of loanwords from Greek, Aramaic (including Syriac), Persian, Turkish (Mamluk and Ottoman), French and English. Sudanese Arabic also has loans from all these sources, with a greater proportion of English words than does Egyptian, because of the extended British colonial presence in Sudan.

Qāsim (2002) is the standard Arabic-Arabic Sudanese dictionary. Dickins (http://www.leeds.ac.uk/arabic/staff/J_Dickins.htm) is an online Arabic-English / English-Arabic Sudanese dictionary. In addition to the non-Arabic lexical sources for Egyptian Arabic, Sudanese Arabic has also taken loanwords from Nubian, Fur and other languages of western Sudan, Beja, various Ethiopian languages, and languages of Southern Sudan.

6. Influence of Egyptian Arabic on Sudanese Arabic

Cairene Arabic is prestigious in Sudan, and a number of words and forms of Cairene origin have come into Sudanese Arabic. Particularly noteworthy is the frequent use of Cairene-style *illi* (also *alli*) as the relative particle relatively formal radio and television discussion programmes. Almost all dialects use *al-* as the relative particle (*alli* being found in the far north of Sudan) (see Dickins 2009, 549).

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55. Arabic in the North African Region

1. Introduction
2. Phonology
3. Morphology
4. Conclusion
5. References

Abstract

This chapter describes some of the most salient features in which variation between the different varieties of the Arabic of the North African region is significant. Two phases of arabization in North Africa in the 7th and 11th centuries resulted in pre-Hilālī, urban and rural Arabic, which contrast with Bedouin varieties of Arabic. This article examines selected aspects of the phonology and morphology of the different varieties of the region (pre-Hilālī, urban, rural and Bedouin).

1. Introduction

'Arabic in the North African Region' is a linguistic term which includes the Arabic vernaculars of Morocco, Algeria, Tunisia, Libya, Ḥassāniyya Arabic spoken by the Moors of Mauritania and the former Spanish Sahara, and Maltese, as well as the Arabic dialects of western Egypt, dead languages like Andalusian Arabic and the Arabic of Sicily, and the Arabic vernaculars spoken in the Diaspora. These dialects are characterized by certain features, such as the 1st person imperfect prefix: *n-* for the singular (*nəlʕəb* 'I play') and *n-* plus suffix *-u* for the plural (*nəlʕbu* 'we play'), as opposed to Oriental Arabic *ʔaʕrab* 'I drink' and *niʕrab* 'we drink'. In this chapter, only varieties of the Arabic vernaculars spoken in the countries of North Africa are discussed. For a linguistic description and bibliography of Maltese, see Mifsud (2007); for Andalusian Arabic, see Corriente (2006); for Sicily, see Agius (1996) and Metcalfe (2009); for the Arabic dialects of the Diaspora, see Caubet (2008b). The region that falls within the scope of this article is delineated by the Mediterranean to the north, the Sahara to the south, the Atlantic to the west, and Egypt to the east. By comparing the distribution of first person prefixes, Behnstedt has identified the transition areas that mark the eastern limits of Maghrebi Arabic in Egypt (Behnstedt, 1998). This area covers over 3 million km², and has a very unevenly distributed population of more than 80 million, concentrated mostly on the coastal plains.

Historically, the arabization of North Africa is related to the Muslim conquest from the east. It took place in two waves: first in the 7th century, and then in the 11th century. These successive Arab invasions are responsible for Arabo-Muslim features in North Africa. The first conquest was military and did not lead to a deep arabization of the region, which remained essentially Berberophone. At this time, some cities and their rural surroundings were partially arabized. Hence pre-Hilālī dialects are divided into

urban and rural dialects (also known as village and mountain ‘Jbāla’ dialects). The first urban centres, home to the early arabization in North Africa, are Kairouan, Mehdiya, and Soussa in today’s Tunisia; Constantine, Djidjelli and Collo in contemporary north-eastern Algeria; the area between Tlemcen, Nedroma, and Rashgoun in the northwest part of Algeria; and Fez, Tangier, and Badis in present-day Morocco (W. Marçais 1961). Jbāla Arabic in northern Morocco, the rural dialects of the Tunisian Sahel, and dialects spoken around Nedroma and in the neighbourhood of Djidjelli and Collo in northeastern Algeria also result from the first wave of arabization. These dialects display considerable substrate influence from Berber languages. It was not until the 11th century, when the Bedouin tribes of the Banū Hilāl, the Banū Sulaym and the Maṣqil subsequently settled, that North Africa was significantly arabized. The Banū Hilāl travelled across Libya, settled in Tripolitania and Tunisia, and also went into Morocco via northern Algeria (between the high plateaus and the Mediterranean Sea). The Banū Sulaym followed the path of the Banū Hilāl, stopping in Cyrenaica, Tripolitania, the south of Tunisia and the southeast of Algeria. The Maṣqil took a more southerly route (via the northern Sahara) and reached southern Morocco. One of their branches, the Banū Ḥassān, arabized Mauritania and gave their name to the Arabic spoken there (Ḥassāniyya).

From a linguistic perspective, the North African dialects may be divided into two main groups: the pre-Hilālī sedentary dialects (which take their name from the Banū Hilāl) and the Bedouin dialects. Pre-Hilālī Arabic developed from the Arabic spoken in the areas first occupied and arabized in the 7th century, and Bedouin Arabic has developed from the Arabic spoken in areas occupied and arabized in the 11th century. As a result of Bedouin migrations, clear-cut distinctions arose between urban, rural, and Bedouin dialects (Palva 2006, 609). These terms are used in a historical sense, and are based on the classification and definitions identified by William Marçais and Philippe Marçais, which follow Ibn Khaldoun (W. Marçais 1950; Ph. Marçais 1957). The two dialect groups are distinguished by certain linguistic features (Caubet 2001). The distinction between pre-Hilālī and Bedouin dialects is, however, based on a historical demarcation which has evolved significantly over time, with population movement and inter-mingling often giving rise to hybrid dialects. The impact of migration is particularly evident in the development of Arabic urban vernaculars (Pereira 2007). In some cases, it is no longer possible to categorize a dialect as Bedouin or sedentary. With the progressive settlement of former Bedouin groups, a process of koineization has occurred, leading to the emergence of mixed, urbanized, bedouinized vernaculars (Miller 2007).

The present article provides an overview of some of the significant linguistic features of North African Arabic. For further research, the publication of the *Encyclopedia of Arabic Language and Linguistics* includes three entries on specific North African urban vernaculars (Algiers, Tripoli and Tunis), entries on national vernaculars (Ḥassāniyya Arabic, Moroccan Arabic, Algeria, Tunisia, Libya) and an entry on Maltese, Andalusian Arabic and Sicily.

2. Phonology

2.1. Consonants

2.1.1. Interdentals

With few exceptions, the interdental fricatives *ṯ and *ḏ are preserved in the Bedouin varieties of North Africa (*tlāta* ‘three’; *kəddāb* ‘liar’). In Tripoli Arabic (Pereira 2010, 49), an urbanized Bedouin variety, these have merged with the dental stops /t/ and /d/ (*tlāta*; *kəddāb*). In the urban and rural sedentary dialects, they have generally merged with the dental stops. For instance, the interdentals are absent from the sedentary dialects of the Fezzan (Libya) (Caubet 2004b, 71). With few exceptions, namely the Arabic of Mahdia (Yoda 2008), the Jews of Tunis (D. Cohen 1975) and the Jews of Soussa (Saada 1956), the interdentals are present in all varieties of Tunisian Arabic. At present, although the pronunciation of the interdentals in Algiers is very unstable (Boucherit 2006, 61), the interdental fricatives may still be present in the old urban varieties of de Tenès, Dellys and Cherchell (Ph. Marçais 1977, 9; Grand’henry 2006, 54).

In Arabic varieties in which the interdentals are absent, *ṯ and *ḏ have merged with /ḏ/ (*ḏrəb* ‘he hit’ < *ḏrṯb*; *ḏəll* ‘shadow’ < *ḏṯll). In varieties in which interdentals are present, *ṯ and *ḏ have merged with /ṯ/ (*ṯrəb*; *ṯəll*).

2.1.2. Reflexes of *q

The reflex of *q is predominantly unvoiced in the pre-Hilālī sedentary varieties, generally realized as the unvoiced plosive [q] (*qāl* ‘he said’). The glottal stop [ʔ] is especially found in the Jewish varieties, as well as the varieties of the women in the Moroccan cities of Tetouan and Chaouen (*ʔāl*); the emphatic [ʔ] is found in the old urban variety of Fez (*ʔāl*). In some rural varieties, including those of Algeria, *q is realized as an emphatic velar [k̠] (*kāl*). It is predominantly voiced, [g] in the Bedouin varieties and in Libya, although it is realized as [q] among the Jews of Tripoli (Yoda 2005, 1–4). The affricate [t͡ʃ] is found in some varieties of the Fezzan (Caubet 2004b, 70). In the Bedouin varieties, [q] is found in borrowings from classical and modern standard Arabic (Pereira 2010, 75–77): religious terms (*qurʔān* ‘Koran’), administrative terms (*qāḏi* ‘judge’), and vocabulary linked to schools (*qāmūs* ‘dictionary’) and new technologies (*naqqāl* ‘mobile phone’).

2.1.3. Reflexes of *k

*k is generally pronounced as [k] in almost all varieties of the Arabic spoken in the North African region. Nevertheless, the reflex of *k may be an affricate [k͡ʃ] (*kʃəlb* ‘dog’) and [t͡ʃ] (*tʃəlb*), or a palatalized [k̠j] (*k̠jəlb*), especially in the rural varieties of Algeria. A voiceless palatal fricative reflex [ç] is found in Northern Jbāla dialects in Morocco and rural dialects of northwestern Algeria (*çəlb*). In Morocco, *k is pro-

nounced as [t] (*ʔalb*) in the Jewish dialect of Tafilalet (Heath 2002, 140) and [ʔ] (*ʔalb*) in the Jewish dialect of Sefrou (Stillman 1988). In Fezzan, *k is pronounced as [ç] and [kʲ] (Caubet 2004, 71).

2.1.4. Reflex of *ġ

*ġ is generally pronounced as [ɣ] in almost all varieties of the Arabic spoken in the North African region. In the speech of most Sahara Bedouins (Southern Tunisian, and Saharan varieties of Algeria and Ḥassāniyya), *ġ and q have merged to be pronounced as [q] (*ʃqīr* ‘small’; *qāba* ‘forest’). In certain Moroccan dialects, *ġ is realized as [ʕ], most notably in the word *ʕē, ʕā* (< *ġīr ‘only’).

2.1.5. Reflexes of *j

In most dialects, *j is reflected by [ʒ], as in the Arabic of Libya, Tunisia and most varieties of Moroccan Arabic. It is also the realization found in most Bedouin varieties (*ʒmāl* ‘camel’; *ṛāʒāl* ‘man’; *drūʒ* ‘stairs’). The affricate [ʒ] is generally found in parts of Algeria, mostly in urban and rural varieties (*ġmāl, ṛāġāl, drūġ*). In rural Algerian dialects and dialects in northern Morocco (rural Jbāla dialects, Tangiers), *j has the reflex [ʒ] when simplex (*ḥāʒa* ‘thing’) and is realized as a simplex [ʒ] when geminate (*ḥāġa* ‘pilgrim’). In contact with sibilants, *j is deaffricated to [g] or [d] (**ʃlās* > *glās* ‘sit down’; **jāz* > *gāz, dāz* ‘he passed’). In the Jewish varieties, sibilants may merge: the shift *j to [z] is very common in Jewish dialects, as is the shift *ʃ to [s]. Moreover, the sibilants /ʃ/ and /ʒ/ are subject to various conditioned changes. When /ʃ/ and /ʒ/ are found in the same word or where they occur in the same word as the sibilants /s/, /ʃ/ or /z/, assimilation (**ʃʕānʒ* > *ʃʕānz* ‘fritter’), dissimilation (**ʒayš* > *zayš* ‘army’), or metathesis (*tʒəwwəʒ* > *tʒəwwəz* ‘he got married’) take place (Taine-Cheikh 1986).

2.1.6. New phonemes

The phonological system of the Arabic dialects of North Africa is very rich, due to the preservation of sounds from foreign loans. New phonemes include /b/, /m/, /z/, /l/, /ġ/, /č/, /v/. Many minimal pairs prove their phonological status. Examples from Tripoli Arabic include: *sərč* ‘internet research’ (< search) vs. *sərʒ* ‘saddle’, *səyyəv* ‘he saved’ (< save) vs. *səyyəf* ‘he was forced’, *ġunʔa* ‘joint’ (< joint) vs. *ʃunʔa* ‘his suitcases’ (see also Caubet 2008a, 275; Pereira 2010, 37–81; Pereira 2009, 549; Taine-Cheikh 2007, 241).

2.2. Vowels

2.2.1. Short vowels

The system of short vowels in sedentary varieties generally differs from that in Bedouin varieties (D. Cohen 1970, 173–174). Sedentary varieties merge *a and *i while preserv-

ing the individuality of *u, in a system contrasting /ə/ and /u/: *ḥuḏra* ‘bedroom’ and *ḥəḏra* ‘stone’ (Pereira 2010, 24–26). In Bedouin varieties, the system merges *i and *u in /ə/, which contrasts with /a/: *tham* ‘he suspected’ and *thəm* ‘he was suspected’ (D. Cohen 1970, 174). Certain pre-Hilālī sedentary varieties, including those of the Jews in Algiers (M. Cohen 1912) and Tripoli (Yoda 2005), have a single short vowel, /ə/, while other Bedouin varieties (e.g. Ḥassāniyya) have four vowels: /i/, /u/, /a/, /ə/ (Taine-Cheikh 2007, 242; D. Cohen 1970, 173).

2.2.2. Long vowels

There are generally three long vowels in the varieties of the Arabic in the North African region. In some varieties (Tripoli Arabic, for instance), the vocalic system is of the Bedouin type, with five long vowels /ā/, /ī/, /ū/, /ē/ and /ō/; the phonemes /ē/ and /ō/ represent the reduction of the diphthongs *ay and *aw respectively. Commutations are shown by the following minimal pairs: *dāb* ‘it melted’ vs. *dīb* ‘wolf’, *fīl* ‘elephant’ vs. *fūl* ‘broad bean’, *ṣūf* ‘wool’ vs. *ṣēf* ‘summer’, *lēn* ‘until’ vs. *lōn* ‘colour’, *ḏēb* ‘pocket’ vs. *ḏīb* ‘bring (imperative)’ and *dōg* ‘taste’ vs. *dūg* ‘taste (imperative)’. (Pereira 2010, 29–36).

2.3. Diphthongs

In the sedentary urban and rural pre-Hilālī varieties, *ay and *aw have generally merged with the long vowels /ī/ and /ū/: **yawm* > *yūm* ‘day’ and **ḏayb* > *ḏīb* ‘pocket’. In the Bedouin varieties, they have either been maintained: *lawn* ‘colour’ and *ṣayf* ‘summer’, or reduced to /ō/ and /ē/: *ḥōṣ* ‘house’ and *ṣēn* ‘ugly’ (Pereira 2010, 34–35). In the Saharan Bedouin varieties, re-diphthongation /ōw/ and /ēy/ may occur: *mōwt* ‘death’ and *klēyt* ‘I ate’ (Cantineau 1960, 103).

2.4. Syllable structure and morphophonemics

Generally, short vowels in open syllables do not occur in North African Arabic (for instance **kṯvṯb* > *ktvṯb* ‘he wrote’), with the exception of certain conservative Bedouin varieties, such as the Saharan varieties or the Arabic of Southern Tunisia or Libya (Caubet 2004, 75), where /*kəlb*/ ‘dog’ can be pronounced [*kəlb*] (vs. [*kəlb*]), /*xubz*/ ‘bread’ can be reflected as [*xobəz*] (vs. [*xobz*]). The constraint on short vowels in open syllables results in an evolution in syllabic structure. It is most noticeable in cases where a vocalic suffix is added transforming a closed syllable to an open one (Ph. Marçais 1977, 26). For example, when a vocalic suffix is added to words such as C₁C₂əC₃ (*ḏrəb* ‘he hit’, *rḏəl* ‘foot’, *tmar* ‘date’, *ṣḥar* ‘month’), the syllabic grouping changes to C₁əC₂C₃, in a mutation called ‘ressaut’ or metathesis: *ḏrəb* + *ət* > *ḏərḃət* ‘she hit’, *rḏəl* + *i* > *rəḏli* ‘my foot’, *tmar* + *a* > *təmra* ‘one date’, *ṣḥar* + *ēn* > *ṣḥrēn* ‘two months’. This mutation is also evident in words with more than three consonants (such as *nəktəb* ‘I write’, *ləḥḏət* ‘accent’, *məsləm* ‘Muslim’), to which a vocalic suffix is added. There are multiple solutions for this syllabic restructuring (Ph. Marçais 1977, 24–34). Some

varieties delete the final vowel of the stem (eastern part of Algeria, Tunisia, Libya and Sahara Bedouin varieties), stressing the first vowel of the group and preserving the original stress pattern: *nəktəb* + *u* > *náktbu* ‘they write’, *ləhžət* + *i* > *láhžti* ‘my accent’, *məktəb* + *a* > *máktba* ‘library’. Other varieties (Djидjelli, Morocco) delete the initial vowel of the stem, and metathesise the final vowel and medial consonant, as in: *nəktəb* + *u* > *nkətbu* ‘they write’, *ləhžət* + *i* > *lhəžti* ‘my accent’, *məktəb* + *a* > *mkətba* ‘library’. Lastly, some Algerian varieties, particularly in Western Algeria, conserve the vowel in the initial syllable through gemination of the second consonant: *nəktəb* + *u* > *nəkkətbu* ‘they write’, *ləhžət* + *i* > *ləhhažti* ‘my accent’, *məktəb* + *a* > *məkkətba* ‘library’. When a vowel-initial pronoun is suffixed to a verb conjugated in third feminine singular form of the suffix conjugation (*qərbət* ‘she hit’), a different set of scenarios are found. Some Algerian Bedouin varieties elide the vowel in the suffix: *qərbət* + *ək* > *qərbtək* ‘she hit you’. Through metathesis, in the Jewish varieties from Alger, Fez and Sefrou, we find the following form: *qərbət* + *ək* > *qərbtək*, thereby creating syncretism of the third feminine singular with the first singular. In eastern North Africa, as well as Saharan and Moroccan varieties, an added suffix *-āt* with a long vowel provides a solution: *qərbət* + *ək* > *qərbātək*. Finally, other varieties, particularly sedentary Algerian, geminate the /t/ of the suffix *-ət*: *qərbət* + *ək* > *qərbəttək*.

3. Morphology

3.1. Pronouns

3.1.1. Independent personal pronouns

The following table presents the most widespread forms of the independent personal pronouns in North African Arabic. There are numerous dialectal variants and the augmented forms are very widely used, recognizable in the form *-ya*, which is mostly applied to first person and second person singular cases (Ph. Marçais 1977, 188–190).

Tab. 55.1: Independent pronouns

Number	Person/Gender	Forms	Augmented forms
Sg.	1.	<i>āna</i>	<i>ānāya</i>
	2m.	<i>ənta</i>	<i>əntāya</i>
	2f.	<i>ənti</i>	<i>əntīya</i>
	3m.	<i>hūwa</i>	
	3f.	<i>hīya</i>	
Pl.	1.	<i>hna</i>	<i>hnāya</i>
	2.	<i>əntūm(a)</i>	
	3.	<i>hūma</i>	

Gender is not generally marked in plural forms, with the exception of certain Bedouin varieties; for instance, in Libya, where a gender distinction between the 2nd and the 3rd persons plural is expressed: *əntu* ‘you (masculine plural)’ contrasts with *əntən*

‘you (feminine plural)’, *hum* or *humma* ‘them (masculine)’ with *hən*, *hənn* or *hənnā* ‘them (feminine)’ (Caubet 2004, 83; Owens 1984, 91); in Southern Tunisia *əntum* and *əntən* contrast (Boris 1958, 15). In Ḥassāniyya, likewise, *əntūma* contrasts with the augmented form *əntūmāti*, and *hūma* with the augmented form *hūmāti* (Taine-Cheikh 2007, 242). Some pre-Hilālī varieties, however, do not distinguish gender in the second singular pronoun. These include the Jewish variety of Algiers (M. Cohen 1912, 177), Djidjelli (Ph. Marçais 1952, 143), and village varieties in northwestern Algeria (Ghazaouat) where *ənta* is used for both genders. In Tunis, *ənti* is the only form. Pre-Hilālī varieties in Northern Morocco (Fez, Chaouen, Anjra) generally share the single form *əntīn(a)* (Caubet 2001, 84; Moscoso 2003, 160; Vicente 2000, 136).

3.1.2. Suffix pronouns

The following table reviews the different forms of the suffix pronouns (Ph. Marçais 1977, 191–192).

Tab. 55.2: Suffix pronouns

Number	Person/Gender	Forms
Sg.	1.	-i, -ya, -y, -ni
	2.	-ək, -k
	3m.	-u, -h, -əh, -a, -ā
	3f.	-ha
Pl.	1.	-na
	2.	-kum
	3.	-hum

In the suffix pronouns, gender distinction generally exists only in the third person singular. In the first person singular, *-ni* is suffixed to verbs (*ḏrəb-ni* ‘he hit me’). In Tripoli, *-ni* is also suffixed to the preposition *zēy*: *zēy-ni* ‘like me’ (Pereira 2010, 322). Distinction is then made between forms suffixed to pre-consonantal words and those suffixed to pre-vocalic words. The suffix *-i* is used with pre-consonantal nouns and prepositions (*wəld-i* ‘my son’; *ḏəḏd-i* ‘against me’). *-ya* is generally suffixed to words ending in the vowels /ā/, /ī/ and /ū/ (*blā-ya* ‘without me’; *yəddī-ya* ‘my hand’; *slī-ya* ‘on me’; *xū-ya* ‘my brother’). A distinction can also be made between *-ya* and *-y*, especially in Tripoli Arabic (Pereira 2010, 240–255), where *-ya* is suffixed to words ending in /ē/ and /ī/ (*slē-ya* ‘on me’; *īdē-ya* ‘my hand’; *fī-ya* ‘in me’; *ṭwāṣī-ya* ‘my glasses’), and *-y* to words ending in /ā/ and /ū/ (*mṣā-y* ‘with me’; *ḏwā-y* ‘my medicine’; *xū-y* ‘my brother’; *bū-y* ‘my father’). Moreover, there is generally no gender distinction in the second person singular, as in the independent pronouns. The suffix *-ək* is added to pre-consonantal words (*bəṣd-ək* ‘after you’; *səyyārt-ək* ‘your car’) and *-k* to pre-vocalic words (*lī-k* ‘for you’; *bū-k* ‘your father’). In some Bedouin varieties from South Tunisia and Libya, a distinction is made between the masculine forms (*-k*, *-ək*), and the palatalized feminine ones pronounced [ç] or [k̟] (Caubet 2004, 84). In the third masculine singular in the pre-Hilālī varieties, *-u* is suffixed to pre-consonantal words (*mānn-u* ‘from him’; *xədmət-u* ‘his work’), and *-h* to pre-vocalic words (*mṣā-h* ‘with him’; *xū-h*

‘his brother’). In the Bedouin varieties, the third masculine singular is never *-u*; we generally find *-vħ* after a consonant (*mənn-əħ* ‘from him’; *šugl-əħ* ‘his work’) and *-h* after a vowel (*lē-h* ‘for him’; *məʕnā-h* ‘its meaning’). The suffix is *-a* in Tripoli Arabic (Pereira 2009, 551), and *-əħ* in pausal forms (*əl-xāl fi xēṛ lēn yukbuṛ l-a wəld uxt-əħ* ‘the uncle is fine until his nephew has grown up’); *-a* is lengthened and stressed when a suffix is added (*mā-šbəħt-ā-š* ‘I did not see him’). Also in Tripoli, when *-h* is suffixed to a vowel-final verb surrounded by the discontinuous negation morpheme *mā...š*, /h/ assimilates to the /š/ of negation, which is then geminated: **mā-nəbbī-h-š > mā-nəbbī-š-ši* ‘I don’t want it’ (Pereira 2010, 244). In the plural, there is generally no gender distinction in most North African Arabic varieties, with the exception of Bedouin varieties of South Tunisia and Libya, where the form *kən* contrasts with *kum*, and *hən* with *hum* (Caubet 2004, 84).

3.2. Verbal morphology

3.2.1. Suffix and prefix conjugations

The following table presents the suffixes and prefixes of the verbal conjugations, taking the conjugation of the verb *ktəb* ‘he wrote’ as an example.

Tab. 55.3: Suffix and prefix conjugation

	Suffix conjugation	Prefix conjugation
1sg.	<i>-t</i> (<i>ktəb-t</i>)	<i>n-</i> (<i>nə-ktəb</i>)
2sg.m.	<i>-t</i> (<i>ktəb-t</i>)	<i>t-</i> (<i>tə-ktəb</i>)
2sg.f.	<i>-ti</i> (<i>ktəb-ti</i>)	<i>t-...-i</i> (<i>tə-ktəb-i</i>)
3sg.m.	<i>-Ø</i> (<i>ktəb-Ø</i>)	<i>y-</i> (<i>yə-ktəb</i>)
3sg.f.	<i>-ət</i> (<i>kətb-ət</i>)	<i>t-</i> (<i>tə-ktəb</i>)
1pl.	<i>-na</i> (<i>ktəb-na</i>)	<i>n-...-u</i> (<i>nə-ktəb-u</i>)
2pl.	<i>-tu</i> (<i>ktəb-tu</i>)	<i>t-...-u</i> (<i>tə-ktəb-u</i>)
3pl.	<i>-u</i> (<i>kətb-u</i>)	<i>y-...-u</i> (<i>yə-ktəb-u</i>)

As for the independent and suffixed pronouns, there is no gender distinction in the plural, except in some Bedouin varieties (Saharan varieties, South Tunisian Arabic and Libyan Arabic): **qəltən* ‘you killed (fem.)’ and **qətlən* ‘they killed (fem.)’ (Ph. Marçais 1977, 37). In the second singular, gender distinction is generally made in conservative varieties such as Bedouin dialects. As for the independent pronouns, some varieties show no gender distinction in the second singular. For instance in Tunis, the following forms are common to the masculine and the feminine: *təktəb* ‘you write’ and *ktəbt* ‘you wrote’ (Gibson 2009, 568). In some varieties of Moroccan Arabic, there is no gender distinction in the second singular in the suffix conjugation (Aguadé 2008, 291): some dialects exhibit *-ti* (Tangier, Rabat, Casablanca, Marrakech, Fes, Atlantic coast); others exhibit *-t* (Anjra, Chaouen, Jewish dialects).

3.2.2. Present and future markers

In Morocco, the preverbal markers *ka* and/or *ta* express habit, repetition concomitance, and generality: *ka yaktāb* ‘he is writing, he writes, usually habitually’ (Caubet 2008, 281). With the same values, the form *da* occurs in some Jewish dialects, the form *a* in rural northern dialects, and the form *la* in Chaouen and Anjra (Aguadé 2008, 292). In northwestern Algeria pre-Hilālī varieties (Ph. Marçais 1957, 223), the preverbal marker *ku* is used for the first and the second persons (*ku taktāb* ‘you write’; *ku nkātbu* ‘we write’), and *ka* for the third persons (*ka taktāb* ‘she writes’; *ka ykātbu* ‘they write’). Etymologically, the preverbal markers *ka* and *ku* are probably grammaticalised forms of *kān* and *kūn*.

Most of the future particles correspond etymologically to the participle of a verb of movement (*gādi*, *māši*, *ṛāyāḥ*, *lāhi*). In Morocco, the future particles are *gādi*, *gād*, *ga*, and *māši*, *māš*. The Jewish dialect of Sefrou uses the form *a* (Aguadé 2008, 292). In some cases the particles agree in gender and number with the subject: *gāda tẓi* and *gādyā tẓi* ‘she will come’, and *gādīn yẓīw* and *gādyīn yẓīw* ‘they will come’ (Caubet 2001, 86). In Algiers, *ṛāyāḥ* expresses the immediate future, also agreeing in gender and number (Boucherit 2006, 65). In Mauretania, the invariable particle *lāhi* is used (Taine-Cheikh 2007, 248). In Tunis Arabic, the particles *bāš*, *bāš* express future tense (Gibson 2009, 569). In Tozeur Arabic, a Bedouin dialect of South Tunisia, the preverbal markers *sa* and *ta* express both future tense, and mark imminence or habit (Saada 1984, 60). In Libya, the preverbal marker *b* expresses the future of intention; this particle can also express volition or mark imminence, possibility, or finality. The preverbal marker *ha* is also used to express the future (Pereira 2009, 555).

3.2.3. IIIy verbs

Most varieties have two types of IIIy verbs: the *-a* type (*nsa*, *yānsa* ‘to forget’) and the *-i* type (*mša*, *yāmsi* ‘to go’). In some Moroccan varieties, a *-u* type may be found (*hba*, *yāhbu* ‘to crawl’). In the pre-Hilālī varieties, the paradigm has been entirely renovated (Caubet 2008a, 283), with forms containing the long vowels in the conjugations. In Bedouin varieties, there is generally no reconstruction of the paradigm. Tab. 55.4 compares both conjugations.

3.2.4. Former hamza verbs

Former verbs with initial *ʔ, like *kla*, *yākāl* (< *ʔakala) ‘to eat’ or *xda*, *yāxād* (< *ʔaxada) ‘to take’ have been generally reshaped as weak verbs (Ph. Marçais 1977, 50). In the suffix conjugation, they are conjugated like verbs IIIy; nevertheless, in some Moroccan varieties, they may be conjugated like verbs IIy/w or like geminated verbs (Aguadé 2008, 292). In the prefix conjugation, the former *ʔ is replaced by /ā/. The imperative is formed like verbs IIw/y.

Tab. 55.4: IIIy verb conjugation

	Suffix conjugation		Prefix conjugation		Imperative	
	Pre-Hilali	Bedouin	Pre-Hilali	Bedouin	Pre-Hilali	Bedouin
1sg.	<i>nsūt</i>	<i>nsēt</i>	<i>nənsa</i>	<i>nənsa</i>		
2sg.m.	<i>nsūt(i)</i>	<i>nsēt</i>	<i>tənsa</i>	<i>tənsa</i>	(ə) <i>nsa</i>	<i>ənsa</i>
2sg.f.	<i>nsūti</i>	<i>nsēti</i>	<i>tənsāy</i>	<i>tənsi</i>	(ə) <i>nsāy</i>	<i>ənsi</i>
3sg.m.	<i>nsa</i>	<i>nse</i>	<i>yənsa</i>	<i>yənsa</i>		
3sg.f.	<i>nsāt</i>	<i>nsət</i>	<i>tənsa</i>	<i>tənsa</i>		
1pl.	<i>nsīna</i>	<i>nsēna</i>	<i>nənsāw</i>	<i>nənsu</i>		
2pl.	<i>nsītu</i>	<i>nsētu</i>	<i>tənsāw</i>	<i>tənsu</i>	(ə) <i>nsāw</i>	<i>ənsu</i>
3pl.	<i>nsāw</i>	<i>nsu</i>	<i>yənsāw</i>	<i>yənsu</i>		

Tab. 55.5: Former hamza verb conjugation

	Suffix conjugation	Prefix conjugation	Imperative
1sg.	<i>klūt</i>	<i>nākəl</i>	
2sg.m.	<i>klūt</i>	<i>tākəl</i>	<i>kūl</i>
2sg.f.	<i>klūti</i>	<i>tākli</i>	<i>kūli</i>
3sg.m.	<i>kla</i>	<i>yākəl</i>	
3sg.f.	<i>klāt</i>	<i>tākəl</i>	
1pl.	<i>klīna</i>	<i>nāklu</i>	
2pl.	<i>klītu</i>	<i>tāklu</i>	<i>kūlu</i>
3pl.	<i>klāw</i>	<i>yāklu</i>	

3.2.5. Verb diminutive

In Ḥassāniyya and in dialects of the Moroccan Atlantic coast, diminutive forms of the verb exist on the stem $aC_1ayC_2aC_3$, $yaC_1ayC_2aC_3$. The use of the verbal diminutive tends to be restricted to situations in which depreciatory or cajoling remarks are made. It is, however, morphologically very productive and the verbal diminutive can be derived from many different verbal forms. Some examples are: *ekeyteb*, *yekeyteb* ‘to write with bad handwriting’ < *ktəb yəktəb* ‘to write’; *meylles imeylles* ‘to turn a little bit smooth’ < *melles, imelles* ‘to turn smooth’; *geyrmaş igeyrmaş* is the diminutive of *garmaş igarmaş* ‘to pinch’; *əsteykhal* ‘to become a little bit blackish’ is the diminutive of *stekhal* ‘to become blackish’ (Taine-Cheikh 1988, 107–110).

3.3. Demonstratives

There are numerous demonstrative forms. Some are found in most varieties, whereas some augmented forms are only found in conservative Bedouin varieties (Ph. Marçais 1977, 197–199). In this article, only the most common forms are mentioned. Demonstratives are always noted with *d* in the tables, but *d* must be read as /d/ for varieties that preserve interdental. Distinction is made between the deictic adjectives (nominal determiners) and demonstrative pronouns. The distance contrast is proximal and distal. There is generally no gender distinction in the plural forms.

3.3.1. Deictic adjectives

There are invariable forms, as well as forms preposed to the noun and forms postposed to the noun.

3.3.1.1. Proximal deictic adjective

The forms preposed to the noun are generally used: *hād-əl-* (*hād-ər-rāžəl* ‘this man’; *hād-əl-bənt* ‘this girl’; *hād-əl-ūlād* ‘these boys’); *hā-l-* is used in Tunisia and Libya (*hā-r-rāžəl*; *hā-l-bənt*; *hā-l-ūlād*). Moreover, some forms vary in number and gender and are preposed and postposed to the noun. The following preposed forms are commonly employed: *hāda l-* (*hāda r-rāžəl*), *hādi l-* (*hādi l-bənt*), *hādu l-* (*hādu l-ūlād*); the following forms postposed to the noun are also found: *əl...hāda* (*ər-rāžəl hāda*), *əl...hādi* (*əl-bənt hādi*), *əl...hādu* (*əl-ūlād hādu*). The following pharyngealized forms exist in Tripoli Arabic: *əl...āhūwá* (*ər-rāžəl āhūwá*), *əl... āhīyá* (*əl-bənt āhīyá*), *əl... āhūmmá* (*l-ūlād āhūmmá*). They appear to be constructed from the deictic *ā-* plus a form of the independent pronouns; in these cases the stress shifts from the initial syllable to the final syllable: *hūwa* > *āhūwá*, *hīya* > *āhīyá*, *hūmma* > *āhūmmá* (Pereira 2008a, 252–256).

Tab. 55.6: Proximal deictic adjectives

	sg. masc.	sg. fem.	pl.
invariable forms		<i>hād-əl-</i> , <i>hā-l-</i>	
preposed to the noun	<i>hāda l-</i>	<i>hādi l-</i>	<i>hādu l-</i>
postposed to the noun	<i>əl...hāda</i>	<i>əl...hādi</i>	<i>əl...hādu</i>

3.3.1.2. Distal deictic adjectives

The forms preposed and postposed to the noun vary in gender and number. They are generally characterized by the presence of /k/. Forms such as *hādāk əl* (*hādāk ər-rāžəl*), *hādīk əl* (*hādīk əl-bənt*) and *hādūk əl* (*hādūk əl-ūlād*) are commonly used. When they are postposed, the following examples are found: *ər-rāžəl hādāk*, *əl-bənt hādīk* and *l-ūlād hādūk*. These forms occur without the *hā-* in head position, especially in Morocco: *dāk*, *dīk*, *dūk*. Longer forms also exist, such as those employed in Tripoli Arabic: *hādāka* and *hādākāya*, *hādīka* and *hādīkāya*, *hādūka* and *hādūkāya*.

Tab. 55.7: Distal deictic adjectives

	sg. masc.	sg. fem.	pl.
preposed to the noun	<i>hādāk əl-</i>	<i>hādīk əl-</i>	<i>hādūk əl-</i>
postposed to the noun	<i>əl...hādāk</i>	<i>əl...hādīk</i>	<i>əl...hādūk</i>

3.3.2. Demonstrative pronouns

3.3.2.1. Proximal demonstrative pronouns

The most common forms are *hāda* and *hādāya* in the masculine singular (*hāda wald-i* ‘this is my son’; *hādāya šāḥb-i* ‘this is my friend’), *hādi* and *hādīya* in the feminine singular (*hādi bənt-i* ‘this is my daughter’; *hādīya uxt-i* ‘this is my sister’), and the invariable plural forms *hādu* and *hādūma* (*hādu šāḥb-i* ‘these ones are my friends’; *hādūma ūlād-i* ‘these ones are my sons’). In certain Libyan varieties, a distinction is made in the plural between masculine *hādūm*, *hādūma*, *hādūla*, *hādōl* and *hādōla* and feminine *hādūn*, *hādūna* and *hādāla* (Ph. Marçais 1977, 198). In Tripoli, the pharyngealized forms are also used as pronouns.

Tab. 55.8: Proximal demonstrative pronouns

sg. masc	sg. fem.	pl.
<i>hāda</i>	<i>hādi</i>	<i>hādu</i>
<i>hādāya</i>	<i>hādīya</i>	<i>hādūma</i>

3.3.2.2. Distal demonstrative pronouns

The forms commonly used are *hādāk* and *hādāka* in the masculine singular (*hādāk xū-h* ‘that one is his brother’), *hādīk* and *hādīka* in the feminine singular (*hādīk uxt-ha* ‘that one is her sister’), and the invariable plural forms *hādūk* and *hādūka* (*hādūk šāḥb-hum* ‘those are their friends’). In some Libyan varieties, a distinction is made between masculine plural *hādōlōk* and feminine plural forms *hādīkən* and *hādānāk* (Ph. Marçais 1977, 198).

Tab. 55.9: Distal demonstrative pronouns

sg. masc	sg. fem.	pl.
<i>hādāk</i>	<i>hādīk</i>	<i>hādūk</i>
<i>hādāka</i>	<i>hādīka</i>	<i>hādūka</i>

3.4. Indefinite article

To mark indeterminate noun status, the noun may appear without any marker: *bīr* ‘a well’, *žrāna* ‘a frog’, *kṛāsi* ‘chairs’, as in Mauretania, Tunisia, Libya and Bedouin dialects. Specific to the Arabic spoken in the North African region, a quantifier, *wāḥd-əl-*, derived from the numeral *wāḥd* ‘one’ plus the article *əl* is very common in Morocco and Algeria: *wāḥd-əl-bənt* ‘a girl’. A shortened form of this quantifier *wāḥi-l-*, *wāḥ-əl-*,

and *wā-l-* is found south of Morocco. The form *ḥā-l-* is present in pre-Hilālī varieties of northwestern and northeastern Algeria (Ph. Marçais 1957, 223; Ph. Marçais 1977, 163). The quantifier *ši*, derived from the word *šay ‘thing’ to express indefiniteness or ‘a certain’ is used in Morocco: *ši bənt* ‘a girl, some girl’ (Caubet 2008a, 284).

3.5. Relative pronoun

The most common relative pronoun is the invariable *əlli*, *lli*, sometimes reduced to *li*. In some pre-Hilālī varieties, *əddi* is found, sometimes reduced to *di*. This is attested in rural northeastern Algerian varieties, for example, and in some pre-Hilālī Moroccan varieties and in northwestern Algeria (Tlemcen). In the latter cases, there is some confusion between the relative pronoun and the possessive particle: *di*, *əddi*, along with *əlli* in Collo (Ph. Marçais 1957, 223; Ph. Marçais 1977, 205). The indefinite relative pronoun *mən* is used for people, while *ma* is used for things.

3.6. Possession

In pre-Hilālī varieties, the synthetic construction (*ʔiḏāfa*) is usually limited to groupings that are naturally associated (*bāb əddār* ‘the main door’), familial designations (*wuld uxt-i* ‘my nephew’), parts of the body (*rās-wəld-i* ‘my son’s head’), or aspects of the personality (*ʔəql-ək* ‘your mind’). It is, however, widely used in Tunisian and Libyan Arabic, in Sahara Bedouin (Ph. Marçais 1977, 166), and Ḥassāniyya, where there is no genitive exponent (Taine-Cheikh 2007, 248). In Tripoli, the synthetic construction is more common than the analytic construction (Pereira 2010, 405–411). In terms of the genitive exponent, *mtāʕ* is used generally in the North African region, but is more common in Eastern Algeria, Tunisia, and Libya. Variants such as *ntāʕ* and *tāʕ* are used alongside *mtāʕ* in Algeria and Morocco. In Morocco, the particle *dyāl* and the form *d-* are commonly used. *Dyāl* is also used in the city of Algiers, along with *mtāʕ* (Boucherit 2006, 64). Some pre-Hilālī varieties exhibit other forms, including *di* (Jewish Moroccan), *əddi* (Djidjelli), or *əlli* in Collo, where the genitive particle takes the same form as the relative pronoun. Fezzan varieties exhibit the particle *jna*. Some of these varieties express gender or number in the possessive particle, as in feminine singular *dyālət*, *mtāʕət/ntāʕət*, and *jənt*; masculine plural *dyāwəl*, *mtāwəʕ/ntāwəʕ*, *mtāʕīn* and *jni*; and feminine plural *mtāʕāt* and *jnāt* (Ph. Marçais 1977, 168–169).

4. Conclusion

This article is based on traditional dialect categorization and the published literature. Some of the sources are dated, and immense zones remain unstudied, particularly in Algeria and Libya. The data must also be seen in the context of widespread migration and urbanization in North African countries in the second half of the 20th century, linked to the growth of capital cities and contributing to processes of koineization and standardization of urban vernaculars (Miller 2007).

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56. Arabic Sociolinguistics

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Abstract

The interest of Arabic for Sociolinguistics is defined in Ferguson's classic article on diglossia (1959). However, the application of sociolinguistic methodology and theory to Arabic began some 20 years later with the advent of a quantitatively-based variationist theory in the Labovian tradition. Sociolinguistic research on Arabic promises to add important dimensions to an understanding of the sociolinguistics of language.

1. A brief developmental history

The western tradition of Arabic sociolinguistics basically begins with Ferguson's classic article on diglossia (1959). While he acknowledged a terminological debt to the French term *diglossie* (Marçais 1930), it was Ferguson who gave systematic substance to the concept, and established on a comparative basis (Arabic, Greek, Haitian Creole, (Swiss) German) its general linguistic applicability. His article is without doubt one of the classics of the Linguistic literature of the twentieth century.

Having said that, it is important, particularly in regards to Arabic, to localize his specific contribution to understanding the broad sociolinguistic situation. The enduring relevance of diglossia is the recognition given to functional differentiation of language varieties in societies. Societies, for any number of reasons, choose to evaluate some varieties more positively than others, or more appropriate than others for a given situation, for certain sets of interlocutors performing certain roles. In the case of Arabic of course, Classical Arabic, Standard Arabic etc. is more positively evaluated than is the native dialect, so that schools and education in general, the media and formal gatherings, among other contexts, require the use of Classical Arabic. Where Ferguson's dichotomization between high and low varieties broke down is his attempt (1959, 333 ff.) to give general linguistic substance to the two varieties. The high variety should be morphologically more complex for instance. In fact, there is no linguistic universal which predisposes one of the varieties to H or L status (see Owens 2009, 24 ff.). Obvious though this observation may be, it reminds us that social evaluation and linguistic structure have no necessary relationship to one another.

Given the ideally normative basis of Ferguson's diglossia, it is no surprise that almost as soon as it was published, the linguistic basis of Arabic diglossia came under closer scrutiny. Notable in particular is Haim Blanc's (1960, also Harrell 1960) analysis of a short inter-dialectal conversation between two speakers of Baghdadi Arabic, one of Aleppo, and one of Jerusalem Arabic. His work set a model for later researchers in two ways, one positive, and one negative. Positively, Blanc noted that in an interdialectal setting, speakers tended to eschew marked regionalisms. For instance, the speaker from Aleppo never used the highly characteristic *imaala* pronunciation of long *aa*, in those contexts where it might be expected, instead using the low [aa] variant exclusively, while the two Baghdadi speakers (half of the group) always substituted *ana* for the characteristic *aani* "I" of Baghdadi, and used the pure vowel variant [ee] in non-emphatic contexts such as [beet] "house", rather than the Baghdadi [ie], [biet] (Erwin 1963).

Less positively, a second aspect of Blanc's article was to suggest that Arabic diglossia could be categorized into scalar sub-types. His basic observation, one in fact adumbrated in Ferguson (1959, 332), was that in spoken Arabic a number of varieties could be distinguished arranged on a scale from pure Classical to pure dialect. His five-point scale was as follows:

- Pure classical
- Modified classical
- Semi-literary colloquial
- Koineized colloquial
- Pure dialect

Badawi (1973) proposed a similar scale (also Bishai 1966). The fundamental observation that in particular the H variety is rarely encountered in unscripted interactional contexts is, by now, well known, as is the observation that a given stretch of speech will frequently contain elements which can be attributed either to a Classical origin, or to a dialectal one. This represents a problem to the scalar approach. What a scale claims is that any stretch of Arabic speech can be unambiguously assigned to one level or another on the basis of fixed linguistic attributes. While a number of scholars have used the scalar construct (Djem 1974; Elgibali 1993; Bassiouney 2006) to describe spoken Arabic, none, including Blanc himself, have proposed a set of universally valid diagnostic linguistic features for this task. Assignment of a given text to one level or another is a matter of taste and feel, rather than linguistic science. I believe the problem here stems from the fact that the two ideal poles, pure Classical and pure dialect, are indeed definable levels. It does not follow from this, however, that the rest of the vast fabric of spoken Arabic should equally fall into easily-identifiable compartments (Kaye 1972).

Indeed, the more interesting subsequent developments have worked within a more empirical classificatory framework, which, rather than start from the deductively-assumed "level", work from the bottom up, inductively, beginning with individual grammatical (phonological) features.

After Ferguson and Blanc's work, a transitional step of sorts was that of T. F. Mitchell (1986). Rather than begin with pre-defined levels, he saw the area between the ideal norms of Classical and dialect as one of different styles. Concentrating in particular on inter-dialectal contexts, he noted, as with Blanc, that marked regionalisms, in his data,

Syrian, Lebanese, Jordanian and Egyptian, tended to be filtered out in inter-dialectal speech situations. Standard Arabic elements could equally be introduced. Mitchell's approach was to identify minimal varying units, ranging from individual morphemes to sentences. Variation can occur with such rapidity that it is difficult to assign entire texts or even parts thereof to one style or another. For instance, in Cairene (Mitchell 1986, 24), the following sentence can be analyzed into three parts, one dialectal, one Classical/Standard, and one word (*ʔuḍifha*) mixed.

ma fiiš ʕandi ḥaaga ʔuḍifha ila ma qaalahu il-giniraal
 dialect → mixed Classical →
 “I have nothing to add to what the general said”.

Mitchell termed the global style which he saw developing in spoken Middle Eastern Arabic “Educated spoken Arabic”, a term which has continued to be used until today. Further notable contributions within the Mitchellian tradition include Meiseles (1980), El-Hassan (1979), and Sallam (1980).

While Mitchell notably steered the study of variation in spoken Arabic away from a levels approach, his alternative in terms of different styles, formal, semi-formal, casual, even if reminiscent in ways of Labov's earlier stylistic approaches, is equally difficult to apply in terms of entire texts. However, the work of his co-workers already pointed in a more quantificational direction. Sallam (1980) for instance, observes that in a mixed group of Egyptian, Jordanian and Lebanese speakers, the realization of “qaaf” varies to differing degrees among the following variants: [q, ʔ, k, g].

Sallam further notes that the realization of “qaaf” varies in interesting ways among different social groups. Women, for instance, tend to use the variant [ʔ] to a higher degree than men (44/55 q/ʔ tokens), who in turn tend to favor [q] (65/25 q/ʔ).

Sallam's quantitative approach (also employed in El-Hassan 1979), associating occurrences of linguistic variables with sociolinguistic categories represents, for Arabic linguistics, a fundamental break with the levels/styles tradition, and brings Arabic sociolinguistics into line with mainstream sociolinguistics as developed with the Labovian quantitative paradigm. Prominent characteristics of this tradition of study include the following:

- (1) Results based on a sociolinguistically-informed spoken corpus
- (2) Discrete linguistic variables quantitatively treated and
- (3) Inductively correlated with/integrated into sociolinguistic categories, settings, constructs, theories

Though not a necessary attribute of a quantitative approach, it has tended to be applied in urban more than rural areas, as traditional dialect boundaries rarely move categorically into urban areas.

2. A paradigm of perspectives

The quantitative paradigm has been applied to all aspects of spoken Arabic. Initially, as seen above, the main focus was on the type of speech characteristic of inter-dialectal communication among educated Arabs. Increasingly further prominent variables were added, which can only be treated cursorily here. The study by Abdel Jawad (1981)

serves as a point of orientation. Using a large corpus collected in Amman, Abdel Jawad isolated two linguistic variables which vary considerably across the city. The variable “kaaf” is realized either as [k] invariably, or as [k ~ č], this variation having different realizations in the population. The variable “qaaf”, already met above in Sallam’s work, is realized as [q ~ g ~ ? ~ k]. Three communities were isolated, a rural Palestinian population, an urban population, each of which settled in Jordan after the 1948 and 1967 wars with Israel, and an east bank population, largely rural in origin, which Abdel Jawad somewhat overgeneralizes as “bedouin”. In general Abdel Jawad found that each of these variables tended to have its own dynamic. The variant [č], associated with rural Palestinian Arabic tended to be lost among this population in Amman, whereas the same phonetic form, with a different lexical distribution, was maintained to a higher degree among east bank speakers. Urban Palestinians rarely moved their original invariable [k] dialect to [č], so that the overall tendency for this variable is an increase in [k] in Amman. The [q] variable, certainly the most studied in Arabic sociolinguistics, is more complex. Rural Palestinians with original [k] move towards [ʔ] or [q]; urban Palestinians broadly maintain their original [ʔ], but also show some movement towards [q], while rural Jordanians maintain [g] or move towards [q] or [ʔ]. There is thus an overall drift towards the [ʔ] and [q] variants.

This study added a new dimension to the sociolinguistic matrix, namely the communal basis of sociolinguistic variation (vs. invariant communal varieties described by Blanc 1964), adumbrating the complexity of variation attested throughout the Arabic-speaking world. Communal-based variation is described in detail by Holes (1983, 1986, 1987) for Bahrain. Briefly, further studies added more dimensions of variation. Studies by Owens (1995, 1998b, 1999), and Miller (2005), highlighted the importance of rural-urban migration; Al-Wer (1997, 1999, 2003) studying the same Amman urban area as Abdel Jawad, but a generation later, emphasizes the emergence of a common Amman koine. Other significant sociolinguistic variables that have been explored include socio-political change (Al-Wer 2002a, 2007), gender (Dekkak 1979; Bakir 1986; Abu Haidar 1987; Haeri 1997), the sociolinguistic market (Haeri 1996; Hachimi 2007), life modes (Ismail 2007), and education (Parkinson 1994; Al-Wer 2002b). Mahmoud (1979), Miller (1985) and Miller and Abu Manga (1992) have studied variation in the Creole/pidgin Juba Arabic of the Sudan.

With these studies the mutually complementary social and sociolinguistic complexity of variation in Arabic is clearly established. For instance, Amara (2005) describes rural variants supplanting older urban ones in Bethlehem; as the rural migrants tend to be Muslims, the urban residents Christian, the rural-urban migration introduces increased communal variation as well. Variation is sociolinguistically multidimensional.

A classic study dissecting competing sociolinguistic variables is that of Ibrahim (1986). Reanalyzing Abdel Jawad’s data, as well as data from Homs in Syria, Ibrahim observed that the prestige variables [ʔ] and [q] (see above this section), have a complementary tendency. [ʔ] is associated with the female population, [q], the Standard Arabic variant, with males. This association, already documented in Sallam (1980, see section 1.), has been reproduced in a number of studies. Ibrahim has an elegant formulation for this dichotomy: the ‘female’ [ʔ] is a marker of an urban prestige variant, whereas [q] is the variant associated with Standard Arabic, also a prestige variant. Thus females, more so than males, tend to favor a dialectal prestige variant.

3. Types and number of variables

Typically, sociolinguistic variables are drawn from phonology and morphology. This follows in part from the nature of quantitatively-based sociolinguistic study. To generate an adequate number of tokens, variants need to be found which are frequent in the spoken language, and phonological and morphological categories, being fewer in number than, say, the individual lexemes of a dialect, are used correspondingly more frequently in texts. Variables that have been studied include the following. By convention, where appropriate, the variant closest to Standard Arabic is given first.

Phonological: “kaaf”, “qaaf”, $\theta \sim t$ (all as above), [u] retraction (Tunisia), $[\theta \sim f]$, $[j \sim y]$, $[\dot{d} \sim \dot{q}]$ (all Bahrain), $[\dot{d} \sim d]$ (Bahrain, Bethlehem), dental palatalization, $[j \sim g]$, glottalization of $[t, q]$, vowel shortening, final CC $\sim$ CəC clusters, stress on nouns like *mádrasa* $\sim$ *madrása* (all Cairo), $[h \sim \emptyset]$, $r =$ trill, tap or approximant (Damascus), $[i \sim \text{ə} \sim u]$ (vowel quality), CVCVC or CvCVC stress, retention of laryngeals, raising of [a] in the context of pharyngeals (all Nigerian Arabic), imala of final -a (Amman, Damascus), syllable structure rules (various conditions, Bahrain, Cairo)

Morphological: ba- $\sim$ n- “1SG”, intrusive -in on active participle, (all Nigeria), b- $\sim \emptyset$ “indicative”, singulative suffix -aa $\sim$ -aaya, n- $\sim$ n-...-u, “1PL” (Nigeria and Egypt), b- $\sim$ b-y- indicative prefix (Amman, Cairo), -it $\sim$ -at 3FSG suffix (Cairo), -k $\sim$ -ts 2F suffix (Jeddah), -kum “2MPL” (Amman)

Lexical: form of pronouns, demonstratives, possessive markers (Cairo)

Beyond the interesting descriptive results attendant upon these variables, various summarizing and explanatory constructs have been developed around them. In perfunctory fashion, these issues include the following:

- (1) Local norms emerge out of a complexity often arising from migration into urban areas (Al-Wer 2007, Amman)
- (2) Established urban areas swallow up, as it were, potential variation arising from urban migration (Miller 2005, Cairo)
- (3) A long-established heterogenaic complexity tends to be maintained (Holes 1987, Bahrain)
- (4) Heterogeneity emerges in newly established urban environments (Owens 1998, Maiduguri, Nigeria)
- (5) New migration increases heterogeneity in established urban areas via an overlay on top of older, maintained variants (Amara 2005, Bethlehem)
- (5) Urban heterogeneity increases as a result of urban innovations (Ismail 2007, Damascus)

Cross-cutting developments have been observed, for instance Miller (2007) noting that older urban varieties may assume stylistic prominence in many North African cities.

While local explanations for each of these configurations have been proposed – for instance the emergent heterogeneity in Maiduguri is explained as a consequence of the minority status of Arabic in the city – few comparative, generalizing studies exist to pinpoint why a number of different outcomes occur in Arabic-speaking societies.

As far as linguistic mechanisms of variation are concerned, one which has emerged as central is lexical conditioning (Abdel Jawad 1981, Bani Yasin and Owens 1986, Holes 1987, Abd-el Jawad and Suleiman 1990). This is particularly important as it pertains to the influence of Standard Arabic on the spoken language. Whereas a given

text may contain many Standard Arabic elements, it does not follow that there is a long-term evolution towards a nativization of Standard Arabic. Instead, Standard Arabic elements tend to remain encapsulated in lexical and lexico-syntactic units, which can be plugged into spoken Arabic under the appropriate circumstances.

The studies cited above provide interesting insights into mechanisms of language change, without necessarily signifying that globally speaking, Arabic is thereby changing. Miller (2005) for instance, documents the “Cairenization” of the speech of Upper Egyptian migrants into Cairo. To date, however, this Cairenization is localized in Cairo and has not decisively changed Arabic in Upper Egypt itself. By their very nature, quantitatively-based sociolinguistic studies deal with local, circumscribed communities. Only through the intensive study of many communities will any meaningful statements about the relation between variation and “change in Arabic as a whole” become possible.

4. Situational linguistics

A further, important domain of Sociolinguistics concerns situational linguistics, which examines properties of speech in conversation. In Arabic sociolinguistics this has taken two main forms. One pertains to terms of address. The most detailed study in this respect is Parkinson (1985), who examines a large number of address terms in Egyptian Arabic and classifies them according to the social attributes of the interlocutors (age, education, status relative to interlocutor) and the nature of address term itself (see also Schmidt 1986). There have also been a number of studies on the ‘reverse role’ address system found in different forms in Gulf Arabic and Lebanon, among other places (Holes 1986b). In these cases the speaker uses speaker referential second person pronouns (*ya uxtiċ* for “my sister”) or generationally-skewed lexical items in addressing familiar persons. Germanos (2007) describes the communal and geographical specificity of greetings (“bonjour”, *as-salaam ʕalaykum*) among Beirutis.

A second large domain concerns codeswitching. While there have been a large number of interesting studies on codeswitching in Arabic (Bentahila 1981; Bentahila/Davies 1983; Chebchoub 1985; Atawneh 1993; Boumans 1998; Caubet/Boumans 2000, Ziamari 2007; 2009; Owens 2002, 2005a, c, 2007), many have concentrated on structural, descriptive aspects, so that most fall within grammatical or psycholinguistic domains of linguistics. Few have examined in detail the socio-interactional attributes of codeswitching (Lawson-Sako/Sachdev 1996). Whether Educated Spoken Arabic itself is best conceptualized in terms of codeswitching or in terms of borrowing (or something else) is a further outstanding issue. The former position has been advocated by Eid (1988, 1992), Bassiouney (2006) and Mejdell (2006), among others, while the latter appears to be the position of Abdel Jawad (1981), Holes, (1987), and Owens (2000a). However, no study has attempted to integrate the Arabic diglossic situation into the contemporary debate on codeswitching vs. borrowing, in general.

Finally, situational perspectives have been applied to the realm of political and religious speeches (Holes 1993, Mazraani 1997; Bassiouney 2006; 2009), with the rhetorical role of Standard Arabic vis a vis dialect being the main focus of interest.

5. Attitudes, variety evaluation, sociology of language

Ideally issues of language variation should be accompanied by systematic correlation with attitudinal judgements about the linguistic variables. In practice, most studies on language attitudes towards and evaluation of varieties of Arabic have been conducted as independent research projects. Language attitudes have been studied relative to varieties of Jordanian (Sawaie 1986; Hussein and Ali 1989), Egyptian (Herbolich 1979, El-Dash / Tucker, 1975), Algerian (Brahimi 1993, 1995; Brahimi and Owens 2000; Ben-rabeh 1994), Hassaniyya (Dia 2007), as well as a part of studies on codeswitching (Bentahila 1981). Owens (1995) examines attitudes of Nigerian Kanuri towards Arabic. One of the more interesting studies on language evaluation is Parkinson's (1991) matched-guise study of "fuṣḥa" among Egyptians. Using a controlled set of linguistics variations, (e.g. [q] for "qaaf" in one set, [ʔ] for "qaaf" in another), he shows that Egyptians allow a broad set of variants into the overarching category of "Fuṣḥa". This result thus mirrors actual linguistic practice, in which, it appears, what constitutes spoken Standard Arabic is a moving target of sorts.

While issues of language attitude abut directly on language policy, planning and education, the brevity of the present article prohibits a summary here (see Owens 2001 for more comprehensive survey; Suleiman 2003).

6. Anthropological perspectives

Anthropological perspectives deal with the integration of language into the broader cultural norms of the society, with an emphasis on meaning rather on form, the traditional domain of sociolinguistics (Haeri 2000, 2003). For instance, Wilmsen (2009), within a framework critical of Gricean implicatures, describes the logic of clearly "false" gender reference within Egyptian society.

7. Summary

While there have been many interesting studies on Arabic sociolinguistics, the potential in the field remains vast. The list of "normalized" outcomes described in section 3 above, certainly incomplete, is indicative of how variation in Arabic can merge into very different sociolinguistic profiles.

However, I believe two inhibiting forces are at work preventing a fuller appreciation of the rich domain of Arabic sociolinguistics. On the one hand there remain serious gaps in the range of sociolinguistic coverage within Arabic sociolinguistics itself. Largely lacking, for instance, are any studies of corpus-based Arabic sociophonetics (Kahn 1975; Khat tab et. al. 2006), whereas certain variables, like that of "qaaf", interesting to be sure, are documented without end. The rich Arabic dialectological tradition (Behnstedt and Woidich 2005), a natural "ally" of sociolinguistics, has never been closely intertwined with Arabic sociolinguistics, and attendant upon this gap, the integration of rural areas into the quantitative variationist paradigm is largely lacking. Arabic sociolinguistic studies themselves tend to focus narrowly on single areas, with

little comparative input from studies elsewhere in the Arabic-speaking world (see Miller 2007 for a broad typology).

On the other hand, “mainstream” sociolinguistics is itself largely a product of generalizations based entirely on language in western societies, English in particular (Owens 1998b). Little effort is made to integrate important notions, such as “standard” vs. “prestige” into a larger, comparative understanding of sociolinguistic behavior. What sociolinguistics has little appreciated to date is that what in one society may be a marginal linguistic phenomenon will in another one be central, so a general sociolinguistics is only possible given a broad range of cross-cultural studies based on a relatively unitary methodologically (Owens 2005b).

Meanwhile, further, Arabic-specific opportunities abound. While the basis of modern sociolinguistics is the spoken word, a greater integration of written forms of Arabic, and more recently, blogging into systematic study would be welcome. A “sociolinguistic” reading of the development of Classical Arabic itself is yet to be attempted, while a general historical Arabic Sociolinguistics still beckons.

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57. Arabic Urban Vernaculars

1. Classification
2. Early urban vernaculars in grammatical traditions
3. Contemporary urban vernaculars
4. Conclusion
5. References

Abstract

This chapter gives a brief overview of past and present Arabic urban vernaculars, addressing the problems involved in the traditional typological division between urban/rural and Bedouin dialects, the status of early Arabic vernaculars within Arab and Western grammatical traditions, and the classification and state of present-day urban vernaculars due to levelling, contact phenomena and social variation.

1. Classification

The term ‘Arabic urban vernaculars’ is ambiguous and can have either socio-geographical or socio-typological connotations. Taken as a socio-geographical indication, ‘urban vernacular’ refers to any vernacular spoken in an urban environment, irrespective of its dialectal type. The vernaculars of Baghdad, Casablanca, Cairo, Damascus or San’a are all urban vernaculars, whatever their dialect type and the history of settlement of these cities. However, within Arabic dialectal studies, the category ‘urban vernacular’ refers to a mixing of typological and sociological criteria. Arabic vernaculars are classified into two main broad categories: sedentary versus Bedouin, and within the sedentary, urban versus rural. This classification refers to the original and often former cultural way of life of these speaking-groups and relies partly on a set of typological features. It reflects the history of settlement rather than the present place/way of life of the speaking-groups.

Bedouin-type and sedentary-type dialects are distinguished by one main phonological feature, the reflexes of *q, realized as /g/ in Bedouin-type dialects and as /q/, /ʔ/, or /k/ in sedentary dialects. Besides, a few typological features constitute partial contrast between the two groups. Palva (2006, 606) provides the following features:

Tab. 57.1: Bedouin versus Sedentary features

Bedouin dialects	Sedentary Dialects
Interdental fricatives	Interdental fricatives > postdental stops
Partially retained and generalized indefinite marker -in (tanwīn)	No indefinite marker -in, except in formulaic expressions
Gender distinction in plural	No gender distinction in finite verbs and personal pronouns
No verb modifiers in the imperfect	Different verb modifiers in the imperfect
Internal passives productively used	Absence of internal passives
Retained productivity of Form IV	Absence of Form IV
Low frequency of analytical genitive	Common use of analytical genitive structures

It seems more difficult to find features that can typologically characterize Arabic urban vernaculars *vis à vis* sedentary rural dialects across the Arabic-speaking world. This can be done only on an area by area and case by case basis. Almost all Arabic dialects have been subject to a certain degree of contact, borrowing, koineization, leveling and accommodation, a fact that erases clear-cut dialect-type boundaries between urban/rural and Bedouin dialects.

2. Early Arabic urban vernaculars within grammatical traditions

Urban vernaculars have attracted the attention of grammarians from an early period. They have been considered as corrupted forms by the Arab grammarian tradition and as mixed innovative forms by the Western Orientalistic tradition. In the Arab world, their status is somewhat ambivalent compared to Bedouin dialects and classical Arabic, although cities have played an important role as places of language change.

2.1. The Arab grammarian tradition

For the pre-Islamic era, a Western/Eastern dialectal distinction (*al-luġa al-ḥiġāziyya/luġat Tamīm*) is said to have reflected a division between sedentary Arabs in the pre-Islamic cities (cf. Mekka and Medina) and the Bedouin tribes in the desert region of the Najd. Both Rabin (1951) and Versteegh (1997), relying on the famous Arab grammarian Sibawayhi, give a list of distinctive features for each dialectal area. This pre-Islamic Bedouin/sedentary distinction is not shared by all specialists (cf. Ivanyi 2007 quoting specialists of the *turāt* such as al-Gundī).

In the first centuries following the expansion of Islam and the codification/standardisation of the Quranic/Classical language, dialect variants began to be evaluated on the basis of their proximity to the Quranic norm. Bedouin variants/dialects spoken by the isolated Bedouin of the Najd came to be considered more 'pure' and closer to the Quranic Arabic norm than the variants/dialects spoken in the cities. City dialects were perceived as corrupted forms of Arabic, resulting from mixed populations and the presence of numerous non Arabic-speakers, particularly in the conquered territories. From the 10th century onward, grammarians such as al-Hamdānī (d. 334/945), Ibn Ginnī (d. 392/1002), al-Fārābī and lexicographers like al-Azharī (d. 370/980), as well as geographers like al-Muqaddasī in the 10th century and historians like Ibn Ḥaldūn in the 14th century participated in the ambivalent and rather derogatory perception of the urban Arabic vernaculars. There is, however, no precise description of urban speech during this period. Urban vernaculars are not described for themselves but are categorized negatively, i.e. as inadequate counterparts to Classical Arabic and pure Bedouin dialects (Eisele 2003, 52).

Data on the Arabic dialectal situation from the 10th to 19th centuries are very scarce and provide little information about the evolution of Arabic urban vernaculars. Apart from a few Arab authors like al-Maġribī, information on Arabic vernaculars is indirectly provided by Middle-Arabic texts (Lentin/Grand'Henry 2008). It was not until the start of Orientalist interest in 'vulgar Arabic' in the 19th century that the first basic descriptions of Arabic vernaculars, including urban ones, appeared.

2.2. Early urban dialects in the Western Orientalist tradition: the koine hypothesis

Interest in the early Arabic urban dialects arose as Western Arabicists tried to understand the evolution of the Arabic language and the origin/genesis of the modern Arabic dialects (Abboud-Haggag 2006). In order to explain the shift from Old Arabic to Neo-Arabic (i.e. Modern Arabic dialects), a number of authors advanced the idea of an urban koine, either a pre-Islamic commercial koine (Corriente 1976), or post-Islamic military koine(s) that developed in the conquered cities and then spread to the surrounding rural areas (Cohen 1962; Ferguson 1959). Mixed and innovative forms of Arabic developed from this military koine, forming the bases of most sedentary dialects. A great deal of literature has been devoted to this issue with contradictory views concerning the idea of one or several urban koines, as well as the degree of restructuring and innovation, with authors like Versteegh (1984) suggesting that contact and

change in the early urban centres could be compared to process of pidginization and creolization. A list of sedentary urban innovative features resulting from this early koineization process is presented in Versteegh (1997, 99–101). The influence of the earlier cities as starting points for the Arabization of the rural areas has been qualified by Diem (1974), who pointed out that Bedouin migrations have been a major factor of Arabization in rural areas.

The koine hypothesis fits with the Arab grammarians' view that Arabic urban vernaculars were more mixed than the Bedouin vernaculars and more innovative. Today most scholars consider that the so-called conservative Bedouin dialects have evolved considerably and exhibit a number of innovative features. However, the 'old' sedentary urban dialects associated with the first phase of Arabization/urbanization in the first centuries of the expansion of Islam (7th–10th centuries) are considered to have kept the most 'innovative' features. They are still found in a number of Arab cities, often retained by small groups of old-city dwellers and, in most cases, surviving as variants/variables rather than fully discrete varieties.

3. Contemporary Arabic urban vernaculars

The modern Arabic urban vernaculars are very diverse and have been classified according to geographic factors (Eastern versus Western urban dialects), social-types (sedentary versus Bedouinized urban dialects) or by ethnic/religious/communal criteria (Muslim, Christian, Jewish, Shi'i, Sunni, etc.). Urban vernaculars also exhibit a number of variations correlated with ethnic or regional affiliation/origin, age, gender, social classes and neighbourhood. Increasing urbanization is bringing increasing dialect diversity within the Arab cities and the idea that each city would be represented by a single stabilized variety that is recognized as the standard norm is often more a chimera than a reality.

Due to different degrees of urbanization, each Arab city presents a specific context of dialect contact and dialect mixing. History and contemporary settings indicate that there is no unilateral development within Arab cities (Miller 2004; Miller et al 2007).

Three main configurations can be distinguished:

- (a) cities with old sedentary urban dialects that developed in a dominant sedentary rural environment. There are no radical differences between these urban vernaculars and the surrounding sedentary rural vernaculars, even if koineization processes have been more advanced in the urban context.
- (b) cities with old sedentary urban vernaculars that developed during the first centuries of the Arab conquest but came to be surrounded by Bedouin-type dialects. Following migration and population movements, these cities have known important linguistic changes.
- (c) cities with Bedouin-type urbanized vernaculars that developed in a Bedouin environment. There is no radical difference between these urbanized Bedouin vernaculars and the surrounding Bedouin-rural dialects, even if the urban vernaculars went through more koineization processes.

There exist many other configurations that will not be dealt with here.

3.1. Cities with sedentary urban dialects in a surrounding sedentary rural environment

These cities are to be found mainly in the Middle East (Egypt, Lebanon, Palestine, Syria, Yemen). They include Cairo and all the cities of the central and northern-eastern Delta in Egypt; San'a in Yemen; Aleppo, Damascus and other cities in Syria; Beirut in Lebanon; Bethlehem, Gaza, Haifa, Hebron, Jaffa, Jerusalem and Nazareth in Israel-Palestine. One of the main phonological markers between urban and rural dialect in Greater Syria was the reflexes of *q, realized as a glottal stop /ʔ/ in all urban dialects and as a /q/ or /k/ in many rural dialects (Cantineau, 1939). However, the use of /ʔ/ has spread to the whole of Lebanon, and large areas of Syria and Palestine. Another typical urban phonological feature seems to be the de-affricated /ʒ/ reflex of *j (except Hama and Muslim Aleppo), which is also spreading in rural areas.

The sedentary vernaculars of all these cities do not form a single typological unit, and are characterized by many specific regional features at all linguistic levels (see the lemma on Beirut, Cairo, Damascus, Jerusalem and San'a in Versteegh et al. 2006–2008 and the papers in Miller et al 2007). They do not show the same degree of koineization, focusing and expansion. Within the main four cities – Cairo, Damascus, Beirut and San'a – the Cairo vernacular appears to be the most established and stabilized urban vernacular. It resulted from a levelling process that occurred in the mid-end of the 19th century and does not seem to be influenced anymore by a levelling process. It exhibits new variation related to gender and neighbourhood, such as palatalization (Haeri 1996). Religious distinction between Muslims/Christians and Jews are limited to a few phonological and lexical features (absence of emphatics and the presence of Ladino words among Jews of Alexandria and Cairo; specific terms of address for Christians).

Damascus Arabic also developed in the late 19th century but numerous dialectal variants linked to regional, religious origin and neighbourhood coexist with the old-sedentary features still used by some Damascene dwellers in some specific neighbourhoods (Lentin 2009).

In Beirut, due to the upheaval of the civil war and the split of the population along communal/religious lines, the old Beirut vernacular did not succeed in establishing itself as the common shared-norm and dialect variation is very high. Speakers' attitudes and representation indicate that the same dialectal variant might have numerous social connotations and that dialectal variation is considered part of the identity of the city (Germanos 2009).

In San'a, the old-San'ani urban vernacular is overwhelmed by the huge provincial migration that has swept into the city since the 1990s. Migrants do not acquire the San'ani dialect and dialect variation is part of the city's character. However, a kind of levelled San'ani Arabic seems to have developed in the media and among the migrants (Watson 2007).

3.2. Cities with old sedentary urban dialects within a Bedouin-rural environment

These cities are to be found in Bahrain, Iraq, Jordan, Libya, Tunisia, Algeria and Morocco and their dialects are the descendants of the dialect spoken in these areas in

the first Islamic centuries. All these cities have known considerable language change and in some cases, the old sedentary urban dialects have been retained either only by non-Muslim minorities (Jewish or Christian) or survived only within the older female part of the population.

For Bahrain, Holes (1987) has identified two co-existing Bahraini dialects: the original sedentary Shi'i Baharma dialect and the Bedouin-based Sunni Arab dialect brought to the city by the present ruling families of Bahrain in the 18th century. The two dialects still coexist but although the Baharma group is demographically dominant, it is the Bedouin-based Sunni dialect that imposes itself in the public space.

In Iraq, the most famous case of a former sedentary urban dialect displaced by a Bedouin-based koine is the case of Baghdad described by Blanc (1964). This process took place between the 14th and 18th centuries following the migration of North Arabian groups into lower Iraq. The Bedouin dialect became progressively the standard urban dialect of the Muslim communities, while the non-Muslims stuck to the old sedentary variety, leading to a split between Muslim and Christian/Jewish varieties. The latter are close to the *qeltu* rural sedentary dialects of Northern Iraq, whereas present-day *galat* Muslim Baghdadi Arabic shares many features with Gulf Arabic.

Other cases of Bedouinization of former sedentary urban vernaculars have been documented by Palva for the Jordanian cities of Karak and Salt (Palva 2008). The process started in the 17th century and led to mixed-systems; the Bedouinization being restricted to a limited number of linguistic features (e.g. /g/ as a reflex of *q, and lexical items). Since the 20th century both dialects have appeared to drop some Bedouin marks and have again been levelled with sedentary urban features. The recent city of Amman also shows the growing influence of Jordanian Bedouin-features over sedentary-Palestinian features (Al-Wer 2007).

In North Africa, the old sedentary urban dialects include the so-called urban pre-hilālī & Andalousian dialects of all the old North African cities like Tripoli in Libya (extinct), Qairouan, Tunis, etc. in Tunisia; Algiers, Constantine, Tlemcen, etc. in Algeria; Old-Fes, Rabat, Salé, Tangier, Tetouan, etc. in Morocco. These North African old sedentary dialects do not form a single typological unit. Some, like Fes, Tetouan, and Tlemcen had the glottal stop /ʔ/ reflex of *q, whereas others like Jewish Tripoli have (q) and old-Rabat has both /ʔ/ and /q/. Interdental fricatives are retained in all Tunisian pre-hilālī urban dialects except the Jewish dialects, but not in Morocco, etc. The reflexes of the diphthongs *aw and *ay are /ū/ and /ī/ in Tunisia, as in some old sedentary dialects of Middle East. Most of these old city dialects did not resist the social changes of the 20th century. In Algiers, like in Tripoli, the old sedentary dialect has almost disappeared (Boucherit 2002). In Morocco, they are increasingly restricted to old women. Neo-urban varieties mixing with rural/Bedouin features and old-city features are spreading (Aguade et al 1998). In the whole of North Africa, old city varieties are considered as effeminate, are avoided by men, and are mainly spoken by old women. The glottal stop /ʔ/ reflex of *q appears to be particularly avoided by men in public space (Miller 2004).

3.3. Cities with Urban Bedouinized vernaculars within a Rural-Bedouin environment

These cities are found in areas mainly inhabited at present by former Bedouin groups: the Arabic Peninsula (like Jeddah, Riyadh, and the Gulf cities), Sudan, North Africa,

Mauritania, etc. In North Africa, the growth of these cities took place after the 11th century and is linked to the arrival of the Bedouin Arab tribes, known as the Banū Sulaymān and Banū Hilāl (Aguade et al. 1998). These vernaculars do not form a typological unit but rather a kind of continuum ranging from more Bedouin features to more mixed features. One of the most common features of urbanization is the loss of plural gender distinction in finite verbs and personal pronouns.

Many other vernaculars developed from a former Bedouin-type but became mixed varieties as in the case of Casablanca, Morocco. Whereas most vernaculars retain the Bedouin /g/ reflex of *q, in Casablanca both /g/ and /q/ are used, as well as analytical genitive structures (Hachimi 2005).

Unlike old city dialects, it does not seem that urban Bedouinized features became associated with female speech. On the contrary, in Morocco, the vernacular of Casablanca is considered 'tough and virile'. The same applies in Amman for Bedouin phonological variants. Therefore these mixed urban vernaculars tend to be quickly acquired by male migrants.

4. Conclusion

Arabic urban vernaculars do not form a typological unit. The former sedentary/Bedouin division is increasingly fragile in urban environments but has proved effective for studying the different layers of Arabization. Increasing urbanization has led to many different urban contexts. Not all the cities developed a shared-common variety, even though koineization and levelling processes are taking place everywhere. Dialect variation seems to be part of the daily life of the Arab cities and has become rather well accepted. Today, few Arab urban vernaculars can be considered as national standards, although modern media and education are contributing towards the emergence of new educated forms of speech. Much more research is needed in order to study detailed cases of accommodation, levelling, variation, social practices in order to establish if the Arabic urban vernaculars are or are not becoming regional/national vernaculars.

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58. Arabic-based Pidgins and Creoles

1. Introduction: What are pidgins and creoles?
2. Generalities
3. Linguistic description
4. Depidginization/decreolization
5. Socio-cultural status and writing of the Arabic creoles
6. References

Abstract

When one thinks of Pidgins and Creoles, the French-, English- or Spanish-based languages spoken in Africa and the Caribbean may first come to mind. Other idioms have, however, acted as lexifiers of Pidgins and Creoles in Africa. Arabic is one such lexifier, and at least three Arabic-based Pidgins and Creoles are currently spoken in Africa: Juba Arabic in Southern Sudan, Kinubi in Kenya and Uganda, and Bongor Arabic in the Mayo-Kebbi area of South-western Chad. These three Pidgins and Creoles arose in the second half of the 19th century and are historically related to each other, sharing many common linguistic features – though each have their own particularities. The main features identifying these languages as Pidgins or Creoles rather than Arabic dialects are the lack of consonant gemination, lack of distinctive vowel length, lack of gender distinction, the use of independent pronouns as both subject and object, the article replaced by the demonstrative pronoun, a very reduced derivational morphology, wide use of the analytical genitive, optional number agreement, and a verbal system using TMA markers.

1. Introduction: What are pidgins and creoles?

A Pidgin is usually defined as a speech-form without native speakers (the main feature distinguishing a Pidgin and a Creole), and is primarily used as a means of communication among people who do not share a common language. Compared to the lexifier language, a Pidgin is a simplified form of language, especially regarding morphology and lexicon. Pidgins are born and used in specific social situations, for example inter-ethnic contacts, contacts among traders, and contacts between colonial rulers and local

workers. Creoles are distinguished from Pidgins in that Creoles may be spoken by individuals as their first language, and therefore do not share the same limitations as Pidgins, as speakers of Creoles develop new strategies to express all their linguistic needs (for more details, see Arends 1994).

When one mentions Pidgins and Creoles, the French-, English- or Spanish-based languages spoken in Africa and the Caribbean may first come to mind. Other idioms have, however, acted as lexifiers of Pidgins and Creoles in Africa. Arabic is one such lexifier, and at least three Arabic-based Pidgins and Creoles are currently spoken: Juba Arabic, Kinubi and Bongor Arabic.

2. Generalities

2.1. Historical background

The establishment of Egyptian trading and military camps in Southern Sudan in the second half of the 19th century led to the use of an Arabic-based *lingua franca* for communication between speakers of Arabic dialects (e.g. Egyptian, West Sudanese) and the multilingual local population. The army was particularly fertile ground for this, as it brought together men from different linguistic backgrounds. This *lingua franca* gradually became a Pidgin in use amongst soldiers and their families. At the end of the 19th century, some of these soldiers made their way to East Africa – to Uganda, and later Kenya, Tanzania and even Somalia – where they settled, mainly serving in the British colonial troops. The soldiers brought with them their language, which would later be known as Kinubi. Around the same period, some other Sudanese soldiers accompanied a slave trader named Rabeh to Chad, where they introduced a pidginized form of Arabic, known as Turku.

2.2. Early sources

These pidginized and creolized forms of Arabic have been described by European observers since the beginning of the 20th century. A British officer, E.V. Jenkins, wrote a booklet in 1908–9 about the pidginized Arabic spoken by Sudanese soldiers serving in Uganda (Kaye/Tosco 1993). In 1913, J. A. Meldon, another British officer, would also write a lexicon of this language.

Turku was described in 1931, in a booklet by a French officer, G. Muraz (Tosco and Owens 1993). Finally, two booklets about the Arabic used in the Congo, written by G. F. Wtterwulghé (1904) and G. Moltedo (1905), may also reveal a certain degree of pidginization (Luffin 2004b). It is worth mentioning that all these works were written by European officers who wanted to facilitate communication between their colleagues and the local soldiers.

2.3. Arabic-based pidgins and creoles today

At least three Arabic-based Pidgins and Creoles, historically related to the languages discussed above, are still spoken today: Juba Arabic, Kinubi and Bongor Arabic. Other

varieties may be in use in Chad or in the Republic of Central Africa, but further surveys are needed. Some scholars also consider the Arabic used as a means of communication between Asian immigrants and the local population of the Arab Gulf states to be a Pidgin (Smart 1990, 83).

2.3.1. Juba Arabic (JA)

JA, locally *árabi ta Júba*, is spoken in Southern Sudan, as well as among the numerous Southerner refugees who fled to Khartoum during the civil war. Outside of Sudan, it is spoken by refugees in the bordering countries, mainly Uganda, Kenya and Egypt, as well as by the Diaspora in Europe and the United States. The language is named after Juba, the regional capital of Southern Sudan, but beneath this generic name some social and geographical varieties can be identified.

JA is used as a Pidgin as well as a Creole, since some people use it as a second or even a third language – alongside Bari, Dinka, Mundare, and Moru – whereas others use it as their first language.

2.3.2. Kinubi (KN)

Kinúbi or *rután núbi* is spoken today mainly in Uganda and Kenya. It is spoken as a first language by the Nubi. According to some sources, it is also spoken as a *lingua franca* by some non-Nubi in towns of Western Uganda. Most Nubi also speak Swahili and English. KN is closely related to JA, but also includes many words borrowed from Swahili and English. There are two main varieties of KN: Ugandan KN and Kenyan KN, though both forms are very close to each other.

2.3.3. Bongor Arabic (BA)

BA, locally *árabi aná bóngor*, less often *túrku* or *túrgu*, is spoken today in the Mayo-Kebbi area of South-western Chad, more specifically in Bongor. It is probably related to the *Turku* described by Muraz, but further investigation is needed. BA is a Pidgin, as it is used as a *lingua franca* between the Masa and Tupuri and the Arabic-speaking traders from the North. Information concerning the actual development of BA is contradictory: although some informants report that Muslim Masa and Tupuri families tend to teach their children BA beside or instead of their own language, others state that BA is increasingly both influenced and rivalled by Chadian Dialectal Arabic.

2.4. Common features of KN, JA and BA

- (1) Vowel length is not distinctive and long vowels are often replaced by stress.
- (2) Some dialectal Arabic phonemes tend to disappear or are modified.
- (3) Lack of consonant gemination.

- (4) Lack of gender distinction.
- (5) Very reduced derivational morphology.
- (6) Independent pronoun used as subject and object.
- (7) The 2nd person plural independent pronoun is built on the singular.
- (8) The article is replaced by the demonstrative.
- (9) The genitive is widely analytic.
- (10) Number agreement is optional.
- (11) The use of an invariable verbal stem.
- (12) The use of TMA verbal markers.
- (13) A wide part of the lexicon is common to each.
- (14) The verbal roots are mainly built on the imperative forms of the lexifier.

2.5. Differences

JA and KN share more features in common than with BA. They are even close enough to be mutually intelligible. Some differences, however, can be noted. For instance, in JA the dual is still widely in use and the internal plural is far more common. Some lexical items are also different. However, the degree of variability in JA renders any comparison difficult. BA differs from both JA and KN on several points, and has some specific phonological processes, different use of TMA markers, and many different lexical items which are related to Chadian Arabic. In addition, some features are found in KN and BA alone, for example the ability to place the negation after the predicate.

3. Linguistic description

3.1. Phonology

3.1.1. Consonants

p	t	č	k	x
b	d	j	g	ǵ
f	s	š		h
v	z			
m	n	ny	ng	
		r		
		l		
w		y		

These general features may change locally. For instance, in BA $f > p$ and $t > d$ are sometimes found, and in KN a free variation may be found between $z \sim j$.

3.1.2. Vowels

i		u
e		o
	a	

Vowel length is not distinctive.

3.1.3. The syllable

The main syllable patterns are: v, vC, Cv and CvC, as in *á-na* 'I', *al* (relative pronoun), *fī* 'in' and *kan* 'if'.

3.1.4. Accent

There is an accent (which in most cases corresponds to the long vowel or the stressed vowel in the lexifier: *kalám* 'word', *dérīb* 'way'), which may be distinctive for some words, e.g. KN *sába* 'seven' and *sabá* 'morning' or BA *ána* 'I' and *aná* 'of'.

3.2. Morphology

3.2.1. Pronouns

Arabic-based Creoles distinguish between independent and suffix pronouns, though the pronouns of the 3rd person are similar:

	independent pronouns			suffix pronouns
	KN/JA	BA	KN/JA	BA
1 st sg.	ána	ána	-i,-y	-(y)i
2 nd sg.	íta	ínti/índi	-ki	-k(i)
3 rd sg.	úwo	hú	-o	-hú
1 st sg.	ína	anína	-éna	-na
2 nd sg.	ítokum	índukum	-kum	-kú(m)
3 rd sg.	úmun	úman	-ómun	-úman

The independent pronouns are used in four cases:

- (1) subject of nominal sentences: JA *úmun Mundáre* 'they are Mundare'
- (2) subject of verbal sentences: BA *ána orú lé-hu* 'I told him'
- (3) objects of verbs: KN *úwo šítim íta* 'he has insulted you'
- (4) after a preposition: BA *hú god ma ána fī Bongor* 'he stayed with me in Bongor'

The suffix pronouns are used after the possessive marker, as in JA *ísim bitá-i* 'my name' or KN *wazé t-ómun* 'their ancestors'. They also come after the preposition *le*, as in BA *anína gáy-só lé-ku sókol da* 'we will do this for you'. In JA, they may follow the *end-* expressing 'to have' (see below).

3.2.2. Nouns and adjectives

There is no productive marker of word classes, the distribution of the words being their main indication.

3.2.2.1. Gender

There is no morphological gender distinction, as in JA or KN: *wéle sakár* ‘a young boy’, *binía sakár* ‘a young girl’ and in BA: *uléd sakár* ‘a young boy’, *bináya sakár* ‘a young girl’.

3.2.2.2. Number

In KN and BA, the majority of nouns have no morphological plural, the plurality being marked by the demonstrative plural, or by quantifiers like KN *Núbi dol* ‘the Nubi’ or BA *mer dólda* ‘the mayors’ and *kalám katír katír* ‘(many) questions’. However, in KN some words may have plural suffixes, like *sókol* ‘thing’ and *sokol-ín* ‘things’ or *bakán* ‘place’ and *bakan-á* ‘places’, a plural prefix like *nas* in *nas Morú* ‘the Moru’ or a suppletive form like *mára* ‘woman’ and *nuswán* ‘women’, or a stress shift like *bágara* ‘cow’ and *bagará* ‘cows’. In BA, a few nouns may bear *-ín* as a plural marker: *malán*, *malan-ín* ‘full’, and other plural markers may occur, though these are less common, e.g. an internal plural like *rájlil* ‘man’ and *rujál* ‘men’, and suppletion, like *mára* ‘woman’ and *awín* ‘women’. In JA, the use of plurals is far more frequent, using all the categories described above, including a more vivid internal plural. The dual is also in use, as in *saat-én* ‘two hours’.

3.2.3. Numerals

Etymologically, all the numerals are related to the Arabic lexicon. However, while JA and KN keep the unity-ten order (*wáy u talatín* ‘thirty-one’), in BA the unity always follows the ten: *ásara u kámsa* ‘fifteen’. In KN and JA, speakers may switch to English to express high numbers, while BA speakers may do the same with French.

3.2.4. The verb

3.2.4.1. Verbal form

All verbs have an invariable stem. There is no derivational morphology, except some compound verbs with ‘to do’, e.g. KN *úwo gu-só kázi* ‘he works (he does work)’.

3.2.4.2. Inflection

In JA and KN, the verb has several TMA (tense-mood-aspect) markers, e.g. *úwo máši* 'he went', *úwo kan máši* 'he was going', *úwo gi-máši* 'he goes', *úwo bi-máši* 'he will go', *úwo kalás máši* 'he's gone'. In BA, only *gáy-* and *kalás* are used as TMA. The perfect is marked by the use of the non-inflected verb stem, e.g. *hú mási* 'he went', while the imperfect is marked by the prefix *gáy-*, e.g. *índukum gáy-mási wén?* 'where are you going?'. The marker *kalás* may reinforce the perfect, e.g. *kalás úman máso* 'they are gone'. All markers are in preverbal position. Stative verbs are generally used without TMA in the present, e.g. KN *ána féker* 'I think' or BA *ána dóru árge* 'I want [to drink] alcohol'.

3.2.4.3. The imperative

The imperative is rendered by the use of the verbal root alone. For some verbs, there is a suppletive form, e.g. KN *taál* 'come' (*já* 'to come').

3.2.4.4. The subjunctive

The verb introduced by an auxiliary is non-inflected, e.g. JA: *anína b-ágder kúruju* 'we can cultivate', KN: *ána ázu kélem me ita* 'I want to talk with you', BA: *ána gáy-dorú orú kalám dá* 'I want to say this'.

3.3. Syntax

3.3.1. Noun phrase

3.3.1.1. Definiteness

The demonstrative pronouns are used as definite markers, e.g. JA: *ásed de*, 'the lion', KN: *rági de* 'the man', BA: *dérib da* 'the road'.

Indefiniteness may be marked by the omission of the definite marker or by the use of the numeral *wáy* 'one', as in BA *kalám wáy* 'one thing'.

3.3.1.2. Modifiers

The noun modifier – demonstrative/definite marker, adjective, numeral – generally stands after the noun, as in KN: *wéle kámsa* 'five boys', JA: *béle de* 'this country', BA: *iyál da* 'these kids', *rujál tinén* 'two men'. However, in KN the word *kíla* 'each' – a Swahili borrowing – precedes the noun, and in JA some modifiers (like numerals) also often precede the noun, e.g. *taláta gabáil* 'three tribes'.

3.3.1.3. Number agreement

Number agreement is not systematic, e.g. KN: *úmun ketir-ín* ‘they are numerous’ and *Swahili ya ketír* ‘Swahili are numerous’, BA: *anína gayd-ín* ‘we stay’ and *anína ma masás* ‘we are not witches’. Number agreement is more frequent in JA, though also not systematic.

3.3.1.4. Genitive

Generally, the possessor noun or the suffix pronoun follows the possessed and is introduced by a genitive marker (JA: *bitá-*, *tá-* or *tát-*, KN: *tá-* (rarely *bitá-*), BA: *aná*), as in JA: *nas bita Júba* ‘the people of Juba’, *ísim bitá-i* ‘my name’, KN: *kurá tá-ki* ‘your leg’ *Núbi ta Mombása* ‘the Nubi of Mombasa’ and in BA: *hasáy aná-y* ‘my stick’, *gúrs aná petról* ‘the money of the oil’.

The use of synthetic genitives may also occur, but often renders specific expressions or compounds, as in JA: *láam gába* ‘animal’, KN: *rután núbi* ‘Kinubi’, BA: *kalám na-sára* ‘French’.

3.3.1.5. Comparison

There is no elative form; comparison is marked by *fútu* after the adjective:

JA: *úwo kebír fútu ána* ‘he is bigger than me’.

BA: *Mamát dá tawíl fútu Ali* ‘Mamat is taller than Ali’.

In KN, *fútu* may be replaced by *záidi min*, e.g. *de tegíl záidi min láger* ‘it is heavier than a stone’.

3.3.1.6. Relative clauses

The relative clause is introduced by *al*, e.g. JA: *azól al já min Yéy* ‘the man who came from Yei’, BA: *hu kalám al fī gélb aná-k* ‘this is the thing that you keep in your heart’. It may also be introduced by *ábu* in JA and KN, e.g. *mesíhi abú fī junúb ta sudán* ‘the Christians who are in Southern Sudan’.

3.3.1.7. Reduplication

Reduplication may be used to emphasize the meaning of a verb, an adjective or an adverb, e.g. JA: *gatágatá* ‘to make scarifications’, KN: *yal-á dugag-ín dugag-ín*, ‘very young kids’, BA: *nas kubár kubár* ‘very important persons’.

3.3.2. The verb phrase

3.3.2.1. Phrase order

The phrase order is SVO, as in BA: *ána súfu sókol dá* 'I saw this', JA: *Dínka g-ásurubu lében* 'the Dinka drink milk'. However, topicalization is quite common, e.g. BA: *déríb dá bes anína dóru* 'we want this road', KN: *mána t-ó ána má árifu* 'I don't know the meaning'.

3.3.2.2. Existential and possessive sentences

Existential sentences are usually marked by the use of *fí* (*má fí* in a negative sentence), as in JA: *fí Júba má fí fíl* 'there are no elephants in Juba', KN: *Núbi fí fí Kénya* 'there are Nubi in Kenya', BA: *Hopital fí fí Bongor* 'there is a hospital in Bongor'.

The main means of rendering a possessive sentence in KN is by use of the verb *éndisi*, e.g. *ána éndisi bé* 'I have a house'. In JA, alongside a similar use of *éndi* (as in *íta ma éndi gúruš* 'you don't have money') is found the word *end-* followed by the suffix pronoun, e.g. *énda-na sámak* 'we have fish', *énd-o iyál* 'he has children'. Other expressions exist, like the use of the existential sentence accompanied by *ma* 'with', e.g. KN: *Morú fí ma rután t-ómun* 'the Moru have their own language'. In BA, possession is rendered by the preposition 'with', e.g. *ána gáy be wadír jedíd* 'I have a new car' or *ána be akú aná-y tinén* 'I have two brothers'.

3.3.3. Negation

In KN and JA, *má* is placed before the predicate or the verb as negation, e.g. *ána má árifu* 'I don't know', *de má Núbi* 'he's not a Nubi'. In Ugandan KN, *má* or *máfi* will often come after the predicate, e.g. *ána árifu má* 'I don't know'.

In BA, the main marker is *máfi*. It occurs usually in sentence-final position, e.g. *ána lúti máfi*, 'I am not stupid', *ána árifu máfi* 'I don't know'. The marker *má* placed before the predicate or the verb is also used but rare, e.g. *ána má dóru* 'I don't want'.

3.4. Lexicon

Though the lexicon of the three Creoles and Pidgins is partly in common, some differences should be noted. The lexicon of JA and KN is derived from various Sudanese and even Egyptian dialects, and in BA an important part of the vocabulary clearly comes from Chadian Arabic. For instance, JA: *der*, KN: *ázu* and BA: *dóru* 'want'. The main differences, however, appear between JA/KN and BA, e.g. JA/KN: *kélem* and BA: *orú* 'say', KN/JA: *(bi)tá* and BA: *aná* 'of', KN/JA: *múnu* and BA: *yátu* 'who', KN/JA: *móyo* and BA: *almé* 'water'.

All these languages are often used along with other idioms, and mixing between two or more languages is quite common, going from borrowing to code-switching or code-mixing. English and/or Sudanese Colloquial are often mixed with JA, English and/or Swahili with KN, and French with BA.

4. Depidginization/decreolization

In all varieties of Arabic Pidgins and Creoles, the speaker may be influenced by knowledge of other forms of Arabic, and this may lead an individual to correct his/her speech. This may affect phonology, morphology or vocabulary. The phenomenon seems to be far less frequent in KN, because it is spoken in areas where no diglossia exists with higher varieties of spoken Arabic. However, in Sudan and in Chad, where JA and BA may be in competition with local Arabic dialects, the phenomenon of depidginization/decreolization is very common, as in JA: *ána ger-ét* (and not *ána ágara*) *fi médresa fi Júba* 'I studied in a school in Juba', or in BA: *anína rikíb-na* (and not *anína ríkib*) *wotír dá sáwa*, 'we took the car together'.

5. Socio-cultural status and writing of the Arabic creoles

In East Africa, the Nubi communities are proud of their language and see it as part of their identity. However, the presence of English and Swahili may endanger the use of KN, especially in big cities like Mombasa or Nairobi, as it has done in Tanzania, where it seems Swahili has replaced KN among the Nubi communities.

In Northern Sudan, JA is often seen as a 'broken Arabic' more than a real language. The situation is somewhat different in the South, where JA tends to become a marker – among others – of regional identity and culture. It is used by churches and radio stations, as well as in songs, theatre and poetry.

To date, little research has been done concerning the Arabic Creoles as written languages. JA is written with Latin characters. It is used in the religious literature, such as in church prayer books, in personal correspondence, and in the administration of some organizations. KN is also written in Latin characters, although to a lesser extent: some Nubi exchange letters in their language or use it for the written administration of their cultural organizations. In Bombo, Mustafer Khamisy, a local intellectual, writes poems and distributes these during Nubi cultural events.

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59. Berber and Arabic Language Contact

1. Introduction
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3. Phonetics/phonology
4. Morphology
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Abstract

Languages spoken in North Africa, including both Arabic and Berber, are characterized by great diversity. Internal differences within the Berber linguistic group make it difficult to take an all-encompassing common language perspective which is sufficiently representative. In reality, we are dealing with regional varieties still insufficiently studied from both intradialectal and interdialectal points of view. Important differences exist between the northern languages and those of the south and/or the so-called peripheral varieties. This internal differentiation can be also found, although less marked, between the various Arab dialects in North Africa, with extreme examples such as those of Djidjeli (Algeria) or those from the Ḥassa:niya in the Western Sahara and in Mauritania. The nature of the contacts between Arabic and Berber obliges one, therefore, to take into account historical contexts, dialectal dispersion, heterogeneity of speech, and the superposition of certain features through time. Moreover, the proximity between Arabic and Berber will appear within a regional configuration. Thus, the proximity and borrowings from a Berber dialect such as Kabyle will be more notable in the Algerian Arabic dialect of Algiers, and those of Zenaga will be much closer to the Ḥassa:niya than to Arab dialects of the north.

1. Introduction

When discussing contact between Arabic and Berber (on Berber as a cognate family of Afroasiatic, see ch. 3), we are limited geographically to North Africa, and therefore to western varieties of Arabic. It is clear that we are principally dealing with dialectal Arabic. Even though, taking into account the Arabic language's diglossic situation, it is true that cases of contacts with Classical Arabic do take place, these are mainly restricted to very specific linguistic segments such as religious lexicon (Boogert/Kossmann 1997). It should also be noted, too, that the move towards a written Berber language in Algeria is producing a new phenomenon, yet to be fully described by Arabists or Semitists, but one of undoubted interest, namely the transfer of standard Arabic structures into Berber (Arous 1991).

Languages spoken in North Africa, both Arabic as well as Berber, are characterized by great diversity. Internal differences within the Berber linguistic group make it difficult to take an all-encompassing common language perspective which can be outlined with precision and is sufficiently representative. In reality, we are dealing with local parlances, in the best of cases regional varieties but still insufficiently studied from both intradialectal and interdialectal points of view. The differences between the northern languages (Riff, Kabyle and others) and those of the south (Tachelhit, Touareg etc.) and/or the so-called peripheral varieties (Siwa, Zenaga) are quite important. This internal differentiation can be also found, although less marked, between the various Arab dialects in North Africa, with extreme examples such as those of Djidjeli (Algeria) or those from the Ḥassa:niya in the Western Sahara and in Mauritania (Taine-Cheikh 2008).

The nature of the contacts between Arabic and Berber in North Africa obliges us, therefore, to go beyond the strictly linguistic, and to take into account historical contexts, dialectal dispersion, heterogeneity of speech, and the superposition of certain features through time.

Moreover, very often, the proximity between Arabic and Berber will appear within a regional configuration. Thus, the proximity and borrowings from a Berber dialect such as Kabyle will be more notable in the Algerian Arabic dialect of Algiers, and those of Zenaga will be much closer to the Ḥassa:niya than to Arab dialects of the north.

2. Vocalism

In the classical dialectological tradition, it is held that the North-African Arabic dialects lose the short vowels of Classical Arabic in open syllables. This loss is compensated by the insertion of ‘ultra-short’ vowels or ‘schwas’ of a neutral timbre often qualified as ‘lubricants’ due to the fact that they allow the pronunciation of sequences of more than two consonants. Although this phenomenon of vocalic reduction is not generalized in the same way in North Africa nor exclusively limited to this area (Cantineau 1941, 114), by general consensus, it is particularly marked in the North-African dialects (cf. P. Marçais 1977, 12; W. Marçais 1902, 47; Cantineau 1960, 107, etc.). The extent of the phenomenon of the loss of the vocalic substance becomes more notable as one travels from the east to the west of North Africa. In other words, it increases with the presence of Berber-speaking populations.

Some researchers do not see there a relationship with Berber or at least do not mention it (W. Marçais 1902; Cantineau 1960). Others, on the contrary, note the influence of the Berber substrate (Abdel-Massih 1976; Diem 1979; Schmitt-Brandt 1979). Durand (1995, 12) goes further in this direction and, following the example of certain Berberists (El Medlaoui 1985; Dell/El Medlaoui 1988 and Boukous 1988), advocates the pure and simple elimination of the schwas in the transcription of Moroccan Arabic and Berber.

3. Phonetics/phonology

As well as the vowel systems, the Berber and the North-African Arab dialects, because of their proximity, reveal many similarities in their consonant systems (Galand 1983).

Certain differences distinguish, however, the status of certain consonants in the two systems, in particular the interdentals, the back consonants and the emphatic ones.

Berber and northern Arabic dialects share a clear tendency to weaken the articulatory tension. Spirantism is a characteristic which affects simple (*lenis*) occlusives from the northern Berber dialects (Basset 1952, 5f.). Its non-phonemic realization in the North-African Arab dialects is often attributed to the influence of the Berber substrate. This often leads to typically Berber realizations (P. Marçais 1952) such as:

- unconditioned alterations of dental /t/ and interdental /t/ towards an affricate consonant [ts] (W. Marçais 1902, 14; P. Marçais 1952, 608; Cantineau 1960, 37)
- the treatment of the lateral sound /l/, which may sometimes be realised as [ʒ] (*sidna* ‘*ʒi* = *sidna* ‘li’ ‘Mr Ali’, [hʒ i:b] < hli:b ‘milk’ or articulated as [n] > *tqu:l-li* > (*tqu:n-ni*) ‘you tell me’, tending to disappear in medial positions: *mie:h* < (*melh*) ‘salt’, causing a compensatory lengthening. The pharyngeal /h/ and the laryngeal /h/ are also often considered as borrowings and often result from this influence (Chaker 1984 Galand 1960)

3.1. Emphatics

The voiced emphatic dental consonant /d/ exists in the majority of the North African dialects as well as in the Jewish Arabic of Tunis (Cohen 1975). Originating from the former interdentals /ʕ/ and /ɬ/, they are today confused to give > /d/.

In the mountain dialects such as those of northern Morocco (northern Taza), northern Oranian (Traras) or northern Constantine (Djидjelli), it has continued to evolve towards a voiceless occlusive [t] realisation.

The geographical distribution of this phenomenon corroborates the special conditions that these areas with a strong Berberphone presence provide:

d	>	d	>	t
z				

This confusion corresponds perfectly to the realizations in the Berber dialects where [t] is very frequently only an allophone of /d/ which intervenes in borrowings from Arabic or as a combined variant resulting from the consonant length or *fortis* (Chaker 1984, 85; Basset 1945–48, 33; Galand 1988; Basset/Picard 1948; Beguinot 1931).

The confusion of d/t is thus probably due to the influence of the substrate: *he-l-lu:ha* *haṭra* ‘a green board’ (P. Marçais 1952, 608).

In conclusion, the appearance of the emphasis is sometimes also the result of contamination, which leads to an extension of the pharyngealization giving a suprasegmental phoneme (Schmitt-Brandt 1979, 233). This phenomenon also exists in Moroccan Arabic (Caubet 1993).

4. Morphology

In the majority of the languages of Morocco, but also in Djidjelli (Marçais, 1952, 302–320), a great number of nouns bearing the Berber morpheme prefix *a-* are attested. This phenomenon is so important that it has become a morphological process of derivation (Marçais 1952, 303ff.).

It becomes particularly apparent in the schemes *accvc* or *accecc*. These come from Berber words which have preserved their morphology while passing to Arabic: *aštey* 'log, yoke' [cf Kabyle *ašitt*, *tašittets*]; *azduz* 'rammer'; *ayrum* 'bread' etc., or Berberized forms of dialectal Arabic terms like: *aktuf* (= *ktef*) 'shoulder'; *asder* (= *sder*) 'chest'; *ažder* (*žder*) 'trunk', *akru* (= *kre*) 'foot', *afxud* (= *fexd*) 'thigh'; *adfer* (= *dfer*) 'nail' [this competes with the Berber term *asker* which testifies to the phase of current transition (*asker* > *adfer* > *dfer*)].

Another vestige of the Berber substrate can be seen in plurals with final suffix *-en*. These remain rare in the urban Djidjelli-speaking areas. They are better preserved in the mountains but appear only in names with initial *a-*, therefore Berber or Berberized terms (P. Marçais 1952, 367). This parallel use is probably condemned to disappear: (1) *aqtoṭ/aqtoṭen* 'cat(s)'; (2) *awrez/awerzen* 'talon(s), heel(s)'; (3) *ayrum/ayrumen* 'bread(s)'; (4) *ayunža/ayenžiwen* '(big) spoon(s)'.

Another noteworthy aspect, that serves as testimony of a transitional stage, is the disappearance of initial vocalic alternation (singular > plural), which is characteristic of the Berber dialects.

Certain North-African Arab dialects use an expressive suffix as a diminutive */-š/*; this is very common in Berber: *Muḥuš*, *Ḥiduš*, *Warduš*, *Liluš* for (Arabic) first names: *Muḥ(ammed)*, *Ḥend*, *Wardiyya*, *Li*. This diminutive is found in Tunisia: *qaṭṭuša* 'kitten'. The same suffix is also sometimes used in northern Morocco as a diminutive for names of animated beings: *tḥilneš* (*tḥi: nneš*) 'young girls', from *tḥi:la* (< *tuḥla*) 'girl'; *ždu: neš* (Anjra) 'small kids', from *ždi: wi* (< *ždi*) etc. (Colin 1926, 67f.).

A characteristic use of the Berber influence, especially in Morocco, but also attested in the rest of North Africa, is the Berber circumfix morpheme */ta-...-t/*. It comprises both a prefixed and a suffixed element and marks especially the feminine, but it is also used as a diminutive marker or as a means of forming very expressive abstract nouns, often with a pejorative sense, often designating physical or moral qualities: *tahraymi(ye)t* < *hraymi*: 'wickedness'; *takebburit* < (*ta*)-*kabbara* 'arrogance' *taklubit* < *kalb* 'villainy' (P. Marçais 1977, 8).

However, it principally serves another more productive function (Guay, 1918). By taking the name of the tradesman, Moroccan Arabic can form the name of his trade by framing it with both sides of the circumfix morpheme: *ta- ... -t* as in: *beqqa:l* 'grocer' > *tabeqqa:l(e)t* 'grocery/trade grocer'. As Colin already pointed out in 1947, these derivatives also designate the corresponding labour or technique in question: *taserra:ž(e)t* < *serra:ž* 'upholstery'; *taḥerrazt* (< *ḥerra:z*): 'cobbling or shoemaking'; *tabennay(e)t* (< *benna:*) 'masonry'.

In certain areas of Algeria (Algiers, Tlemcen, etc) the names of trades are also formed by adding a suffix of Turkish origin, *-ği*. This is used to form 'names of professionals', derived from nouns which indicate either the manufactured object or the usual operation: *Ḥammamği* 'owner or worker in a Hammam', *qahwaği* 'owner or worker in a café', *gumregği* (< *gümrukçi*) 'customs officer, tax inspector', *sa'aği* 'clock maker', etc (Colin 1945–49, and W. Marçais 1902, 95).

5. The verb phrase: prefixed markers

The majority of the North-African modern Arab dialects innovated in the morphological expression of the opposition between '*réel*' and the '*irréel*' in order to specify the

temporal and/or aspectual value expressed by the verb (Colin 1935). North African dialectal Arabic thus developed a series of verb particles and auxiliaries (prefixed verbs), which, at the end of a process of grammaticalization (Heine 1992, 1993; Simeone-Senelle/Vanhove 1997), make it possible to express time by integration in the verbal system of a verbo-nominal form. This may occur with an active participle, or by the use of periphrastic forms such as a prefix, particle, or auxiliary + conjugated form (Simeone-Senelle/Tauzin/Caubet 1985–1986, 60). This phenomenon seems to be due, according to Colin (1935, 135), to the Berber substrate which experiences these developments and which often enable him to specify aspectual and temporal nuances like iterativity, duration, possibility or the imperfective in general.

5.1. The prefix *ka-*

One of the most important instruments of dialectal Arabic is the introduction of the preverbal particle *ka-* and certain variants, particularly in Morocco and in some towns in Algeria (Kampffmeyer 1899; Cohen 1924; Marçais 1952 and 1977; Grand'Henry 1976, 1977 and 1978; Fischer/Jastrow 1980, Caubet 1985–1986 and 1993; Durand 1991).

Nevertheless, although the structure of sentences and the use of the prefixed particle *ka-* is similar to that of Berber, it has not been proven beyond doubt that it is due, in all cases, to a direct influence of the substrate. The principal counter-argument seems to lie in the fact that this innovation can be found in the majority of Arabic languages. The differences, in fact, concern only the choice of the particle (*b-*, *be-*, *ta-*, *ka-*). The fact that traces remain of the use in Tunisia (Saada 1963–1966) - in the same functions and conditions - of the particle *b-* confirms that, as specialists such as Cohen (1986), Caubet (1993) or Durand (1991) have already expressed, circumspection is necessary.

5.2. *La:/illa* and *qa (aqqa)*

However, if innovation in itself is not necessary due to the influence of Berber, it is probable that this language is decisive in the choice and the usage of certain preverbal particles. This is the case of the variants *la:* and *qa (aqqa)* which appear to derive respectively from Berber *ili/illa* 'to be/exist' and from *aqqa*. The latter is used in almost all Riffian dialects with personal pronoun suffixes used inflexionally in order to express a kind of 'presentation' giving the sense of 'me here, here that I..., here that you...'.

According to Colin (1935, 134), the speech of Beni Snûs uses the same prefix *qa* + *habitud* stem (continuous or repeated action) with an invariable variant. This is indicative of a grammaticalization process involving the transition from an auxiliary (flexional) function to a prefix (fixed and invariable) statute.

In addition, the close relation between the Riffian prefix *qa* (or auxiliary, depending on the degree of evolution) and the Kabyle form *aqliyi*, (< *muqqel- iyi*), used in a similar way, seems to be corroborated by the fact that Iznasen of Riff and the Senhadja make parallel usage of the two forms: *aqqliyi* and *aqqayi* (Rensisio 1932, 264).

The extension of the use of the verbal prefix *qa* is not limited, however, to the Moroccan or Algerian Berberophone areas, as we also find it at the other end of

Berberia, in the dialect of Siouah, in Egypt: *imani qa traḥet* 'where do you go?' (Basset 1890, 19). This use is parallel, according to the author, with the particle *at* (= *ad*) or, more exactly, with their interrogative variant in the Riff: *mani gha traḥed?* 'Where are you going?'

From this point of view, one could even argue that in North Africa proximity exists between the forms *la:* and *qa* and could consider to what extent the two forms have the same etymology, *qa* and *la:* being probably an alteration of the long form *aqql-* (*iḃi*).

In any case, and as Colin (1935, 135, note 1) rightly reminds us, this usage corresponds perfectly in the Arabic dialects of North Africa to the general use, and in similar conditions, of another variant, which comes from the archaic Arabic imperative *ra* 'see', *ra:ni nakul* 'I am eating'. We could add to that the nearness, even the identity of the original semantic fields from these two prefixes *qa* and *ra:ni*, whose two consonant bases have the sense of 'to see/look at'.

6. Noun phrase

6.1. Construct state and annexation state (analytic state)

The relation of possession can be expressed in dialectal Arabic using a synthetic construction or by the means of an analytical construction, which uses for example the particle *dya:l*, its short form *d* or its variants like *mta:*, *nta:*, *ta:*, *eddi*, *di*, *elli*, etc. Berber has both types of construction (Galand 1963–66; 1969; Basset 1952). The construction of the analytical type requires the insertion of the preposition *n* between the name and the suffix or between the first and the second terms of the construct, e.g. *axxam n baba*; *axxam nwen*; *mmis n tmurt* 'the house of my father; your house; son of the country'.

These constructions are generally the same in Arabic and Berber. The assumption of Berber influence is certainly tempting; however, as this analytical construction is a very common evolution in the majority of the languages, caution should be exercised. Nevertheless, it would be difficult not to see the influence of the North-African substrate in the case of the following construction which uses the variant *d* as particle of the genitive.

In the dialect of Djidjelli and northern Constantine, as well as in northern Morocco and Oran, we observe the obligatory addition of the personal suffix, with the corresponding concord in gender and number, to the name indicating a degree of relationship, when connected to another.: 'the sister of Muḥammed' thus gives 'his sister of him of Muhammed': *ḥt-u d Mḥemmed*.

This form corresponds to the Berber analytical construction phrase with intercalation of preposition *n*: *weltma-s n Muḥend*. An Arabic-speaking person from Algiers would, in this case, realize: *ḥut Muḥammed* (P. Marçais 1952, 413d and 421c; 1977, 170f.; Fischer/Jastrow 1980, 259). In certain dialects of the Algerian North-West, in Nedroma and the north of Taza one even finds hybrid constructions such as: *bbwa:y n faṭima* 'father of Fatima' or *yemma:-in lqa: id* [*yemma n lqayid*] 'the mother of the caid' (Fischer/Jastrow 1980, 259).

6.2. The predicative particle *d*

The use in Djidjelli of the predicative particle *d* ('annonciative' for Marçais) in almost all cases, as in Berber, leaves no room for doubt: *hu: ma d leḥwa* '(those over there) are brothers'; *d faṭma* 'this is Fatima'; *d errbi:* 'it is spring', etc.

6.3. The indefinite *wa:hed* and its variation

Among the innovations of the Arabic dialect, worthy of note is the use of the numeral *wa:hed* as an indefinite article. This article has several variants such as *wah-*, *wahī* (Algiers-Jewish) or, depending on the context, shorter forms such as *ḥa* or *ḥ* in the masculine singular (P. Marçais 1952, 400f.) and *wa:ḥdi:n*, *uḥu:d* in the plural (P. Marçais 1977, 206ff.).

This use is well-known in the Berber language which from the numeral 'one' makes an indefinite article – a tendency which is widespread amongst both Arabic dialects as well as in Berber. North African Arabic makes it an invariable article in the plural: '(certain type) of men', thus in the Algerian Arabic dialect: *wahed er-rḡa:l*.

A different use distinguishes, however, the two languages in the singular. Berber, unlike the Arabic dialect, can carry out concord of gender, as in the following examples (Algiers Arabic): *wahed er-ra:ḡel*; *wahed l-lemra* 'a man; a woman', but Berber Kabyle: *yiwen wergaz*, *yiwet n tmeṭṭut* 'a man; a woman'.

This difference seems, however, neither sufficient, nor important enough to indicate a structural opposition: the Arabic dialect could have lost the agreement of gender. In this sense, evidence can be seen in the proper use in Berber where precisely this same agreement is being lost. We already know the example quoted by Marçais (1952, 403) of the Kabyle dialect of Guergour (Algeria): *yiwen n iḡil* 'an arm', *yiwen n tmeṭṭut* 'a woman'. But it is not the only one. The majority of the Riff dialects no longer distinguish gender: *ijj n wergaz* 'a man', *ijj n temḡart* 'a woman'. What is more, the realization of agreement is not limited to the Berber dialects since we also find it in the Maltese dialect: *wiehed raḡel* (*tifel*, *qassis* etc.) 'a certain man (servant boy, priest, etc)', but *wahda mara* (*sinjura*, etc) 'a woman (lady, etc)' (Aquilina 1965, 35). The situation is thus similar in Berber and Arabic. The only true difference is limited to the use of *wahed* in the plural in certain north-African dialects, which is probably a later development, following a process of grammaticalization.

6.4. Comparison

The use of the comparative and the superlative in Classical Arabic follow specific schemes and synthetic constructions, which survive in certain North-African conservative Arabic dialects (Taine-Cheikh 2008, 122). They have, however, disappeared in the Northern dialects, which use specific constructions, of an analytical type, connected by a preposition like '*anni* in the Egyptian variety, possibly due to the influence of the Coptic substrate on Egyptian Arabic (Littman 1902), or '*la* in the North-African Arabic dialects in such sentences as: *ṣḡi:r 'la xu:h* '(he is) smaller than his brother'. Aguadé/

Vicente (1997) use the same example which confirms the existence of the same type of structures in Berber as in dialectal Arabic: Kabyle *išfa fell-i*, Algerian Arabic *šfa 'liy-a* 'he remembers me'.

7. The lexicon: some syntactic and semantic calques

Many studies already exist on this subject (Colin 1926, 1927, 1945–49, 1963–66; Kuntze 1955; Taifi 1979, Boukous 1989; Corriente 1997, 1981 and more generally see bibliographic notes in Bougchiche 1997 and Tilmatine 2008). The influence of Berber on dialectal Arabic may be important in certain specific areas such as agriculture or botany (Tilmatine/Bustamante 2001), but is less present in the religious, technical or scientific vocabulary in general.

Numerous examples, widespread in the cases of language contact, illustrate the work in these fields:

- Calques of structures from the kind men *ša:b*, 'to find, find the means of' < (a) *wi-yufan*, 'if somebody found/could...', made up also by an exclamative interrogative indefinite pronoun *wi* and the verb *af* 'to find'.
- The verbs '*mel*, *da:r*, *idi:r* (from the Classical Arabic 'making, turning, turn') used in dialectal Arabic in the senses 'to put, place': '*mel ḥwayḡek!* 'Put on your clothes! Get dressed', or 'to be' (e.g. in Oran, in questions such as *ki:f da:yra* 'how is it?', *ki: da: yra?* 'How is that? (= How are you?)'. A use, which refers to Berber *egg-igga*: 'to make, put, place' Colin (1963–66).
- According to Colin, the verbal auxiliary *ra:-* is reminiscent of the traditional (antiquated) imperative Arabic *ra-* 'to see'. Its use as an auxiliary verb is unknown in Hispanic and Maltese varieties, but is well known by them in the sense of 'to see'. This reminds us of the use made in similar conditions by the majority of Berber dialects of the verb *qql*, *imuqqel*, *itsmuqul* or *iqqul* 'to become' (cf. 4.2). Furthermore, idiomatic expressions often revolve around local cultural references. Thus, in Morocco and in several other areas of North Africa '*ru: sat le-mṭar* refers to a ritual of obtaining rain (Camps 1989), which involves a doll symbolising a 'fiancée of the rain' to render the Berber phrase *tislit wenzar* with the same signification.

One of the effects of the coexistence of two languages and their simultaneous use is the tendency to substitute genders, nouns or certain segments of the semantic field of a given lexeme. These substitutions are carried out due to an attraction towards the old language-substrate and applied to the current language:

- Changes of the nominal gender in the case of certain substantives *ržjel* 'leg, foot', formerly feminine has become masculine, influenced by the fact that the Berber equivalent, *aḍar*, is masculine. The same occurs for words like *lhem*, *šu:f*, *ba:b*, 'meat', 'wool' and 'door' which have remained masculine in the majority of the North-African Arabic dialects, but which have become feminine in Djidjelli, under the sway of Berber where *tifi*, *taḍuft* and *tabburt* are feminine.
- Changes of number, as grammatical category, in words, especially in Djidjelli, which, while being indisputable plurals (syntactic agreement) do not take however, the corresponding morphological mark. Originally singular Arabic nouns thus take a

plural value. P. Marçais (1952, 340–341) cites a dozen cases including *aman*, *bu:l*, *hra:*, *ri:q*, *qemh*, *š*ˈ*i:r*, *fu:l* etc. respectively ‘water’, ‘urine’, ‘shit’, ‘saliva’, ‘wheat’, ‘barley’, ‘broad beans’. The corresponding plurals and collectives in Berber are: *ibezzaden*, *ibeccan*, *ixxan*, *illufaz*, *irden*, *timžin*, *ibawen*. After a period of concomitant use, only one of the two words will survive, the dominant one, with the other being left with just the gender or the number. Kossmann (2008) points out a similar influence in the opposition of collective/unity noun distinction in Berber and the Arabic dialect.

Sometimes, the analogy is a semantic one. A word takes a new semantic segment which is absent in its original field: in Arabic, the term (a) *xder* does not have the sense of ‘green/uncooked/not ripe’. However, in dialectal Arabic it can have this meaning e.g. *lhem xder* ‘green flesh’. Berber, however, provides the key with its corresponding idiomatic expression: *aksum azegzaw* ‘green meat’ (in the sense of ‘raw’).

8. Conclusion

This short outline and the data that we have on the linguistic contacts between the Berber and Arabic are, of course, incomplete. Nevertheless, beyond a simple relational dimension substrate/adstratum or monostatic superstratum, there are indications to suggest a likely hypothesis that there is a convergent evolution of the two North-African native languages. In certain cases, it is clear that formal or semantic analogy determines similarity or even identity of the implemented phonetic, morphological, lexical or syntactical variants during the process of innovation in both mother tongues. It seems clear that the diffusion of these usages in dialectal Arabic has probably been strong facilitated and accelerated by the impulsion of the surrounding Berberphone language.

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60. Arabic-Persian Language Contact

1. Introduction
2. Language contact in pre-Islamic times
3. Language contact in the Early Islamic Era
4. The emergence of New Persian
5. Later developments in language contact
6. Language contact in modern dialectal Arabic and Persian
7. References

Abstract

The linguistic interference between Arabic and Persian manifests itself most strikingly in the reciprocally borrowed lexicon. In the course of time, the contact between the two languages varied according to which culture was more sophisticated. In the pre-Islamic and early Islamic era Arabic adopted Persian lexemes that covered a wide range of terms, such as botany, science and bureaucracy. After New Persian has emerged in the 9th century AD, its vocabulary was inundated with Arabic language elements that were later fully incorporated into the Persian language. However, it was not only lexical elements that entered Persian: Arabic morphological and even syntactic features also found their way into the language. In modern times, direct contact between Arabic and Persian is clearly detectable in their geographically adjacent regions, e.g. Iraq and the Gulf. In these two areas, local Arabic and Persian dialects embrace a number of words from the other language; words that never became an integral part of the respective literary language.

1. Introduction

Linguistic interference between Arabic and Persian embraces two reciprocal processes in the course of history. In the pre-Islamic and early Islamic era, when Iranian culture was more sophisticated than the developing Arabic culture, Iranian language elements entered Pre-Classical and Classical Arabic. After the first centuries of the Islamic rule, when Arabic culture became well-established in the conquered territories, it exerted an unprecedented effect on the emerging New Persian language, which in turn borrowed numerous Arabic elements (Eilers 1971). Interestingly, whereas Arabic borrowed almost exclusively lexical items from Persian, Persian also incorporated Arabic grammatical elements. The examination of the reciprocal process of these borrowings is the examination of the evolution and the cultural history of the two languages.

2. Language contact in pre-Islamic times

Political and economic ties between Arabs and Persians go back well into the Achaemenid period (559–330 BC), although no linguistic contacts can be demonstrated with

certainty before the Sasanian era (224–651 AD). The Sasanians exerted intense political influence on the Arabian Peninsula. During their reign, Eastern Arabia, Oman and parts of Yemen were principally subject to direct Persian control, but Persian influence was also introduced in Yaṭrib and even in Mecca. The most significant direct rule over parts of Arabia was, however, imposed by the Arab Lakhmid dynasty, whose chiefs were allies of the Sasanians. There was evidently a considerable Persian influence exercised by Sasanian Persia over pre-Islamic Arabic culture and literature, mediated, in particular, via the Lakhmids.

The vocabulary of pre-Classical Arabic mostly comprised words inherited from a previous Semitic phase, but also incorporated many loans (*muʿarrab* or *daḥīla*) from Syriac, Aramaic, Greek, Latin and, of course, Persian. In many cases Aramaic was only a mediator between Persian and Arabic, so the absence of a Persian loan-word in other Semitic languages points to direct borrowing. These Persian loan-words came into Arabic directly from Middle Persian (MPers.) or *Pahlavī*, and probably from its spoken variant called *Darī*.

Hīra, the capital of the Lakhmids, played an important role in the earliest phase of lexical borrowings, since many of the greatest poets of the *Ġāhiliyya* went there to seek the help and patronage of its rulers: ʿAbīd b. al-Abrāṣ, Labīd and al-Nābiġa al-Dubayānī to name but a few. The most important poet in this respect was al-Aʿšā, a contemporary of the Prophet, who was famous for his fondness for using Persian words in his poems, including names of musical instruments, e.g. *ṣanġ* ‘cymbal; castanet’ (< MPers. *čang* ‘harp’) with its derivative *ṣannāġ* ‘cymbal player’; flowers, e.g. *yāsamin* ‘jasmine’ (< MPers. *yāsaman*); and other miscellaneous words, e.g. *šahanšāh* ‘ruler, king of kings’ (< MPers. *šāhānšāh*). Although some of these words subsequently fell into disuse, a good number of them have gained ground in Arabic and are in use to this day (for a list of Persian words in pre-Islamic poetry, see Āḍarnūš 1374/1995, 127–144). These borrowings did not exclusively affect poetry, but also found their way into the Qurʾān. When Muḥammad founded Islam, he even borrowed the very term for religion (*dīn* < MPers. *dēn*) from Persian. Furthermore, when he wished to amaze his followers by describing what pleasures await the righteous, he frequently had recourse to Persian terms. In general, Persian words tended to be borrowed by the Arabs for objects and concepts which their own language, despite its richness, lacked: for cultural and, to a lesser extent, religious and ethnic terms (for a list of such words, see Bosworth 1983, 610).

In this early period, some Arabic forms preserved the Middle Persian ending *-ag*, but in an Arabicized form, e.g. *tāzaġ* ‘fresh, new’ (< MPers. *tāzag*). The existence of this *-aġ* ending in Arabic words points to early borrowing, because Middle Persian *-ag* disappeared later in New Persian, where it became *-a*. Persian words borrowed by Arabic in the New Persian era took over this latter ending, cf. Ar. *barnāmaġ* ‘programme; index’ (< MPers. *war-nāmag* ‘head of a book’) and Ar. *rūznāma* ‘calendar, almanac’ (< NPers. *rōz-nāma* ‘journal, diary’). As early as in the 8th century, Sibawayh discussed in his *Kitāb* what changes occurred in Iranian words when they entered Arabic. He realised that these words were adapted to Arabic nominal morphology and that sounds that did not have equivalents in Arabic were replaced by sounds close to them in pronunciation, thus *g* by *ġ*, *k* or *q*, e.g. *ġāh* ‘high rank; prestige’ (< MPers. *gāh* ‘place, throne’), *kanz* ‘treasure’ (< MPers. *ganġ*), *ṭabaq* ‘plate, dish’ (< MPers. *tābag* ‘frying-pan’); and *p* by *b* or *f*, e.g. *fil* ‘elephant’ (< MPers. *pīl*). Another phenomenon

of the lexical adoption was the emphatization of certain consonants, e.g. *rawḍa* '(well-watered) garden or meadow' (< MPers. *rōd* 'river') (Bosworth 1983, 610; the etymology given by Asbaghi for this word is dubious, see Asbaghi 1988, 138).

3. Language contact in the Early Islamic Era

In the case of many Persian lexemes, however, it is not easy to determine whether they entered Arabic before Islam or in the early Islamic period. As a result of the Arab conquests, borrowings from the languages of the conquered peoples inevitably increased. After the fall of the Sasanian Empire, Middle Persian started to lose ground to Arabic, although for a short time it retained its original position as an administrative language. When 'Abd al-Malik (d. 87/705) introduced Arabic as the language of administration in his empire, the indigenous Persian aristocracy (*dihqān*) became integrated into the political and social fabric of Islam, and played an important role in setting up the government of the eastern Islamic provinces. In this way, many Iranian words were adopted in the field of statehood and military; notions that had antecedents in Sasanian Iran, but were alien to the desert Arabs, e.g. *dīwān* 'account books of the treasury; collection of poems' (< MPers. *dēwān* 'archive, collected writings'), *wazīr* 'vizier, minister' (< MPers. *wizīr* 'decision, judgement'). Arabic phonology was also slightly affected by Persian. A well known feature of this is the pronunciation of postvocalic alveolars as interdental, e.g. *bağdād* 'Baghdad', although later on these interdentals shifted to their corresponding plosives (Fischer 1982, 92).

In Persia, during the first centuries of Islam, Arabic remained the dominant language in administration, religion, theology, science and culture. In the everyday intercourse of the Iranian population, however, Arabic did not take root at all. Although literary Middle Persian became limited to use by the Zoroastrians and their literature, spoken Persian (*Darī*) remained a vernacular language in the new cities of the eastern Islamic empire. Yet, the cultural role of Persian was diminished by the dominant position of Arabic, and many Iranian scholars of the time became bilingual in Arabic/Persian or even switched to Arabic completely. Indeed, some of the most important scholars of Arabo-Islamic culture had Persian as their mother-tongue, such as the grammarians Sībawayh (d. 177/793), al-Fārisī (d. 377/987), and later al-Ġawālīqī (d. 540/1145), who compiled a dictionary on loanwords from Iranian and other languages in Arabic. Loans in spoken Arabic dialects seem to have been more abundant than in *al-Fuṣṣḥā*. Al-Ḥarīrī (d. 516/1122) already quoted in his *Durrat al-ğawwās fī awhām al-ḥawāṣṣ* the word *ham* 'also, too' (Fischer 1982, 93), which never made its way into literary Arabic (though the word has lived on to modern times, but its use is restricted to Iraq, *hamm*, see Woodhead/Beene 1967, 483; and the Gulf region, *ham*, see Holes 2001, 545). In these early centuries Arabic was also characterized by regionalism; the vernaculars of Iraq were subject to the influx of Iranian words to a greater extent than those of Syria. This can be attested in Classical Arabic poetry: Ġarīr (d. 110/728) and al-Farazdaq (d. 110/728) used more Iranian words in comparison with al-Aḥṭal (d. 92/710), who lived in Syria.

Another outcome of the Islamic conquests was the settlement of many Arab tribes in various parts of Iran. Due to their contact with the local population, it is probable

that the Arabic spoken in Iran had a huge impact on the Persian of the time, including the adoption of the Arabic script in the emerging New Persian language and the borrowing of a large amount of words.

4. The emergence of New Persian

In the eastern periphery of the Abbasid Caliphate, the Persian colloquial language (*Darī*) emerged in a new form in the middle of the 9th century, now to be called New Persian (NPers.). The weakening and the disintegration of the Caliphate must have played a significant role in this Iranian cultural renaissance. There was, however, absolutely no split from Islam or the Arabic language, and Arabic remained the main language for scholarly pursuits. New Persian could only fill niches that Arabic could not: local history writing, lyric and epic poetry. Even then, Persian was not a national language in the modern sense of the word; it was usually kings of Turkish origin in the courts of the newly independent Iranian dynasties (e.g. the Sāmānids in the 10th century) who preferred Persian to Arabic. Given the universal cultural power of Arabic, it was now this language that started to lend many of its words to enrich the vocabulary of the developing New Persian language. On the whole, the most influential source of loans into New Persian was Arabic. The earliest loanwords began to penetrate New Persian in the 9th–10th centuries (20–30%). This process must have taken place in a rather smooth fashion, as the phonological inventory of Early Classical Persian (the first phase of New Persian, 9th–12th centuries) was still close to that of Middle Persian and also very close to that of Classical Arabic (e.g. NPers. *mubārīz* ‘fighter’ < Ar. *mubārīz*).

4.1. Arabic elements in New Persian

Persian has never been inhospitable towards Arabic lexemes, which is manifested by the fact that by the turn of the 11th and 12th centuries the proportion of Arabic loans heavily increased (to ca. 50%). The majority of Arabic loans were already incorporated into New Persian by the late 12th century and have, until recently, showed a remarkable steadiness. But, as will be seen later, the impact of Arabic showed itself not only on the lexical level but also on the morphological and even syntactic level. After the fall of Baghdad in 1258, Arabic lost its foothold in the eastern provinces, thereby drawing the final border between Arabic and Persian. The Mongol Ilkhānids, who as non-Muslims were not dependent on Arabic, made Persian their language of education and administration. Despite the great loss they caused to Iran through their conquest, this period (13th–14th centuries, the starting point of the second phase of New Persian, called Classical Persian) is considered to be the climax of Persian literature. This is also the epoch when literary Persian was, probably in the most extreme way, immersed in Arabic. Writers of this era, such as Sa‘dī (d. 691/1292), not only inundated their works with Arabic elements, but even used Arabic morphology and semantics freely by coining new and innovative meanings to words, e.g. *ša‘qa* ‘lightning’ instead of the current Arabic/Persian *ša‘īqa*, and *baṭṭāl* ‘liar’ instead of its regular meaning ‘inactive, unemployed man’ (whereas the word for ‘liar’ in Arabic would be *mubṭil*).

4.2. Types of Arabic elements in New Persian

The linguistic influence of Arabic is most evidently detectable in the lexicon of Persian, and somewhat less so in phonology and morphosyntax (Perry 2005). The initial step in the adoption of Arabic lexemes was the adoption of the script itself. New Persian began to use a vaguely modified Arabic script; it had 32 letters, 28 were taken from Arabic and 4 new letters supplied with three dots were added to represent Persian phonemes. Because of the impact of Arabic loanwords, the phonological inventory of Early Classical Persian was augmented with new phonemes compared to Middle Persian. The most distinctive new phoneme is the glottal stop, which originated in two separate Arabic phonemes represented by the letters *hamza* and *ʿayn*.

As regards morphosyntax, some grammatical elements of Arabic were also transmitted into Persian, especially in nominal morphology. These include regular and broken plurals (*musāfir-īn* ‘passengers’ – the acc./gen. form is used instead of the nom. form –, *ihsās-āt* ‘emotions’, *nigāriš-āt* ‘writings’, *qurūn* ‘centuries’, supplemented with innovative Persian usages, e.g. *ḥawāla-ḡāt* ‘money orders’, *ʿarab-hā* ‘Arabs’); *idāfa*-structures (*bayt ul-māl* ‘treasury’, *dastūr ul-ʿamal* ‘prescription’); feminine gender and gender agreement (*quwwa-yi darrāka* ‘perceptive power’, *umarā-yi ḥawāṣṣ* ‘noble emirs’). A remarkable feature is the re-borrowing of words of Persian origin that had previously been adopted by Arabic and furnished there with a broken plural, e.g. MPers. *gōhr* ‘substance, essence; jewel’ > Ar. *ḡawhar*, pl. *ḡawāhir* > NPers. *ḡawhar* ‘substance, essence; acid’, NPers. *ḡawāhir* ‘jewel’, pl. *ḡawāhir-āt*; or MPers. *bōyestān* ‘flower garden’ > Ar. *bustān* ‘garden’, pl. *basātīn* > NPers. *bustān*, pl. *basātīn*. In the field of word-formation Persian shows ingenious methods based exclusively on Arabic patterns, on the one hand through derivation (*diḡālat* or *daḡālat* ‘interference’, together with the original Arabic form *mudāḡila*: *awlā-tar* ‘prior, superior’, *balʿ-īdan* ‘to swallow’, *aqall-an* with the *tanwīn*-ending meaning ‘at least’), and on the other hand, by forming compounds. The formation of compounds was one of the most developed means in New Persian of enlarging vocabulary with Arabic loans. Compounds can either be word-compounds (*waṭan-parast* ‘patriot’, *muwāfiqat-nāma* ‘letter of agreement, contract’, *ṣāhib-naẓar* ‘clear-sighted person’) or phrasal-compounds (*taṣmīm gir-iftan* ‘to decide’, *lā-ubālī-garī* ‘carelessness’, *ʿala l-ḡuṣṣ* ‘particularly’).

In the Arabic lexicon of the recipient Persian language certain other characteristics can be observed, such as phonetic changes (*maʿnī* ‘meaning’ < Ar. *maʿnā*, *madrisa* ‘school’ < Ar. *madrasa*, *ṣikl* ‘shape, form’ < Ar. *ṣakl*, where the Persian pronunciation may follow the Arabic dialectal form), semantic changes (*ṣuḡbat* ‘speech’ < Ar. *ṣuḡba* ‘companionship’, *kitābat* ‘writing’ and *kitāba* ‘inscription’ < Ar. *kitāba* ‘writing’), and occasional *imāla* in elevated style (*ḡiḡz* ‘ḡiḡz’).

5. Later developments in language contact

Persian words continued, although with much less intensity, to penetrate into Arabic in later centuries, e.g. *aḡūr* ‘stable’ (< NPers. *āḡur/āḡūr*) via Turkish in the Mamlūk era, or *qunbula* ‘bomb’ (< NPers. *ḡumpāra*) in Ottoman times (Fischer 1982, 152).

Modern Persian (the third phase of New Persian, from the 19th century onwards) is still deeply rooted in Arabic, since Arabic loanwords constitute more than 50% of its vocabulary, and in elevated styles (religious, scientific) they may exceed 80%. Even if the proportion of Arabic loans may fluctuate according to age, genre, social context or even idiolect, a Classical or a Modern Persian style entirely deprived of Arabic loans is almost impossible, despite intermittent linguistic purity and reawakening movements (*bāzgašt-i adabī*) over the centuries. In the modern era, no education in Persian is conducted in the Arabic-speaking world, whereas in Iran compulsory education in Arabic is part of the curriculum. Nonetheless, since Arabic is not taught as a living language, Iranians are unable to read Arabic texts, let alone to converse in Arabic, and may even find it difficult to understand the Arabic insertions in the Persian literary works.

6. Language contact in modern dialectal Arabic and Persian

This linguistic situation is more complicated due to the presence of an Arabic-speaking minority within the boundaries of Iran. How much of the population of present-day Iran is ethnically Arab and Arabic-speaking is hard to say, but it is estimated that 3% of Iran's 70 million citizens are Arabs, which would put the Arab population at approximately 2 million, of whom the majority live in Ḥūzistān (for other figures, see Oberling 1986, 216). Since the Sasanian era, this region has been extensively Arabized, so that until 1925 it was called 'Arabistān' but owing to the large-scale immigration of Persian families into the larger towns over the past decades, only the countryside is still mostly Arabic-speaking. Although the province is politically part of Iran, linguistically its Arab population forms a unit with the southern Mesopotamian area, more precisely with the Muslim *gilit*-dialects current among the sedentary and non-sedentary population of Southern Iraq. Similar to the wide range of Persian lexical elements in Iraqi Arabic (e.g. *parda* 'curtain' < NPers. *parda*), Ḥūzistānī Arabic is significantly influenced by Persian. The speech of the Ḥūzistānīs can most easily be distinguished from that of the neighbouring Iraqi townspeople by the great number of Persian words they employ, especially administrative terms (for a list of words, see Ingham 1997, 25). The use of these words generally occurs through code-mixing.

Ḥūzistān is not the only province inhabited by Arabs in Iran. In many corners of its vast territory small pockets of Arab communities can be found, such as in several districts of Ḥurāsān (Zīr Kūh, Sarāḥs) and the large Sunni Arab population along the coast of the Persian Gulf (for other areas with Arab tribes, see Oberling 1986, 215 ff.). The coastline stretching from Ābādān to approximately the town of Ġāsk has a distinctive Arab character due to its interrelation in an ethnic, commercial, cultural and linguistic sense with the territory of the present-day Arab Gulf states. As a result, dozens of Arabic words penetrated into the Persian dialects spoken on the Iranian side of the Gulf (generally technical terms of pearl-diving, fishing and traditional shipbuilding, e.g. *muḥār* 'shellfish, oysters' < Ar. *maḥār*, *miḥḥā* 'knife for opening clams' < Ar. **maḥḥā* 'tool for breaking something open'), just as a substantial number of Persian words became part of the Arabic dialects along the southern side (in Kuwait, parts of Saudi

Arabia, Baḥrain, Qatar, the UAE and Oman, e.g. *mēwa* ‘fruit’ (< NPers. *mīwa*), *dir-wāza* ‘gate’ (< NPers. *darwāza*). Both groups of lexical items underwent certain changes in order to meet the standards of the phonology of the host language.

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61. Language Contact between Arabic and Modern European Languages

1. Introduction
2. Influence of European languages on Arabic
3. Influence of Arabic on modern European languages
4. Conclusion
5. References

Abstract

Language contact between Arabic and modern European languages is a bidirectional process, which affects the lexicon and idiomatic phraseology of the standard language and the local dialects in the Arabic world, as well as the lexicon of virtually all European languages. Loan vocabulary can either be inherited (most prominently in Ibero-romance) or reflect neologisms in the wake of recent political events or the general impact of an internationalizing media and commerce language. This article will provide examples from both modern Standard Arabic and Arabic dialects (e.g., Cairene) on the Middle Eastern and North African side, as well as Germanic, Romance, and Slavic languages on the European side. Code switching phenomena in the language of migrants are another important factor in this context, not least in sub-standard varieties of several languages (notably French). This article will also highlight specific morpho-phonological, morpho-syntactic, and semantic factors that play a role in the process of borrowing on the lexicon and phrase levels.

1. Introduction

Linguistic contact between Arabic and modern European languages emerged as a result of several factors: (1) the Islamic conquests and their cultural imprint on the Iberian peninsula and Southern Italy; (2) the political and economic encounters in the Middle Ages in the Mediterranean region, resulting in the phenomenon of an – only indirectly attested – *lingua franca* comprising Romance, Slavic, and Arabic elements (cf. Foltys 1984 and Wansbrough 1996 for the time until ca. 1500); (3) the colonial activities of Great Britain, France, and Italy in the Middle East and Northern Africa; (4) the migration of Arabs from formerly colonised regions to European countries (mainly England and France); (5) the impact of the international media language on the lexicon and style in Arabic media (newspapers, satellite TV, internet) and the same phenomenon in the realm of other text genres, e.g., diplomatic language. In addition, this article will briefly consider the issue of Arabic loan vocabulary in South-Slavic, most, but not all of which, entered via Turkish. Not mentioned in this article are pidgin and creole phenomena as affecting the specific linguistic situation in Malta and on Cyprus (but see articles 61 and 65 in this handbook). Other wider issues going beyond

the scope of this article are the historical evidence of numerous *Kulturwörter* found in both Semitic and Indoeuropean (e.g. Hebrew *yayn* and Greek *oínos* ‘wine’), Semitic loan words in the Germanic languages (e.g., German *Sippe* ‘confederation of families’ from Hebrew *mišpāḥā* ‘family’), due to the fact that Carthaginians colonized the North Sea region between the 6th and 3rd centuries BC (cf. Vennemann 2003), and syntactic commonalities between Semitic and Celtic (cf. Gensler 1993), all of which points to earlier language contact (cf. in general Haugen 1950, Weinreich 1953, and Thomason & Kaufman 1988), but *not* common ancestry, as sometimes assumed within the so-called ‘Nostratic’ model. In the following, contact phenomena will be treated in a systematic way, not strictly according to the chronology of historical events in either the Arab world or in Europe.

2. Influence of European languages on Arabic

2.1. Modern Standard Arabic

2.1.1. Phonotactics and morpho-syntax

As other Semitic languages (cf. Bolozky 1999 for Israeli Hebrew), Arabic has always successfully managed to integrate foreign vocabulary in its root and pattern system. Two well-known classical examples inherited from Greek and Latin, respectively, are *ġins* ‘species, kind’ (from *génos* via Aramaic *gensā*) and *širāt* ‘path, street’ (from *strata*). A modern example is the noun *raskala* ‘recycling’, in which the English letters *r*, *c* [s], *c* [k], and *l* are mapped onto a canonical Arabic quadriliteral C₁aC₂C₃aC₄a pattern. Neologisms under European influence can also emerge on the basis of Semitic roots. The verb *’aslama*, for instance, functions in the meaning ‘to islamise’ as a quasi-quadriliteral verb (as opposed to form IV as in *’aslama* ‘to become a Muslim’), from which a passive-reflexive form *ta’aslama* ‘to be islamised’ can be derived.

Morpho-syntactic European influence can be observed in technical neologisms (cf. Ali 1987) involving (quasi-)prefixes or compounding, two features in principle not germane to Semitic. Nouns and adjectives such as *lā-nihā’īya* ‘infinity’, *lā-sāmīya* ‘antisemitism’, *ġanūb-’ifriqī* ‘South-African’, and *šibh-rasmī* ‘semi-official’ are cases in point (cf. Monteil 1960, 131–142; Blau 1981, 172–174; Badawi et al. 2004, 58f., 751f.). Blends as a phenomenon *per se*, on the other hand, have been attested across Semitic for a long time – cf. the Arabic technical term *naḥt* ‘[word] sculpture’ – and need not necessarily be attributed to European influence. The term *ra’smāl* ‘capital’, for instance, an annexation synchronically reanalysed as a compound, has a precursor already in Qur’ānic *ru’ūsū ’amwālī-kum* ‘your wealth’ (Q 2: 279). True neologisms include terms like *kahraṭas* ‘electro-magnetism’, deriving from the compounding of *kahrabā’* ‘electricity’ + *maġnāfīs* ‘magnet’. Appositional structures can equally be reanalysed as quasi-compounds, as can be observed in neologisms like *waṭanī-qawmī* ‘ethno-political’ or *iqtisādī-iġtimā’ī* ‘socio-economic’. Occasionally, even attributions can undergo such a process, as witnessed by the terms *al-farīq ’awwal* ‘the lieutenant-general’ (as opposed to expected *al-farīq al-’awwal*) and *’amīn ’āmm* ‘secretary-gen-

eral' in constructions like *'amīn 'āmm al-'umam al-muttaḥida* 'the Secretary-General of the United Nations' (as opposed to expected *'amīn al-'umam al-muttaḥida al-'āmm*) (cf. El-Ayoubi et al. 2001, 49 f.).

2.1.2. Lexicon

Besides the above-mentioned morphologically assimilated word type *raskala*, modern Arabic features a fair number of unassimilated forms (save for means of linear derivation, typically *nisba* endings). This holds for many Latin- or Greek-based terms like *bibliogrāfiyā* 'bibliography' or *tiknōqrāt* 'technocrat' (cf. Badawi et al. 2004, 742). Often, native forms preferred by language academies coexist with borrowed forms, a notable example pair being *hātif* 'invisible voice' and *tilifōn* 'telephone'. Regional factors play a role as well; thus, one finds French-based *'otél* 'hotel' and Turkish-based *lokanda* besides the native Arabic terms for 'hotel', *funduq* and *nazl* (cf. Badawi et al. 2004, 743).

In the course of loan processes the Standard Arabic phoneme inventory can, but need not adjust to the borrowed source words. Whereas *television* can be adapted as *tilivizyōn* or *tilifizyōn*, depending on the sociolinguistic register (cf. Atawneh 2007, 32), *police* is always rendered as *būlis* – unless the 'native' term *ṣurṭa* is used, in itself a loanword from Greek *chortes*/Latin *cohors*, as many Arabs feel disinclined (but are, of course, not unable in principle) to pronounce an unvoiced /p/. For orthographic processes in the course of lexical borrowing from English to Arabic cf. also Weninger 2001.

2.1.3. Phraseology and idiomatics

On the phrase level, many European-based *calques* can be found in Modern Standard Arabic. Examples include expressions like *ittaḥaḍa fī l-iftibār* 'to take into consideration' or *wuḍi'a fī l-isti'māl* 'fut mis en usage' (cf. Versteegh 2001, 184). Gully (1993, 43 ff.) counts the frequent use of auxiliary verbs like *tamma* – in connection with verbs referring to a momentary event – among the typical features of European-Arabic stylistic convergence, e.g., *tamma tawqī'u l-ittifāqīya* (instead of *wuqqi'ati l-ittifāqīya*) 'the treaty was signed'. The same holds for the *qāma bi-* construction, e.g., *qāma bi-ziyāra* instead of *zāra* 'he visited'. Werner Diem (personal communication) cautions, however, that the last two of these constructions may have been attested in Arabic literary style much longer than often assumed. In modern literature (cf. Newman 2002), journalism (cf. Ashtiany 1993), as well as political (cf. Issawi 1967 and Ayalon 1989) and diplomatic context in general, many phrases reflect English and/or French patterns, as, for instance, closing formulae in diplomatic letters à la *'antahizu hādīhi l-furṣata li-l-'i'rābi* 'an fā'iqi taqdīr-i 'I take this opportunity to express my highest esteem' (cf. Edzard 2006, 110).

On the nominal level, the borrowing of many idioms is even more obvious. Examples include *'umla ṣa'ba* 'hard currency', *suyūla naqdīya* 'cash flow', *naṣīb al-'asad* 'lion's share', *'āmil al-waqt* 'time factor', or even *qimmat ḡabal al-ḡalīd* 'the tip of the iceberg', the latter expression evidently being a non-Arabic concept (cf. Holes 2004, 46 f.).

2.2. Modern Arabic dialects

2.2.1. Phonotactics and morpho-syntax

Regarding the incorporation of foreign words one can observe a high degree of flexibility. Taking the Cairene Arabic dialect as an example, lower sociolects tend to observe indigenous noun patterns more closely in such processes, e.g., *garabuks* instead of *gir-buks* 'gear box' (cf. Woidich 2006, 110). In other instances, the rendition of foreign patterns seems to be almost arbitrary, as in *fulkis* ~ *filuks* ~ *fluks* 'Volkswagen' ('VW'). Looking beyond the phoneme inventory as well as the inventory of nominal forms in Arabic dialects, the comparison of the syllable structure in the source language and the target language is illuminating. Paradis & LaCharité (2007, 127 f.) illustrate this point with French loan words in Moroccan Arabic. The branching coda /tr/ in French, for instance, can either be maintained in (or better: be 'imported' into) the target language (*mètre* > [mitr]) or be broken up by an epenthetic schwa (*mètre* > [mitər]), in better harmony with universal preference laws for syllable structure. Alternatively, the final /r/ in the syllable coda can even be deleted, as in *arbitre* > [larbit] 'umpire'. (In the latter example, the French definite article is also reanalysed as part of the word stem, the opposite process in comparison with the historical adaptation of *Alexandria* as *al-ʿIskandarīya*.)

To a much higher degree than in Standard Arabic, foreign verbs can be incorporated in Arabic dialects and then are typically mapped onto the II. form or its quadriliteral counterpart, just as in Modern Hebrew (e.g., *tilfen* 'he rang on the phone'). This is entirely due to morphological convenience and completely independent of the semantics usually associated with form II. An illustration (cf. again Woidich 2006, 110) is found in the phrase *ik-kumbiyūtar bi-yhannig* 'the computer is down' ('is hanging').

The morpho-syntactic phenomena mentioned above (1.1.1.) seem to play a lesser role in the Arabic dialects, even though technical vocabulary is as readily borrowed in the dialects as in the standard language.

2.2.2. Lexicon

Due to the overwhelming presence of Western commercials and better accessibility of Western media in general, the spoken dialects display an enormous spectre of European (and, of course, American English) vocabulary. Synchronically, it is not easy to decide in each case, whether a neologism can already be classified as a 'loan word'. At any rate, English, French, and Italian loan words are abundant by now in word fields comprising, but not limited to technical items (e.g., *mubayl* 'cellular phone' < English *mobile*), clothing items (e.g., *balṭū* 'coat' < French *paletot*), or food items (e.g., *bitillu* 'veal' < Italian *vitello*). While the latter three terms coexist in Cairene Arabic, such linguistic coexistence is not necessarily found all over the Arab world. Rather, the former colonial history may be an important factor of choice in this respect. Thus, French loan vocabulary (e.g., *mayō* 'bathing suit' from *maillot*) is more likely to be found in North-African context (cf., e.g., Paradis & LaCharité 2007) as well as in Syria and Lebanon (cf. e.g., Behnstedt 1996), and traces of Italian loanwords (e.g., *kambiyu* '[money] change' from *cambio*) are typical of Egypt, Tunis, and Libya (cf., e.g., Abdu

1988; Baccouche 1994; Edzard 2003; and Cifoletti 2007b), but rather untypical of the Arabian peninsula. Popular food items, say, in the realm of Italian cuisine (e.g., *bitsa* from *pizza*), have no historical-political limits and thus may be found all over the Arab world.

2.2.3. Phraseology and idiomatics

Let it suffice here to give some examples of dialectal numeral phrases coined after European models. Examples include *ilbiritta ittis'a milli* 'the nine-millimetre Beretta' or *ilbižō lḥamsa rākib* 'the five-seat Peugeot'. In this context, it is noteworthy that loan words can neither take possessive suffixes nor be put in the plural, and thus are construed as mass terms, e.g., *wāhid filuks* 'one Volkswagen' and *talāta filuks* 'three Volkswagen' (cf. Woidich 2006, 221).

2.2.4. Code-switching phenomena

Code-switching phenomena can affect individual words as well as whole sentences within broader discourse, but can also occur within one and the same sentence. Arabic-English examples recorded in Egypt include *bas cancel-t-uh* 'but I cancelled it' and *ruḥt el library imbāriḥ wa checked books kūrī* 'I went to the library yesterday and checked many books'. Arabic-French examples recorded in Morocco include *tatbqa tatgratter* 'you keep scratching' and *xdām-t f-waḥad la société d'assurances* 'I worked in an insurance company' (cf. Mejdell 2006, 417 f. and, in general, Heath 1989, as well as the contributions in Youssi et al. (eds.) 2002). In all these cases, subcategorisation rules stipulate that the sentences start out with an Arabic word. In multicultural cities like Beirut, virtually any combination of Arabic, English, and French elements can be observed in commercial context.

3. Influence of Arabic on modern European languages

3.1. Lexical influence across European languages

3.1.1. Inherited loan vocabulary

Loan vocabulary inherited from Arabic permeates practically all European languages. This can be illustrated, for instance, with star names, e.g., *Acamar* < *'aḥīr an-nahr* 'end of the river', listed in astronomy as 'Theta Eridani' (cf. Kunitzsch & Smart 2006). The term *zenith* derives from Arabic *saṃt ar-ra's* 'direction of the head [towards the sky]'. Ubiquitous terms like *alcohol* (< *al-kuḥl* 'the powder for blackening eyelids'), *algebra* (< *al-ḡabr* 'the 'restoration' [of a negative value in an equation by setting it on the other side in the equation, e.g., $a - x = b \rightarrow a = b + x$ ']), or *lute* (< *al-'ūd*) hardly need mentioning (cf., e.g., Kaye 2007). In these and many other cases, especially in Ibero-Romance context (see 3.2.1), the Arabic definite article is reanalysed as an integral

part of the word stem. It also happens that an Arabic plural is adapted as a singular form, e.g., English *magazine* or French *magasin* from Arabic *maḥāzin*, plural of *maḥzan* ‘storehouse’. The Arabic origin of a loan word may not always be obvious at first glance, as for instance in German *Razzia* ‘police raid’, deriving (via Italian) from Arabic *ḡazwa* ‘military incursion’.

3.1.2. Recently borrowed loan vocabulary

Both the immigration of Arabs in Europe and recent political events in the Middle East account for a growing number of Arabic neologisms, some of which may be distorted phonologically, e.g., regularly *el-Ka’ida* instead of *al-Qā’ida* in German broadcasting. Semantically, some terms may take on a *par excellence* meaning. The term *fatwā* for instance – properly a legal expert opinion of a *mufī* – is often understood in the sense of ‘death *fatwā*’, as a result of the notorious Iranian *fatwā* against the author Salman Rushdie.

3.2. The situation in Ibero-Romance and Siculo-Italian

3.2.1. Ibero-Romance

Not least due to the relatively peaceful coexistence on the Iberian peninsula before the *Reconquista*, Ibero-Romance features by far the largest stock of Arabic loan words in European context (cf. in general Kontzi 1998 and Kiesler 2007). Besides person and place names (e.g., *Guadalquivir* < (al-)wādī al-kabīr ‘the big river’), an ‘acculturation’ process can be observed mainly in the realms of agriculture (e.g., *arroz* < *ar-ruzz* ‘the rice’, *aceite* < *az-zayt* ‘the (olive) oil’), household (e.g., *alcoba* ‘alcove’ < *al-qubba* ‘the cupola’), agent nouns (e.g., *alcalde* ‘mayor’ < *al-qāḍī* ‘the judge’ – this term also being a *cause célèbre* as a witness for the lateral quality of /q/ in earlier times), and (mathematical) science (e.g., *alcora* < *al-kura* ‘the sphere’).

Of special interest are syntagmatic *calques* à la *hijo de algo* ‘son of wealth’, which developed into *hidalgo* ‘noble man’ and which is based on Arabic quasi-compound models such as *ibn as-sabīl* ‘son of the way’, i.e. ‘wanderer’, or *ḡū l-‘ilm* ‘possessor of knowledge’, i.e. ‘savant’ (cf. Kiesler 2007, 286). Another comparable example is *dueño de la traición* ‘possessor of treason’, i.e. ‘traitor’.

Code-switching on the literary level was famous in the context of the Spanish *muwaššah* poetry, in which the *ḥarḡa* (Spanish *jarcha*; literally: ‘final one’) represented a colloquial Spanish refrain in the context of a poem written otherwise in Arabic (cf. Zwartjes 1997).

Conversely, Spanish substratal loan words were also attested in Andalusian Arabic, e.g., *kurniḥa* ‘crow’, deriving from Spanish *corneja* (cf. Corriente 1997, 2007). Historically, an originally Latin term could even enter Ibero-Romance via an Arabic detour. The Spanish term *baladí* ‘little’, for instance, derives from Arabic *balad* ‘place’ etc., which in turn is based upon Latin *palatium* ‘palace’.

3.2.2. (Siculo-)Italian

Just as in Ibero-Romance, Arabic has affected (Southern) Italian, including Sardinian vocabulary to a great extent in the realm of agriculture, as witnessed by terms like *carciofo* ‘artichoke’ (< Arabic *ḥaršūf*) or *cottone* ‘cotton’ (< Arabic *quṭn*) (cf. in general Pellegrini 1989). Agent nouns are attested as well, e.g., Sicilian *ràisi* ‘leader of a group of tuna fishermen’, deriving from Arabic *raʿīs* (via Maghribi *rāyīs*) ‘chef’ (cf. Kontzi 1998, 341 f. and Cifoletti 2007a, 455). Other terms are historically associated with commerce and trade, e.g. *fondaco* ‘a sort of accommodation for businessmen’, deriving from Arabic *funduq* ‘hotel’.

3.3. The situation in South-Slavic, especially Bosnian

Arabic loan words also play a role in Slavic, especially South-Slavic onomastics and the lexicon in general. The name of the Russian composer Rachmaninoff, for instance, contains the Arabic adjective *rahmān* ‘merciful’. A large number of Arabic loan words have entered the Bosnian variety of Bosnian-Croatian-Serbian (‘BCS’), largely through Turkish. Manuscripts, which feature BCS in Arabic script (‘Arebica’), were produced until the early 20th century (cf. Vajzović 1995 on ‘Alhamijado’ (< *al-ʿaḡamī* ‘the foreign = non-Arabic one’) literature in general). Based on the dictionary by Škaljić (6th ed. 1989), Muftić (2000) estimates that about 3800 out of ca. 6500 attested Turkish loan words are ultimately of Arabic origin. Most of these words reflect sound changes, such as *b > p*, which can already be observed in Turkish, e.g., *ʿaḡāʾib > adžaip* ‘miraculous things’. Another example, this time reflecting the sound change *w > v*, is *sawdāʾ > sevdah* ‘yearning love’ (the latter word is etymologically *not* related with the element *sev-* in Turkish *sevgi* ‘love’, etc.). Gemination of consonants tends to be reduced in BCS, as being apparent in the name *Abdulah* (< ‘*Abdallāh*’), but forms like *džennet* ‘paradise’ (< Arabic *ḡanna*) with preserved gemination are attested nevertheless.

Some phonological processes, like the loss of *h*, can be reversed. As a distinct linguistic-cultural feature, the syllable-final *h* in *kahva* ‘coffee’ (< *qahwa*), which has vanished in practically all loan words designating ‘coffee’, tends to be retained (or better: ‘reinstated’) in the Bosnian variety of BCS, a process called ‘chiisation’ (cf. also Bosnian *lahko* as opposed to BCS *lako* ‘easy’). An /h/ may also be audible in the Bosnian term *sahat* ~ *sat* (< Arabic *sāʿa* ‘watch’), which can be used next to BCS *časovnik* ‘watch’ (cf. also Bosnian *sahadžija* vs. BCS *časovničar* ‘watchmaker’). An Arabic-style pronunciation with preservation of the glottal stop is maintained at times, for instance in the name *Fuʿad* (< *Fuʿād* ‘heart’), which otherwise would wind up as *Fuad* (cf. in general Muftić 2000).

In recent times, some additional religious-political terms have entered the Bosnian variety of BCS directly from Arabic, just as happened in other European languages.

3.4. The language of Arab migrants

Reliable data on the language of Arabic migrants are only emerging at this point. Besides individual lexical items, syntactic features may be copied onto the target lan-

guage. The following example concerns the use of the anaphoric pronoun (*‘ā’id*) in relative clauses, e.g., *the film that I have seen it*, reflecting *al-filmu alladī ra’aytu-hū*. Code-switching phenomena have also been reported in this respect. A recent example reflecting Moroccan Arabic-Dutch language contact (recorded in the Netherlands) is the following interrogative sentence: *škun ġadi y-dir-hom controler-en* (who FUT 3-do-3PL supervise-INF) ‘who is going to supervise them’ (cf. Boumans 1998, 231, quoted in de Ruiter 2007, 77). In principle, one can also expect ‘foreigner talk’ phenomena in this context.

3.5. Case study: Arabic words in French *argot*

In the wake of former colonialism, mainly in Algeria, French *argot* (‘slang’) has adopted a large number of Arabic loan words, increasingly present now in French suburbia (cf. Colin et al. 1997). (Intermediary Maghribi forms are ignored here in the following derivations.) Many such terms have a pejorative connotation, e.g., *bled* ‘place far away from anything interesting’ (< *balad* ‘country, town, place’), *souk* ‘disorder’ (< *sūq* ‘market’), *miskin/mesquin* ‘poor’ (< *miskīn* ‘poor’) and, notably, *crouille* (< dialectal *‘aḥū-ya* ‘my brother’), a term for ‘Arabs’ themselves. Other terms are semantically neutral or even positively connotated, e.g., *toubib* ‘(medical) doctor’ (< *ṭabīb* ‘doctor’), *flouze* ‘money’ (< *fulūs* ‘money’) or *kif* ‘drug’ (usually ‘marijuana’) (< *kayf* ‘well-being’), from which the verb *kiffer* ‘to love, adore’ derives (but not: ‘to smoke marijuana’, as in German *kiffen*). Even more ‘down to earth’ is the verb *niquer* ‘to have sex’, deriving from the imperfect form *yanīku* of Arabic *nāka* ‘to have sex’, or, according to other sources, from *nakaḥa*, *yankiḥu* ‘to marry’ (‘to consummate marriage’). Individual imperative forms are attested as well in *argot*, notably *chouf* ‘see!’ (< dialectal *šūf* ‘see!’) in an exclamatory sense.

Arabic prepositional phrases can wind up in *argot* as grammaticalised (de-semantised) adverbs, e.g., *bézeḥ* ‘very much’ (< *bi-s-sayf* ‘with the sword’) or *fissa* ‘at once’ (< *fī s-sā’a* ‘within the hour’).

4. Conclusion

The creation of loan words and loan translations (*calques*) in both directions, as well as code-switching phenomena, continue to be productive processes that reflect steadily increasing cultural and political links between the Arabic world and European countries. All these observations point to the importance of the concept of linguistic convergence as an explanatory model which complements the fundamental tenets of genetic linguistics (cf. Thomason & Kaufman 1988).

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62. Maltese as a National Language

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Abstract

'Arabic Dialects and Maltese' is the name of an important work on Arabic dialectology (Kaye/Rosenhouse 1998) which obviously makes a statement about the relationship of Maltese to Arabic. The Arabs came to Byzantine Malta around 870 A.D., bringing with them the Arabic language. Despite subsequent historical, political, social and linguistic developments, Maltese still retains much that is clearly derived from Arabic. This article presents the processes that led to the emerging perception of Maltese as a language in its own right and its eventual definition in 1934 as an official language of Malta, along with English. This was followed by the Independence Constitution of 1964, according Maltese national status. The process culminated in Malta's accession treaty with the European Union in 2003, in which Maltese was recognised as one of the official languages of the EU.

1. Malta before the Arabs

The geographical position at the centre of the Mediterranean has exposed the Maltese Islands to most of the political and cultural upheavals in the history of this region. The islands are situated 96 kilometres from the tip of Southern Sicily and 288 kilometres from the nearest point in Tunisia. Malta, the larger of the islands in the archipelago, has an area of 246 sq. km, while Gozo, the second largest, is 67 sq. km (Azzopardi 1995). People have been present on the islands since around 5000 B.C., when Neolithic farmers crossed over from Sicily and started farming the land, eventually building magnificent megalithic monuments which are the earliest free-standing structures in the world, ante-dating the earliest surviving pyramids of Egypt by a millennium. These early inhabitants were eventually followed by a Bronze Age people around 2500 B.C. (Trump 2002). The Phoenicians arrived on the islands sometime in the eighth century B.C., their rule eventually giving way to that of Carthage in the Punic period. Malta passed under the Romans in 210 B.C., forming part of the Roman province of Sicily

(Bonanno 2005). In his narrative of the shipwreck in Malta of the Apostle Paul in 60 A.D., St Luke calls the inhabitants who offered their help and hospitality *barbaroi* (Acts of the Apostles, chapters 27, 28). In this context, the term implies that they spoke neither Greek nor Latin: with great probability they spoke some form of neo-Punic. The third century witnessed a period of disruption and upheaval, and Malta was probably occupied by the Vandals and later by the Ostrogoths, until the Byzantines took control in 535 A.D. (Bonanno 2005).

2. The Arabs in Malta

The Arabs took Malta around 869 or 870 A.D., although the date 870–1 is given for the Muslims of Sicily who came to the relief of Malta, then besieged by the Byzantines (Wettinger 1984). According to al-Ḥimyarī (Brincat 1991a, 1995) Malta was left by the Arabs as an uninhabited ruin for about 180 years, after which they re-settled it and rebuilt its city. However a literal interpretation of this text has been contested by Dalli (2002b, 2006). Moreover, some recent archaeological (ceramic) evidence has come to light which points to some trading activity between Malta and the Central Mediterranean and to the occupation of the old city of Mdina in the late 10th and 11th centuries (Molinari/Cutajar 1999). A Byzantine attack in 1053/4 was successfully repulsed, after the Arabs, realising they were outnumbered by their slaves, offered them favourable terms if they agreed to fight with them against the Byzantines. The Arabs who invaded and occupied Sicily in the 9th century probably also invaded and occupied Malta, and the two communities would eventually have achieved a high degree of homogeneity, reflected also in the language and personal nomenclature (Wettinger 1979; Fiorini 1988). Although Maltese displays undisputable Western Arabic traits, it also has a set of features attested in the Levant. The interpretation of this phenomenon is not at all clear (Borg, Alexander 1994; Borg, Albert/Mifsud 2002).

3. Initial contacts with Romance languages

When Count Roger the Norman attacked Malta in 1091, he found an established Muslim community which submitted to his sovereignty and agreed to pay him a large indemnity and annual tribute. The need for a reconquest of the islands by Roger II in 1127 (Dalli 2002a), implies a vigorous Muslim presence. In fact some of the surviving Arabic (funerary) inscriptions are from the Norman period (Rossi 1931). The reconquest would have led to a strengthened Norman presence in Malta and there is evidence for organised Christian communities in the islands before the death of Roger II in 1154, pointing to the existence of a pluricultural society (Fiorini/Vella 2006, Busuttil/Fiorini/Vella 2010). At the same time, Maltese Arab poets dedicated verses in Arabic to the Norman kings and a North European traveller could, at about 1175, record his perception of Malta as ‘inhabited by Saracens’. The inscriptions, poems and a reference to a document from 1198 as containing Arabic writing show that as expected, Classical Arabic was used at this time alongside the vernacular in a typical diglossic mode (Wettinger 1993).

4. The expulsion of the Muslims

William II, who had succeeded his father Roger II, died in 1189. The Hohenstaufen Emperor Henry VI claimed Sicily through the inheritance of his wife Constance, daughter of Roger II, but was challenged by Tancred, with Sicilian and South Italian support. Henry prevailed in 1194 but died in 1197 and was succeeded by his son Frederick II, who created a centralised Sicilian state (Dalli 2002b). From an administrative report drawn up in 1240 by Giliberto Abate for the Hohenstaufen Frederick II, it seems the islands still had a large Muslim community at this time. According to Ibn Ḥaldūn, in 1249 Frederick sent the Maltese Muslims, together with those of Sicily, into exile to Lucera in Italy, following a Muslim rebellion in Western Sicily. The disappearance of Islam from the Maltese islands did not happen overnight. The expulsion applied to 'Muslims' (a religious denomination) not to 'Arabs' or 'Moors' (ethnic groups). In all probability all the Muslims had to do to avoid exile was to convert to Christianity, especially if they had property to lose. Thus a sizeable section of the population would probably have stayed behind both in Malta and in Gozo, but as Christians (Wettinger 1984). Conversion, however, would have entailed the loss of diglossia with the suppression of Classical Arabic (Wettinger 1993, Kaye/Rosenhouse 1998) as a conservative and standardising factor: this change would have facilitated the gradual emergence of 'Maltese' from 'Maltese Arabic'. Newly fashionable Romance linguistic models accompanying cultural developments would have served, at least initially, as a bountiful source for uninhibited linguistic borrowing among the higher classes of society, and Latin and Old Sicilian would have taken over 'High' functions (Mifsud/Borg, Albert 1994).

5. Angevin and Aragonese rule

Frederick II died in 1250 and was succeeded by his son Conrad, who died in 1254, leaving an infant son. Manfred, the illegitimate son of Frederick II, was crowned king in Palermo in 1258, and by 1260 he had consolidated his power in Italy. In 1263 Pope Urban IV chose Charles of Anjou, the brother of Louis IX, King of France, to oppose Manfred who was killed in battle in 1266. Conrad's young heir was executed in 1268, leading to Angevin rule in Sicily and Malta, based in Naples. The Angevins took the local administration of the islands and their defence quite seriously, and during this time there were new arrivals: officials, soldiers and servants from Sicily, Naples and Provence; sailors and merchants from Genoa and other parts of Italy. After the Sicilian Vespers in 1282 and a naval battle in Maltese waters between the Aragonese and Angevin fleets in 1283, in which the former were victorious, Malta passed to Aragonese rule. The islands were intermittently governed by the crown or by feudal lords. Catalan merchants could now compete with Genoese and Pisan commercial interests. Maltese cotton found its way to Sicily and Genoa, while wheat was imported from Sicily. The foreign administrators, soldiers and clergy would have tended to keep to the only three urbanised centres in the islands (Mdina, the old capital; Birgu, originally a small village inhabited by the families of soldiers guarding the fort in the main harbour; and the fortified citadel in Gozo). It must have been here that Maltese Arabic, and later Mal-

tese would have been exposed to linguistic influences from Romance languages, and it would have been here too that the basis for the Sicilian superstratum in Maltese would have slowly been laid down (Brincat 1991b). The rest of the population lived in the surrounding countryside, and here, among the peasantry clinging to its land, the Arabic element would have been stronger. While leading ecclesiastics were often foreigners, many priests were of local birth and they may have used the church to protect the indigenous population's ancient non-written Muslim customs and its 'Arab' speech and culture. This hypothesis is borne out by the various attempts made around the late 15th and early 16th centuries to exclude foreigners from Maltese benefices and to insist that the clergy be able to speak Maltese (Luttrell 1991). In the mid-fourteenth century a German cleric on his way to the Holy Land could still describe the islands' inhabitants as 'Saracens', referring not to their faith but to their language and culture (Dalli 2002b). At the same time, exposure to foreigners and their speech led to a growing awareness by the inhabitants that their own speech had a different and definable identity. Notarial documents yield expressions such as '*appellatus in lingua maltensi*' (1436), '*vocatur in lingua maltisi*' (1500), '*ut maltensi lingua dicimus*' (1521), etc. (Wettinger 1993). Furthermore, a 20-line text in Latin script, expressly described as 'a poem in Maltese', whose author died in 1485, survives in a copy from 1533. To date this is the earliest known continuous text in Maltese (Wettinger/Fsadni 1968, 1983).

6. The Knights Hospitaller of St. John

In 1530 the Spanish Emperor Charles V ceded Malta to the Knights Hospitaller of St. John, who had been expelled from Rhodes by the Ottoman Emperor Suleiman the Magnificent. A sizeable group of Rhodians who had left with the Order settled in Malta with the Knights. To no avail did the Maltese nobility in the old capital Mdina make representations about Malta's ancient right to be governed directly by the Crown. On the other hand, the humbler folk who were concentrated in the town of Birgu, next to the Castle protecting the harbour, saw this as an opportunity for employment (Grima 2001). The Knights came from the noble families of Europe along with their retinues, and Malta eventually became a cosmopolitan centre, especially after the victory over the Ottomans in the Great Siege of 1565, when the Knights finally realised the islands' potential, and money poured in from all over Europe for the building of a new impregnable fortress city, Valletta. The harbour area with the Three Cities and Valletta would have teemed with activity, with labour coming in both from abroad and from the local countryside.

7. Contact between locals and foreigners

Cultural and linguistic contact between speakers of Maltese and the foreign population would have multiplied beyond comparison to what it had been before the advent of the Order. Italian was established as the cultural 'High' language of Malta and was regularly spoken (and written) by the Maltese who had ambitions for social advancement. Maltese, on the other hand, was regarded merely as a local dialect. As early as

1557, however, contemporaries noticed that the Maltese were mixing Italian and Maltese. It should be noted that at this time, Maltese was in general only spoken and the elite would have written in Italian. This language remained entrenched among the cultural elite throughout the 17th, 18th and 19th centuries, accentuating the divide between the elite and the illiterate peasant population. Contemporary reports from the end of the 17th century, for instance, mention the widespread use of European Romance languages in the harbour area (Italian, French and Spanish), although the Maltese still spoke Maltese among themselves. Indeed, a visitor writing in the middle of the 18th century remarked that the natives spoke Maltese among themselves in front of foreigners so as not to be understood. Maltese was to become a literary language only much later when, in the first half of the 20th century, it began to detach itself culturally from the Italian mainland (C. Cassar 2001).

This situation of social contact, forming the basis for the progressive Latinization of Maltese, is borne out by intermarriages between Maltese females and foreign males (with the majority coming from Sicily and Italy), surnames, illegitimate births (where in many cases a Knight appears as ‘godfather’) and commuting between the harbour cities and the countryside for market purposes. Finding themselves in this new milieu, Maltese speakers would have experienced social pressure to suppress, at least in public, certain characteristics of their (originally) rural speech, including certain speech sounds (harking back to Arabic) which were felt to be particularly marked with respect to the foreigner’s speech, and to adopt (and adapt) lexical and grammatical items and turns of phrase reflecting new cultural realities. Thus G. A. Vassallo and L. Mifsud Tommasi, two major Maltese Romantic poets writing in the mid-nineteenth century, admit that they omit ‘aspirated’ and some ‘guttural’ sounds to avoid a certain ‘harshness’ in their verses (Pullicino 1853). In a similar vein, A.F. Ash-Shidyaq, who resided in Malta in the first half of the nineteenth century, recounts that when country people interacted with people from the capital Valletta, they used to merge the voiced velar fricative with the voiced pharyngeal fricative and the unvoiced velar fricative with the unvoiced pharyngeal fricative (F. X. Cassar 1985). Through contact with these speakers’ extended families back in their respective villages, such changes would have eventually reached other sections of society. Since such speech would have been particularly marked as more properly belonging to the city milieu, this would have led to the development of a new diglossia, based on two varieties of Maltese, as speakers would have retained their ‘native’ way of speaking for interaction at home in their villages (Brincat 1991b). This situation was to crystallize later with the recognition of a ‘Standard’ variety of Maltese based on this ‘city speech’ and which would eventually be given written form; correspondingly all other varieties of Maltese retained their dialect status and remained unwritten (Borg, Albert 1988). European travellers visiting Malta sometimes left their impressions of the language in travel journals or published word lists, the earliest one being published in 1603. Western interest in Maltese led to the writing of grammars both by foreign and Maltese scholars. The earliest extant unpublished grammar and dictionary goes back to the 17th century (Cassola 2000) while the first published grammar appeared in 1750. The first published dictionary is Vassalli 1796.

8. Maltese as a national language

Mikiel Anton Vassalli (1764–1829) was the most prominent intellectual to conceptualise a ‘Maltese nationality’ and the idea of Maltese as a dignified ‘national language’

(Cassola 2000). He considered Malta to be a spiritual and physical organism, the centre of interests wherein individuality is acquired through the recognition of a national tradition, history, culture, and, above all, language. Thanks to him a well-formed vision of a national language made its appearance, based on the concept that Maltese could perform the role of both an official language of the state and a medium for literature (C. Cassar 2001). Vassalli distinguishes broadly five 'dialect' areas for Maltese, based largely on geographical considerations, and roundly condemns the 'corrupt' speech of the harbour cities. Vassalli was an outstanding scholar who, for his far-sighted vision for Maltese as a vehicle for the education and the cultural and political emancipation of his fellow countrymen, whom he addresses as 'fellow citizens' of 'the Maltese nation', is considered 'the father of the Maltese language' (Vassalli 1796). Later Maltese writers were to see him not only as an isolated scholar, completely misunderstood or utterly ignored in his own time, but also as a symbol of national awareness which was to animate the people in their fight for independence (Friggieri 1988).

9. The French and British in Malta

With the passing of time the Order's rule became increasingly more autocratic and the 17th and 18th centuries saw several expressions of discontent and protest against it, occasioned mainly by the imposition of unpopular fiscal measures and the progressive erosion of the people's ancient rights. In 1798 when Napoleon called at Malta with his fleet on the way to Egypt, the French encountered practically no resistance, in particular because many of the French Knights had been conspiring secretly with French revolutionary agents. The Order's rule came to an abrupt end. The Maltese, however, soon found that the French promise to have their rights, culture and religion respected was a vain one, and this led to a popular revolt against them. The French shut themselves up within the defences of Valletta and the Maltese organised themselves into a national resistance movement with a provisional revolutionary government known as the National Assembly (later transformed into a National Congress with democratically elected leaders), but also with conspiring patriots inside Valletta paying with their lives for their aspirations. By 1799 the people had agreed to place themselves under British protection.

When the blockade was lifted in 1800 and the French departed, the Maltese leaders found themselves sidestepped by a British administration vested with full executive powers in the context of the perception by London of Malta's strategic role in British interests – a role incompatible with the recognition of popular sovereignty. This two-fold experience of betrayal helped in moulding a new awareness of a national identity in line with what was happening in Europe at the time, encouraged also by the presence of a considerable number of Italian exiles fighting for Unification (Mallia-Milanes 1988, Frendo 1994). Aspirations to nationhood were also fed by the liberalisation of the press (1839), which saw the introduction of newspapers in Italian, English and Maltese. Alongside the political discourse, there developed a Maltese literary production centred on the theme of nationhood, a concept to be defined and expressed in the Romantic terms typical of the time. This vision included a historical and cultural

evaluation of the ancient identity of the island, essentially composed of the religious tradition, the heroic events of the remote past, the enchanting beauty of the countryside, the moral and physical virtues of the Maltese (especially the village woman), and the Maltese language as the most distinctive feature of the national community (Friggieri 1988).

With the opening of the Suez Canal in 1869 Malta assumed an even more crucial strategic role for the British, who were intent on safeguarding the route to India, and correspondingly their government made further inroads into the civil liberties of the Maltese (C. Cassar 2001). The closing decades of the 19th century saw systematic attempts by the colonial administration to anglicise Maltese society, involving chiefly the promotion of English at the expense of the centuries-old role of Italian in Maltese daily life. The bitter feud between the social forces supporting English and those in favour of retaining the traditional role of Italian spilled over into the first three decades of the 20th century and became known as the highly divisive ‘Language Question’. A somewhat unexpected by-product of this struggle was the recognition of the role of Maltese, initially through its exploitation by the ‘British’ camp as an argument against Italian: its Semitic roots were by now acknowledged and it could not easily be dismissed as just another local dialect along with other dialects on the Italian mainland in contradistinction with literary Italian. Furthermore, when early Maltese Romantics chose to write in Maltese, they showed once and for all that the people’s language could also serve as a literary medium. In addition, Maltese was also instrumentalised for its ‘usefulness’ for the teaching and learning of English with a view to the advancement of the Maltese, given their position within the British Empire, including the possibility of emigration. In 1931 the present writing system for Maltese was officially recognised, and in 1934 English and Maltese were recognised as official languages, while Italian lost its official status (Frendo 1992). The process of anglicisation was sealed with the outcome of the Second World War and English became ever more important in Maltese society, replacing Italian in practically all its ‘High’ functions and sharing some of these with Maltese which, in addition to fulfilling ‘Low’ functions, became ever more present also in the written medium in public life.

10. Independence and after

The Independence Constitution of 1964 recognizes Maltese as the national language of Malta, while it shares with English its status as an official language. The status of Maltese continues to be enhanced not only through a considerable literary production (poetry, prose and drama), with a steady increase in publications, but also through its presence in the media (newspapers, radio and television) and through its expanding use for official purposes. The accession of Malta to the European Union bestowed a new prestige on Maltese, since it is now one of the official languages of the Union. This new status has also had far reaching practical effects on the further growth of the language, since the mandatory translation into Maltese of all official EU documentation is serving to develop new registers (especially those for technical domains) and to expand existing ones.

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63. Ancient South Arabian

1. Introduction
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Abstract

There are four Semitic languages which are subsumed under the term Ancient South Arabian (ASA): Sabaic, Minaic, Qatabanic, and Ḥaḍramitic. These languages were spoken and written in South Arabia (present-day Yemen) between the early 1st millennium BC and the 6th century AD. The particular script which all of them have in common cannot obscure the fact that these languages are quite distinct from each other. The following survey will concentrate on Sabaic as the best documented of the four languages, but also present all relevant features and differences of the three other ASA languages.

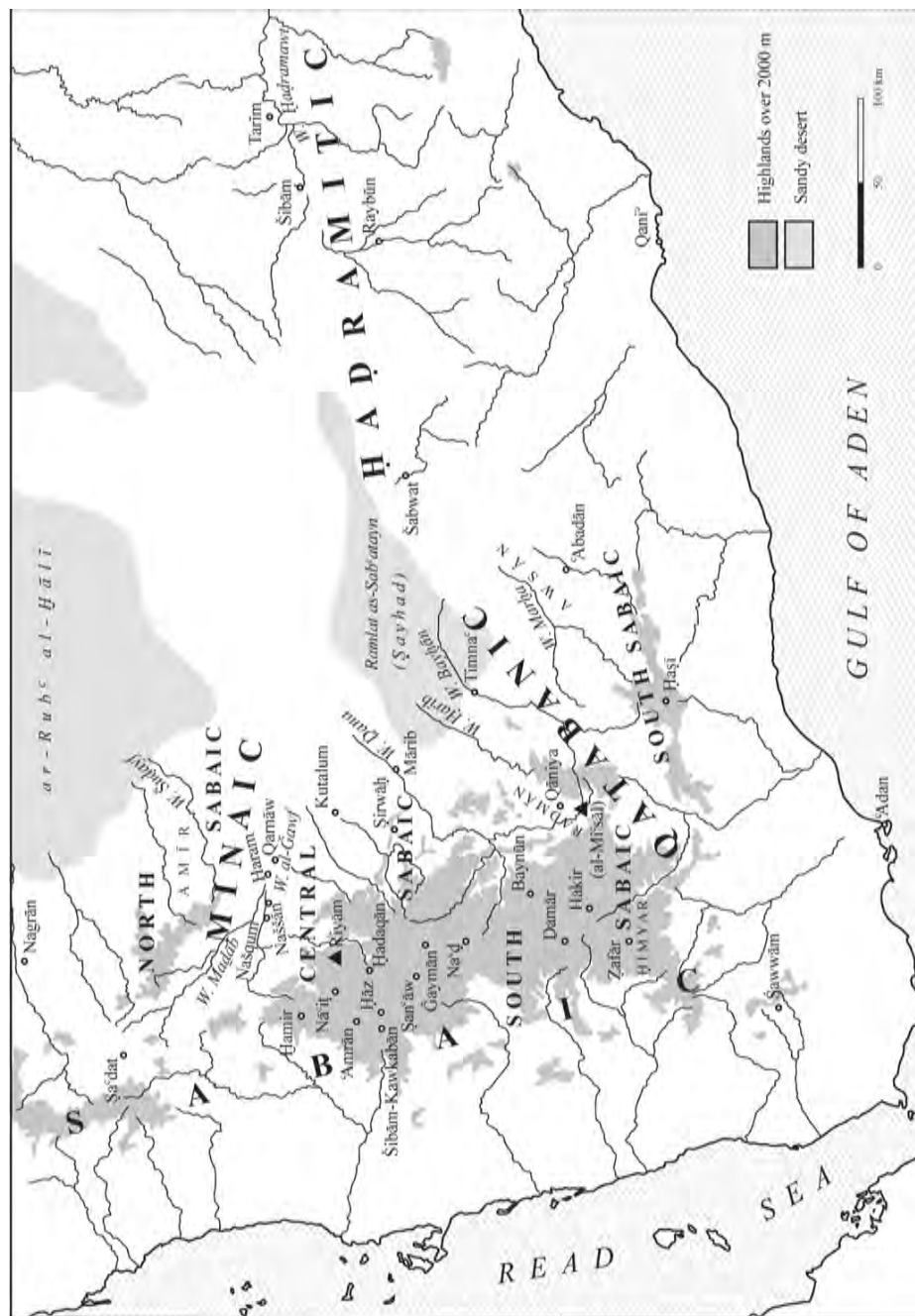
1. Introduction

1.1. Historical and geographical setting, terminology

Ancient South Arabian (henceforth ASA) is a collective term for four different idioms (Sabaic, Minaic, Qatabanic, and Ḥaḍramitic, see 2.1.) which were spoken and written in Southwest Arabia at least from the early 1st millennium BC until the rise of Islam. Sometimes the terms *Old South Arabian* (OSA) or *Epigraphic South Arabian* (ESA) are used instead. As a fourth term, *Ṣayḥadic* had been introduced by A.F.L. Beeston, referring to the desert called Ṣayḥad, at the fringes of which the Ancient South Arabian cultures emerged. Epigraphic documentation of the ASA languages is concentrated in the area of present-day Yemen and southern Saudi Arabia (Najrān). Minaic inscriptions, however, are found also in Northwest Arabia and beyond (see 2.1.).

1.2. Character of sources and script

Our knowledge of ASA is almost entirely based on epigraphy. Only traces of a pre-Islamic idiom have survived in the modern Arabic dialects of Yemen. Descriptions of a pre-Islamic language of Yemen (called ‘Ḥimyaritic’) are handed down by medieval Arab scholars, namely al-Ḥamdānī (10th century AD, see Robin 2007). The character



of this medieval 'Himyaritic', however, is under dispute. One opinion considers it as a separate, non-ASA ('non-Ṣayhadic') language (thus most recently Robin *op.cit.*), another as the consequent development of the latest epigraphic Sabaic (see Stein 2008).

As for the epigraphic sources, we can distinguish two main types. The first one comprises the so-called *monumental*, or *musnad*, inscriptions. These texts are written on rock surfaces and stone blocks, and only rarely on metal, first of all on bronze tablets cast in relief. More than 10,000 inscriptions of these kinds have so far been published. However, the bulk of these consist of name graffiti and other short texts and fragments, which provide not much material for a linguistic analysis. More elaborated texts add up to less than 3000. Out of them, the vast majority is formed by dedicatory inscriptions (about 1500 texts), followed by building inscriptions (800). Much less represented are legal texts, commemorative inscriptions and others. Despite the restricted formulae of these genres, there are many, and often quite long, narrative passages found especially in the dedicatory inscriptions (the longest ASA inscription is the dedicatory text J 576+577 with more than 1300 word units).

The second type of ASA scriptures are wooden sticks and palm-leaf stalks which are inscribed with a special script, called *minuscule* or *zabūr*. This minuscule script, originally resembling the characters of the monumental inscriptions, developed into a merely cursive ductus from the first half of the 1st millennium BC. At the end of this development, the characters of this cursive script show almost no similarities to their equivalents in the contemporary monumental script (see the palaeographic chart, Fig. 63.1). This cheap and handy writing material was used for everyday purposes. Among these texts we find legal deeds, instructions, and settlements relating to business and trade, as well as letters on commerce and private matters, writing exercises, and notes from the cult practice. About 240 of these inscriptions have so far been published, including a corpus of 205 Sabaic texts from the Middle and Late Sabaic times (Stein 2010).

2. Classification of Ancient South Arabian

Since Voigt 1987, the traditional integration of the ASA languages within South Semitic is given up in favour of a Central Semitic classification. This widely accepted classification was based, however, on the assumption of a more or less homogeneous ASA language, without greater differences between the several subgroups. In the meantime, this uniform picture of ASA has become shaky due to the discovery of more distinct patterns within the different idioms and dialects.

In recent years, discussion on the linguistic classification of ASA tends to include socio-cultural, historical, and archaeological aspects since it is closely connected with the question of the origin of the Ancient South Arabian culture in general. In terms of grammatical aspects, the existence of remarkable links to the Northwest Semitic languages is beyond doubt, and also the ASA script seems to originate from the proto-Canaanite alphabet (Hayajneh/Tropper 1997). In interpreting these facts, opinions range between assuming an immigration of proto-South Arabians from the Levant in the late 2nd millennium BC (Nebes 2001, cf. also Stein 2003, 5) and the scenery of a close linguistic continuum in the whole area from the Mediterranean to Southwest

	ESab	MSab	LSab		ESab	MSab	LSab
h	𐩦 𐩧	𐩨 𐩩	𐩪 𐩫	ś	𐩬 𐩭	𐩮 𐩯	𐩰 𐩱
l	𐩲 𐩳	𐩴 𐩵	𐩶 𐩷	f	𐩸 𐩹	𐩺 𐩻	𐩽 𐩾
h	𐩿 𐱀	𐱁 𐱂	𐱃 𐱄	i	𐱅 𐱆	𐱇 𐱈	𐱉 𐱊
m	𐱋 𐱌	𐱍 𐱎	𐱏 𐱐	e	𐱑 𐱒	𐱓 𐱔	𐱕 𐱖
q	𐱗 𐱘	𐱙 𐱚	𐱛 𐱜	d	𐱝 𐱞	𐱟 𐱠	𐱡 𐱢
w	𐱣 𐱤	𐱥 𐱦	𐱧 𐱨	g	𐱩 𐱪	𐱫 𐱬	𐱭 𐱮
ś	𐱯 𐱰	𐱱 𐱲	𐱳 𐱴	d	𐱵 𐱶	𐱷 𐱸	𐱹 𐱺
r	𐱻 𐱼	𐱽 𐱾	𐱿 𐲀	ḡ	𐲁 𐲂	𐲃 𐲄	𐲅 𐲆
b	𐲇 𐲈	𐲉 𐲊	𐲋 𐲌	t	𐲍 𐲎	𐲏 𐲐	𐲑 𐲒
t	𐲓 𐲔	𐲕 𐲖	𐲗 𐲘	z	𐲙 𐲚	𐲛 𐲜	𐲝 𐲞
s	𐲟 𐲠	𐲡 𐲢	𐲣 𐲤	d	𐲥 𐲦	𐲧 𐲨	𐲩 𐲪
k	𐲫 𐲬	𐲭 𐲮	𐲯 𐲰	y	𐲱 𐲲	𐲳 𐲴	𐲵 𐲶
n	𐲷 𐲸	𐲹 𐲺	𐲻 𐲼	t	𐲽 𐲾	𐲿 𐳀	𐳁 𐳂
h	𐲿 𐳀	𐳁 𐳂	𐳃 𐳄	z	𐳅 𐳆	𐳇 𐳈	𐳉 𐳊
ś	𐳋 𐳌	𐳍 𐳎	𐳏 𐳐				

Fig. 63.1: Development of the ASA script from ESab (left) via MSab towards LSab (right)

Arabia already in the early 2nd millennium and even beyond (Mazzini 2005; Avanzini 2009).

Regarding terminology, the question whether the four main idioms of ASA should be called languages or dialects still remains to be solved, not least on the basis of recently found new data. Nevertheless the term ‘languages’, introduced by Beeston 1984, shall be used for these four idioms within the present context. This is simply for practical reasons since several subcategories, called dialects, can still be determined, at least within Sabaic. The designations of the single languages and dialects are all modern terms, traditionally derived from the names of the particular ethnic group. How the authors of the ASA inscriptions themselves called their mother tongues is unknown (cf. Stein *forthcoming*).

2.1. The four ASA languages

By far most epigraphic material (more than 5500 published inscriptions) is written in *Sabaic*. This language was spoken in the kingdom of Saba', i.e. the Yemeni Highlands and the oases in the adjoining desert fringe between Mārib and the Wadi al-Jawf from at least the 8th century BC, but probably even earlier (11th/10th century BC, see Stein 2010, 46). Although written documentation ceases with the end of the Ancient South Arabian culture in the late 6th century AD, a late branch of Sabaic must still have been spoken for some centuries after the rise of Islam, however decreasing more and more in favour of Arabic (see 1.2). The main characteristics of Sabaic, in contrast to the other ASA languages, are the formation of pronomina and causative verbal stem with *h* (non-Sabaic: *s*), an augmented form of the prefix conjugation (PC-N: *yf'ln*), and the infinitive of derived verbal stems augmented by *-n*.

Minaic is attested as early as Sabaic. About 1600 inscriptions are known mainly from the Jawf region in northern Yemen, the heartland of the Minaean culture, but also from the oasis of al-ʿUlā (ancient Dedān) and from Egypt, and some Minaic and Ḥaḍramitic dedications appear as far as the island of Delos (cf. Robin 1996, 1127 f. and 1130 f.). As an alternative, historically neutral, term for this language *Maḍābic* is also used (after the Wadi Maḍāb, see, e.g., Robin 1991, 98). Minaic documentation ends with the fall of the kingdom of Maʿīn at the end of the 2nd century BC, being completely replaced by Sabaic in the Jawf region.

Qatabanic documentation starts, as far as can be seen, in the 8th/7th century BC, but may be of older origin as well. More than 2000 inscriptions are known from the kingdom of Qatabān, stretching from the capital Timna' in Wadi Bayḥān up to the southern Yemeni highlands east of Zafār. Epigraphic tradition ceases with the disintegration of the Qatabanian kingdom in the second half of the 2nd century AD.

Ḥaḍramitic inscriptions are known from at least the 7th century BC until the 3rd century AD (single instances even later), mainly from the region of Ṣabwa, the capital of the kingdom of Ḥaḍramawt, and from Raybūn. The 1500 texts published to date are, however, by no means representative since half of these, from the excavations at Raybūn, consist of small fragments only. In terms of usable linguistic data, Ḥaḍramitic has still the poorest documentation among all ASA languages.

2.2. Historical and regional variation (dialects)

For the Sabaic language, three phases of historical development can be determined, each characterized by specific grammatical peculiarities (see Stein 2003, 5 ff.): *Early Sabaic* (ESab), 11th/8th–4th century BC, *Middle Sabaic* (MSab), 3rd century BC–mid 4th century AD, and *Late Sabaic* (LSab), mid 4th–6th century AD, the latter mainly emerging from the South Sabaic dialect of Ḥimyar (cf. below; for the definition of the transition from ESab to MSab see Stein 2005).

Within the MSab period, Sabaic can be divided into three main regional dialect areas (Stein 2004): North, Central, and South Sabaic (cf. Map 63.1). While *Central Sabaic*, providing by far the broadest epigraphic evidence, traditionally serves as a certain 'standard' in describing Sabaic grammar, the northern and southern dialects show some distinct differences from this.

North Sabaic: The so far only representative idiom is *Amiritic* (previously called *Haramic*), the dialect spoken by the tribe of Amīr, preserved in inscriptions mainly from the Jawf (see Stein 2007). This dialect is heavily influenced by North Arabian structures; its main features are the distinction of only two unvoiced sibilants (*s* and *š*, missing *ś*), formation of the 1st and 2nd persons SC after a pattern *fʿlt* (not *fʿlk*, as common in ASA), a preposition *mn* (instead of the common *bn*), and a negation *lm*, followed by a PC verbal form denoting past actions.

South Sabaic comprises two large areas, the home territory of Ḥimyar in the southern highlands on the one hand, and the adjacent regions to the east, occupied by the tribes of Ḥawlān and Radmān (therefore called *Radmanic*), on the other. One of the most specific characteristics of the southern dialects, which are generally subject to some influence by Qatabanic, is the metathesis of the first radicals in roots I *w* (e.g., *ʾlwd* instead of *ʾwld* “children”). After the conquest of all Yemen by the Ḥimyarites at the end of the 3rd century AD, their dialect, mixed up with some features of the Central Sabaic ‘standard’, became predominant in South Arabia, forming the LSab stage of Sabaic language history (cf. above).

In terms of the other languages, no evidence for a similar differentiation is at present available. At least in Minaic, however, regional variation may be assumed between the heartland in the Jawf and the traders’ colony in Dedān where features similar to the Amiritic dialect can be found (e.g., *w-sfʿ w-msr* (M 317/4) instead of *w-sʿy w-mśr* (cf., e.g., M 247/4) “and destroy and remove (from its place)”, A. Multhoff, personal communication).

3. Phonology

The defective system of the consonantal script allows only limited insights into ASA phonological structure. Namely questions of syllable formation, stress, and the system of vowels are hardly, if at all, answerable. In the following, only the most striking peculiarities of ASA phonology are presented. For further data and discussion of Sabaic, see Stein 2003; for the other languages, no detailed analysis has been undertaken so far.

3.1. The consonantal system

Except for Ḥaḍramitic (and the Amiritic dialect, see above), all ASA languages seem to have the full repertoire of 29 consonants. In the ASA sequence of the alphabet, they run as follows (cf. the script table in Fig. 63.1.):

h l ḥ m q w š r b t s k n ḫ ś š f ʿ d g d ġ t z ḏ y t z

In Ḥaḍramitic, the sibilant /*ś*/ and the interdental fricative /*t*/ have fallen together from the earliest times. In the script, the resulting sound is represented by either *t* (mainly in older texts) or *ś* (exclusively in later orthography, from the 3rd century BC onwards), e.g. *šltt* against *ślśt* “three (f.)” and the personal pronouns *-t* and *-ś* (Priolella 2006, with further examples). Equally, a merging of /*z*/ and /*d*/ can be observed in some instances,

as in the personal name $\text{'l}^{\text{'}}\text{d}$ (besides $\text{'l}^{\text{'}}\text{z}$, as in Sabaic), and the relative pronoun z- (instead of d-) in a number of name graffiti (Frantsouzoff 2003a, 41 f.). This leads to the conclusion that interdental fricatives were not productive in Ḥaḍramitic. Since even the two sounds $/\text{ʃ}/$ and $/\text{z}/$ are mixed up (e.g., $\text{w-q}\text{ʃ}^{\text{'}}\text{-t}$ besides $\text{w-q}\text{z}^{\text{'}}\text{-t}$ “and he consecrated it”, see Robin/Frantsouzoff 1999, 159), the Ḥaḍramitic consonantal system strongly resembles that of Ethiopic (Gəʿəz).

Speculations on the phonetic value of the consonants shall be avoided here. One remark has to be made only on the three non-emphatic, unvoiced sibilants. Traditionally, they have been transcribed s , ʃ , and ś . Since the phonetic values of these sounds do not correspond with those of the respective letters in Northwest Semitic, an alternative ‘neutral’ system has been introduced, using numbers for distinguishing the three sounds (see table 63.1).

In the present article, however, the traditional system has been retained.

Tab. 63.1: ASA sibilants in Semitic context

ASA trad.	ASA neutral	NW-Sem.	Arabic
s	s^1	ʃ	s
ʃ	s^2	ś	ʃ
ś	s^3	s	s

3.1.1. Assimilation

Total regressive assimilation of n to a following consonant is a typical feature of MSab and LSab, but not yet productive in ESab, e.g., bt (ESab bnt) “daughter”, 'tt (ESab 'ntt) “woman”, 'fs (ESab 'nfs , pl.) “souls”. The three other ASA languages do not seem to exhibit n -assimilation at all, even though a form 'tt (Mon.script.sab. 419/6') or 'śt (< 'tt , see the example from SOYCE 705 in 4.3.3.) is occasionally found in Minaic and Ḥaḍramitic texts. However, this could also be considered a purely lexical phenomenon since there is no single instance for a form bt , while bnt “daughter” is amply attested in texts of both languages.

3.1.2. Sound changes

In Sabaic, the most remarkable feature is the consequent use of the letter d for etymological $/\text{z}/$ in the minuscule inscriptions in post-ESab times, while in the monumental inscriptions, the two letters are clearly distinguished until the end of epigraphic documentation. This phenomenon suggests that the two sounds have fallen together in vernacular speech. Furthermore, the radicals w and y are not always clearly distinguished in weak roots. Spellings like kyn besides kwn “he was” or yfy besides wfy “well-being” are, however, often confined to limited regions or historical periods. Apart from this, sound changes are limited to the South Sabaic dialect area and, consequently, to LSab. There, the change $/\text{ś}/ > /s/$ and a merging of $/\text{d}/$ and $/\text{z}/$ are attested,

the latter being confirmed by many examples from minuscule inscriptions of that period, e.g., *ḏbr* instead of *zbr* “he wrote”, and the relative pronoun *z-* instead of *ḏ-* (Stein 2010, 41).

3.2. Vowels

Establishing certain orthographic rules has contributed much to a better understanding of the vocalic structure of Sabaic. The most important rule says that etymologically long vowels are regularly expressed by *matres lectionis* only at the end of a word unit (i.e., normally before word divider), but not inside a word, thus *hqšbw* “they have constructed”, but *hqšb-hw* “they have constructed it” (together in one inscription: R 5085/5–6) and *ʾlmkmw* “you (pl.) know (lit.: you have learned)”, but *whbkm-hw* “you (pl.) have given it” (X.BSB 100/6–7.11–12). The regularity of this phenomenon can be taken as an indication for the awareness of a difference between long and short vowels.

In other cases, like *bt* besides *byt* “house” and *ym* besides *ywm* “day”, a monophthongization may have been the reason for defective writing (**/bēt/* < */bayt/* etc.). The comparatively few instances of defective forms of words with an etymological diphthong suggest that monophthongization was a marginal phenomenon, rather limited, perhaps, to vernacular speech.

As *matres lectionis*, only *w* and *y* are used in Sabaic (for */ū/* and */ī/*, perhaps also */ō/* and */ē/*, respectively), leaving the vowel */ā/* principally unexpressed in script (thus Stein 2003, 41; a different interpretation of the evidence is proposed by Robin 2001, 574–577). Given this, the opposition between endless dual forms in ESab (e.g., *bn* “the two sons (of ...)” or *hqny* “they have dedicated”, with two subjects), and forms ending in *-y* in MSab (*bn_y* and *hqny_y*, respectively, in one and the same context) may well be explained by a sound shift between these periods, from an original ending */-ā/*, which was not expressed in script, towards */-ē/*, represented by the *mater lectionis* *y*. In Qatabanic, a similar shift can be assumed which turned, in contrast to Sabaic, towards */ō/* (thus, *bnw* and *sqnyw*, respectively, for the referred dual context). This ending *-w* is sheer a characteristic of Qatabanic, occurring not only in nominal and verbal dual forms, but also in other cases in which Sabaic shows a *-y* in the particular position, namely in numerals and prepositions.

Outside Sabaic, however, a non-etymological *h* often occurs in certain positions, especially in plural nouns, e.g., *bhn* “sons (of ...)” and *ʾnḥtn* “the women” (Minaic), *mqmh-sm* “their estates” and *nfshy-sm* “their chambers” (Qatabanic), and *bḥtm* “inscriptions” (Ḥaḍramitic). A probable instance from verbal forms in Minaic is the imperative *šdḥtn* “tell me!” in Mon.script.sab. 126/5. The occurrence in endings of perhaps external feminine plurals makes the assumption of a vowel */ā/* behind it quite probable (in this sense also Frantsouzoff 2003a, 42 f.). As forms like the personal pronoun *ʾhnk* and perhaps the ending *-h* of the construct state in Minaic (see 4.1.4. and 4.3.1.) suggest, this *mater lectionis* *h* seems not to concern only long, but also (occasionally?) short vowels.

4. Morphology

Due to the particular size of epigraphic material, the morphological data of the four ASA languages differ widely. By far the most detailed information is available for

Sabaic. Investigating the minuscule inscriptions during the past years has helped complete most of the paradigms. In the other ASA languages, formation patterns are still rather incomplete and therefore treated less extensively in the following. Marked differences from Sabaic characteristics are, however, always pointed out, while historical and regional variation within the single languages is only exceptionally referred to. The presentation of the Sabaic data is mainly based on Stein 2003. For exhaustive evidence and discussion, see the relevant chapters therein. For the other languages, the summaries by Beeston 1984 have not yet been outdated; wherever necessary, additional references are quoted.

4.1. Nouns

4.1.1. Word formation

There are nouns formed of monoradical (e.g., *f* “mouth”), biradical (e.g., *sm* “name”, *yd* “hand”) and triradical roots. Several nouns range between the second and third category, forming triconsonantal derivatives of biradical bases, like *ʿhy-hw* “his brother”, but *ʿh* “brother (of ...)”. Some quadriradical roots are also found (e.g., *kwkb* “star”, *šʿml* “left”); most quadriconsonantal nouns are, however, reduplicated forms, like *glgl* “sesame”, *sʿsʿ* “summer”, and *grbb* “(some sort of vine)”.

Common nominal patterns (singular) are *fʿl*, *fʿlt*, *fʿln*, *ʿfʿl*, *mfʿl*, *mfʿlt*, *tfʿl*, *tfʿlt*, and *hfʿlt*. Apart from the etymologically unexplained preposition *nḥql* “apart from, except for” and perhaps the Minaic theonyms NBʿL and NKRḤ, no instance for a *n*-prefigating pattern (**nfʿl*) is attested. The ending -y serves as *nisba*, attached to nouns of up to four consonants, e.g., *sbʿy* “Sabaeen”, *ḥḍrmy* “Ḥaḍrami” (lit.: “of Ḥaḍramawt”), fem. *šrwḥyt* “(woman) of Širwāḥ”.

4.1.2. Gender

Two genders are distinguished: masculine and feminine. Morphologically, the marker for the feminine is the ending -t, as in the frequent *šlmt* “(female) statuette”, in contrast to *šlm* “(male) statuette”. Besides this, there are several nouns of feminine gender without any morphological indication, e.g., *ʿm* “mother”, *ʿrd* “land”, *ʿrh* “matter, affair”, *bʿr* “well”, *hgr* “town”, and *nfs* “soul”, and also adjectives of a ‘naturally’ feminine character, like *ḥyd* “menstruating”.

4.1.3. Number

All four languages distinguish three numbers: singular, dual, and plural. A characteristic feature shared by all ASA languages is the extensive usage of the internal or broken plural, while the external or sound plural is restricted to relatively few words. The formation of the external plural as well as of the dual is shown in table 63.2

Common patterns of the broken plural are: *ʿfʿl* (most frequent), *fʿl*, *fʿlt*, *fʿly*, *fʿwl*, *fʿyl*, *fʿwlt*, *fʿylt*, *ʿfʿlt*, *ʿfʿlw*, *mfʿl* (of sg. *mfʿl* and *mfʿlt*), *mfʿlt* (of sg. *mfʿl*), *tfʿlt* (of sg.

tfʿl), and *hfʿl* (of sg. *hfʿlt*). The plural of *nisba* forms follows the pattern *ʿfʿl*, as in *ʿsbʿ* “Sabaeans”, *ʿḥdr* “Ḥaḍramites”, *ʿsrḥ* “(men) of Ṣirwāḥ”. As the two last mentioned show, this form generally does not exceed a triconsonantal base, irrespective of the length of the reference noun.

4.1.4. State

In Sabaic, four states can be distinguished: construct, indeterminate, determinate, and absolute state. The latter is restricted to certain instances like numerals and adverbial expressions and therefore not included into the following paradigm; its formation appears to be similar to the construct state. Some scholars have attributed the name ‘absolute’ instead to the indeterminate state, ignoring the existence of a fourth category (e.g., Beeston 1984, 30 with n. 54, cf. the discussion by Stein 2003, 86 f.). The specific endings *-m* of the indeterminate and *-n/-hn* of the determinate state are also called ‘indefinite’ and ‘definite article’ respectively. Table 63.2 shows the Sabaic pattern of the MSab-LSab periods for the sample word *šlm* “statuette”:

Tab. 63.2: Nominal inflection in Sabaic

		construct		indeterminate	determinate
		nominative	obliquus		
singular	m.	<i>šlm</i>	<i>šlm</i>	<i>šlm-m</i>	<i>šlm-n</i>
	f.	<i>šlm-t</i>	<i>šlm-t</i>	<i>šlm-t-m</i>	<i>šlm-t-n</i>
dual	m.	<i>šlm-y</i>	<i>šlm-y</i>	<i>šlm-n</i>	<i>šlm-n-hn</i>
	f.	<i>šlm-t-y</i>	<i>šlm-t-y</i>	<i>šlm-t-n</i>	<i>šlm-t-n-hn</i>
external	m.	<i>šlm-w</i>	<i>šlm-y</i>	<i>šlm-n</i>	<i>šlm-n-hn</i>
plural	f.	<i>šlm-t</i>	<i>šlm-t</i>	<i>šlm-t-m</i>	<i>šlm-t-n</i>

In ESab, there is evidence for the nominative dual construct ending in *-Ø* instead of *-y*, what can be taken as indication for an ending */-ā/* in the early period, which was later shifted to */-ē/* (see 3.2.).

In Qatabanic and Ḥaḍramitic, principally the same system seems to be in use. In the indeterminate dual, however, these languages have endings in *-myw* and *-nyw* respectively. Due to the characteristic sound shift (see 3.2.), construct dual forms end in *-w* instead of *-y* in Qatabanic. In Ḥaḍramitic, the ending of the determinate state singular often appears as *-hn*, what might be connected with the *mater lectionis* *h* found otherwise in this language (see 3.2.). On the other hand, this writing could reflect the original form **hn* of the definite article, which is otherwise preserved only in the dual and plural forms (*-n-hn*).

In contrast to this, Minaic seems not to make regular use of the indeterminate ending or *mimation*. The comparatively few instances of this ending occur too irregularly and sometimes even erroneously so that they may be considered a merely stylistic feature taken over from Sabaic, or even an enclitic particle. A particular feature of Minaic is the singular of the construct state ending in *-h*, regardless of the case of the word. This ending, probably to be read */-a/*, may be connected with the construct end-

ing *-a* in Ethiopic. In Qatabanic, a similar phenomenon can be observed in construct plural forms ending in *-h*, or *-hy* and (rarely) *-hw* (see the examples sub 3.2, last paragraph).

4.1.5. Case inflection

In Sabaic, the practice of case inflection can be taken for sure. At least in MSab, nouns in the external plural, first of all *bn* “son”, and even the relative pronoun *’lw/’ly* (see 4.3.4.) clearly distinguish a nominative ending *-w* and an oblique *-y* (i.e., *bnw* against *bny* “sons (of ...)”) which can, from a comparative point of view, be traced back to a sound */-ū/* and */-ī/* respectively. Likewise, a distinction between a nominative in */-ā/* and an oblique in */-ay/* in dual may be postulated for the earliest stage of Sabaic (see 4.1.4.). In the singular, the indeterminate ending or *mimation* requires some vowel before, which could hardly be anything else than a case ending. Graphically, however, no distinction can be observed since short vowels are principally not expressed in script. Since use of *mimation* is preserved up to the latest stage of Sabaic and even in the minuscule inscriptions, there is no reason to assume a loss of case inflection at some time within Sabaic language history.

Among the other ASA languages, only Qatabanic seems to follow the same system. As for Minaic, the irregular use of *mimation* (see 4.1.4.) contradicts, at least for the singular, the assumption of case inflection since the relevant endings would not have been morphologically protected. The evidence for Ḥaḍramitic is still too poor to provide enough representative data, but the feature of *mimation* is basically productive (cf. Frantsouzoff 2003a, 47 f.).

4.2. Numerals

4.2.1. Cardinals

Cardinal numbers from ‘1’ to ‘19’ have a masculine and a feminine form. As is usual in Semitic, numerals from ‘3’ to ‘10’ and ‘13’ to ‘19’ take the opposite gender of the enumerate noun (‘gender polarity’), thus *’lūt ’šlmm* “three (male) statuettes”, *ḥmst ’šr ymtm* “fifteen days”, *’rb’ ’šr blṭm* “fourteen *blṭt*-coins”, but *’hd wrḥm* “one month”. Table 63.3 shows the Sabaic evidence (the masculine sequence from ‘14’ to ‘19’ is known from the minuscule inscriptions (Stein 2010, 41); forms in [] brackets have not yet been attested).

Note: The historical development from ESab towards the later forms in the case of ‘3’, ‘6’, and ‘8’ went rather slowly. While the earliest instances of the later forms occur already in the 3rd century BC, the ESab forms stay in use up to the 2nd century AD.

In dating formulae only, a separate numeral *’stn* “one” is used, e.g., *b-’stnm d-fr’m w-sdṭm d-fqḥw b-wrḥm wrḥm* (R 3854/3 f., Qatab.) “on the first (day) of the first decade and (on) the sixth (day) of the second decade in every month” (for Sabaic reference, see Stein 2010, 66 f.); note that the numerals in such datings are morphologically cardinals, not ordinals (Stein 2003, 117 ff.)!

Tab. 63.3: Cardinal numerals in Sabaic

masculine		feminine		masculine		feminine	
ESab	M/LSab	ESab	M/LSab	ESab	M/LSab	ESab	M/LSab
1	<i>ʿhd</i>		<i>ʿht</i>	11	<i>ʿhd ʿsr</i>		<i>ʿht ʿsr</i>
2	<i>ṭny</i>		<i>ṭty</i>	12	<i>ṭny ʿsr</i>		<i>ṭty ʿsr</i>
3	<i>šlt ṭlt</i>		<i>šltt ṭltt</i>	13	<i>šlt ʿsr [ṭlt ʿsr]</i>		<i>[šltt ʿsr] ṭltt ʿsr</i>
4	<i>ʿrb ʿ</i>		<i>ʿrb ʿt</i>	14	<i>ʿrb ʿ ʿsr</i>		<i>ʿrb ʿt ʿsr</i>
5	<i>ḥms</i>		<i>ḥmst</i>	15	<i>[ḥms ʿsr]</i>		<i>ḥmst ʿsr</i>
6	<i>sdṭ st</i>		<i>sdṭt stt</i>	16	<i>[sdṭ ʿsr] [st ʿsr]</i>		<i>sdṭt ʿsr stt ʿsr</i>
7	<i>sb ʿ</i>		<i>sb ʿt</i>	17	<i>sb ʿ ʿsr</i>		<i>sb ʿt ʿsr</i>
8	<i>ṭmny ṭmn</i>		<i>ṭmn(y)t</i>	18	<i>[ṭmny ʿsr] ṭmn ʿsr</i>		<i>ṭmn(y)t ʿsr</i>
9	<i>ts ʿ</i>		<i>ts ʿt</i>	19	<i>ts ʿ ʿsr</i>		<i>ts ʿt ʿsr</i>
10	<i>ʿsr</i>		<i>ʿsrt</i>				

In the other ASA languages, different forms for some numbers are used, namely *ṭd*, f. *ṭt*, “one” in Qatabanic, and *st* “six (m.)” in Ḥaḍramitic. The number “two”, again, is written *ṭnw* in Qatabanic (see 3.2.), “eight” occurs as *ṭmnw(t)* in Ḥaḍramitic.

The decades are basically formed by adding to the stem the ending *-y* which may be connected with the dual. The three non-Sabaic languages often add a non-etymological *h* before this ending, thus *ʿrb ʿhy* “forty”, *ṭmnhy* “eighty” (see 3.2.). In Sabaic, the paradigm runs as shown in table 63.4.

Tab. 63.4: Decades in Sabaic

	ESab	M/LSab
20		<i>ʿšry</i>
30	<i>šlty</i>	<i>ṭlty</i>
40		<i>ʿrb ʿy</i>
50		<i>ḥmsy</i>
60	<i>sdty</i>	<i>sty</i>
70		<i>sb ʿy</i>
80		<i>ṭmnyy</i>
90		<i>ts ʿy</i>

Unlike the minor cardinals, the two words for “hundred”, *mʿt*, and “thousand”, *ʿlf*, are substantives of invariable gender (feminine and masculine, respectively), inflecting for number and case. Thus, for two units a dual form is used (e.g., *ṭty mʿtn* “two hundred”), as well as the plural for higher numbers (e.g., *ṭlt mʿn ʿsdm* “300 men”, *ṭltt ʿlfm sbym* “3000 captives”). As can be seen from these examples, in respect of congruence in gender, both nouns follow the rule of common enumerates.

Cardinal numbers are composed according to the following rules: In compound numbers, the units are arranged rising from smallest to largest, e.g., *ʿrb ʿt w-ʿšry w-ts ʿ mʿnm ʿsdm w-ṭny w-sty w-ḥms mʿnm sbym* (J 577/14) “924 men (killed) and 562 captives”. Generally, the enumerate noun, in the required dual or plural form, is placed after the numeral. In indeterminate expressions, the numerals (except for “hundred” and “thousand”, see above) appear in the absolute state, as in the examples quoted above. When the enumerate is in determinate state, the definite article is attached to the numeral as well, e.g., *ʿrb ʿtn w-ʿšrnhn ʿšlmn* “the(se) 24 statuettes”.

4.2.2. Ordinals

Except for the noun *qdm* “first”, ordinals are triconsonantal derivates of the respective cardinal number, thus *tny* “second”, *tl̥* “third” (with the older variant **šl̥* not yet attested), *rbʿ* “fourth”, *hms* “fifth”, *sd̥* “sixth”, and so on. Feminine forms are given the ending *-t* (*tn(y)t*, *rbʿt* etc.). Ordinals may be placed before or after their enumerate, agreeing with it in state and gender, e.g., *tnym tʿtwm* (C 461/4–5) “a second offering”, *gzwtn rbʿtn* (Ry 506/3) “the fourth raid”, *h̥rf tbʿkrb* (...) *tsʿn* “the ninth year of (the eponym) TBʿKRB”.

4.2.3. Fractions

For “half”, there is a separate noun *fqh*. From “third” onwards, fractions exhibit the same spelling as the masculine ordinals, thus *tl̥* (with the older form *šl̥*, see 4.2.1.), *rbʿ* and so forth. These numbers, though probably of feminine gender, are inflected as regular masculine nouns, e.g., *fqh̥m w-h̥ms w-ʿšry bl̥tm* (X.BSB 37/1) “25½ *bl̥tm*-coins”, *šl̥ rbʿ kl qbrn* (DAI FH Awām 1997–5/1) “three fourths of the whole tomb”, *w-l yqny h̥ywm w-ʿndhmw dn tmnn fqh w-fqh* (DAI FH Awām 1997–6/4–5) “and H̥YWM and ʿNDHMW shall possess this eighth (of the tomb) fifty-fifty” (note that the noun *fqh* “half”, in distributive adverbial use, is in absolute state).

4.3. Pronouns

A complete paradigm of the personal pronouns so far attested in all the ASA languages, illustrated by examples in context, is given by Multhoff *forthcoming*.

4.3.1. Independent personal pronouns

Our knowledge of the personal pronouns has greatly increased by the data of the letter correspondence in minuscule script (see Stein 2010, 41 f.). For Sabaic, the paradigm is now almost complete (table 63.5).

Tab. 63.5: Independent personal pronouns in Sabaic

person	singular	dual	plural
1. c.	^ʾ <i>n</i> , (^ʾ <i>nk</i> ?)	- (?)	[?]
2. m.	^ʾ (<i>n</i>) <i>t</i>		^ʾ (<i>n</i>) <i>tmw</i>
f.	^ʾ (<i>n</i>) <i>t</i>	^ʾ (<i>n</i>) <i>tmy</i>	[?]

The only instance for a 1st person form ^ʾ*nk* (Mon.script.sab. 7A/3) could be interpreted as Minaic influence (see below). In the 2nd person, the forms with assimilation of *n* (^ʾ*t*, ^ʾ*tmw* etc.) are a later development, the non-assimilated (^ʾ*nt*, ^ʾ*ntmw* etc.) are

older (see 3.1.1.). For the 3rd person, the demonstrative of the remoter deixis is used (see 4.3.3.). – In Minaic, there is evidence for a 1st person form *’hmk* (Mon.script.sab. 126/2 and 239/4).

4.3.2. Enclitic (suffixed) personal pronouns

The most striking difference within ASA pronominal morphology is the formation of third person pronouns with *h* in Sabaic against *s* in all other languages. The most complete paradigm can, again, be given for Sabaic thanks to the minuscule inscriptions (see table 63.6).

Tab. 63.6: Enclitic personal pronouns in Sabaic

person	case	singular	dual	plural
1. c.	gen. acc.	[-y] -n	- (?)	-n [-n]
2. m. f.		-k -k	-kmy	-kmw -kn
3. m. f.		-hw -h	-hmy	-hmw -hn

The genitive singular form of the 1st person is thus far only attested in some Minaic letters (e.g., *k-y* “to me” in Mon.script.sab. 239/2.3.4), all certain attestations for the 1st person plural are from Minaic and Amiritic letters.

For the non-Sabaic languages, only 3rd person patterns are sufficiently available (table 63.7).

Tab. 63.7: 3rd person enclitic personal pronouns in Minaic, Qatabanic and Ḥaḍramitic

		singular	dual	plural
Minaic	m. f.	-s(w) -s	-smn [-smn]	-sm -sn
Qatabanic	m. f.	-s, -sww -s, -syw	-smy	-sm -sn
Ḥaḍramitic	m. f.	-s, -sww -š, -šyw -t, -tyw	-sm(y)n, -smy [?]	-sm -sn, -sn ²

The augmented singular forms in Qatabanic and Ḥaḍramitic are obviously attached to nouns ending in a long vowel, such as dual and external plural forms, as in *ṛtḏt šb’m ḏt šntm nfs-s w-’ḏn-s w-bn-syw s’d’l w-ḡwt’l w-yḥm’l w-...* (Arbach 2005/2, Qatab.) “ŠB’M has entrusted to (the goddess) ḏT ŠNTM her soul, her intelligence, and her sons, (namely) S’D’L, ḠWT’L, YḤM’L, ...”, but also prepositions, like *’l-sww* (<’lw) “on, against him” (in R 3884bis=NAM 601/8, Qatab.).

Note that Ḥaḍramitic distinguishes phonologically between masculine (*s*-based) and feminine (*š*-based) forms, at least in the singular. The variants with *t* are due to the

characteristic sound shift in this language (see 3.1). The Ḥaḍramitic feminine plural form *-sn* is thus far attested in two inscriptions (al-‘Oqm/1977/4 and R 4862 = J 919/6, see Pirenne 1990, 76 f. and 109); the form *-śn*, in analogy to the singular, is claimed by Frantsouzoff 2003b, 254.

Within Minaic letter correspondence, forms of 1st and 2nd persons also occur, the latter being formed analogous to the 3rd person in dual and plural (*-kmn* and *-km*, respectively).

4.3.3. Demonstrative pronouns

Two types of demonstratives are known: One formed on the basis of *d*, denoting the nearer, immediate deixis (“this”), and another formed of *h* in Sabaic and *s/ś* in the other languages, indicating remoter deixis (“that”) and used anaphorically. For the nearer deixis, the Sabaic forms are shown in table 63.8.

Tab. 63.8: Demonstratives of nearer deixis in Sabaic

	singular	dual	plural
m.	<i>dñ</i>	<i>d(y)n</i>	<i>’ln</i>
f.	<i>dt</i>	[?]	<i>’lt</i>

The other languages follow this pattern in the singular. For a possible instance of a feminine dual *dtyn* in Minaic, see 4.3.4. In masculine plural, Minaic exhibits a form *’hlt*, while Qatabanic uses the *d*-base even for this number (*dtn* “these”, see Mazzini 2006, 477 f.). For Ḥaḍramitic, no instances for this pronoun at all have so far been observed.

The demonstrative of the remoter deixis, which is used for the 3rd person independent personal pronoun as well, inflects for two cases. In Sabaic and Qatabanic, the forms shown in table 63.9 are attested:

Tab. 63.9: Demonstratives of remoter deixis in Sabaic and Qatabanic

		singular		dual		plural	
		nom.	obl.	nom.	obl.	nom.	obl.
Sabaic	m.	<i>h(w)ʾ</i>	<i>hwt</i>	<i>hmy</i>	<i>hmt</i>	<i>hmw</i>	<i>hmt</i>
	f.	<i>h(y)ʾ</i>	<i>hyt</i>				
Qatabanic	m.	<i>sw</i>	<i>swt</i>	[?]	<i>smyt</i>	<i>sm</i>	<i>smt</i>
	f.	[sy]	<i>syt</i>	[?]	[?]	[?]	[?]

Note: The plene forms of nominative singular in Sabaic (*hwʾ* and *hyʾ*) are comparatively rare. Occasionally, plene writings occur also for the oblique forms (*hmyt* and *hmyt* for dual and plural masculine and *hnyt* for plural feminine), which can be taken as a base for reconstructing the vocalic structure of these pronouns.

In Minaic inscriptions, the nominative singular (masculine and feminine) occurs as *s* in letter correspondence (e.g., Mon.script.sab. 73/2.3 and 248/2); the only possible

example for an oblique *swt* is quoted by Beeston 1984, 63. The nominative plural *sm* is found in al-Jawf 04.28/7.9.

In Ḥaḍramitic, only the nominative singular is attested, following the pattern of Qatabanic: *w-bn-mw fṭnm l-štwr ḏw yḥr ʿm ʾštm w-sw-ḥwr ʿm šwʿt-s w-šy wrwtm b-mḥrmhn* (Rb I/84 No. 197a-e = SOYCE 705/3–5) “And be it far from FṬNM that he cohabits with a woman while he is together with his wife and she is a priestess(?) in the temple” (interpretation modified after Avanzini in the CSAI database and Multhoff *forthcoming*, example 8).

4.3.4. Relative pronouns

In addition to an unchangeable relative *ḏ*-, all the ASA languages have a declinable relative pronoun. The broadest attestation is, again, in Sabaic, showing a distinct dialectal development in orthography and morphology of the pronoun (table 63.10).

Tab. 63.10: Relative pronoun in Sabaic

		singular	dualplural	nom.	plural	obl.
ESab	m.	<i>ḏ</i> -	[?]		<i>ʾl</i>	
	f.	<i>ḏt</i>	[?]		<i>ʾlt</i>	
MSab	m.	<i>ḏ</i> -	<i>ḏy</i>	<i>ʾlw</i>		<i>ʾly</i>
	f.	<i>ḏt</i>	<i>ḏty</i>		<i>ʾlt</i>	
LSab	m.	<i>ḏ</i> -	<i>ḏy</i>		<i>ʾlht</i>	
	f.	<i>t</i> -	[?]			

Regarding the dual in ESab, one may propose an opposition between a nominative *ḏ* (m.), *ḏt* (f.) and an oblique *ḏy*, *ḏty* (in analogy to nominal inflection, see 4.1.5. above), however no reliable evidence has thus far been found.

Among the other languages, Qatabanic has a *ḏ*-based plural form, as in the case of the near deixis demonstrative (table 63.11).

Tab. 63.11: Relative pronoun in Minaic, Qatabanic and Ḥaḍramitic

		singular	dual	plural
Minaic	m.	<i>ḏ</i> -	<i>ḏy</i>	<i>ʾhl</i>
	f.	<i>ḏt</i>	<i>ḏty</i>	
Qatabanic	m.	<i>ḏ</i> -	<i>ḏw</i> , <i>ḏwy</i>	<i>ḏtw</i> , <i>ḏty</i>
	f.	<i>ḏt</i>	[?]	[?]
Ḥaḍramitic	m.	<i>ḏ</i> -, <i>ḏw</i>	<i>ḏy</i> , <i>ḏhy</i>	[?]
	f.	<i>ḏt</i> , <i>ḏtw</i>	[?]	[?]

Note: The Minaic feminine dual *ḏty* is attested once (Gr 326/2); the only instance of the alleged variant *ḏtyn* (M 169 = Gr 289/3) might well be interpreted as a demonstrative (cf. the interpretation by Bauér/Lundin 1998, 107 f.). The plural *ʾhl* occurs in both masculine and feminine context, the latter in Mon.script.sab. 146/4 and 408/1.

Besides this common plural form, the variants *hl* and *dl* are quoted in the literature. The syntactic interpretation of the particular passages, however, is far from certain (cf. Beeston 1984, 63 n. 121, Avanzini 1995, 147 and 152). – As for Qatabanic, the second-mentioned form in dual and plural occurs comparatively rarely (see Mazzini 2006, 481 f.). In Ḥaḍramitic, rarely singular forms augmented by *-w* occur (*dw*, *dtw*, see Frantsozoff 2003a, 44 f.). For the few instances of dual forms, see Mazzini 2006, 482 n. 27. The short form *dy* is more frequent than *dhy* with only one example; another form *dwy* may be paralleled with the Qatabanic evidence (*loc. cit.*, with n. 31).

The relative pronoun may be augmented by the enclitic *-m* in both Sabaic and Qatabanic (Mazzini 2006, 480 f.: ‘correlative’, cf., however, the critical remarks by Stein 2009, 91–94). In cases where the augmented form *dt-m* represents a plural, the loss of the original *w*-ending indicates the vocalic character of this ending in Qatabanic (see 3.2.): *smtn w-ʕṣṣrn dt-m wsm w-ṣṣr* (J 2360/6) “the drawings and inscriptions which were(?) drawn and written”.

4.4. Verbs

4.4.1. Verbal stems

Our knowledge of the morphology of ASA verbal stems has undergone fundamental changes during the last years. A thorough analysis of the Sabaic verbal system by A. Multhoff has led to some completely new and partly unexpected data not only for Sabaic, but for the other ASA languages as well (see Multhoff 2010b and *forthcoming*). The results of this work can only be briefly summarized here. Basically, six verbal stems are graphically distinct in all ASA languages: an unaugmented base stem (0_1), an equally unaugmented derived stem 0_2 (for the graphical distinction of the infinitive 0_1 and 0_2 in Sabaic and Qatabanic, see 4.4.2.4.), a causative with prefixed *h* (H, Sabaic) resp. *s* (S, non-Sabaic), and the corresponding reflexives to each of them (thus, T_1 , T_2 , and ST). Only in Minaic can additional subcategories of these stems be distinguished, including a reduplicating form (indexed with 3, see table 63.12).

Note: The 0_2 , T_2 , S_2 , and ST_2 stems in Minaic are not graphically distinguished from the respective base stems, yet may be determined semantically. The same is valid for Ḥaḍramitic 0_2 and T_2 .

A very remarkable feature of the ASA verbal system is the different formation of SC and PC forms in the T_1 -stem of Sabaic and Qatabanic, with prefixed and infixed *t*, respectively, as in the following example: *w-tmlyw sby w-qny hyt hgrn bʕsn ... w-nḥbw hgrn tʕrmn ... w-ymtlyw kl ʕbʕl-hw* (J 576/5 f., Sab.) “and they took the captives and the livestock of that city BʕSN as booty ..., and they took the city of TʕRMN by storm ..., and they took all its inhabitants as booty” (for the use of PC in narrative past context, see 5.1.2). A comparable feature seems to be productive in the reduplicating stems (0_3 , T_3 , S_3 , and ST_3) in Minaic, where a combination of unaugmented forms in SC but reduplicated forms in PC and infinitive can be observed, e.g. *nšʕh ystnšʕn w-stnšʕw* (Mon.script.sab. 599/9) “the levy(?) which they will ask for and have (already) asked for” and *smʕm d-ʕtlm* (Mon.script.sab. 599/12) “witness who has signed (this document)” against *smʕm d-yʕtllm* (Mon.script.sab. 605/4 and 624/12–13) “witness who will sign”. However, at least in the 0_3 stem, reduplicating SC-forms also seem to occur, e.g. *w-s hl fnnw k-k* (Mon.script.sab. 73/3) “And he has indeed sent to you”.

Tab. 63.12: Verbal stem formation in ASA

	Sabaic			Minaic		Qatabanic		Ḥaḍramitic	
	SC	PC	infinitive	SC	PC	SC	PC	SC	PC
0 ₁	<i>fʿl</i>	<i>y-fʿl</i>	<i>fʿl</i>	<i>fʿl</i>	<i>y-fʿl</i>	<i>fʿl</i>	<i>y-fʿl</i>	<i>fʿl</i>	<i>y-fʿl</i>
0 ₂	<i>fʿl</i>	<i>y-fʿl</i>	<i>fʿln</i>	[<i>fʿl</i>]	[<i>y-fʿl</i>]	<i>fʿl</i>	<i>y-fʿl</i>	[<i>fʿl</i>]	[<i>y-fʿl</i>]
0 ₃	—	—	—	[<i>fʿl</i> ?] (<i>fʿl</i> ?)	<i>y-fʿl</i>	—	—	—	—
H ₁ /S ₁	<i>hfʿl</i>	<i>y-hfʿl</i>	<i>hfʿln</i>	<i>sfʿl</i>	<i>y-sfʿl</i>	<i>sfʿl</i>	<i>y-sfʿl</i>	<i>sfʿl</i>	<i>y-sfʿl</i>
H ₂ /S ₂	—	—	—	[<i>sfʿl</i>]	[<i>y-sfʿl</i>]	[?]	[?]	[?]	[?]
H ₃ /S ₃	—	—	—	<i>sfʿl</i> (?)	<i>y-sfʿl</i>	—	—	—	—
T ₁	<i>tfʿl</i>	<i>y-ftʿl</i>	<i>ftʿln</i>	<i>ftʿl</i>	<i>y-ftʿl</i>	<i>tfʿl</i>	<i>y-ftʿl</i>	<i>ftʿl</i>	<i>y-ftʿl</i>
T ₂	<i>tfʿl</i>	<i>y-tfʿl</i>	<i>tfʿln</i>	[<i>ftʿl</i>]	[<i>y-ftʿl</i>]	<i>ftʿl</i>	[<i>y-ftʿl</i>]	[<i>ftʿl</i>]	[<i>y-ftʿl</i>]
T ₃	—	—	—	<i>ftʿl</i> (?)	<i>y-ftʿl</i>	—	—	—	—
ST ₁	<i>stfʿl</i>	<i>y-stfʿl</i>	<i>stfʿln</i>	<i>stfʿl</i>	<i>y-stfʿl</i>	<i>stfʿl</i>	<i>y-stfʿl</i>	<i>stfʿl</i>	<i>y-stfʿl</i>
ST ₂	—	—	—	[<i>stfʿl</i>]	[<i>y-stfʿl</i>]	[?]	[?]	[?]	[?]
ST ₃	—	—	—	<i>stfʿl</i> (?)	<i>y-stfʿl</i>	—	—	—	—

Despite an occasional passive function of the T and ST stems, an internal passive of each stem is established at least for Sabaic, cf., e.g., *l-qbly ḏ-wld l-hmw bnm* (J 669/8–9) “because a son was born to them” besides *ḡlm wldt-hw mgdlt* (C 19/7–8) “the boy which MGDLT has born”. Graphically not distinguished from the particular stem, this passive voice was probably vocalized differently, like in Arabic.

4.4.2. Verbal inflection

Recent work on the ASA minuscule inscriptions has yielded great success in filling up the paradigms of Sabaic and, partly, Minaic verbal inflection. For Sabaic, the paradigm is almost complete. Table 63.13 summarizes the Sabaic evidence, while comparative aspects of the other languages are discussed in the following paragraphs.

Note: Evidence for 1st person forms of PC is only found in letters written in the Amiric dialect (and also in Minaic). The defective forms of 3rd person dual and feminine plural SC (*fʿl* and *fʿlt*) are found in ESab inscriptions, while all later instances have the ending *-y* and *-ty* respectively. This may be explained, parallel to the dual pattern in nominal morphology (see 4.1.4.), as a graphical indication for an original ending */-ā/*, which shifted towards */-ē/* in post-ESab times. As for the 3rd person plural feminine PC, the parallel existence of two different patterns must be stated (see the recent discussion by Avanzini 2006 and Stein 2009, 89 ff.). Whether they are really contemporary or rather a result of historical or dialectal changes still remains unclear. For a definition of PC-Ø and PC-N, see 4.4.2.2, last paragraph.

4.4.2.1. Suffix conjugation (SC)

Marked differences from the Sabaic pattern mainly concern the feminine of the 3rd person plural. At least in Qatabanic and Ḥaḍramitic, the pattern *fʿl-n* is established

Tab. 63.13: Verbal inflection in Sabaic

person		suffix conj. (SC)	prefix conjugation 'short' form (PC-Ø)	'long' form (PC-N)
singular	3. m.	<i>f^ll</i>	<i>y-f^ll</i>	<i>y-f^ll-n</i>
	f.	<i>f^ll-t</i>	<i>t-f^ll</i>	<i>t-f^ll-n</i>
	2. m.	<i>f^ll-k</i>	<i>t-f^ll</i>	<i>t-f^ll-n</i>
	f.	<i>f^ll-k</i>	[?]	<i>t-f^ll-n</i>
	1. c.	<i>f^ll-k</i>	[<i>ʔ-f^ll</i>]	[<i>ʔ-f^ll-n</i>]
dual	3. m.	<i>f^ll(-y)</i>	<i>y-f^ll-y</i>	<i>y-f^ll-nn</i>
	f.	<i>f^llt(-y)</i>	[?]	<i>t-f^ll-nn</i>
	2. m.	<i>f^ll-kmy</i>	[?]	<i>t-f^ll-nn</i>
	f.	[<i>f^ll-kmy</i>]	[?]	<i>t-f^ll-nn</i>
plural	3. m.	<i>f^ll-w</i>	<i>y-f^ll-w</i>	<i>y-f^ll-nn</i>
	f.	<i>f^ll(-y)</i>	<i>y-f^ll-n, t-f^ll-n</i>	[<i>y-f^ll-nn</i>], <i>t-f^ll-nn</i>
	2. m.	<i>f^ll-kmw</i>	[?]	<i>t-f^ll-nn</i>
	f.	<i>f^ll-kn</i>	[?]	[?]
	1. c.	<i>f^ll-n</i>	[<i>n-f^ll</i>]	[?]

(against Sabaic *f^ll(-y)*, see Robin 1983, 181 ff.). As for Minaic, the same pattern may be proposed on the basis of some minuscule inscriptions (e.g., Mon.script.sab. 667/2).

The observation that endings of masculine dual and plural are (almost) never expressed in Minaic (Beeston 1984, M 5:4) is valid for monumental inscriptions only; in the minuscule texts, at least the plural pattern *f^llw* seems to be regularly written. Thus, the defective forms (*f^ll*) in context of plural may be considered merely an orthographical feature.

In Qatabanic, again, dual forms end in *-w* (thus, *f^llw* instead of Sabaic *f^lly*) and are therefore graphically identical with the plural. The same may be valid for Ḥaḍramitic where several instances for *f^llw* in dualic context, but no single form *f^lly* have been found (Robin 1983, 183; Frantsouzoff 2003a, 45).

Concerning 1st and 2nd person forms, Minaic and Sabaic share the formation with *-k* (in the other languages, no relevant evidence has thus far been observed). Therefore it is the more remarkable that the Amiritic dialect, spoken in the immediate neighbourhood of those two idioms, exhibits a formation with *-t* (*f^llt*, *f^lltm*, see Stein 2007, 24 ff.).

4.4.2.2. Prefix conjugation (PC)

In Qatabanic and Ḥaḍramitic, the masculine plural is marked by an ending *-wn* (thus, *yf^llwn*, see Frantsouzoff 2003a, 46). This can be compared with Minaic, where a pattern *yf^lln* (perhaps with occasional plene writing in the ending) is surely established in the minuscule inscriptions: *w-ʔ^lltm l-yʔwsn-km* (Mon.script.sab. 142/2) “The gods may compensate you”; *w-ʔntmw ʔl t^ldn* (< *ʔDD*, Mon.script.sab. 133/3–4) “And you, do not take into account!”. Only in Qatabanic, an alternative plural form *yf^llw* is found in narrative contexts (see 5.1.2, ‘consecutive imperfect’), which can be interpreted as a short form (**yif^lalū*) different from the long form **yif^lalūna* (see Avanzini 2005, cf. Mazzini 2007 for a historical explanation).

As for the feminine plural, evidence is very scarce. In Qatabanic, the only instance shows a formation *yf^lwn*, like the masculine: *w-‘m l-yz’ šdq-sn b-kl mngw byktrbwn ‘m-n thrg-s l-wfy mr’-sn* (NAM 511/10–12) “And may (the god) ‘M continue to grant them (favour) in all matters which they beg from his authority for the well-being of their lord”. The only examples in Minaic seem to be the forms *trdnn* (< *WRD*) “(the women who) descend” and *l’nytn* “they become wives” in M 293A = as-Sawda 37/5 f., which clearly show a double *n* in their ending.

The base of PC formation in the base stem 0₁ is generally /f^{VI}/; there is no indication for a pattern analogous to Ethiopic *yāqattəl* in any ASA language (Nebes 1994a). Nevertheless the morphological distinction between indicative and other moods finds hardly expression in the consonantal script. Few indications could be found in defective forms of weak verbs in jussive contrasting with occasional plene forms in the indicative (e.g., *l-yšmn wfy* (J 611/16–17) “may he set up the well-being of (...)” against *dt šym w-yšymn wfy* (München VM 91–315 336) “that he has set up and will set up the well-being of (...)”; personal communication A. Multhoff) and in the differentiation between *yf^lwn* and *yf^lw* in Qatabanic masculine plural (see above). – In addition, as the quoted example from NAM 511 shows, Qatabanic (as well as Minaic) has a *b-* prefixed to indicative PC forms. In contrast, moods such as the jussive are unmarked (a more differentiated picture is drawn by Avanzini 2005). This feature is completely unknown in Sabaic.

The most remarkable characteristic which separates Sabaic from all other ASA languages is the differentiation between an unaugmented form (PC-Ø) and an augmented form (PC-N), the latter being characterized by adding an ending *-n* (in singular) and *-nn* (in dual and plural) to the inflected forms (cf. the paradigm in table 63.13). The semantic significance of this distinction is not yet clear; it is, however, in no way a question of indicative and jussive (see the remarks in 5.1.2.). The Sabaic PC-Ø and PC-N must therefore not be confused with the common Semitic categories jussive/preterite (‘short imperfect’, **yaqtul*) and indicative/present (‘long imperfect’, **yaqtulu*) respectively, which are, as already pointed out, not graphically distinct in Sabaic and beyond (on the only exception in Qatabanic, see above). The augment *-n*, plural *-nn*, of the PC-N is thus most probably to be connected with the *energicus* ending in other Semitic languages. In order to avoid any confusion, the terms ‘short form’ and ‘long form’, which have indeed been used to designate the Sabaic PC forms in the older literature, should be replaced by the neutral terms ‘unaugmented’ and ‘augmented’, abbreviated PC-Ø and PC-N, respectively. – In the other ASA languages, this *-n* augment is not productive at all; several instances in the Minaic inscriptions may well be considered as plural forms (cf. already Beeston 1984, 60).

4.4.2.3. Imperative

Formation of the imperative is known exclusively from the letters in minuscule script and at present only for the masculine. In Sabaic, the singular pattern is *f^ll*, in most cases augmented by *-n*. In the dual and plural, the augmented form is *f^llⁿⁿ*, what may be considered an analogy to the PC-N formation. And indeed, besides this, a short form occurs, but obviously this does not follow the pattern of the PC-Ø (**f^lw*), but rather exhibits a pattern *f^lln*, cf. *w-‘ntmw šhln l-šrh’l* (X.BSB 99/5) “And you, attend to (the matter) for ŠRH’L!” (short form) and *w-‘tmw f-štrnn* (X.BSB 136/8) “And you,

write!” (long form). As for Minaic, examples like *w-ʿnt bl ḥmym* (< *WBL*, Mon.script.sab. 667/1) “And you, bring ḤMYM!” and *w-ʿntmy ʿlwn* (Mon.script.sab. 206A/3–4) “And you (dual), bring up!” point into the same direction.

4.4.2.4. Infinitive and participle

Morphologically, the infinitive follows the pattern of the PC in all ASA languages, as in Qatabanic *fʿl* = T₁, Minaic *fʿl* = 0₃, etc. (see 4.4.1.). The most specific feature of infinitive formation in Sabaic, at least in its central dialect, is the differentiation between an unaugmented form (*fʿl*) in the base stem 0₁ and a form augmented by *-n* in all derived stems (*ḥfʿln*, *fʿln*, etc.). This pattern, regularly in use from MSab times onwards, but not yet in ESab, allows a clear morphological distinction between the base stem 0₁ (infinitive *fʿl*) and the derived 0₂ (infinitive *fʿln*). The other ASA languages do not share this feature. Only in Qatabanic may a *-m* be attached to the infinitive of derived stems in certain syntactic positions (see Nebes 1988 and Multhoff *forthcoming*, with note 46).

As far as can be seen, the participle has a form *fʿl* in the base stem (0₁), but an *m*-prefixed formation in the derived stems, thus Sabaic *mfʿl* (0₂), *mḥfʿl*, etc., Qatabanic *msfʿl*, and so forth.

4.5. Particles

4.5.1. Prepositions

The direction marker “for, to(wards)” is *k-* in Minaic and *h-* in Ḥaḍramitic, as opposed to *l-* in the two other languages. For Ḥaḍramitic, the same is valid for the combination *h-n* “from” (Sabaic *l-n*, cf. the following paragraph), as in *h-n ʿsnm ʾd mn ʿym* (R 2640) “from the foundation up to the top”. As this example shows, the preposition “to(wards)”, forming *ʿd(y)* in the other languages, is spelt with *ʿ* in Ḥaḍramitic (which has to be considered a lexical rather than a phonological phenomenon, see Sima 1999/2000). Finally, prepositions ending in *-y* in Sabaic are written with *-w* in Qatabanic, e.g., *(b-)ʿlw* “(up)on” and *b-qdmw* “before” (Sab. *(b-)ʿly* and *b-qdmy*, respectively, see 3.2.).

4.5.2. Enclitics

The ASA languages share the two enclitic particles *-m(w)* and *-ʿy* which probably have an emphasizing function, as in expressions like Sabaic *b-mw ḍn ḥrfn* “in the very same year” (as opposed to unmarked *b-ḍn ḥrfn*). They are mainly attached to prepositions, conjunctions, and relative pronouns, but also to nouns (like *w-sʿr-ʿy ḍ-ngw k-sm* (M 293A = as-Sawda 37/6, Min.) “and the rest of what has been announced to them”, see Nebes 1991 and Stein 2009, 92 f.); in Ḥaḍramitic, enclitic *-m* is attached also to finite verbal forms (Frantsouzoff 2003a, 46). The minuscule inscriptions make particularly broad use of these enclitics (Stein 2010, 43 f.).

Another enclitic *-n* has only recently been determined (Stein 2003, 231–238). Attached to prepositions, this enclitic turns the meaning of the foregoing particle into its opposite, e.g., *ʿbr-n* and *ʿm-n* “from” against *(b-/l-)*ʿ*br* “to(wards)”, *(b-)*ʿ*m* “with”. This pattern works perfectly also with the prepositions traditionally spelled *bn* and *ln* “from”, which may be split up into the prepositions *b-* “in, at, by” and *l-* “to(wards), for”, respectively, and the enclitic particle. Amply attested in Sabaic, this feature also seems to be productive in the other ASA languages, cf. Ḥaḍramitic *h-n* “from” (see 4.5.1.) and *ṯht-n* “under”, and *ʿm-n* “from” in the formulae of Minaic (as well as Sabaic) letters and in Qatabanic (cf. the example from NAM 511 in 4.4.2.2.). The preposition *bn* (= *b-n*) “from” is common in all ASA languages.

4.5.3. Negations

The common negative particle in ASA is *ʿl*. Besides this, an alternative form *lhm* seems to be preferred in Minaic, e.g. in *w-hn ʿy lhm drʿw* (Mon.script.sab. 624/6) “When they have not sown”. A similar form *lm* is used in the Amiritic dialect of Sabaic. Unlike Minaic, however, this is exclusively connected with PC verbal forms of past meaning and may thus be connected with the corresponding negation in Arabic (see 2.2.). In LSab, a negation *dʿ* is used instead of *ʿl*. Supposedly originating in earlier stages of South Sabaic, this negation has survived in some of the modern Arabic dialects of Yemen.

5. Syntax

In the field of Sabaic syntax, a number of specialist studies are available, mainly by N. Nebes. The different types of subordinate clauses are exemplified by Nebes in Nebes/Stein 2004, 474–484, conditional clauses in all ASA languages are dealt with exhaustively by Sima 2001a. Due to the less differentiated, and often fragmentary, documentation of the non-Sabaic languages, the syntactic characteristics of Qatabanic, Minaic and especially Ḥaḍramitic are still poorly understood. In the following, only few selected features shall be demonstrated, focussing on those which can be considered characteristic in ASA in comparison with other Semitic languages. Unless otherwise indicated, the features and examples are Sabaic.

5.1. Use of tenses

5.1.1. The uses of suffix conjugation (SC)

The basic function of SC is anteriority (antecedent action) to a given relative moment. It thus expresses all kinds of past and past perfect actions, in main clauses as well as in hypotaxis: *w-štr šrk f-mḏʿ* (X.BSB 109/3) “The letter you sent has arrived”; *rbntf yzʿfr w-... ḥqnyw mrʿ-hmw ʿlmqh-bʿl-ʿwm šlmn ... l-qbly ḏ-wld l-hmw bnm ḏkrn w-šftw ʿlmqhw k-mhn-mw yldn l-hmw bnm w-yḥywn f-yḥqnywn šlmm* (J 669/1–12) “RBTNf

YẒFR and ... have dedicated to their lord ʾLMQH(W), lord of (the temple) ʾWM, the statuette ... because a male son was born to them, and they had promised ʾLMQHW (before) that as soon as a son would be born to them and would survive they would dedicate a statuette”.

In conditional clauses, SC may appear in the protasis, however alternating with PC forms in this position, cf. *w-hmy-ʾl whbt-hw w-h[... ʿdy w]rh d-sbʾ f-l yškrn mššntm b-ʿly ġnm[t]* (X.BSB 49/3–5) “If she has not given and [...] it [till the m]onth D-SBʾ, let an interest be imposed upon ĠNMT” and *w-hmy-ʾl yhbnn ... bnw d-mwṭbn nšh b-dn ḏhrn b-dn mwʿdn f-l yškrn w-rbh w-tšfn mššntm* (X.BSB 51/5–7) “If the Banū D-MWṬBN will not give ... the forfeit (which is written down) in this document at this (appointed) date, let an interest and fine be imposed and inflicted”; in the apodosis, PC forms (or imperative) are the rule (cf. also the example from J 669 above).

5.1.2. The uses of prefix conjugation (PC)

The basic functions of PC are simultaneity (simultaneous action) and posteriority (subsequent action) to a given relative moment. Consequently present and future as well as modal actions, like jussive and vetitive, are expressed by PC forms: *kl ʾsdn w-ʾnṭn ʾlw ystmynn ʾslm w-mlkm w-whbm w-...* (F 76/2–3) “all men and women who are called ʾSLM, MLKM, WHBM, and ...”; *w-d-yʾsyn b-hw qn[ym] ... w-ʾl yḥdṭn ʾqdmn l-yhnkrn ḥms blṭm* (Rob Maš 1/12–14) “Whosoever finds in it (i.e., the cistern reserved for a deity) some she[ep] ..., and does not tell the overseers, shall be punished by five *blṭt*-coins”; *b-kl ʾmP stmlʾw w-ystmlʾnn b-ʿm-hw* (NNAG 6 = J 627/13–14) “in all oracular fulfilments they have sought (in the past) and they will seek (in future) with him”; *w-ʾlmqhw l-ykrbn-k* (X.BSB 98/1–2) “May ʾLMQHW bless you”; *w-bnw šṭrn w-ʾwld-hmw f-ʾl ymnʾw bny ršwn w-ʾwld-hmw bn hyʿ l-hmw hʾ fwnṭn msbʾ mwn* (R 4815/6–7) “The Banū ŠṬRN and their children must not prevent the Banū RŠYN and their children from that this canal, (that is) the water course, flows to them” (representative examples for all syntactic contexts are given by Nebes 1994b).

Especially in narrative contexts, the relative moment may be fixed in the past (i.e., syntactically in a main clause with SC predicate). In these cases, the PC form marks posteriority to this relative moment, but not necessarily to the reader’s (or writer’s) perspective: *w-bdʿ b-ʿl-hmw b-ʿm šP-hmw bqrn w-sfrtm d-y(h)bw b-ʿm šP-hmw* (R 3945/3–4) “He imposed on them as tribute, together with their (former) tribute, cattle and other amounts which they would have to give together with their (former) tribute”; *w-ʾl l-hmw b-hw kl mwm d-ystqynn* (E 13/22ʾ–23ʾ) “They had in it (i.e., the occupied royal palace in the city of ŠBWT) no water that they could drink”. In contrast to this, simultaneity to an antecedent clause is not expressed by PC forms, but rather remains unmarked (Nebes 1990, 66–68).

A particular feature of Sabaic syntax is the use of PC-forms, preceded by the conjunction *w-*, in a past context – parallel to the ‘consecutive imperfect’ in Hebrew. This pattern is used in narratives, thus mainly in the historical reports of dedicatory and commemorative inscriptions, in order to mark a progression in the past (cf. Nebes 1994b, 200–202 and Gruntfest 1999): *w-bn-hw f-ygbʾw ʿdy hgrn nʿd w-bn-hw f-yḥsrn mlkn ʾlšrh yḥdb w-d-bn ḥms-hw w-ʾfrs-hw ʿdy ʾrd mhʾnf m-wyqmʾw w-hbʾln hgrnhn ʿty w-ʿty w-ylyfw b-hw mhrgrtm w-sby m-wltn w-ḡnm d-ʿsm w-bn-hw f-yʾwlv b-ʿly*

hgrn ḏfw w-ykbnn b-hw ḏ-mḏrḥm w-š'bn mh'nfm w-yhbrrw š'bn mh'nfm b-ly mḏmt-hmw w-hsḥt-hmw mḏmt-hmw 'dy ḏt ḥml-hmw hgrn ḏfw w-yhrgw bn-hmw mhrḡm ḏ-sm (J 576/7–9) “And from there, they returned to the city of N'D. And from there, the king 'LŠRḤ YHDB and some of his troops and his cavalry marched against the land of MH'NFM. And they overthrew and seized the two cities 'TY and 'TY. And they got there trophies, captives, loot, and booty that were numerous. And from there, they turned to the city of ḌFW. And they found there the (clan) Ḍ-MḌRHM and the tribe MH'NFM. And the tribe MH'NFM came into the open against their vanguard, but their vanguard defeated them until they drove them back into the city of ḌFW. And they killed a number of them that was considerable.” (This passage is a small section of a rather extensive historical report on the campaigns of the Sabaean king; cf. also the quotation from the same inscription in 4.4.1, above.) As the example shows, the characteristic sequence *w-yf^l* may be split up by a syntactic element placed in front of the main verb for the purpose of focusing (see 5.3.1). – Traces of this narrative pattern have also been observed in Qatabanic (namely in 'Arbaš-Say'un 1, see Avanzini 2005, 320) and Minaic (especially in R 3427 = M 338, see Gruntfest 1999, 174), though the evidence is rather scarce in these languages.

As Nebes 1994b has demonstrated, no significant difference in the function of PC-Ø and PC-N can be established. Both forms may occur in any syntactic context (cf., e.g., the forms *ygb'w*, *ylfyw* etc. (PC-Ø) against *yḥsm* and *ykbnn* (PC-N) in the example from J 576, above). A syntactic differentiation of both forms on the level of perfective/jussive (PC-Ø) vs. imperfective (PC-N) or the like, as proposed by Tropper 1997, is not substantiated by the textual evidence (cf. also Stein 2003, 167).

Only recently, a past function of the PC according to that of the early Semitic preterite **yaqtul* (= Akkadian *iprus*) has been claimed in Qatabanic and Ḥaḍramitic (Avanzini 2005, Frantsouzoff 2003a, 46). The Qatabanic evidence, however, is so far confined to narratives and thus syntactically identical with the Sabaic pattern *w-yf^l* (see above, and 4.4.2.2, first paragraph), and the proposed Ḥaḍramitic examples may well be interpreted in a completely different way (see Multhoff 2010a, 28–34). Consequently, apart from the ‘consecutive imperfect’, there is no conclusive evidence for a preterite meaning of PC forms in any ASA language.

5.2. Constructions of the infinitive

The infinitive may represent different parts of a sentence, such as object, subject, adverbial qualification, etc. (see Nebes 1988). Syntactically the infinitive is constructed like a verbal form, accompanied by its subject in the nominative, and its object(s), if required, in the accusative (Nebes 1987): *ḏt 'l šn 'ḥḏ w-h'byn kl 'nsm bn msb' 'wm* (MB 2002 I-20/1–2) “It is not allowed to seize and keep any person from the road of 'WM”; *b-ḏt ḥmr-hmw t'wln ḥmw w-²frs-hmw* (J 616/28–29) “(they praised the god 'LMQH) that he has granted them to return – they themselves and their cavalry”; *w-l-wz' 'lmqh-thwn b'l-'wm ḥmr 'bd-hw rb't ḥwfyw-hw* (J 693/10–12) “and (they have dedicated) that 'LMQH THWN, lord of 'WM, may continue (lit.: for the continuing) to grant his servant RB'T to safeguard him”.

A characteristic feature of all ASA languages is the so-called infinitive chain. In connection with a finite verbal form, one or more infinitives can be attached with the

conjunction *w-*, paratactically continuing the preceding clause. The syntactic relations of these infinitives are the same as those of the main verb: *w-bnw šhrm f-l yqnynn w-brl w-b'l w-hwštn w-hš'mn w-qyḏ w-qtyḏn b-hmt mr'tnhn* (X.BSB 61/6–8) “The Banū ŠHRM may acquire and possess, own and control, sell and exchange, or exchange (something) for, those two women”; cf. also the example from BR-M. Bayḥān 1 in 5.4., below. However, the infinitive does not need to follow the main verb immediately, but may be separated from it by a number of other words: *w-l-kmw l-yhšbḥn 'ttr w-'lmqhw n'mtm w-h'rk ywm-kmw* (X.BSB 100/3–4) “May (the gods) ‘TTR and ‘LMQHW let shine luck for you and prolong your day”. In some instances, the verbs of the infinitive chain seem to express an explicative sense: *br'w w-hw'rn w-hšqrn byt-hmw yf'n* (C 416/2) “They have built, (i.e., in particular) laid the foundation and completed their house (named) YF'N”.

5.3. The main clause

5.3.1. Word order

The common word order, VERB – SUBJECT – OBJECT, is broken in many cases for the purpose of focusing. First of all, the majority of ASA inscriptions start with a noun, be it the subject (i.e., the name of the author) or the central object of the text: *PN hqny GN šlmm* “PN has dedicated to GN a statuette” (dedicatory inscriptions); *PN₁ ḥt PN₂* “PN₁ has written to PN₂” (ESab letter correspondence); *'rb' w-ḥmsy bltm n'mtm 'lt hmqḏ w-šdq 'ws'tt dyrs lyšrh'l bn tqd* (X.BSB 27/1–2) “Fifty-four good bltt-coins which 'WS'TT of (the clan) YRS has transferred and paid to YSRH'L of (the clan) TDQ”. Alternatively, the matter of the inscription may be emphasized by preposing a demonstrative or adverb, as in *ḏt yḏkrnn twb'l w-'hy-hw ... k-yhbnn* (X.BSB 51/1–2) “Thus declare TWB'L and his brothers ... that they will hand over” and *b-ḥg ḏn mḥrn ḥḥr ṯlb* (R 4176/1) “By the authority of this decree (the god) T^oLB has decreed (the following)”.

Within the text proper, focusing is achieved by placing the relevant part of the sentence in front of the main verb. The preposed element may be either the subject, the object, or a prepositional phrase, e.g., *w-b-mw hwt ywmn ḏ-b-hw stml'w b-'m 'lmqh f-ḥmr-hmw ḏnmm w-sqym* (J 653/10–12) “And on that very day on which they asked 'LMQH for fulfilment, he granted them rain and irrigation” (cf. also the example from J 576 in 5.1.2., above); *b-ḏt wfym 'br-n-kmw f-h'sm ḥmd* (Ghul Document A/2–3) “For (the information) that well-being (was reported) from you, he has thanked many times”; *w-štr štrk b-'m rḥbm f-mḏ' w-rdy w-h' f-l yḥdgn b-ḥḥbn l-k kl 'ḥšn-k ... w-b wz' štr l-hmw l-ḥmdn w-hn'm f-ḥywn l-hw* (Mon.script.sab. 68/2–7) “The letter you have sent (lit.: written) with RḤBM has arrived and pleased. He (i.e., the sender of the present letter) will not fail to inform of you all your relatives ... For continuing to write to them thank you! And greet HN'M from him!”. As the last example from letter correspondence shows, preposing serves the purpose of text arrangement, each sentence accentuated like this introducing a new matter of contents. In narrative texts, the preposing goes along with a progress in the course of action. It is for this reason that in most (however not all) cases the main verb of the sentence is introduced by the progress particle *f-* (see Nebes 1995, chapter 5). Amply attested in Sabaic, this pattern

is found in Qatabanic (see Nebes 1995, 247–253) and Minaic as well, cf. *w-ʿttr w-wdm l-yšrhñ b-nfsh-kmn w-ʿdnh-kmn w-s sysr k-k* (Mon.script.sab. 73/2, Min.) “(The gods) ‘TTR and WDM may preserve your soul and your mind. And he (i.e., the sender) has sent to you”; in Ḥaḍramitic, the evidence is not representative.

5.3.2. Syndetic and asyndetic coordination

Generally, syndetic coordination by *w-* is the rule. In addition, paratactic coordination by *f-* is productive in Minaic and Amiric, but not in the other languages: *w-b-hñ sfñw ḡyln b-šty šmt blty d-mdhww f-ḥtmyn bn ʿrh mtl-s* (YM 10886/8–11, Min.) “and (they have asked the god) because they have let the canal flow in northern direction(?) without the permission of D-MDHW. So they will refrain from an affair like this (in future)”; *w-ʿh-k šḥt qty w-tmt f-ʿnt hb ʿhk* (Mon.script.sab. 188/2 f., Min.) “Your brother has had written cucumber and garlic. And you, give your brother (...)”.

In Qatabanic, finite verb forms of SC are often asyndetically connected, resulting in verbal chains that are semantically parallel to the equally productive infinitive chains, cf. *ʿlḍrʿ ... w-ʿbʿly ... w-hwʿm ... ʿsyw zrbw bnyw qbr-sm mrdʿm* (Ry 521/1–2) “‘LDR’ ..., ‘BʿLY’ ..., and HWFʿM ... have bought, acquired, and built their tomb (named) MRDʿM” and *šʿbn d-hrbt ḥwr hgrn šwm brʿw w-swṭr w-sšqr ḍn mḥfdn yḥḍr* (R 4329/1–2) “The tribe of (the city) HRBT, settlers in the city of ŠWM, built, laid foundations, and completed this tower (named) YḤḌR” (while the finite forms in the first example are asyndetic, the infinitives following the main verb in the second are coordinated by *w-*). This feature is unknown in the other ASA languages.

Apart from this particular pattern, asyndetic constructions are rare in ASA. Occasionally they nevertheless occur, implying, as it seems, a modal function such as explicative, final, consecutive, and the like: *w-hmy ʿl tkbn mmtm f-štrñ l-hw ystʿkd l-k* (X.BSB 124/9–10) “If you don’t get linseed, write to him so that he may keep (some) for you”; *f-štr k-y ʿšmk mḥr* (Mon.script.sab. 126/4 f., Min.) “Write to me, so that I may depart tomorrow!”.

5.4. Attributive relative clauses

Attributive relative clauses may either be introduced by the relative pronoun (see 4.3.4.), or asyndetically attached to the antecedent. In the case of asyndetic construction, the antecedent is in the construct state, hence the relative clause effectively in the genitive, cf. *frsn w-rkb-hw d-ḏhbn hqnyt šftw ln-qdmm* (J 745/4–6) “(... have dedicated) the horse and its rider (made of) bronze, (i.e.) the dedication which they had promised for a long time” besides *šlmtñ dṭ ḏhbn dṭ šftt-hw ʿmt-hw* (as-Saʿīd 2002 no. 4/4–6) “(... have dedicated) the statuette of bronze which his maid-servant had promised him” and *šlmm d-ḏhbm d-šftt-hw* (E 37/8–9) “(... have dedicated) a statuette of bronze, which they had promised him” (note that in the last example, the antecedent is indeterminate). The preference for one or the other construction is dependent on syntactical reasons: is the antecedent augmented by an attribute (as in the second and third examples), an asyndetic relative clause is basically excluded. Wherever possible, however, the asyndetic construction seems to be preferred.

A common feature is the arrangement of one or more verbs in a relative clause in paronomastic construction, such as *kl sb't w-dby' w-tqdm t sb'w w-db' w-tqdmn* (BR-M. Bayhān 1/8–9) “all campaigns, operations and attacks they undertook, executed and carried out”; *w-bn 'sm hlz w-mrd mrd 'b-hmy b-hyt hgrn šwm* (J 585/10–11) “and (that he returned) from the increase of sickness and disease their father suffered from in that city ŠWM”. As these examples show, the antecedent of a genitive construction may consist of more than one noun. Likewise, several nouns, or relative sentences, may be grouped together in the genitive chain.

6. Literature (a selection)

The bibliographic list in paragraph 7 contains, besides the literature cited in the text, a selection of the most recent reference works and studies on the topic. Currently research is still in progress especially in the field of ASA verbal morphology and syntax. Therefore some works had to be included that have not yet appeared. In the following, some introductory remarks on the relevance of some titles may be permitted.

An exhaustive, annotated bibliography on all aspects of Ancient South Arabian studies by W. W. Müller appears annually in the *Archiv für Orientforschung*. Up to the year 1996, the entries have been published separately (Müller 2001). References to ASA inscriptions are given by Kitchen 2000 and Stein 2003, 274–290, where the sigla of inscriptions cited in the present article may be found as well. As far as the texts are covered there, bibliographical data is also found within the CSAI corpus (see below).

The most comprehensive text collections are still CIH and RES. They will be, however, partly replaced by some new corpora, first of all CSAI and IDIS. The volumes of the IDIS series are dedicated to particular sites, presenting all epigraphic material known from that spot. The CSAI project is a database provided by the University of Pisa which aims at a complete collection of the entire epigraphic material of the four ASA languages. At present, almost all Qatabanic, Minaic, and Ḥaḍramitic inscriptions are accessible under <http://csai.humnet.unipi.it>. Of the accompanying printed volumes, the first one containing the Qatabanic inscriptions appeared in 2004.

There is no comprehensive grammar of any ASA language available. The most recent, however not complete, reference for Sabaic is Stein 2003, for the other languages, one still has recourse to the brief survey by Beeston 1984 (the grammar and lexicon of Minaic by Arbach 1993 have never been printed). Nevertheless a large number of important studies on selected grammatical aspects, mostly of Sabaic, have appeared in the past twenty years.

In terms of the lexicon, there is no up-to-date dictionary of any ASA language available. The only reliable reference work remains the *Sabaic Dictionary* (Beeston et al. 1982), but even this requires a complete revision since our knowledge of ASA vocabulary has substantially increased during the last decades, not least by the new data provided by the minuscule inscriptions. The most comprehensive reference to these texts is Stein 2010. For Qatabanic, one may consult Ricks 1989. A distinctive part of the ASA lexicon is exhaustively treated by Sima 2000.

Abbreviations: ASA = Ancient South Arabian; ESab = Early Sabaic; MSab = Middle Sabaic; LSab = Late Sabaic; PC = prefix conjugation; SC = suffix conjugation

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64. Modern South Arabian

1. Introduction
2. Languages and speakers
3. Dialectology and sociolinguistic situation
4. Phonology and phonetics
5. Morphology
6. Syntax
7. Conclusion
9. References

Abstract

This chapter is devoted to the linguistic characteristics of the six Modern South Arabian languages (MSAL) in their present state. A brief presentation of the native speakers and their way of life is followed by an overview of the dialectology and the sociolinguistic situation in Yemen and Oman. The linguistic section covers the phonology and phonetics, morphology and syntax. It underscores the originality and the richness of this distinct group within the Semitic family and contributes to a better knowledge of the latter. The characteristics of all the six MSAL are illustrated by numerous examples, including new data for the poorly known Hobyōt. Although a traditional oral literature that conveys a part of the ancient South Arabian patrimony has not been dealt with in the text, the principal sources of information on the subject are provided in the list of references.

1. Introduction

The so-called Modern South Arabian Languages (MSAL) are without any known script. They are presently spoken by about 200.000 speakers in the South of the Arabian Peninsula, in the Republic of Yemen and in the Sultanate of Oman, not including

the members of the Diaspora in Kuwait, in the United Arab Emirates, and in Kenya and Tanzania.

Among the various designations of this group, the one which is currently used by the scientific community is somewhat ambiguous, but a more appropriate solution has not yet been found. The MSAL belong to the Western South Semitic group. They exhibit many features in common with the ancient and modern languages of the same group such as the Epigraphic South Arabian languages and the Afro-Semitic languages of Eritrea and Ethiopia. The precise nature of their relationship with the ancient South Arabian languages remains a point of discussion (see ch. 68). Moreover, the differences with Arabic are strong enough to make intercomprehension impossible between speakers of any of the MSAL and Arabic speakers.

There are six MSAL: Mehri (M), Hobyōt (Hb), Ḥarsūsi (H), Baḥari (B), Jibbālī (J), Soqotri (S). These languages are unequally well studied. A considerable data base and texts have been published on Soqotri, Mehri and Jibbali since the first studies appeared between 1834 and 1840. Much less is available on Harsusi and Bathari for which no new research has been carried out since the 1980s. As for Hobyot, the last explored language, no exhaustive study has yet been achieved.

This chapter is an updated version of (Simeone-Senelle 1997a), with new data collected after 1996 during my fieldwork on Soqotri, Mehri dialects and Hobyot spoken in Yemen.

2. Languages and speakers

The six languages can be subdivided in three groups according to their linguistic affinities: 1) M with Hb, B, and H 2) S, 3) J. The very recent development of the research on Hb, at least Hb spoken in Yemen discovered in 1985, allows to relate it to the Mehri group, even though regular contacts with J speakers have an effect upon this speech.

The Mehri language, named [mehriyət], [mehriyōt], [məhrəyyət] depending on the dialect, is the most widespread language with about 100,000 speakers. The majority (88,600) live in Yemen, in the far eastern Governorate of Mahra; the others in the mountains of Dhofar in Oman. On the coast, its area extends from the Omani border to the eastern bank of Wadi Masilah in Yemen and not to Mukalla, as it was in 1975 (Johnstone 1975, 2). In the North it is spoken as far as the border of the Rub' al-Khali.

The Mahra inhabitants in the desert steppe of Yemen and in the mountains of Dhofar in Oman are semi-nomads who breed camels, cows and goats. In some wadis they cultivate palm-trees. In Yemen some of them are owners of four-wheel drive cars which enable them to trade with other countries of the Peninsula and provide supplies for numerous shops in the coastal towns and villages. On the coast the activities are sea-oriented: fishing, fish drying and freezing. Some people are employees in public services in the main coastal villages.

The term Hobyot [həwbyūt, hōbyōt] refers both to the speakers and to their language. According to my last recordings in December 2007, they number approximately 400 individuals. They are settled in the far-east of Mahra and in Oman, in a very restricted area on the border. Their settlements with round stone-walls houses covered with branches are scattered over less than 12 kilometers on the slopes of the mountain

overlooking the Hawf area. There, they breed camels, cows and goats, and cultivate some garden produce, millet, fodder, and collect honey. They spend the rainy season with their cattle up in the mountain. Some are established in coastal villages: Hawf, 'Abri, Rehen, where they practise mainly fishing. They are in close contact with the Mehri and Jibbali speakers.

Ḥarsūsi [ḥarsīyət] is spoken by the *Ḥarāsīs* and the *'Ifār*, in the area of *Jiddat al-Ḥarāsīs* (north-east of Dhofar). The number of speakers was estimated at no more than 600 (Johnstone 1977, x), but this reckoning was made during the period when many Harasis had left their region to go and work in oil wells. Since then, many of them have returned.

Baṭḥari is the language of the *Baṭāhira* who live on the south-western coast of Oman in the Jāzir area, between Hasik and Ras Sharbitat. They are 'pastoral cave-dwellers and fishermen' (Johnstone 1975, 94) and their numbers amount to about 300 individuals (Morris 1983, 130).

The Jibbali language [gēblēt]/[šherēt] is described under a variety of names in the scientific literature, e.g. *Eḥkili*, *Šxauri*, *Šheri*, *Qarāwi*. Finally, Johnstone (1981, xi-xii) chose the name *Jibbālī* (an arabization of the name *šheri*), a name that he considered to be neutral. However, in 2010 in Muscat some native speakers from Salalah informed me (p.c.) they disagree with Johnstone's decision. They insist on using *Šheri* as the correct name both for their community and their language. It is spoken in Oman 'by a number of communities of different social status and tribal origin, numbering together about 5,000' (Johnstone 1975, 94). They live as semi-nomads in the mountains of Dhofar, rearing camels and cows and collecting frankincense. In the coastal villages of this area (Raysut, Salāla, Mirbaṭ, Sidh ...) they practise various occupations. The *Baṭāhira*, who breed cattle in the mountains of Wādī Ezdaḥ, east of the road to Thamrit, speak J (Morris 1983, 143 n.1). The inhabitants of the Kūria Mūria Islands are fishermen who speak a variety of the eastern J (Johnstone 1981, xii).

The term Soqotri [sḳāṭri] is applied to both the islanders and their language. It is spoken in Yemen, on the island of Soqatra and the neighbouring islets of 'Abd-al-Kūri and Samḥa. The S speakers are estimated at 50,000, including those of 'Abd-al-Kūri (less than 400) and of Samḥa (150) (Cheung/De Vantier 2006, 268). On the coast the islanders are fishermen and also cultivate date-palms. In the mountains, cave-dwelling Bedouin rear cows and goats, village-dwellers cultivate millet, and in the eastern area collect the gum of the Dragon's Blood tree. The economy of 'Abd-al-Kūri and Samḥa is based on fishing.

3. Dialectology and sociolinguistic situation

Dialectal data for B and H are lacking. Dialectal groups are delimited in M, S, J and Hb, for which sociological and geographical parameters are relevant.

In the Mehri language of Yemen, the so-called Mehri of the *Sharqiya*, there is a clear distinction, from both a linguistic point of view and according to Yemenite Mehri speakers, between two groups: the western variety called [*mehriyā*] and the eastern variety [*mehriyōt*] separated geographically by the Fartak cape. Moreover, within the same dialectal area there are differences between Bedouin and city varieties. The dialect of Qishn, the former capital of the Mahra, remains the most prestigious across the whole region. In Dhofar, there is another variety called [*məhrəyyət*] (Johnstone 1975, 2). In the far eastern part, M is in contact with Hb and J.

There are some dialectal differences within Hb, depending on the intensity of contact with J or/and *mehriyōt*. In addition, it has been noted that the Hb speaking inhabitants of African origin living in Rehen have a particular Hb dialect. Research in this field has just begun (Sima 2004; Simeone-Senelle 2009).

For J, Johnstone (1981, xii) makes a distinction between the central, eastern and western dialects.

Regarding S, it is possible to distinguish four groups between the surveyed dialects: those of the northern coastal villages (including the capital Hadibo), those of the southern coast, the varieties spoken by the Bedouin in the Hagher Mountains, in the center of the island, and the dialects of the area of Qalansiya (in the far west). The dialect of ʿAbd-al-Kūri is categorised separately whereas that of Samḥa belongs to the western dialects of Soqatra (Naumkin 1988, 343–344). Many aspects of this dialectology require further investigation.

MSAL native speakers use their mother tongue for private purposes, within the family and with speakers of the same language. As for cultural activities, the texts collected in M, H, J, S and B prove that these languages still possess a traditional oral literature. Many a speaker of the area where M, J, and Hb are in contact knows several MSAL. There is no intercomprehension between native speakers of different MSAL mother tongues; when in contact with each other, they resort to Arabic, as with Arabic speakers. All speakers are Muslim. Both in Oman and in Yemen, Arabic is the official language of communication: administration, school, army, and business. The MSAL speakers on the coast are bi- or multilingual. The use of MSAL is increasingly reduced, and the contacts give rise to new linguistic attitudes. The influence of Arabic is increasing (Simeone-Senelle 1997b; 2009, 328). As modern infrastructure has opened up the MSAL areas (*ibid.* 325–326), this process has accelerated in the last two years, so that these languages are now considered to be very endangered.

4. Phonology and phonetics

4.1. The consonants

Among the modern Semitic languages, the consonant system of the MSAL is closest to the reconstructed system of Proto-Semitic. They are the only ones with three voiceless alveolar fricatives. In addition, they have a phoneme /ʃ/.

Another typical feature of the MSAL is the post-glottalized realization of the so-called ‘emphatic’ consonants of Semitic. The implications of this feature are of great interest, questioning the hypothesis of a Cushitic influence on the Afro-Semitic languages in this matter (see ch. 9).

Only S does not have interdentalals. The consonant system of Yemenite M does not lack interdentalals. The merging of the interdentalals with the dentalals in some city dialects in western Mahra is a sociolinguistical phenomenon.

In S, the merging of the velar fricatives /x/ and /g/ with the pharyngeals /ħ/ and /ʕ/ is particular to only certain dialects studied before 1985; in other dialects the velar fricatives do occur, even in native words: SQa *xtē* (SQb *htē*) ‘night’; SQa *ššġtəh* (SQb *ššʕtəh*) ‘three(f.)’; SQa *litaġ* (SQb *litaʕ*) ‘killed’.

Tab. 64.1: Consonant system

	plosive		fricative		ejective	nasal	liquid	rolled
labial		b		f			m	
denti-alveolar	t	d			ɬ	n	l	r
			s	z	ʃ			
interdental			t̪	ɖ	ɬ/ɖ			
palato-alveolar			ʃ		ʃ			
lateral-alveolar			ʃ		ʃ			
palatal				y				
velar	k	g	x	ɣ	ɰ			
labio-velar				ʁ				
pharyngeal			ħ	ʕ				
laryngeal			ʔ	h				

In J /ʃ/ may correspond to M /h/, to S /h/ or /ʃ/: JL *béʃəl*, M, Hb *behēl*, SL *béhel* ‘cooked’; JL, Hb *-hum*, MQn *-həm*, SQa *-hən/-ʃən* suf.pr.pl.3m.

The Central dialect of Jibbali (cJ) has a phoneme /ʃ/ (labialized ʃ) contrasting with /ʃ/: JL *ebrūtš* ‘your (sg.f.) daughter’, *ebrūtš* ‘his daughter’, the Eastern dialect (eJ) has only /ʃ/.

4.1.1. The laterals /ʃ/ and /ʃ/

The laterals /ʃ/ and /ʃ/ have an apico-alveolar articulation: the tongue-tip is on the alveolar ridge and the lateral fricative sound is produced by the air flowing out of the passage opened by lowering the mid-section of the tongue and retracting the corner of the mouth, generally at the right side. The glottalized ʃ̣, corresponding to the Arabic ɖ, is often voiced (see 4.1.2.). It is also transcribed ʒ (ML), ʒ̣ (JL), ɖ (SL).

4.1.2. The ejective consonants

The ‘emphatic’ consonants are ejective, not velarized as in Arabic: [t̪], [t̪], [s̪], [ʃ̪]/[ʃ̪], [ʃ̪], [k̪]. For greater convenience, they are written with a subscript dot. The degree of the glottalization varies, depending on the position of the consonant in the word and on the dialects concerned: for instance, in some S dialects, the glottalization is weaker, and in the M dialect of Qishn, the incomplete constriction of the glottis provokes a laryngealisation or ‘creaky voice’; under such conditions, some emphatics become voiced. Johnstone (1975, 98) has shown that in the languages of Dhofar, glottalized consonants are to be grouped with the voiced consonants from a morphological point of view.

In the Mehri of Qishn, laryngealization may spread to the direct vicinity of the consonant or even to the entire word (Lonnet/Simeone-Senelle 1983, 191–193).

The Modern South Arabian Languages

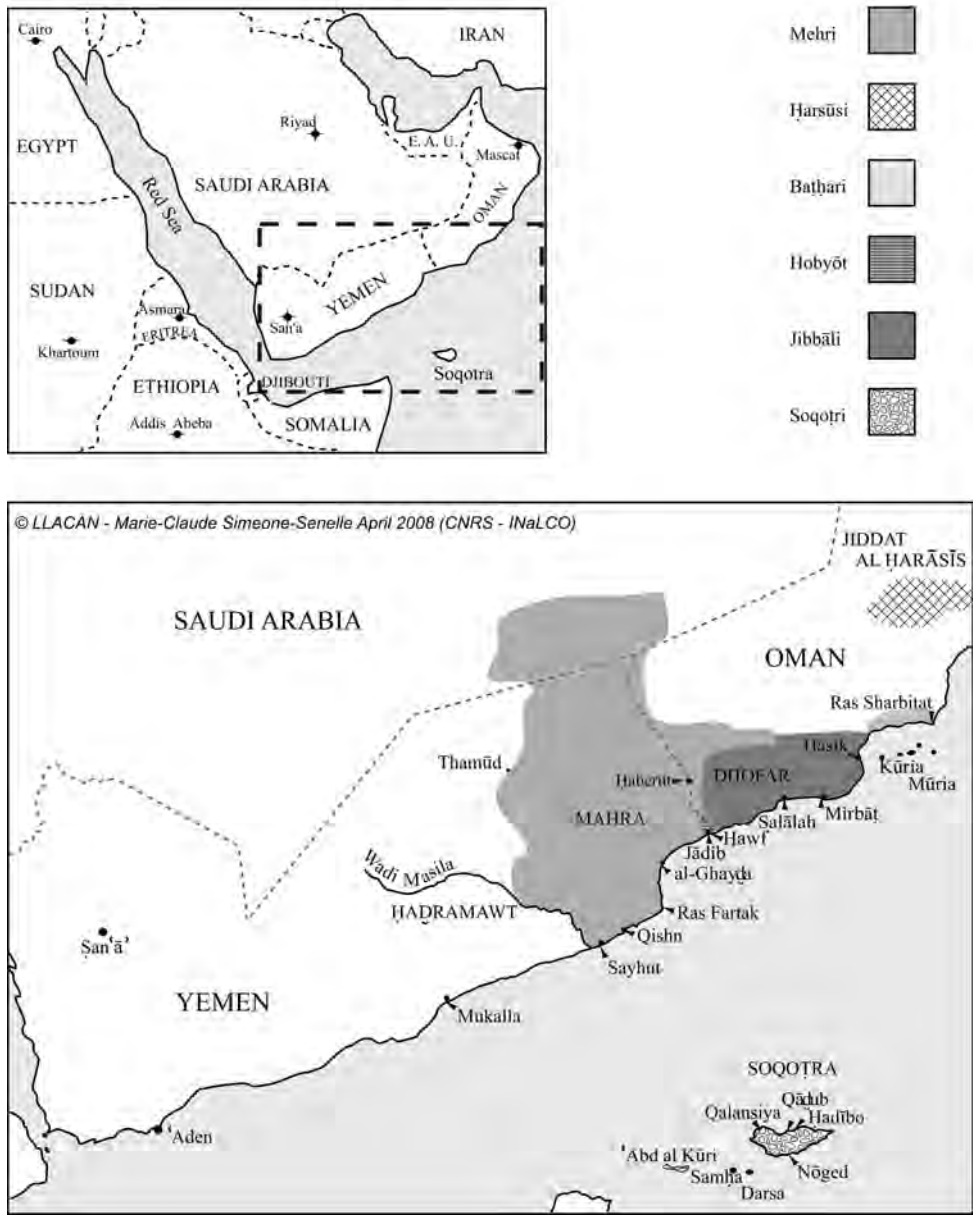


Fig. 64.1: The Modern South Arabian languages

4.1.3. The glottalized /ʕ/

ʕ ([ʕ] in cJ) occurs in all the MSAL, but never in the same words in the six languages (Frolova 2005): MQn *hašbáʕ*, ML *šəbáʕ*, Hb(Ht) *hišəbáʕ*, B *hašbáʕ*, HL *hašbáʕ*, but JL *ʔiṣbáʕ*, Hb(Hf) *ʔiṣəbáʕ*, SQb *ʔəṣbaʕ* ‘finger’.

ʕ may be connected with some rules of phonetic evolution. This phonologized variant often comes from the palatalization of /k/: J *šuyēt*, cJ *šuyēt*, ML *káymət* ‘judgment day’, SHr *šédhər*, ML *kādar* ‘pot’, J *məšhayrér*, cJ *məšhérér*, ML *məḵhayrír* ‘shin-bone’; or from a very particular evolution of /s/ or /ʃ/: ML *šəfdēt*, HL *šəfdáyt* ‘frog’ (see Ar. *dufdaʕa*).

In a few occurrences, no explanation can be provided: SQa *šáʕšaʕ* ‘take a little sip’, *hənšəh* ‘(name of) shellfish’; MQn *šənšəʕ* ‘snail (col.)’; MQn *šəffī*, ML *šəffáy*, Hb *šifeʕ*, B *šəffáyh* ‘elbow’; Hb *bišʕin* ‘Tristram’s grackle’ (here, ʕ may be a variant of š before ʕ); JL *šúrum* ‘sulk’.

4.1.4. The pharyngeals /ʕ/, /ħ/ and the laryngeal /h/.

ʕ has a particular status in H and in some dialects of M where it occurs very rarely. Generally, the pharyngeal is replaced by the laryngeal ʔ, or is but only a virtual phoneme influencing the length and the timbre of the vowel in contact, sometimes inducing a diphthong (or a glottalization, see 4.1.3.). In M, this phenomenon seems to be less common in the dialects of Yemen (except those of the area of Qishn) than in the Mehri of Dhofar:

<ʕfr>: MQn *əfər*, ML *ʔəfər*; HL *ʔáfər*, but MDt, MJb, Hb *ʕəfər*, B *ʕəfər*, JL *ʕəfər*, S *ʕəfər*; ‘red’. <mr>: MQn, ML *(ʔ)āmōr*, HL *ʔāmōr*, and Hb *ʕāmōr*, JL *ʕōr*, SHo *ʕamor* ‘say’ (and ‘do’ in S).

Often, where ʕ occurs, its status is unstable: MDt *kā* or *kaʕ* ‘ground’. Its occurrence is not predictable: MDt, Hb *fām* (sg.), *fáʕmā* (pl.) ‘foot, leg’; ML *rēʕi* ‘herder’, *rō* ‘herd’.

In M, Hb, H, *h* and *ħ*, initial and non-etymological, may be the development of the laryngeal ʔ: MQn, ML *ħəbēr*, Hb *ħəbeyr*, HL *ħəbyār* ‘she-camels’; MQn, ML *ħayb*, Hb *ħəb*, ‘father’.

In a word such as MQn *ħəróh*, ML *ħərōh*, Hb *ħerēh*, HL *ħərīh*, (B *ērīh*) ‘head’, *ħ* seems to be the lexification of a fossilized (Johnstone 1970a) definite article, absent in the languages of Yemen.

4.1.5. The so-called parasitic h in Soqotri

The occurrence of a non-etymological and non-morphological *h* (in nouns and very rarely in verbs) is a typical feature of S. It is related to the particular evolution of the long vowels and to the stress rules in S: as stress falls on the penultimate or antepenultimate syllable, the formerly long vowel of the syllable might be preserved by this *h* (more rarely by ʔ): *kátmeħam* (M *kətmīm*, J *kaṭmīm*) ‘butter’, SQb *šaləlħen* (pl. *šaləlīħən*) ‘small valley, small stream’; SHo *libʔħən* (MY *ləbōn*) ‘white’, *ʔirhez* (MQnB *hayrēz*, ML *yərēz*, JL *ʔirəz*) ‘rice’.

A particular articulation of the consonants, with the vocal cords apart at one end, occurs in S, and this phenomenon ([^h], [^ʔ]), called ‘murmur’ or ‘breathy voice’ (Ladefoged/Maddieson 2006) may affect the neighbouring vowels and contribute to the occurrence of the parasitic *h* (Lonnet/Simeone-Senelle 1997, 366): *léš^hən* ‘tongue’.

4.1.6. Palatalization

This phenomenon is very common, and a palatalized consonant may be phonologized (cf. /š/).

The palatalization of /g/, /k/ and /q/ occurs in all the MSAL, but to different degrees: /g/ > voiced pre-palatal [ž], [žʷ] in S, [ž] (or the labialized variant) in JL, voiced palato-alveolar [ḡ] in M and Hb: SQb [ḡāžəh], SAK [ʕāžʷəh] ‘woman’; eJ [ḡāžət], Hb [ḡoḡḡīt], MQn [ḡaḡənōt] ‘girl’.

In some S dialects, /k/ in contact with /i/ > [c], /q/ > [ç]: SQa *ikōtəb* ‘he writes’, *dikáʕr* ‘of the house’, and SQb *icōtəb*, *dⁱ-çaʕr*.

4.1.7. The retroflex clusters

In M and Hb of Yemen, /r/ plus a following denti- or lateral-alveolar consonant both have a retroflex articulation: MQn *taḡórt* > [taḡóɽt] (with voiced final *t*) ‘wealth’; MMf [koɽnēt] ‘womb’; MQn *kešēr-l-siḡartən* > [kešēɽ[siḡáɽtən] ‘the barks of trees’; MJb *haršōm* > [haɽšōm] ‘tops of the feet’; MQn [kiɽš], Hb(Ht) [keɽš] ‘belly’.

4.1.8. The consonants /m/, /b/, and /l/

In J, *m* and *b*, two etymological consonants, never occur in intervocalic position. This non-occurrence affects the length and timbre of the vowel. The long vowels and the nasalized ones are the phonetic results of this phenomenon: JL *erḥīm*, *erḥūt* ‘beautiful (m., f.)’; *yḡēr/ yḡbírā* ‘meet(pft./subj.)’.

In MY, in the paradigm of a few verbs, *b* does not occur in intervocalic position: MQn *ṭalōm* ‘they requested’ < /ṭalōbəm/; MQn *šōt/ yəšōt/ lašbēt* ‘take (pft./ipft./subj.)’.

In J, and in some S dialects, /l/ has a fricative variant *ž*: JL *gižāl* (ML *gīlāl*) ‘cooked/boiled (food)’; SQa *šázəʕ* (SHo *šálʕ*) ‘rib’.

In Eastern M and sometimes in H, /l/ > *w* in coda position: HL = ML *ḥəwḡāt* (MQn *ḥəlḡāt*) ‘circle’.

In M of Dhofar and eastern Yemen, in stressed syllables *l* is reduced to zero and the length and timbre of the vowel change: ML /sólmaq/ > *sēmāq* ‘I was safe’; MJd *māseʔ* and *mālsé* (MQn *mēlsē*) ‘rain’; MDt *kōtet* (Qn *kāltet*, ML *kawtēt*) ‘tale’.

In pausal forms, some final voiced consonants are often devoiced and realized as ejectives in MY. In some S dialects, only final /ʕ/ is concerned: MJb *dāmēḡ* > [dāmēx] ‘brain’; MQn *ḡīd* > [ḡīt] ‘good’; SQb *ṭədəʕ* > [ṭədəh] ‘back’.

4.2. The vowels

In M, according to the dialect in question, the vowel system has 2 or 3 short vowels /a/, /ə/, (/ɛ/), and 5 or 6 long vowels /ī/, /ē/, (/ē/), /ā/, /ō/, /ū/. As Johnstone noted (1975,

Tab. 64.2: Timbre of the vowels

	Front	Central	Back
close	i		u
half-close	e ø		o
half-open	ɛ œ	ə	ʌ ɔ
open	a		ɑ

103), it is difficult to distinguish phonetically *ō* from *ū* (the same speaker may use *āmānū* or *āmārōt* ‘she said’), and *ī* from *ē*, even if rare minimal pairs do occur: ML *kəbkīb* ‘star’, *kəbkēb* ‘entry’, *ktōb* ‘book’, *ktūb* ‘he wrote’.

On the phonetic level, the MSAL have a very large range of vocalic timbres. i, e, ɛ, ə, a, ɔ, o, u are always attested, some S dialects have *ø* and *œ* in addition (Lonnet/Simeone-Senelle 1997, 351). J (Johnstone 1981, xv) and S are noticeable for the richness of the vocalic timbres. The quantity and timbre of the vowels may be linked to stress rules and the consonantic context (i.e. the occurrence or not of the glottalized, pharyngeals, velars, etc.).

In S the contrast between long and short vowels is not always phonological, and in J the long vowels result from the integration of the definite article (*ε-* / *a-*) or from the processing of b/w or y: JL *ʔerní*, def. *ʔērnī* ‘hare’; *ʔəb*, def. *ʔəb* ‘door’; *šəgēb* <š-gwb> ‘answer’; *ōšəf* <wšf> ‘describe’; *lūn* <lbn> ‘white(m.)’, *gēr* <gyr> ‘oppress’.

In M and H, the stressed long vowel may be diphthongized in some contexts: HL *ǧəlāwī* (ML *ǧəlēī*); MQnB *dəkēyḵ* (MQn *dəḵīḵ*) ‘flour’; ML, MY *əftarawr* (pft.), *iftārōrən* (ipft.) ‘yawn’.

In J, nasal vowels are combinative variants resulting from the influence of an intervocalic *m*: JL <xmr> *xēr* ‘wine’, *oxōr* ‘make drunk’, *axtīr* ‘drink wine’; *ylūʕ* <lmʕ> ‘it shines’.

In MY, Hb and S, vowels in contact with nasal consonants are frequently nasalized: MQn [amūʂʌǧ] ‘I chew’; Hb(Hf) [tūm^h] ‘you (pl.m.)’; SQaB [ǧās] (SQa *ǧans*), SNd [ʕās] (SQb *ʕans*) ‘elbow’.

4.3. Other phenomena

4.3.1. Syllabic structure and stress

The most common syllabic structures are Cv(C) or Cv:. In initial position: (C)Cv(C) or (C)Cv:, and in final position: Cv(C(C)) or Cv:(C).

In J, triconsonantal groups occur: JL *šottf* ‘(meat) become dry’, *ššfēf* ‘be able to be dried’, *ikkēb* ‘he stoops’.

The stress in M, Hb, B, H is on the last long syllable or on the first syllable if there are only short syllables in the stress unit.

In J, sometimes in H, a word or a stress unit can have several stressed syllables: JL *kəlún*, H *kúlún* (M *kəlón*) ‘bride’. When a word has only one stress, it is on the same syllable as the M word.

In S, the general trend is to have the stress towards the beginning of the word. This phenomenon has led to the dividing of the vowel, having lost stress and length, by the emergence of a so-called ‘parasitic’ *h* (see 4.1.5.).

4.3.2. Gemination

Gemination occurs in all the MSAL to various degrees according to the language but is very rare in S. It never has a morphological value. Its origin may be lexical (with roots C2 = C3, or C3 = C4, or C4 = C5), phonetic or morpho-phonetic:

In verbs, it is due to the assimilation of a radical consonant in contact with the infix derivational morpheme *-t-*: MDt *ḥaddūr* <ḥ-t-ḏr> ‘take care’; MQn *ʔāṣṣad* <ʔ-t-ṣd> ‘be anxious’; ML *kāṣṣal* <k-t-ṣl> ‘be broken’; HL *ḥáttem* <h-t-mm> ‘be sad’; JL *múttas* <m-t-ss> ‘be bitten’. In J, it occurs in the paradigm of some verbs derived by vocalic prefix: *eśśókər/yaśśókərən* <śkr> ‘squint(pft./ipft.)’, *iffhós* ‘it boils’ (pft. *efhés*, caus. of *fhes*) (cf., Johnstone 1980a).

It also occurs when a pronoun is suffixed to the verb: MQn *tšaffūk-ah* ‘she marries him’ <š-fwk>. With the prefixed definite article, the initial consonant of the noun may be geminated: JL (Johnstone 1981, xxix) *kób*, def. *e-kkób* ‘the dog’.

The process of gemination is related to the syllabic structure. In the morphological variation of verbs and nouns, gemination does not affect the same consonant; a shifting of gemination may occur, and depending on the forms of the paradigms, gemination affects either a consonant of the root or the derivational morpheme: MQnB *féttək*, *fəttəkōt* <f-t-kk> ‘he, she got rid of’, *kaṣṣáwr*, *kaṣarrūt* <k-t-ṣr> ‘he, she shortened’; lšāḥ-*ḥas* <š-ḥśś> ‘he tracks(subj.)’; HL *kaṭṭəbōt* (pl. *kaṭəbāb*) ‘doll’; JL *dekk/ yóddek* (pft./subj.) ‘he bumps (against)’; *míxxəl*, a.p. of *axlél* ‘(water) penetrate’.

5. Morphology

5.1. Personal pronouns

5.1.1. Independent pronouns

The dual pronouns bear the same marker as the nominal dual *-i*. The pronominal dual is obsolete in the Mehriyet variety of M, and is less and less used in Hb.

Independent pronouns generally stand for the subject of the sentence. They can be apposed to a noun with a suffix pronoun or to the connecting particle *d-/d-*, to express possession: MQn *beyt-i hoh* ‘my house’, *səkkēr-k d-hēt* ‘your sugar’; Hb *lēhi trit d-ho^h* <cow.dual/ 2(f)/of-I> ‘my two cows’; SQb *di-ḥan kaʕr* ‘our house’, SQa *di-het m^her* ‘your belly’. Independent pronouns can also follow some prepositions: JL *ləhés šé* ‘like him’.

Tab. 64.3: Independent pronouns

	MY (ML)	Hb	HL	JL	SQa, SQb
Sg.	1c. <i>hoh</i> (=)	<i>ho(h)</i>	<i>hoh</i>	<i>hé</i>	<i>həh(ə)n</i> , <i>ho^h</i>
	2m. <i>hēt</i> (=)	<i>het</i>	<i>hēt</i>	<i>het</i>	<i>het</i>
	2f. <i>hēt</i> (=)	<i>hit</i>	<i>hēt</i>	<i>hit</i>	<i>hit</i>
	3m. <i>heh</i> (=)	<i>heh</i>	<i>hah</i>	<i>šeh še</i>	<i>y^hehš heh</i>
	3f. <i>seh</i> (=)	<i>seh</i>	<i>sēh</i>	<i>se</i>	<i>se^h</i>
Du.	1c. <i>tī</i> (<i>əkāy</i>)	<i>tī</i> , <i>tī^h</i>	<i>ətī</i>	<i>tī</i>	<i>kī^h</i>
	2c. <i>tī</i> (<i>ətáy</i>)	<i>tī</i> , <i>tī^h</i>	<i>ətī</i>	<i>tī</i>	<i>tī^h</i>
	3c. <i>hī</i> (<i>hay</i>)	<i>hī</i> , <i>hī^h</i>	<i>hī</i>	<i>ši</i>	<i>he^hi</i> , <i>hi</i>
Pl.	1c. <i>nha, nha</i> (<i>ənha</i>)	<i>nəha</i>	<i>ənḥā</i>	<i>nha(n)</i>	<i>ḥan(hən)</i>
	2m. <i>tēm</i> (<i>ətēm</i>)	<i>tum</i> [<i>tūm</i>]	<i>ətōm</i>	<i>tum</i>	<i>tan</i>
	2f. <i>tēn</i> (<i>ətēn</i>)	<i>ten</i> [<i>ten</i>]	<i>ətēn</i>	<i>ten</i>	<i>tan</i>
	3m. <i>hēm</i> (=)	<i>hum</i> [<i>hūm</i>]	<i>hōm</i>	<i>šum</i>	<i>yhan</i>
	3f. <i>sēn</i> (=)	<i>šen</i> , <i>sen</i>	<i>sēn</i>	<i>sən</i>	<i>san</i>

5.1.2. Suffix pronouns

Tab. 64.4: Suffix pronouns with (Verb, Prep.), N.sg./pl.

	MY & ML	Hb	HL	JL	SQb
Sg.	1c. <i>(-ī, əy)</i> , <i>-il-yē</i>	<i>(-ī)-il-yə/o</i>	<i>(-ə)nī)</i> , <i>-il-yē</i>	<i>-il-i</i>	<i>-əy^h</i> , <i>əʔ</i>
	2m. <i>-(ū)kl-ke</i>	<i>-(ō)kl-ikē/e</i>	<i>(-k)-əkl-iyək</i>	<i>-kl-ek</i>	<i>-k</i>
	2f. <i>-(ī, ē)š/-še</i>	<i>-(ī)š/-iše/e</i>	<i>-əš/-iyəš</i>	<i>-š/-eš</i>	<i>-š</i>
	3m. <i>-(e, ī)h/-he</i>	<i>-(e)h/-he/e</i>	<i>(-əḥ)</i> , <i>-əh/-iyəh</i>	<i>-š/-eš</i>	<i>-h, -š</i>
	3f. <i>-(ī)s/-se</i>	<i>-(ē)s/-se/e</i>	<i>(-īs)</i> , <i>-əs/-iyəs</i>	<i>-s/-es</i>	<i>-s</i>
Du.	1c. <i>-(ī, ə)kil-iki</i>	<i>-(ə)kil-eki</i>	<i>-(ə)kil-iki</i>	<i>-šil-eši</i>	<i>-ki</i>
	2c. idem	idem	idem	idem	idem
	3c. <i>-(ī, ə)hil-ihī</i>	<i>-(ə)hil-ehī</i>	<i>-(ə)hil-ihī</i>	idem	idem
Pl.	1c. <i>-(īm)</i> , <i>-yənl-iən</i>	<i>(-ēn)</i> , <i>-ənl-yən</i>	<i>(-ayn)</i> , <i>-ənl-(a, ī)yən</i>	<i>-ənl-en</i>	<i>-ən</i>
	2m. <i>-(ī)kəml-ikəm</i>	<i>-(ō)kəml-ikūm</i>	<i>-(ō)kəml-ikəm</i>	<i>-kəml-əkūm</i>	<i>-kən</i>
	2f. <i>-(ī)kənl-ikən</i>	<i>-(ē)kənl-ikən</i>	<i>-(ī)kənl-ikən</i>	<i>-kənl-ekən</i>	idem
	3m. <i>-(ī)həml-ihəm</i>	<i>-(ō)həml-ihūm</i>	<i>-(ō)həml-ihəm</i>	<i>-həml-əhūm</i>	<i>-ʔhən</i> , <i>-šən</i>
	3f. <i>-(ī)əšənl-isən</i>	<i>-(ī)sənl-īsən</i>	<i>-(ī)sənl-isən</i>	<i>-sənl-sən</i>	<i>-sən</i>

In M, Hb, and H, the suffix pronoun has a different form after a noun and after a verb or preposition. They also vary according to the number of the noun, as in J.

In S, there is only one set of suffix pronouns. The 3m. has a *h* or *š* base.

In ML, HL, JL, the suffix pronouns can only be added to the noun defined by the article: ML *a-ğəṛōy-əh* ‘his speech’ <art-speech-suf.pr.sg.3m.> (MQn *ğəṛōy-əh*), HL *a-mkō-kəm* ‘their place’, JL *ērūn-ēs* ‘his goats’ (indef. form: *ʔerūn*).

When added to a noun or a verb, the suffix pronoun entails modifications of the basic pattern of the word, vocalic timbre and quantity, syllabic structure and/or stress: MQn *gaḡenōt* > *gaḡēnāt-s* ‘her girl’, pl. *gaḡenūm* > *gaḡenāt-se*; *səbūt* > *səbūtáy-s* ‘he beat her’, *isūbət* > *isəbūt-s* ‘he beats her’. Hb(Hf) *ḡəwōtə* > *ḡwōt-ihum* ‘their brothers’. ML *naxrīr* > *a-nxṛáy-r-i* ‘my nose’. HL *bəḡōd* > *bəḡəd-áyn* ‘he chased us’. JL *rēš* > *é-rešé-sən* ‘their (f.) heads’, *kóršš* > *kiršš-š* ‘he thumped him’.

Except in S, after some prepositions, the sg.1 suffix pronoun is *-(v)ni*: MQn *hī-ni*, ML *háy-ni*, HL *hé-ni*, JL *hī-ni* 'for me'. It is more usual in HL, with numerous prepositions: *t-* (accusative mark) > *téni* (M *tey*, JL *tə*); *béni* (ML *bī*, JL *bī*) 'at me'; *əm-bēnyéni wə bēnyūk* 'between me and you'; and with most verbs: *ənk'ə-ni* 'he came to me', *bə-gəḏā-ni* 'he chased me' (*təxōm-i* 'you want me').

In all MSAL, after a verb, the pronoun is usually suffixed to the accusative mark *t-*. SQa, SQb *šīnək teh* 'I saw him'; MQn *itāwim tēsen* 'they eat them (f.)'.

Some prepositions in M, Hb, HL, JL are followed by the same pronouns as the plural nouns: MQn *nxālīhəm*, Hb, JL *lxinūhum* 'under them'.

In S personal suffixes are very rarely suffixed directly to nouns or verbs. The pronoun referring to the possessor is either an independent pronoun introduced by *d-* (see 5.1.1.), or a dependent pronoun suffixed to the preposition *mə(n)* 'from'. In both cases the whole phrase precedes the possessed: SQa *mə-s fēnə* 'her face'; SHo *me-š š^hem* 'his name'.

5.2. Interrogative pronouns

M, H *mōn*, Hb *mūn*, B *mān*, J *mun*, S *mon* 'who?'

J *mun mən* 'which of?'

M *hēsən*, Hb *īnīh*, B *híne*, H *hāsən*, J *ʔíné*, S *ínem* 'what?'

5.3. Nouns

Substantives have two genders (masculine and feminine), and three numbers (singular, dual and plural). Contrary to Johnstone's assertion (1975, 112), the nominal dual is still alive in S, MY and Hb.

5.3.1. Singular nouns

The main patterns are: Cv(:)C(v)C, C(v)Cv(:)C, and in J CvCvC; for the quadrilaterals: CvCCv:C, in J CvCCvC, in S CvCCvC.

The feminine marker is the ending *-(v)t* in M, Hb, B, H, J, and *-h* in S (*-t* occurs at the dual and plural). The vowel preceding the morpheme is *o*, *u*, *i*, *e*, *a*, long or short:

JL *ngəst* 'pollution'; MQn *gaḡenōt*, ML *gəḡənōt*, JL *ḡebgəst*, SDm *ʕəwgínoh* 'girl'; Hb(Hf) *ḡəḡūt* 'big girl'; M *rēšūt*, HL *rəsēt* 'snake'; SQb *ḡázəh* (du. *ḡāžéti*) 'woman'; MQn *ḡarmēt*, JL *ḡarmét* 'woman'; JL *šəḏfét* 'chance'; MQn *kənəmūt*, ML *kənəmūt*, B *kənəmōt* JL *šinūt* 'louse'; MQn *fxīdət* 'tribe'.

In S, for animates the feminine form is marked by a vocalic opposition: SQa *ṭáḡrər* (m.), *ṭáḡrer* (f.) 'wild goat'.

In M, B, H and J, some borrowed feminine nouns have an *-h* ending:

MQn *makīnah* 'motor', B *ḡesməh* or *ḡəsmət* 'honour', HL *kāməh* 'measure', ML *táwrəh*, JL *tórəh* 'revolution'.

5.3.2. Dual

The dual marker for nouns is the suffix *-i*. In M, Hb, H, J, nouns are usually followed by the numeral 2, and the suffix dual mark is often realized by native speakers as a prefix to the numeral: MQn [ǵayǵ-itroh] for /ǵayǵi troh/ ‘two men’. In S, the numeral is usually omitted: SQb *fārḥāši d-bérki* ‘(the two) articulations of (the two) knees’. In M, Hb, H, J, some duals function as plurals (cf. Johnstone 1975, 113).

5.3.3. Plural

As in the other languages of the South Semitic group, there are internal and external plurals. One singular noun may have several plural forms: ML (sg. *šaffáy*) *šaffōf*, *šaffáw-wat*, *šaffūtān* ‘elbows’; Hb (sg. *šēǵerēt*) *šigǵortā*, *šāǵēr* ‘paths in a mountain’. A few plurals are suppletive plurals.

5.3.3.1. Internal plurals

For Johnstone (1975, 113) these plural patterns are closer to those of Afro-Semitic languages than to those of Arabic. The singular pattern is modified but does not have an affix. The most common patterns are ((sg.) pl.):

C(ə)Cv:C (plural of many feminine singulars)

ML (*nəktāt*) *nəkāṭ*, JL (*nəktōt*) *nəḵot* ‘dots’; MY (*məkənsēt*) *məkōnəs* ‘broom’; Hb(Hf) (*nəbbāt*) *nbēb*, JL (*nibbōt*) *nbēb* ‘bees’.

Vocalic opposition in the last syllable: (sg.) *i/e/ə* > (pl.) *o*, *ɔ/u*. This pattern is common for the quadrilaterals.

MQn, ML (*ḥənīd*) *ḥənōd*, JL (*nīd*)/*nud* ‘waterskins’; MQn, ML, HL (*nxārīr*) *nxārōr*, JL, SQb (*naxrēr*, *nāḥrər*) *naxrōr*, *nāḥrur* ‘noses’; SQa (*ǵém^hel*) *ǵéməḥəl* ‘she-camels’; Hb (*ikéybīn*) *ikéybūn* ‘scorpions’.

CCv:CC, CCvCC (in J, CC’Cv^bCC), for quadrilaterals. The long vowel is sometimes diphthongized or stressed (in J only where *w* > *b*):

MQnB (*mkaṭār*) *mḵáwṭər* ‘caravans’; Hb (*ʿarḵēb*) *ʿarōḵəb* (=MY) ‘mice’; ML, HL, JL (*mənxāl*, *mānxəl*, *múnxul*) *mənōxəl*, (J) *inēbxəl* ‘sieves’.

5.3.3.2. External plurals

The singular pattern may or may not be modified; the plural is marked by a suffix and/or a prefix morpheme:

Suffixes *-vt* and *-(v)tə(n)*. Many feminine nouns, and some masculine nouns have this pattern:

ML (*təmrīt*) *təmərtən* ‘ear lobes’; MQn (*hanǵəlūt*) *hanǵáltən* ‘jellyfish’; Hb, SHr (*lē, ʔéləhe*) *ley^htə, ʔelētən* ‘cows’; SQa (*rēy^ʿeh*) *re^ʿThētən* ‘herders(f.)’.

Suffix *-t*, and *-h/-t* in S:

MQn (*ḥalm*) *ḥalōmət* ‘dreams’; Hb (*ḵāṣər*) *ḵāṣōrt* ‘leopards’; HL (*yārāb*) *yārəbet* ‘sacks’; SQa (*šārəh*) *šāhrət* ‘sisters-in-law’.

Suffix *-īn* and *-ən/-ihən* in S:

M, JL (*ǧəfōn*, *ǧífūn*) *ǧəfənīn*, *ǧəfənīn* ‘tulchans’; M, Hb (*kəroš*, *kerōš*)/*kərsáyin*, *keršīn* ‘mosquitoes’; SQb (*ʿeyǧ*) *ʿəǧǧəhən* ‘men’; SHo (*šəhər*) *šihārən* ‘fishing line’; SHr (*kəʿəd*) *kuʿdən* ‘camel-calves’.

This type of plural includes those with an *m*- prefix and those with *ʔh/h-*, combined or not with a suffix *-t/-h(S)* for masculine, and *-tən* for feminine.

ML (*nīdēx*) *mənādāx* ‘smokes’; JL (*kalbēt*) *mkalbət* ‘turnings (on a path)’;

Hb (*bīr*) *habyōr* ‘wells’; HL (*slēb*) *həslōb* ‘weapons’, (*gawf*) *həgawf* ‘chests’; MQn (*bōb*) *hābwēbət* ‘doors’; ML (*hirūt*) *ahyārtən* ‘female donkeys’; JL (*šəb*) *əšbēt* ‘monitor lizards’; SQb (*šəhər*) *ʿəšhārəh* ‘months’.

Some original duals in J (JL, and Johnstone 1975, 113) are only used as plurals: *lhōti* ‘cows’, *ǧagənāti* ‘girls’, *hērnāti* ‘mountains (dim.)’.

5.4. Adjectives

Like nouns, adjectives have two genders in the singular and the plural, but many have a common plural. Except in S, adjectives have only two numbers. The feminine is usually marked by a *-t/-h* ending added to the masculine form, but in S it may also be marked by a vocalic opposition (*-t-* appears in the dual):

SQa (m.) *šeybāb*, (f.) *šibīb* (du. *šibībīti*) ‘old’, *ǧəʿalhal*, *ǧəʿalhlēl* ‘round’, *xəbxcəb*, *xəb-xēb* ‘clumsy’. Ablaut is very scarce in M and absent in the other MSAL.

In all the languages a few unmarked adjectives can only qualify a feminine noun:

MQn *hanōb*, ML *nōb*, B *nawb*, JL *um* ‘big’; SQa *ǧāhləl* ‘pregnant’, *ībši* ‘gravid’.

Many patterns are common with nouns. The C(v)Cī/C (or CvCāyC) pattern is more common with adjectives than with nouns:

MQn, HL *dəwīl*, ML *dəwāyl* ‘old’; MQn *səxīf*, ML *səxāyf*, JL *sxīf* ‘idiot’; SQa *kaʿən-hən* ‘curved’.

Although only the passive participle may function as an adjective in M and H, there are some Cā/ōCāC adjective patterns (cf. Ar. CāCiC): ML, HL *ʔagəz*, JL *ʿəǧəz* ‘lazy’.

In J, the participle with *-ūn* (f. *-ūnt*) suffix also has an adjectival (and sometimes adverbial) function: JL *sədrūn*, *sədrūnt* ‘stiff’, *rəǧfūn* ‘timid’ (and ‘shivery’); some examples are also found in Hb(Ht) *gebhun*, *gebhunnt* ‘blunt’.

Some examples of adjectives sg.m., f./ pl.m., f. (or common):

Hb(Hf) *rekēk*, *rekēkat* / *rikōk*, *rikōkte* ‘thin’; *fərhun*, *fərhənt*, / *furhanīn*, *fərhānintā* ‘happy’; *ʿəfər*, *ʿəfərīt* / *ʿāfər*, ML *ʔəfər*, *ʔāfərōt* / *ʔāfər*, B *ʿāfər*, *ʿāfərēt* / *ʿāfər*, HL *ʔāfər*, *ʔāfərōt* / *ʔāfər*; JL *ʿəfər*, *ʿāfirīt* / *ʿāfirētā*, SQa *ʿēfər*, *ʿēfəroh* / du. *ʿēfri*, *ʿēfərōti* / *ʿēfirihin*, *ʿēfərētān*, SJ ms gives a c.pl. *ʿāfirētān* ‘red’.

In J, H and particularly in S, the verbal phrase, with the relator *d-/di-* and with verb at ipft. or pft., often has an adjectival function (see 6.7.2.). This construction is particularly used in S to qualify, as there are a small number of pure attributive adjectives in this dialect.

HL *d-isdōd* ‘sufficient (ipft.sg.3m.)’; JL *də-mízzōt* ‘full (pft.sg.3f.)’; SQa *di-škər*, *di-škərah* / *di-škəro*, *di-škərtə* / *di-škər* ‘kind’.

5.5. The definite article

It is attested only in the languages of Oman. The definite article is a prothetic vowel with a timbre conditioned by the vowel of the determined item (Johnstone 1981, xxix–xxx): JL *e-ṭēl* ‘the drum’; *ʔidēn* ‘ear’, def. *ʔidēn* (Sima 2002).

5.6. Deictics

Tab. 64.5: Deictics referring to persons and things (demonstratives)

	proximal, 'this' (m., f./pl.)	distal, 'that' (m., f./pl.)
MY	<i>dōm, dīmāh / lyōm</i>	<i>dēk(əm), dīk(əm) / lyēk(əm)</i>
ML	<i>dōmāh, dīmāh / əlyōmāh</i>	<i>dēk, dāyk / əlyēk</i> <i>dākmāh, dākmāh / əlyākmāh</i>
Hb	<i>dēn(əh), dīn(əh) / lōh (HHf lénəh)</i>	<i>dēh(un), dīh(un) / lōh(un)</i>
B	<i>dān(əməh), dīn / ɪlūn</i>	
H	<i>dā, dī; dōn, dēnəh / lō^h</i> <i>dānəməh (m. & f.) / lələməh</i>	<i>dēk, dīk / lək</i> <i>dākəməh, dākməh / ʔələməh</i>
J	<i>dēnu, dīnu / izēnu</i>	<i>dōhun, dūhun / izōhūn (nearby)</i> <i>dōkun, dūkun / izōk (further away)</i>
S	<i>də^h, də^h & dəš / dihi(du.) / lénha</i> <i>dādha, dīdhalšha*</i>	<i>dək, dəš / diki(du.) /</i> <i>dādbok, dīdbok / šlbo^k **</i>

Remarks: *In some S dialects *-ha* and not *ha*. *dādha/ha* < *də-d-h/ha* <this-which/who-here>. **One also seldom finds *dādbō^h*. *dādbok* < *də-d-bok* <this-rel.-there>. In all the MSAL (except S for demonstratives), there are long deictic forms with an *-m* or *-n* ending.

Tab. 64.6: Deictics referring to space

	near, 'here'	far, 'there'
M	<i>boh, būm, bōm, bawmāh</i>	<i>həlōk, həlākəməh</i>
Hb	<i>bō, bo^h, bō, bōmə, būwe[?]</i>	<i>həlōh, hellō, həlākəmə</i>
H	<i>būməh</i>	<i>həlōk(əməh)</i>
J	<i>bo, bun, būn</i>	<i>lhōn, lōkun</i>
S	<i>h/ha, bo^h</i>	<i>bok</i>

Remarks: In S *h/ha* and *bo^h* are used in compounds: *lhāl/ha, lbo^h* 'here'; *diboh* < *ʔid-boh* 'to here'; as *boh* in MQn: *het lboh* 'bring here!'.¹

Deictics referring to time:

'now': M *šərōməh*, MJd *nšōnə, nšərōmə*, Hb *nāšənə*, B *nāšərəh*, H *nōšəh, nōšərəh*, J *naʕšānu, našānu*, S *nāʕa*.

'today': M *yemōh, yəmə*, H *yəməh*, Hb *axór*, B *hōr*, J *šhər, šher*, S *her*.

'tomorrow': M *ǧēhmāh, ǧēhəməh*, Hb *ǧēhmə*, B, H *ǧēhəməh*, J *qərérəh*, S *qerūri, qer-erəh*.

'yesterday': M *yemšī, yəməšē*, Hb *ʔmši, mšīn*, J *ʔəmšīn*, S *ʔəmšīn*.

Anteriority and posteriority may be expressed with the preposition 'before' (M *fənə-*, J *fənē*, S *fēne-*, *fon-*) or the adverb 'after-' (M *bād*, J, S *baʕd*), plus temporal deictics: ML *fənəməšē*, J *fənémšīn* 'before yesterday'; MQn *bād ǧēhmāh* 'after tomorrow'.

5.7. Numerals

The numerals are of a great interest for comparison because their phonological, morphological and syntactical characteristics distinguish them within the Semitic group (Johnstone 1982, 225).

Tab. 64.7: Cardinals (m./ f.)

	MSr (ML) Hb	HL	JL	SQb (SQa)
1	<i>tāt / fūt</i> (<i>tāt / táy</i>) <i>tāt / tēyt, fūt</i>	<i>tād / tet</i>	<i>tad / tit</i>	<i>tad / tēy^h</i> (<i>tod / tah</i>)
2	<i>troh / trūt</i> (<i>tārō, troh / tráy</i> , <i>trēt</i>) <i>tro, troh / trūt</i>	<i>tārō / tarét</i>	<i>troh / trāt</i>	<i>trōhl / trih</i> (<i>trōhl / treh</i>)
3	<i>shalét / šgafūt</i> (<i>shālūt / šātáy</i>) <i>shellét, shālót / shatéyt</i>	<i>śaláyś / šāff/táy</i>	<i>shalét / śotét</i>	<i>śéleh / śéśtəh</i> (<i>śíleh / śógtəh</i>)
4	<i>hārba / arbōt</i> (<i>árba / arbōt</i>) <i>ʔārbaś / ʔarbʕáwt, ʔarbōt</i>	<i>ʔārba / rəbōt</i>	<i>ʔārbaś / ʔārbaśót</i>	<i>ʔárbeś / ʔírbaś</i> (<i>ʔérbeś / ʔarbaśah</i>)
5	<i>xáyməh / xmōh</i> (<i>xáyməh / xəmməh</i>) <i>xāməh / xəmmóh</i>	<i>xáyməh / xəmmōh</i>	<i>xīš / xōš</i>	<i>hūməh / hóyməh</i> (<i>xōməh / xōməy^h</i>)
6	<i>hett / yittūt</i> (<i>hət / yəfūt</i>) <i>het / htet</i>	<i>hāttəh / yəttēt</i>	<i>šét / štət</i>	<i>yháśt / hūtəh</i> (<i>yśśt / yēttəh</i>)
7	<i>hōba / yibéyt</i> (<i>hōba / yəbáy</i>) <i>hōba / hebíśat</i>	<i>hōba / həbáy</i>	<i>šōś / šəbśát</i>	<i>yhōbəś / híbśə</i> (<i>yēbəś / yēbəśəh</i>)
8	<i>tmōni / təmənēt</i> (<i>tmōni / təmənyēt</i>) <i>temēni / temēnit</i>	<i>təmōni / təmənēt</i>	<i>tōni / tīnāt</i>	<i>téməni / téməneh</i> (<i>təmēni / təmənəh</i>)
9	<i>səʔ / séyt</i> (<i>sē / sāt</i>) <i>səś / sáśet</i>	<i>sē / sāʔáy, səśáy</i>	<i>səś / saśét</i>	<i>sēś / séśəh</i> (<i>saś / séśəh</i>)
10	<i>śśār / āśārūt</i> (<i>ʔōśār / ʔāśārūt</i>) <i>śśār / ʕāśārūt</i>	<i>ʔōśār / ʕāśārēt</i>	<i>śśār / ʕāśírét</i>	<i>ʕāśār / ʕéśéreh</i> (<i>ʕāśār / ʕéśireh</i>)

The numbers 1 and 2 are adjectives, and 2 follows the noun in the dual. For 3–10, masculine numerals count feminine nouns, and feminine numerals count masculine nouns. They are usually followed by nouns in the plural form, and above 13 the noun may be either plural or singular. After 12, 22, 32 ... the noun may be in the dual: SQa *ʕéśíreh w-trōh śhēri* < 10 and-2 month(du.) > ‘12 months’.

In all MSAL, numerals used after 10 are usually Arabic borrowings. Nowadays the MSAL number system above 10 is only known and used by elderly Bedouin speakers. In this system, number and noun agree in gender from 11 to 19. The structure of numbers is: tens + ‘and’ + units.

ML 11 *ʔāśārūt w-tāt* (Hb *ʕāśārūt w-tat*) (+m.), *ʔōśār w-táy* (+f.); 12 *ʔāśārūt w-trōh* (Hb *ʕāśārūt w-troh*); 13 *ʔāśārūt wə-šātáy* (Hb *ʕāśārūt wə-shatéyt*), *ʔōśār wə-shālūt* ...

The tens, when not borrowed from Arabic, are made by suffixation of *-vh*.

20 ML *ʕāśārəh*, SQa *ʕāśrəh*, but MQn *āśrīn* (< Ar.), JL *ʕéśəri* (du. used as pl.);

30 J *śəlōh*, SQa *śéláh*, but ML *śəlātáyn*.

In S, from 30 onwards in some dialects and 40 in others, the multiples of 10 are constructed as follows: units + 10 (pl.):

30 SL *śéle* 'esárhen <3 tens>. SQaB 40 *ʔárbaʕ* 'asárən. 50 *xéyma* 'asárən. 60 *yáʕt* 'asárən. 70 *yába* 'asárən. 80 *témene* 'asárən. 90 *seʕ* 'asárən. 100 MQn *miyēt*; ML *əmyūt*; Hb *míyut*, J *mút*; SQa *mít*.

To count livestock, Bedouins use specific items:

ML *taḥōb* 'herd of about 100 camels'; J *ʔšḥšb* 'herd of 15 camels (and upwards)'; SQaB *méḥbər* '100 head of cattle', *treh meḥbəri* '200'.

1000 MQn *ʔelf*, Hb *ʔelf*, ML *ʔēf*, J *ʔɔf*; SQb *ʔalf*.

In M, Hb, J, and partially in H (Johnstone 1975, 115–116), specific numerals are used for counting days above 2. The noun 'day' (f.) is in the singular form:

Tab. 64.8: Numerals counting the days

	ML	Hb	JL
3 days	<i>śēlāt yūm</i>	<i>śhelt yōm</i>	<i>śēlāt ēm</i>
4	<i>rība</i> --	<i>rībaʕ</i> --	<i>rīʕ</i> --
5	<i>xáymaḥ</i> --	<i>xām</i> --	<i>xīš</i> --
6	<i>šīdāt</i> --	<i>hett</i> --	<i>šet</i> --
7	<i>šība</i> --	<i>šēbaʕ</i> --	<i>šīʕ</i> --
8	<i>tīmən</i> --	<i>tēmən</i> --	<i>tīn</i> --
9	<i>tīsa</i> --	<i>tēsaʕ</i> --	<i>tāsʕ</i> --
10	<i>ʔáyšər</i> --	<i>ʕésər</i> --	<i>ʕásər</i> --

Some young native Hb(Rn) speakers no longer use this system: *sɔʕ* *ḥayīm* < 7(m.) / days > '7 days'.

Tab. 64.9: Ordinals

	ML m./ f.	HL
1st	<i>ḥāwīl</i> / <i>ḥāwālīt</i>	<i>ḥāwīl</i> / <i>ḥāwālēt</i>
2nd	<i>māšēgər</i> / <i>māšəgərēt</i>	<i>māšēgər</i> / <i>māšəgərēt</i>
3rd	<i>śōlāt</i> / <i>śawūt</i>	<i>śēlās</i> / <i>śēlśāt</i>
4th	<i>rōbaʕ</i> / <i>rəbāyt</i>	<i>rēbaʔ</i> / <i>rēbat</i>
5th	<i>xōmas</i> / <i>xəmhēt</i>	<i>xāmāh</i> / <i>xāmhāt</i>
6th	<i>šōdās</i> / <i>šədtēt</i>	<i>hētt</i> / <i>hēttāt</i>
7th	<i>sōbaʕ</i> / <i>səbāyt</i>	<i>hēbaʔ</i> / <i>hēbaʔt</i>
8th	<i>tōmən</i> / <i>təmənt</i>	<i>tēmən</i> / <i>tēmnāt</i>
9th	<i>tōsaʔ</i> / <i>təšāyt</i>	<i>tēsaʔ</i> / <i>tēsaʕt</i>
10th	<i>ʔáyšər</i> / <i>ʔāšərēt</i>	<i>ʔāsər</i> / <i>ʔāšərt</i>

The ordinals in ML and HL are formed on the pattern of the *nomen agentis*, and some are based on the ancient root of number. Beyond *nésḥer* '1st', in SL, the ordinals are formed by the numeral preceded by *di-*: *di-h(y)óbeh* < which (is) seven > 'seventh'. In J, the data are not complete (Johnstone 1975, 116): JL *ʔénfī* / *ʔénfēt* 'first', and *mš* / *šāgər* < *gyr* > 'other, second'.

5.8. Verbs

Like all Semitic languages, the MSAL have a basic verbal theme and derived themes (Simeone-Senelle 1998a). There is also a vocalic internal passive.

5.8.1. The basic theme

There are two different types of basic verbs, based on semantic and morphological criteria: active verbs (Johnstone's type A), transitive or intransitive, and middle verbs (Johnstone's type B): state verbs, middle-passive verbs, verbs whose subject is also the patient.

5.8.2. The derived themes (Simeone-Senelle 1998a, 75–88)

As in many Semitic languages, the derived themes are characterized by internal vocalic modification, infixation (*-t-*), and prefixation (*h-/ʔ-*, *š/ṣ-*, *n-*), but no derived measure is formed by gemination (see 4.3.2.).

In some cases, type A and B verbs have a different pattern for the same derived theme.

Tab. 64.10. Table of verbal themes (*ō/ū* in M, *é/í* in JL and S)

	M	Hb	HL	c/e J	S
Simple					
A	CəCōC	CəCōC	CəCōC	CəCōC/CəCōC	CəCōC
B	CēCəC	Cé/CīCəC	CēCəC	CéCəC	CéCəC
passive	CəCēC	CəCéC	CəCēC	CəCéC	Cé/CīCəC
Derived					
inter. mod.	(a)CōCəC	(e/é)Cō/CéCəC	(a)CēCəC	(e/é)Cé/CīCəC	Cō/CéCəC
-t-	(A) CālātCəC	CātCəC	CātCəC	CātCəC	CātCəC
(B)	əCtəCōC	əCtəCōC	əCtəCōC	əCtəCéC	CātCəC
h/ʔ/v-	(hə)CCōC	ʔaCCōC	(a)CCōC	(e/é)CCé/CīC	šCCəC
š-	(A) šəCCōC	šəCCōC	šəCCōC	š/šəCCéC	šəCCəC
(B)	šəCēCəC	?	šəCéCəC*	š/šəCéCəC	šəCéCəC
n-	(ə)nCēCəC	?	(ə)nCēCəC	(ə)nCéCəC/éC	(ə)nCa/CéCīC
Quad.	(ə)nCaCCōC	?	(ə)nCaCCōC	(ə)nCaCéCéC	ibid.

5.8.2.1. Theme with internal modification

A prefixed vowel may occur in this theme. In the M of Mahra, the derived theme does not have a prefix. In the M of Dhofar, in H and J, it is often missing when C1 is a voiceless consonant (ejectives pattern with voiced consonants). In all MSAL the imperfective has an augmentative *-(ə)n*:

(pft./ ipft./ subj. 3m.sg): ML = MQn *fōkər/ yə/ífákrən/ y/ləfōkər*, Hb *efékər/ yifekərən/ yefékər*, JL *efúkur/ yfúkrən* 'think'; M (a) *šōli/ yəšáliyən* = HL *asāl* = JL *ešól/ yšólen* = SJms *šáli* 'pray'; SQa *hōbi/ iḥōbiən* = ML *hōbi / yəḥábyən* '(baby) crawl'.

Except for rare verbs like: MQn, ML *lōtəg lūtəg* = Hb *lótəg* = J *létəg* = SQa *látəg* 'kill'.

In M, J, S some irregular verbs have a different pattern: SQa *gēdəḥ/ igīdḥən/ lígdəḥ* 'come', *hisəb/ iḥē'sbən/ liḥsáb* 'count'; ML *šēwər/ yəšáwərən/ yəšēwər* 'consult'.

In J, verbs with C2 = *h* and *x* ‘have both the *eCōCəC* and *eCCēC* pattern’ (Johnstone 1981, xxi). All MSAL also contain some idiosyncratic verbs of both types (*id.*, xxv–xxvi).

The classification of these verbs as ‘intensive-conative’ (*id.* 1975, 105; 1981, xvi) does not seem to hold when one considers the semantic value of the verbs in all MSAL. When the form is derived from a simple verbal form, it is always transitive and the meaning is usually factitive or causative. When no corresponding simple form exists, the verb can be transitive or intransitive; some of them are denominative: ML *aṣōbāḥ*, JL *eṣōḥ* ‘do something, come to someone in the morning’.

5.8.2.2. Theme with infix -*t*-

The suffix *-(ə)n* occurs in the imperfective of type B verbs. In J, some type B verbs are irregular (cf. Johnstone 1981, xxiii–xxiv). In M, H, Hb and J, this infix induces gemination and gemination shifts within the word (see. 4.3.2.).

The derived verbs do not always correspond to a simple theme. By analogy with Arabic, this form was classified as causative and reflexive, but the value is more often that of a middle verb, not a causative:

MQn *stālūb/ istālībān/ lṣtālōb* ‘be armed’ = ML *astālūb*; SQa *fātkər/ iftākərən/ leftēkər*, ML *əftākōr*, J *əftākēr* ‘think, consider’; ML *kəthāwll/ yəktəḥāylən/ yəktəḥāwl* = HL *ək-təḥōl* = JL *ekthēl* ‘apply khol’; B *yəmtēzḥən* ‘he jokes’; Hb *ihām’an* ‘he listens’ (*hēma’* (type B) ‘hear’); ML *ṣētəm* = HL *ṣōtəm* = JL *ṣōtēm* (Hb *ṣātōm*, type B pattern) ‘buy’ (*ṣōm*, *ṣem*, *ṣēm* ‘sell’); Hb *wātḳəḏ* = ML, HL, JL *ṣṭḳuḏ* ‘wake up (intrans.)’; SHo *ḥṣṭṣəm* ‘be drunk’; SQa *ḳənəl iḳṭōnīl iḳṭēnī* ‘eat’ (*ḳānə* ‘to feed’), *ṣṭbər/ yeṭṭbər* ‘observe’ (*ṣēbər* ‘see’).

Some have a reciprocal value:

Hb *əntāwḥəm* = ML *əntāwḥəm* = JL *əntōḥ* (pl.3m.) = S(ML) *əntōḥo* (du.3m.), (= SHo *xṣṭnəḳə*) ‘they fought each other’.

5.8.2.3. Theme with preformant *h/(?)v*-

In M, specially in MY, the derivative morpheme *h-* is often missing at the pft. and ipft. but is always present at the subj.

In J, the conjugation may induce the gemination of one of the radical consonants (C1 or C2) at some persons at the ipft and pft.

In S, the ipft. may have the augmentative *-n*.

The most common meaning of this form is causative, or factitive:

MQn *frōḳl/ yəfrōḳl/ ləḥāfrək* ‘frighten’ (*fīrək*, type B, ‘be afraid’), *ṣawḳl/ iṣawḳ/ lhāṣək* ‘put fire to sth’; ML *xlūṣl/ yəxlōṣl/ yəḥáxləf* ‘leave behind’ (*xayləf*, type B, ‘succeed’); Hb *ʔawḳá’* ‘put down’ (= ML *həwḳā*); JL *eṣḥək* ‘make so. grind fine’ (*ṣḥək* ‘grind fine’, type A), *ebšēl/ yēššōl/ yēbšəl* (*bēšəl*, type B, ‘be cooked’) = ML *həbhəl* (passive *bəhēl*) = HL *abhōl* = SQb *əbhəl* (passive *bēhəl*) ‘cook’.

It can also have a middle, reflexive or middle passive value:

MQnB = ML *hənsūr* 'have had enough sleep', ML *həzráwb* = JL *ežréb* 'be ill' = HL *azráwb* '(woman) feel labour pains'; SQa *ʔégzə* 'want', *ʔesēlamən* 'we (both) greet each other' (du.1 ipft with suf. -n).

Some verbs are denominative: ML *həsbāh* & *həsbēh* = HL *ašbāh* = JL *ešbāh* = Sms *ʔšsbah* 'be in the morning'.

5.8.2.4. Theme with preformant š- (š- in cj)

As with the -t- derived form, all languages have a different pattern for type A and B verbs. All type B verbs have an ipft. conjugation with the suffix -(ə)n. This very frequent form, considered as 'causative-reflexive', also has other values, essentially middle or passive:

MQnB *šifkáwt* 'she got married' (*fūk* 'he gave in marriage') = HL *šəfáwḵ*; Hb *šxábər/ išxabūr/ yəšxábər* = MQn *šxəbōr* = ML = JL *šxəbér* = SML *šhábər* 'ask, inquire'; SHo *šémətal* 'speak'; ML *šəxtū* = HL *šəxtō* = eJ *šəxtə*, cJ *šəxtə* 'be injured'.

There are also some denominative verbs:

SQa *šəṭéyləml/ yišṭéyləmənl/ ləšṭáləml* 'dinner at night' (cf. Ar. <ḏlm> 'darkness'); MQnB *šənsūḵ* 'take a snuff' (*ʔnšīḵat* 'pinch of snuff'); ML *šəsxáwḵ* 'think someone a fool' (*səxáyf* fool).

5.8.2.5. Theme with preformant n-

In MQn and some S dialects, the ipft. conjugation has the suffix -(ə)n. All the derived verbs are intransitive. The meanings of this form are middle, reflexive, reciprocal and sometimes intensive:

HL *ənḵáyṭa* 'be cut' (*káwṭa* < ḵṭ> 'be tired; cut'); MQn *ʔmbéil/ imbéin/ ləmbéi* <bʕy> 'bleat'; JL *ənḥérək* 'move' (= *aḥtérək*); SHo *ənḥáḵeḵ/ inḥáḵeḵənl/ lenḥáḵeḵ* 'snore'.

This derivation concerns mainly quadriconsonantal and denominative verbs (Simeone-Senelle 1998a, 86):

SL *enḵárḵer* 'be dusty' (*kárḵahar* 'dust'); MQn *ngəršáwḵ* 'be wrinkled' (*ngəršáyḵ* 'wrinkle'); SL *inkórkim*, JL *ənḵérkím* 'become yellow' (S *kirkam*, J *kerkúm* 'yellow'); cJ *nʕifírér* 'become red' (*ʕšfər* 'red'); HL *ənḵáyṭa* 'be thirsty' (*ḵeteyāt* 'thirst').

5.8.3. Conjugations

There is one suffix conjugation (perfective value) and two, sometimes three, prefix conjugations: indicative (imperfective value), subjunctive, and conditional (only in J, ML, Hb). The verb has three numbers: singular, plural and, except for the *mehriyet* variety, dual including the first person. In J, M of the eastern Mahra and Hb, the dual is becoming obsolete. Except for some derived verbs, the vocalic pattern of the subjunctive differs from the imperfective. The conjugation of the conditional is derived

from the subjunctive; its whole paradigm has an *-n* suffix. Except in H (Johnstone 1975, 109), in both conjugations an *l-* prefix is added to all vocalic prefixes of the paradigm. It occurs in the 3m. (sg., du., pl.) in some M dialects of the Mahra and in S where /y/ is realized as a vocalic [i].

In the perfective the first two persons (sg., du., pl.) have the suffix *-k/š*.

Active verbs (type A), and middle verbs (type B) have a specific vocalic pattern in the basic and derived themes. There exists a vocalic passive for the basic theme of type A verbs and for some derived themes.

The future, except in S, has a special form that varies according to the language.

Tab. 64.11: Perfective suffixes

		M, H (Hb)	J	S
Sg.	1c.	<i>-k</i>	<i>-k</i>	<i>-k</i>
	2m.	<i>-k</i>	<i>-k</i>	<i>-k</i>
	2f.	<i>-š</i>	<i>-š</i>	<i>-š</i>
	3m.	—	—	—
	3f.	<i>-ōt(ūṭ)/ēṭ</i>	<i>-ot</i>	<i>-oh</i>
Du.	1c.	<i>-ki</i>	<i>-ši</i>	<i>-ki</i>
	2c.	<i>-ki</i>	<i>-ši</i>	<i>-ki</i>
	3m.	<i>-ōlē</i>	<i>-ó</i>	<i>-o</i>
	3f.	<i>-tōlē</i>	<i>-tó</i>	<i>-to</i>
Pl.	1c.	<i>-ən</i>	<i>-ən</i>	<i>-ən</i>
	2m.	<i>-kə(u)m</i>	<i>-kum</i>	<i>-kən</i>
	2f.	<i>-kən</i>	<i>-kən</i>	<i>-kən</i>
	3m.	<i>-ə(u)m/V</i>	—	<i>-V</i>
	3f.	—	—	—

V = internal vowel change

Tab. 64.12: Imperfective affixes

		M, H/Hb	J	S
Sg.	1c.	<i>ə/ε-</i>	<i>ə-</i>	<i>ə-</i>
	2m.	<i>t-</i>	<i>t-</i>	<i>t-</i>
	2f.	<i>t-...V/i</i>	<i>t-...V</i>	<i>t-...V</i>
	3m.	<i>yə-(i)</i>	<i>yə-</i>	<i>i-</i>
	3f.	<i>t-</i>	<i>t-</i>	<i>t-</i>
Du.	1c.	<i>ə-...-o</i>	<i>ə-...-o(ɔ)</i>	<i>ə-...o</i>
	2c.	<i>t-...-o</i>	<i>t-...-o(ɔ)</i>	<i>t-...-o</i>
	3m.	<i>y-/i-...-o</i>	<i>yə-...-o(ɔ)</i>	<i>i-...-o</i>
	3f.	<i>t-...-o</i>	<i>t-...-o(ɔ)</i>	<i>t-...-o</i>
Pl.	1c.	<i>n-</i>	<i>n-</i>	<i>n-</i>
	2m.	<i>t-...V-ə/um</i>	<i>t-</i>	<i>t-...V</i>
	2f.	<i>t-...-ən</i>	<i>t-...-ən</i>	<i>t-...-ən</i>
	3m.	<i>y-/i-...V-ə/um</i>	<i>y-</i>	<i>i-...V</i>
	3f.	<i>t-...-ən</i>	<i>t-...-ən</i>	<i>t-...-ən</i>

In ipft., condit. and subj. of type B verbs, J has the prefix *n-* in dual 1.

Tab. 64.13: Affixes in the imperfective with suffix *-n* and conditional

	Singular	Dual	Plural
1c.	<i>ə-/l-...-ən</i>	<i>ə-/l-...-ay-ən</i>	<i>n-...-ən</i>
2m.	<i>t-...-ən</i>	<i>t-...-ay-ən</i>	<i>t-...-ən</i>
2f.	<i>t-...-ən</i>	<i>t-...-ay-ən</i>	<i>t-...-ən</i>
3m.	<i>y-...-ən</i>	<i>y-...-ay-ən</i>	<i>y-...-ən</i>
3f.	<i>t-...-ən</i>	<i>t-...-ay-ən</i>	<i>t-...-ən</i>

In all MSAL, some derived verbs have this imperfective. The conditional is attested only in MO, J, H and Hb.

Non-occurrence of prefixes (Johnstone 1980b, 466–470):

In J and S, *t-*, or all the personal prefixes may be absent in the conjugation of some verbs: derived verbs, simple quadriliteral or hollow verbs (with C2=C3), and in the passive of simple and derived verbs. With these types of verbs, the marker *l-* occurs throughout the whole paradigm of the subjunctive (and conditional, in J).

5.8.3.1 Simple verb (type A). Active voice

Tab. 64.14: Perfective (type A)

		MQn(ML) 'put sth. straight'	Hb 'know'	HL 'write'	JL 'be able'	SQb 'know'
Sg.	1c.	<i>r(ə)kəzk</i>	<i>ġ(ə)rəbək</i>	<i>kəṭōbək</i>	<i>ḵṣḍṣrk</i>	<i>ʿərōbk</i>
	2m.	<i>ibid.</i>	<i>ibid.</i>	<i>ibid.</i>	<i>ibid.</i>	<i>ibid.</i>
	2f.	<i>r(ə)kəzš</i>	<i>ġ(ə)rəbəš</i>	<i>kəṭōbəš</i>	<i>ḵṣḍṣrš/š</i>	<i>ʿərōbš</i>
	3m.	<i>r(ə)kūz</i>	<i>ġərōb</i>	<i>kəṭōb</i>	<i>ḵṣḍṣr</i>	<i>ʿərōb</i>
	3f.	<i>r(ə)kəzūt</i>	<i>ġ(ə)rəbōt</i>	<i>kəṭəbōt</i>	<i>*ḵṣḍṣrūt</i>	<i>ʿərəboh/t</i>
Du.	1c.	<i>(rəkəzki)</i>	<i>ġərōbki</i>	<i>kəṭōb(ə)ki</i>	<i>ḵṣḍṣr/š</i>	<i>ʿərəbki</i>
	2c.	<i>(ibid.)</i>	<i>ibid.</i>	<i>ibid.</i>	<i>ibid.</i>	<i>ibid.</i>
	3m.	<i>(rəkəzō)</i>	<i>ġ(ə)rēbo</i>	<i>kəṭəbō</i>	<i>ḵṣḍṣrš</i>	<i>ʿərəbo</i>
	3f.	<i>(rəkəzītō)</i>	<i>ġ(ə)rēbo</i>	<i>kəṭəbtō</i>	<i>ḵṣḍṣrtš</i>	<i>ʿərəbato</i>
Pl.	1c.	<i>r(ə)kūzən</i>	<i>ġ(ə)rābən</i>	<i>kəṭōbən</i>	<i>ḵṣḍṣrən</i>	<i>ʿərōbən</i>
	2m.	<i>r(ə)kəzkəm</i>	<i>ġ(ə)rābkum</i>	<i>kəṭōbkəm</i>	<i>ḵṣḍṣrkum</i>	<i>ʿərōbkən</i>
	2f.	<i>r(ə)kəzkən</i>	<i>ġ(ə)rābkən</i>	<i>kəṭōbkən</i>	<i>ḵṣḍṣrkən</i>	<i>ibid.</i>
	3m.	<i>rkūzəm(rkāwz)</i>	<i>ġ(ə)rābum</i>	<i>kəṭōbəm</i>	<i>ḵṣḍṣr</i>	<i>ʿərūb</i>
	3f.	<i>r(ə)kūz</i>	<i>ġərōb</i>	<i>kəṭōb</i>	<i>ibid.</i>	<i>ʿərōb</i>

In all MSAL (with very few exceptions in MQn) sg.3m. = pl.3f., and in J sg.3m. = pl.3m. = pl.3f.

In S, in sg.3f., the same verb may have *-vh*, and *-vt*: SQa *ḥelībōh* or *ḥelībōt* 'it (sg.f.) is milked'.

In M and H, the vowel of the suffix in sg.3f., du.3 is *ē* for passives and some derived measures.

Tab. 64.15: Imperfective (type A)

		MHf 'break'	Hb 'know'	HL 'strike'	JL 'be able'	SQb 'go down'
Sg.	1c.	<i>etōbār</i>	<i>eḡōrāb</i>	<i>əlōbād</i>	<i>əkōdār</i>	<i>əkōfād</i>
	2m.	<i>tətōbār</i>	<i>tḡōrāb</i>	<i>təlōbād</i>	<i>tḵōdār</i>	<i>təkōfād</i>
	2f.	<i>tətībār</i>	<i>tḡērāb</i>	<i>təlībād</i>	<i>tḵīdār</i>	<i>təkōfid</i>
	3m.	<i>yətōbār</i>	<i>yīḡōrāb</i>	<i>yəlōbād</i>	<i>yḵōdār</i>	<i>ikōfād</i>
	3f.	<i>tətōbār</i>	<i>tḡōrāb</i>	<i>təlōbād</i>	<i>tḵōdār</i>	<i>təkōfād</i>
Du.	1c.	<i>etbārō</i>	<i>eḡōrbo</i>	<i>əlbādō</i>	<i>əkōdōrō</i>	<i>əkāfādo</i>
	2c.	<i>tətbārō</i>	<i>tḡōrbo</i>	<i>təlbādō</i>	<i>tḵādērō</i>	<i>təkāfādo</i>
	3m.	<i>yətbārō</i>	<i>yīḡōrbo</i>	<i>yəlbādō</i>	<i>yḵōdōrō</i>	<i>ikāfādo</i>
	3f.	<i>tətbārō</i>	<i>tḡōrbo</i>	<i>təlbādō</i>	<i>tḵōdōrō</i>	<i>təkāfādo</i>
Pl.	1c.	<i>nətōbār</i>	<i>nḡōrāb</i>	<i>nəlōbād</i>	<i>nəkōdār</i>	<i>nḵōfād</i>
	2m.	<i>tətābrām</i>	<i>tḡōrbum</i>	<i>təlōbādām</i>	<i>təkōdār</i>	<i>təkōfād</i>
	2f.	<i>tətābrān</i>	<i>tḡōrbān</i>	<i>təlōbādān</i>	<i>təkōdārān</i>	<i>təkōfādān</i>
	3m.	<i>yətābrām</i>	<i>yīḡōrbum</i>	<i>yəlōbādām</i>	<i>yḵōdār</i>	<i>ikōfād</i>
	3f.	<i>tətābrān</i>	<i>tḡōrbān</i>	<i>təlōbādān</i>	<i>təkōdārān</i>	<i>təkōfādān</i>

The vowel change occurs in S in pl.3m.

In M, sg.2f. may be *t-...V* or *t-...V-i*, depending on the type of verb, although many verbs have both conjugations.

In Hb pl.2, 3m. are *t(ə)-*, *y(i/ə)-...-um*.

In all MSAL, pl.2f. = pl.3f.; in J and S, pl.2m. = sg.2m = sg.3f.

Tab. 64.16: Subjunctive (type A)

		MQn(ML)	Hb	HL	JL	S
Sg.	1c.	<i>larkēz</i>	<i>lgārēb</i>	<i>əlbēd</i>	<i>lḵōdār</i>	<i>ləʕārāb</i>
	2m.	<i>tarkēz</i>	<i>tḡārēb</i>	<i>təlbēd</i>	<i>tḵōdār</i>	<i>təʕārāb</i>
	2f.	<i>tarkēz(tarkēzi)</i>	<i>tḡārēb</i>	<i>təlbēd</i>	<i>tḵīdār</i>	<i>təʕārib</i>
	3m.	<i>larkēz(yarkēz)</i>	<i>yīḡārēb</i>	<i>yəlbēd</i>	<i>yḵōdār</i>	<i>ləʕārāb</i>
	3f.	<i>tarkēz</i>	<i>tḡārēb</i>	<i>təlbēd</i>	<i>tḵōdār</i>	<i>təʕāreb</i>
Du.	1c.	<i>(ərəkzō)</i>	Ø	<i>əlbādō</i>	<i>lḵōdōrō</i>	<i>ləʕrābo</i>
	2c.	<i>(tərəkzō)</i>	Ø	<i>təlbādō</i>	<i>tḵōdōrō</i>	<i>təʕrābo</i>
	3m.	<i>(yərəkzō)</i>	Ø	<i>yəlbādō</i>	<i>yḵōdōrō</i>	<i>ləʕrābo</i>
	3f.	<i>(tərəkzō)</i>	Ø	<i>təlbādō</i>	<i>tḵōdōrō</i>	<i>təʕrābo</i>
Pl.	1c.	<i>narkēz</i>	<i>nḡārēb</i>	<i>nəlbēd</i>	<i>nḵādēr</i>	<i>nəʕāreb</i>
	2m.	<i>tarkēzām</i>	<i>tḡārēbum</i>	<i>təlbādām</i>	<i>tḵōdōr</i>	<i>təʕāreb</i>
	2f.	<i>tarkēzān</i>	<i>tḡārēbān</i>	<i>təlbādān</i>	<i>tḵōdērān</i>	<i>təʕārebān</i>
	3m.	<i>larkēzām</i>	<i>yīḡārēbum</i>	<i>yəlbādām</i>	<i>yḵōdōr</i>	<i>ləʕārib</i>
	3f.	<i>tarkēzān</i>	<i>tḡōrbān</i>	<i>təlbādān</i>	<i>tḵōdērān</i>	<i>təʕārebān</i>

In JL (Johnstone 1981, xvii), the subjunctive dual differs from the imperfective, but they are identical in Johnstone (1975, 109).

Imperative

Except in S, the imperative form is identical to the subjunctive, without personal indice. In M, sg.2f. always has the suffix *-i*.

In S, command is expressed by the imperfective, the prohibitive by the subj. following a negative particle.

Tab. 64.17: Conditional

		ML(type A) 'put sth. straight'	ML(type B) 'get broken'	Hb 'be, become'	J 'be able' ...
Sg.	1c.	<i>larkēzən</i>	<i>lātḃirən</i>	<i>lkīnən</i>	<i>ləḳdīrən</i>
	2m.	<i>tarkēzən</i>	<i>tātḃirən</i>	<i>tkīnən</i>	<i>təḳdīrən</i>
	2f.	<i>tarkēzən</i>	<i>tātḃirən</i>	<i>tkūnən</i>	<i>təḳdīrən</i>
	3m.	<i>yarkēzən</i>	<i>yātḃirən</i>	<i>ykūnən</i>	<i>yəḳdīrən</i>
	3f.	<i>tarkēzən</i>	<i>tātḃirən</i>	<i>tkīnən</i>	<i>təḳdīrən</i>
Du.	1c.	<i>larkəzáyən</i>	<i>lātḃaráyən</i>	Ø	<i>nəḳdórʔn</i>
	2c.	<i>tarkəzáyən</i>	<i>tātḃaráyən</i>	Ø	<i>təḳdórʔn</i>
	3m.	<i>yarkəzáyən</i>	<i>yātḃaráyən</i>	Ø	<i>təḳdórʔn</i>
	3f.	<i>tarkəzáyən</i>	<i>tātḃaráyən</i>	Ø	<i>təḳdórʔn</i>
Pl.	1c.	<i>narkəzáyən</i>	<i>nātḃirən</i>	<i>nkūnən</i>	<i>nəḳdérən</i>
	2m.	<i>tarkēzən</i>	<i>tātḃirən</i>	<i>tkīnən</i>	<i>təḳdérən</i>
	2f.	ibid.	ibid.	<i>tkūnən</i>	ibid.
	3m.	<i>yarkēzən</i>	<i>yātḃirən</i>	<i>ykūnən</i>	<i>yəḳdórʔn</i>
	3f.	<i>tarkēzən</i>	<i>tātḃirən</i>	<i>tkūnən</i>	<i>təḳdérən</i>

The conditional occurs neither in MY nor in S. Elsewhere it is limited to unreal hypothetical conditional sentences, *lu* (ML), *wili* (Hb) introduce the protasis. In MO and J, it occurs rarely, in Hb, it is limited to very few verbs.

The prefixes are those of the subjunctive (except for 1du. in J), the suffix is *-n* in the whole paradigm, and there is no number marker.

5.8.3.2. Simple verb (type B). Middle voice

Tab. 64.18: Perfective (type B)

		MHf(ML) 'be broken'	JL 'shiver with fear'	SQa 'be broken'
Sg.	1c.	<i>tšbrek(tšbrək)</i>	<i>fédərk</i>	<i>géšəlk</i>
	2m.	<i>tšbrek(tšbrək)</i>	<i>fédərk</i>	<i>géšəlk</i>
	2f.	<i>tébreš(tšbrəš)</i>	<i>fédərsiš</i>	<i>géšəliš</i>
	3m.	<i>tībər</i>	<i>fédər</i>	<i>géšəl</i>
	3f.	<i>təbrūt(təbrūt)</i>	<i>fīdirūt</i>	<i>géšələh</i>
Du.	1c.	<i>tšbrəki</i>	<i>fédərsiši</i>	<i>géšəlki</i>
	2c.	ibid.	ibid.	ibid.
	3m.	<i>təbrō(təbrō)</i>	<i>fédérš</i>	<i>géšələ</i>
	3f.	<i>(təbrərtō)</i>	<i>fédértš</i>	<i>géšəltə</i>
Pl.	1c.	<i>tšbrən</i>	<i>fédərən</i>	<i>géšələn</i>
	2m.	<i>tšbrəkəm(-bər-)</i>	<i>fédərkum</i>	<i>géšəlkən</i>
	2f.	<i>tšbrəkən(-bər-)</i>	<i>fédərkən</i>	<i>géšəlkən</i>
	3m.	<i>tšbrəm</i>	<i>fédər</i>	<i>géšəlkən</i>
	3f.	<i>tībər</i>	<i>fédər</i>	<i>géšəl</i>

In M sg.3f. (type B) = sg.3f. (type A).

tēbər in Hb has the same conjugation as in ML, including the dual.

In JL, Johnstone gives *ǰəḍər* as a variant, for the whole paradigm.

In J, in dual 1–2, the personal indice is palatalized.

Tab. 64.19: Imperfective (type B)

		MHf(ML)	JL	Sms 'remember'
Sg.	1c.	<i>etbōr(ə-)</i>	<i>əfédōr</i>	<i>ədékər</i>
	2m.	<i>tətbōr</i>	<i>təfédōr</i>	<i>tdékər</i>
	2f.	<i>tətbēr(təbáyri)</i>	<i>tfídír</i>	<i>tdékír</i>
	3m.	<i>yətbōr</i>	<i>yfédōr</i>	<i>ydékər</i>
	3f.	<i>tətbōr</i>	<i>təfédōr</i>	<i>tdékər</i>
Du.	1c.	<i>(ətbārō)</i>	<i>nfədérǝ</i>	[?]
	2c.	<i>(tətbārō)</i>	<i>tfədérǝ</i>	[?]
	3m.	<i>(yətbārō)</i>	<i>yfədérǝ</i>	[?]
	3f.	<i>(tətbārō)</i>	<i>tfədérǝ</i>	[?]
Pl.	1c.	<i>nətbōr</i>	<i>nfédōr</i>	<i>ndékər</i>
	2m.	<i>tətbīrəm(tətbīr)</i>	<i>tfédér</i>	<i>tdékər</i>
	2f.	<i>tətbōrən</i>	<i>tfédōrən</i>	<i>tdékōrən</i>
	3m.	<i>yətbīrəm(yətbīr)</i>	<i>yfédér</i>	<i>ydékər</i>
	3f.	<i>tətbōrən</i>	<i>tfédōrən</i>	<i>tdékōrən</i>

In ML, in pl. the conjugation of indicative type B is the same as the pl. passive voice.

Tab. 64.20: Subjunctive (type B)

Conjugation in JL:			
	Sg.	Dual	Pl.
1c.	<i>ləfǝḍr</i>	<i>nfədərǝ</i>	<i>nəfǝḍr</i>
2m.	<i>təfǝḍr</i>	<i>tfədərǝ</i>	<i>əḍfēr</i>
2f.	<i>təfǝḍír</i>	ibid.	<i>təfǝḍōrən</i>
3m.	<i>yəfǝḍr</i>	<i>yfədərǝ</i>	<i>yəḍfēr</i>
3f.	<i>təfǝḍr</i>	<i>tfədərǝ</i>	<i>təfǝḍōrən</i>

For type B, in M, the subjunctive pattern is the same as the imperfective.

In S, it was not possible to elicit a full paradigm for the subjunctive forms of type B verbs.

5.8.3.3. The passive

The vocalic passive form occurs in all MSAL. It is particularly frequent in S.

The patterns of the simple verbs are (pft/ ipft/ subj.):

MQn *CīCūC/ iCīCēC/ ICīCēC*; ML *CəCēC/ yəCCōC/ yəCCōC*

JL *(ε)CCīC/ ilēCCōC/ ICCōC*

SQa *CīCe/əC/ CūCəC/ ICCōC*

Tab. 64.21: Examples of the passive

	passive < active
MQn	<i>xīlēk/ ixīlēk</i> < <i>xəlūk</i> ‘create’ <i>libēd</i> < <i>ləbūd</i> ‘strike’
Hb	<i>ḡilēd/ yəḡəlód/ yəḡəlód</i> < <i>ḡelód</i> ‘hit’
JL	<i>līd</i> < <i>lōd</i> < <i>lbd</i> > ‘strike’ <i>šīm</i> < <i>šēm</i> < <i>šm</i> > ‘sell’ <i>eršīk</i> < <i>eršók</i> ‘bless’
SQa	<i>rīhaš/ rūhaš/ lerhōš</i> < <i>rāhaš/ iróhaš/ lrāhaš</i> ‘wash, cure’
SHo	<i>līda</i> < <i>lāda</i> ‘divide’ <i>līta</i> < <i>lāta</i> ‘kill’

This pattern is valid for the passive of the simple verb and for some derived themes:

MQn	<i>hdīkēk</i> < <i>hədkāwk</i> (derived by <i>h-</i>) ‘grind’
JL	<i>exit</i> < <i>oxōt</i> (derived by int. modif. < <i>xbt</i> >) ‘load’ <i>efsēx</i> < <i>effōsx</i> (derived by <i>-t</i>) ‘undress, untie’
Sms	<i>ʔinka</i> < <i>ʔnka</i> (derived by pref.) ‘bring’

Generally, in J and S, the person-markers do not occur in the passive form (Johnstone 1968; Testen 1992) therefore the prefix *l-* occurs throughout the whole paradigm of the subjunctive.

5.8.4. Tense and modality

As the prefix conjugation has an imperfective value and the suffix conjugation a perfective one, particles, preverbs and auxiliary verbs or periphrastic constructions are used to express tenses and modalities.

Main aspectual-temporal markers:

ḏ-/d- (M, Hb, H), *d-led-/lid-* (J).

With this marker, which does not occur before the *t-* personal indice, the ipft. has a concomitant value.

MQn *d-əhōriḡ šīs mehrīyāt* ‘I am speaking Mehri to you’ (*əhōriḡ* ‘I speak (usually, generally)’). ML *hoh d-əšāmələn təḡərēt* ‘I am dealing with merchants’. Hb *d-iʿāmər* ‘he is saying’. HL *d-ašáwwər* ‘I am stopping’. JL *d-igóləd* ‘he is hitting’ (*yḡóləd* ‘he (always) hits’).

The suffix conjugation with this marker is a resultative perfective, expressing the present state resulting from an accomplished process:

MQn *šarōmah də-nfūs* ‘now, he is gone’, *dʰ-fīzāt* ‘she is afraid’; Hb *fāmi dā-ḥebtōt* ‘my leg is swollen’; HL *hoh dā-hēndək* ‘I am sleepy’; JL *ešəfəri ed-mízót mih* ‘the pan is full of water’.

ber/bər/ber

In M, Hb, H it is an invariable preverb. In J and S, *bər* is conjugated in the suf. conj. Its values and functioning are similar to Ar. *qad* (Simeone-Senelle 1997a, 408).

Examples are scarce with the pref. conj.: *bər* means ‘now, already’, and it often expresses that something has happened as opposed to circumstances or another state/fact: MQn *bər isyūr lēken ihōriḡ lá* ‘[baby] he already walks but he doesn’t speak (yet)’. With the suf. conj., *ber* emphasises the completion of the process, with a resultative value:

MQnB *wət mḡōrən bər kēsā, iṭawyəm teh* ‘afterwards, when it is quite dried, they eat it’; Hb(Hf) *hoh ber wtəlūmk* ‘I am prepared’; HL *ḥādōtya ndēf, bər rəḥēzək tīsən* ‘my hands are clean, I’ve just washed them’; JL *bérōt šəfhōt* ‘she is past childbearing’; SQb *šarīt bər mīle?* ‘the tape is full (it has just stopped)’.

With the future, it expresses imminence (Simeone-Senelle/Vanhove 1997, 90–91):

MQn *bər ḥōm əlté* ‘I am about to eat’; JL *ber ḥa-yóktəb* ‘he is about to write’.

Future (Simeone-Senelle 1993, 249–278; Simeone-Senelle/Vanhove 1997, 88–90)

S is the only language that does not have a special future conjugation (ipft. is used). In M, H, and B the future is expressed by means of a verbo-nominal form, the active participle, that only has a predicative function. It varies in gender and number.

In the basic form, the participle has an *-a* suffix: CəCCōn-*a*, CəCīCt-*al* (CəCCōn-*i*, CəCCāwt-*i*) / CəCēyC-*a*, CəCCūṭən (sg.m., f. / (du.m., f.) / pl.m., f.). The active participle stem of the derived forms has an *m*- prefixed (and occasionally an *-a* suffixed) to the subjunctive pattern. Gender opposition is neutralized at the plural of derived forms in ML and in MQnB (but not in MQn); the common plural is identical to the nominal feminine plural: MQnB *məkarāwtən*, future (c.pl.) of *ḥakrawr* ‘go at midday’.

In these languages, the periphrasis: ‘want’ + verb in subj. also has a future value.

In Hb, the future consists of *mé/éd*-suf.pr. + subj. The suf. pr. refers to the subject. In some dialects, *méd* (meaning ‘volition, wish’) may be invariable:

Hb(Hf) *méd-es tətīk ḥmo* ‘she will drink water’, (Ht) *méd yəntāwḥəm* ‘they will fight o.a.’, but *médhum yisērum* ‘they will go’

In J the preverb *ḥa-lḥ-* precedes the subjunctive:

JL *ḥa-yśóm* ‘he’ll buy’, *ḥa-lḡád* ‘I’ll go’, *ḥ-lḥí* ‘he will look for’.

Other verbal particles and auxiliaries are used to express tenses, aspects and modalities.

(?)*ād-* + suf. pr. + pft/ipft, for the progressive (M, H);

ʿād- / (?)*ād-* + suf.pr. + ?ʿar (restrictive particle) + *mən* + suf.pr. + pft. ‘have just ...’ (M);

ḥalxal + subj. (S), *ləbōd* (aux. pft.) + ipft. (H), ʿ*ad* (aux. pft.) + ipft. (J, S) ‘to keep on’;

wīlēka (aux.) + subj. (M, H), *lāʿaflǝḡəf* (aux.) + ipft (S) ‘be used to’;

?*āzōm* <ʿzm> (aux.) + subj. ‘almost/very nearly’ in the past (M, H);

šōr (aux.) + *d/ḏ-* + ipft (M) ‘begin to (inchoative)’.

5.9. Other parts of speech

5.9.1. Adverbs

Besides temporal deictics (cf. 5.6.), the common adverbs of time are:

sōbər (M), *šəbər* (H), *səbər* (J), *déhər* (S) ‘always’; ?*ābdan* (M), *bdan* (J) ‘never, ever’ (from Ar.); *mḡōrən* (M), *mḡóre*, *mḡóre* (Hb, J), *məḡārə* (B), *mḡōrhən* (rare), *mətālē* (H), *mser* <mən + ser> (S) ‘afterwards, later on’; *yəllilə* (M), *əlʿāyni*, *əlʿéni* (J) ‘to-night’; *ḡasré* (J) ‘at night’.

5.9.2. Prepositions

The prepositions common to all MSAL are:

b(ə)- ‘in, with’; *h(ə)*- ‘to, for’; *l*- ‘against, on’; *k*+N/ +suf.pr. ‘with’; *mən* ‘from’; *t(ə)*-accusative marker for pers. pr.; *ḏār* (M, H), *ḏér* (J), *tār* (MQn), *ṭhar* (S) ‘on’; *ənṣāli* (M, H), *n/ḵín* (J, Hb), *nḥat* (S) ‘under’; *sār* (M, H), *ser* (J), *sar* (S) ‘behind’; *fən*, *fənw*- (M, B), *fēn* (Hb), *fēn* (H), *fēne* ε, *fən-é*- (J), *(di-)fónə*, *fēnə* (S) ‘before, in front of’.

Some prepositions are used in constructions denoting time: *k*- in M, Hb, H, J, and *l*- in S for periods of the day: *k-ṣōbah* (M, Hb, H), *k-hás(š)áf* (J), *lə-ṣabḥ* (S) ‘in the morning’, and part of the year in MQn: *k-xáref* ‘in autumn’.

Some prepositions do not occur in all the MSAL:

bād/baʿd (M, H) (cf. Ar.) and *(m)əm-bād* (M); *mən-ḏér* (J) ‘after’; *bark/brek* (M, Hb, B, H) ‘in, inside, at’; *tē/te/tā* (M, H, J), *ʔetēʔ* (Hb) ‘up to’; *ʕan* (J) ‘from, than’, *ʕa(n)* (S) ‘from, to’; *ken* (J), *kə/en*, *kən* (S) ‘from’; *ʔad/ʔid/d* (S) ‘in, to’, *(ʔe)d* (J) ‘to, up to’, *ʔed* ‘till’ (J); *yəl* (J), *diəl* <ʔəd + əl> (S) ‘towards’; *wde*- (M, H) ‘towards’; *ʕa(m)k* (J) ‘in, at’ (cf. *ʕamk* (M, Hb, H, S) ‘middle’).

Except in S, *h*- ‘to, for’ is used in compound prepositions: *h-āl*, *h-all/h-ən* (M) ‘to, at, with’, *hné*+N/suf.pr. (ML/MQn) ‘at’, *hel*, *helt*- (H) ‘at’, *her* (J) ‘to, up to, for’, *hes* (J) ‘up to’.

Each language also has its own prepositions that do not occur in the others:

H *wəl* ‘towards’, *əm-būn*, *mātōd* ‘after’; J *tél*+N/*tól*+suf.pr. ‘at, with’, *mən-tél* ‘from’, *ʔémt* ‘towards, to’, *her* ‘up to, to, for’; S *ʕʔaf* ‘up to, until’.

The same element can either be a preposition, a conjunction or an adverb:

(J) *hes* ‘up to’ and ‘then, when’ and *hīs/his/hes* (M), *hīs/həs/əs* (H) ‘when, since; like’, *hes* ‘like’ (Hb); *her* ‘up to, to, for’ and ‘if, when’ (J).

5.9.3. Conjunctions

The main temporal conjunctions are:

tehl/teʔ/te/tē/te/ta (M, Hb, H), *tə-wət* (MQn), *(ʔ)ε/ʔa* (J) ‘until, till, then when’; *mət/mayt/mit* (ML, Hb, H, J, S), *wə/et* (MQn), *her*, *ḥákt* ε- (J) ‘when’; *hes* (M, Hb, H, J), *tə/tə*, *ʕam* (S) ‘when, as’; *lɔd/t*, *sēʕ* (S) ‘when, while’; *lo/ól*, *ke*, *karámmə*, *kaném(m)ɔ* (S) ‘when, if’.

The main causal conjunction:

ʔən/l-ən (M), *yənn* (H), *l-ín/l-hin* (J). ‘because’.

The main final conjunctions are:

l-egirēh/l-agərē (M) (*l-egeré* ‘because, for’ in J), *hér* (J), *uken* <‘and’+‘be’> and *ker* (S) ‘in order to, so that’.

5.9.4. Interrogative particles

híneli (Hb), *híne/héni* (J) ‘why?’;

kō, *kóh* (ML), *wākō* (ML=MQn), *kə*, *wākó* (Hb), *kəh* (J); *hībáh* (ML), *hībóh* (MQn), *həbó*, *həbō* (Hb, H), *hābō* (B), *ʔifo(l)/fəl* (S) ‘how? why?’;

mayt (M), *mit* (J), *mih/mīh* (S) ‘when?’;
hō (ML), *hō*, *hō* (MQn, Hb), *hān(ə)* (B), *hōnəh* (H), *hun*, *hūtun* (J), *hən/ho(ʔo)* (S) ‘where?’;
wələ <*w* + neg.> (M), *flə/bé-flə* (*b* ‘and’, *lə* neg.) (J) ‘or else?’.

6. Syntax

6.1. Word order

6.1.1. At clause level

In nominal clauses, the order is Subject + nominal Predicate:

SQa *tāhin nāfā di-gāžētən* ‘grind (is) (the) work of women’; MQn *yimóh raḥmēt* ‘today it rains’ <today/ rain>; B *kélləs eḳáʿ lə bəṭāhrūt* ‘all the earth (belongs) to the B.’ <all.it(f.)/ earth/ of/ Bathari >.

In verbal clauses, the order is VS(N)O or S(pers.pronoun)VO.

6.1.2. At phrase level

6.1.2.1. Nominal phrases

The definite article when it exists (in MO, H, B, J) is always prefixed to the definite item.

With two nouns, the order is always: Determined + Determiner; except in S, the same holds true in possessive construction (N+pr.suf.) and with adjectives (N+Adj.).

The construct state is only found in some frozen constructions and special words (kinship nouns, parts of the body, and the item *baʿl* ‘owner, possessor, he of ...’). It is very rare in Hb. In the languages with a definite article, the two terms are usually definite.

MQn *bōli kāśən* ‘people of Qishn’; HL *lēlt awkēb* ‘the wedding night’ <night/ entry>; JL *ēṭəb ʔz* <art.teat/ art.goat> ‘the teat of goat’; SQa *bər kākā* ‘nephew’ <son/ brother/sister>.

A particle usually links the Determined to the Determiner. This particle is *d/d-* after a singular noun, and *-l-* (JL *iz*) after a plural noun. In M, Hb, and sometimes in S, *d/d-* is often used, even with plural nouns. In J where *d-* does not occur in a possessive phrase, the particle is *é*. In the languages with a definite article, both items of the phrase may be definite.

MQn *hadūtən l-nūr* ‘(the) maternal aunts of Nur’; MJb *kīs ḏ^p-tōmər* ‘sack of dates’; Hb(Hf) *šinót dā-qanyūn* ‘the sleep of babies’; HL *āsnéwəwət dā-heydōntən* ‘jaw-joints’ <art.joints-of-ears>; B *nātuš le-ḥālūt* ‘spots of rust’; JL *mékék dā-kūt* ‘half a sack of food’, *edaʿbēh iz-šxórtə* ‘the curses of the old women’, *etb é-ʔéméš* <art.teat/ of-art.mother.suf.pr.sg.3f.> ‘the teat of her mother’; SAK *kəṭrəh d-dər* ‘a drop of blood’.

In S, the same construction occurs with the independent personal pronouns to express possession (see 5.1.1.), but the possessive phrase (*di/mə(n)* + pronoun) always precedes the possessed (see 5.1.2.). When the latter is in a construct or prepositional phrase the possessive is before the complement phrase.

SQa *bīyāh di-hæ di-bēbeh* ‘(the) mother of my father’ <mother/ of-I/ of-father>; *di-ḥan mən-xalf* ‘out of our place’; SHo *di-hi l-ʿāzeh* ‘with his wife’.

6.1.2.2. Verbal phrases

The direct or indirect object follows the verb directly. When the complement is pronominal, it is often (always in S) introduced by the accusative marker *t-*. Verbs with three valencies have the pronominal complement preceding the nominal complement: V + (*t-*) + suf.pr. + N. When both complements are pronominal, the beneficiary precedes the object:

MJb *ṭālōm tē-sən ḥmo* ‘they ask them(f.) for water’; ML *ṭālāwb-əh ṣalḥ* ‘they asked him for a truce’; Hb(Hf) *wuzum t-ī te-h* ‘he gave it to me’.

6.1.2.3. Complex sentences

In asyndetic constructions, the complement clause follows the main one. In hypothetical conditional sentences, the protasis usually precedes the apodosis. With causal, final and temporal clauses, the clause order varies. Topicalization and focusing are to be taken into account.

6.2. Agreement rules

Generally, the subject governs person, gender and number agreement in the verb. Demonstratives, and attributive and predicative adjectives agree in gender and number (including the dual in S), as well as in definiteness for attributives, with the nouns they determine. Except in S, a dual noun may often govern a plural agreement. With multiple subjects, agreement is always pl.m.

Animated collective nouns govern a singular or plural agreement, with gender polarity for livestock (m. in sg., f. in pl., and vice versa):

Hb *men-sən* (pr.pl.3f.) *ḥōrūn* ‘some goats’ (*ḥōz* sg.m.), *men-hum* (pr.pl.3m.) *leyhtə* ‘some cows’ (*lēh* sg.f.).

6.3. Negation

Each language has its own construction (cf. Simeone-Senelle 1994a). In all of them (except in J) pft. and ipft. conjugations have the same negation, as well as declarative, interrogative and prohibitive sentences in five of the six languages (Soqotri of Soqotra being the exception).

In MO, and some eastern dialects of MY, in Hb, and in J, the negative particle has two elements (ə)l...laʔ/ʔə(l)...ləʔ circumfixed to the negated term / sentence:

ML ʔəl səbēb-i laʔ ‘(it’s) not my fault’; ʔəl awágəbkəm təsīrəm wə-tkəlām aməlāwtəg wəṭōmāh laʔ ‘it is not fitting for you to go and leave the dead like that’; əl təhēlāz bey laʔ ‘don’t nag me!’. Hb(Ht) l-šīn siyērōt lāʔ ‘we haven’t <neg.-with.us> cars’; JL āxṭēr əl ksé mīh hēr yəšhəs tihum ləʔ ‘the caravan did not find water to boil their meat’, embére ṭrōi ɔ yté ɛ yəsḥáʔ ləʔ ‘the shy boy does not eat till he is satisfied’, ɔ tšérk dšhun ləʔ ‘don’t do that!’.

In Hb, negation in declarative sentences may only have the postposed element, the construction being similar to what it is in MY, B and H. This is a free variation: (Hf) (əl) ixóm yánšoz šēhi lāʔ ‘he doesn’t want to drink tea’.

In the prohibitive sentences, only the second element is usually present in MO and Hb: Hb(Hf) tezēm lāʔ ‘don’t give!’, (Mn) tšēǧizm lāʔ ‘don’t refuse!’. In JL, in this case, optionally, the first item may occur alone, in a reduced form: JL ʔə tšktāb ‘do not write!’.

In ML, the first element may occur alone in interrogative sentences and, in J, in complement clauses after verbs of fearing, hoping ... (Johnstone 1981, 2).

In MY, B, and H, the negative particle is laʔ. Always postposed to the negated term, it is often placed at the end of the clause:

MQn hēt hēs-t-ī hoh lāʔ ‘you (are) not like me’ <you/ like- (acc.) -me/ I/ neg.>; ɤadūrən ngərē šxəf də-hāybūt də-bōli ǧōdāb lāʔ ‘we couldn’t drink the milk of the camels of the people of Jadib’; tǧīra ɤahwēt lāʔ ‘don’t drink coffee!’. B raḥak lā ‘(it’s) not far’. HL əkhōl əǧātér laʔ ‘I cannot speak’; təhémāmāh laʔ ‘don’t bother about it!’ (=ML təhtāmāmāh laʔ).

In S, in declarative sentences, the particle of negation is əl (sometimes [ɔʔ]), always preposed to the negated term or phrase:

SQb se əl ḥōwrāh ‘she (is) not black’, əl fšek ‘I didn’t lunch’; SQA b əl tənṣḍək kálām dīye ‘you don’t say anything good’.

In prohibitive sentences, the negative particle is ʔ/ʔa(n)/ḥa, according to the dialect, followed by the subjunctive:

SHr ʔa tšte ‘don’t eat!’, SQb ʔa ləzʔam ‘don’t sit down!’ (subj. without pers. pref.), SQA ḥa tīgdeḥən ‘don’t come (pl.)!’.

In the ‘Abd-al-Kūri dialect, the particle is əl + subj.: əl tšémtəl ‘don’t speak!’

6.4. Interrogation

Interrogation may be expressed by rising intonation alone: MQn tḥəm ɤahwēt lāʔ ‘don’t you want coffee?’ syntactically similar to ‘You don’t want coffee?’; MJb təhōriǧ məh-riyōt ‘Do you speak Mehri?’; S əl ǧšʔark ‘aren’t you (sg.m.) ill?’ (= ‘how are you?’).

Among wh-words, some are always in head position:

SQb hoʔo d-mése kən ‘where has it rained?’ <where/ of-rain/ it.was>, inem d-ḥaf de-ḥa w-ǧfol d-meyḥ šem ‘what (is) this place here, and what (is) its name?’ (lit. how its name).

Others are always in final position:

MQn āmərək ḥībōh ‘what did you say?’; ḥamməs mōn ‘what is her name?’; Hb nkaʔk men hō ‘where do you come from?’.

wələ is always after a pause: MQn tḥəm ḥmo, wələʔ ‘do you want water, or not?’

6.5. Coordination (phrasal and clausal)

Coordination can be only mere juxtaposition, but most often the coordinating conjunction is used: *w(ə)/ū/u* in M, Hb, B, H, S, and *b* in J. This particle is affixed to the second term of the coordination:

JL *hé b-hét* ‘you and I’; SQb *b-ʿamk d-ḥadībo^h u-ḥawləf* ‘between Hadiboh and Hawlef’.

In narratives, *w/b* often indicates a new step in the relation of events. It means ‘and thus, and suddenly’: MJB *gaḡḡēn u-ḡath kōsəm āgizōn tūtōbən u-hem ṭāymən* ‘a boy and his sister met women who were tanning and (thus) they were thirsty’.

w may also introduce a causative clause: SQaB *əl idīnət w-əl šərət* ‘she has not been found guilty because she didn’t do harm’.

When *w-* coordinates two negative clauses (‘nor ...or, neither ...nor’), it is immediately followed by the negative particle, even in the languages where this is at the end of the phrase:

MQn *gehmoṇa-lá škōṭra u-la kūryamūrya u-la ābdəlkūri* ‘I shall (or you/he will) neither go to Soqotra nor Kurya Murya or ‘Abd-al-Kuri’.

6.6. Conditionals

The apodosis is introduced by a particle.

6.6.1. Real conditional

The verb in the protasis is in the pft. or the ipft., while the verb in the apodosis is in the ipft., future or subj./imperative.

M (*u-*)*lū, lē* ‘(even) if’

MQn *ulū het ḵəhəbk lá? uzmēnəs <fut.> ha ērs* ‘even if you don’t come, I’ll go to the wedding’

M, Hb, H *ʔam, hām/ham, həm* ‘if’

MQn *ham xəṛāḡək tḵṵhk lá?* ‘if I go out, you don’t come’ or ‘if I am gone, you don’t come’; Hb(Hf) *həm nəkaʿ ḡehme, mēdi-lʿamer h-eh* ‘if he goes tomorrow, I’ll tell him’; HL *am bəṛək šéllək téni əlá?* ‘if you can’t give me a lift’.

MJb *hən, MQn, Hb ʔe/en* ‘if’

MJb *hən ṭḥəm tšəwē imō? ṭəḵəšəwəm* ‘if you want to see what it is, (you) spend the afternoon (at home)’; Hb(Hf) *ṭād ʔen šénə xəšməh iḵəṛōb hənéh lá?* ‘if someone sees his enemy, he doesn’t go near to him’.

J *her, hel* ‘if, when’

JL *hér siéréh əl zḥōt hīni lə? ḥa-l-əmtéḥək* ‘if the car does not come to me, I’ll get very annoyed’.

Hb *ḥad <ḥa + d>* (for this construction, cf. J *mit/mid + ā/ē* ‘when’)

(Hf) *ḥad siyūr ḥəf inōkaʿ bə-tōmər* ‘if/when he goes to Hawf, he brings dates’

S *tə, ləd/žəd + subj.* ‘if’

SQa *tə tigdəḥ ḥan di-nəzəḡən ʔək əknīyoh* ‘if you go, we’ll give you food’, SQb *žəd ligdəḥ* ‘if he goes’.

S *ke/ə*

SQaB *kə rībən hes wu ʿesə tsɔkəʃ* ‘if we advise her, thus maybe she’ll calm down’.

MQn *əlḳā* (subj. sg.3m. of *wīḳa* ‘be, happen’) + subj., and future in the apodosis:

MQn *əlḳā ḥáybi l-nḳā ha-bārīs, āmālēya ḥáfleh* ‘if my father goes to Paris, we’ll give a party’.

6.6.2. Unreal conditional

The verb in the apodosis is in the perfective or a modal conjugation (subj. or conditional) and, for an unreal condition in the present, the verb in the protasis is in the pft.

MQn *əlḳā* (+ pft. in the protasis and the apodosis):

MQn *əlḳā ḳəḥāb fənē šīlāt yōm ḳsáyñi bə-bēti* ‘if he had come three days ago, he would have found me at home’

ML, H *lū/lō*, Hb *wili*. The conditional or the subj. occurs in the apodosis.

ML *lu šīnək tēk, l-əḡrēbən* <cond.> *tēk əláʔ* ‘if I had seen you, I wouldn’t have known you’; Hb(Hf) *wili nḳaʿa mšīn hoh l-kīnən* <cond.> *fərḥənt* ‘if he had come yesterday, I would have been happy’.

M *ʔəḏə* (rare), J *ḏ-kun* (<rel. + ‘be’.pft.sg.3m.>):

JL *ḏ-kun ʿāzi bun l-ḡédən* <cond.> *šəš ɛ mskét* ‘if ‘Ali had been here, I would have gone with him to Muscat’.

S *lʿam*, *lémən*:

SHa *lʿam ʿéḡib lēšəm tan* ‘if he had wanted to kill us’; *lémən ḡəḏəḥk, šīnək ʿali* ‘if you had come, you would have seen ‘Ali’.

6.7. Subordination

6.7.1. Complement clauses

Many verbs (motion, opinion, will) appear in an asyndetic construction with the verb of the complement clause, mainly when the subject is the same. The second verb is generally in the subjunctive:

MQnB *ṯəṣm tənḥāḡ* ‘she wants to dance (subj)’; Hb(Hf) *ekhəl lésbaḥ* ‘I know how to swim’; JL *ʿágəb yḥélbəs* ‘he wanted to milk it(f.)’; SQaB *ʿéḡbən nəḥərəʔ mən məkéylhi* ‘we wanted to look for a medicine-man’.

Only SAK does not have asyndetic constructions whatever the first verb. The complement clause is always introduced by *ḳə*: *egēboh ḳə tšboš* ‘she wanted to cry’.

In the other MSAL, the conjunction depends on the semantics of the main-clause verb. A preposition or relator/linker: *mən*, *l*, *d/d* (Simeone-Senelle 2003, 246). In J the negative element *ə(l)* is used after verbs of dread and denial.

MQn *yāmərəm d-bōli yəntūf ḥaməlēya* <fut.> *ḳəbōbər* ‘they say that the inhabitants of Yentuf are preparing torchlights’; *xziw mən tāmērən* <subj.pl.f.> *ḥīni* ‘they refused(pl.f.) to tell me’; MGa *ḥád yiʔōmər de tiwī ʔasəbāt shēləm toh ʔāynen* ‘someone says that the flesh has been eaten up by the animals’;

SHr *ḥašáyḳ ʔen seh təḡodeḥən* ‘I know that she comes/is coming (ipft)’.

JL *ḡəlšt ə tzeṣ-š* <subj.> *fəndél* ‘she refused to give (subj.) him sweet potatoes’.

6.7.2. Relative clauses

A relative clause can be placed directly next to the word it determines with an anaphoric independent pronoun introduced by the conjunction of coordination *w*, but it is usually introduced by a relator. The antecedent is determined by the article in MO, H, J. Relative particles are identical to the genitive particle/relator (see 6.1.2.), but the number agreement with the antecedent is rare.

MJb *ʿaǧizōn kel de-ber šfākōt* ‘all the women who (sg.) are married’; MQn *ḵabōyāl lih l-sen b-rḥabēt* ‘the tribes which(pl.) (are) in town’

SHo *ṭad de-ʿérim b-ḵéšan* ‘one who formerly (was) in Qishn’

The relative clause also operates as an adjective (see 5.4.), especially in J and S:

JL *etét-š ʿ-xerəǧót* ‘his woman who has died’ (= his late wife); SQa *fərəhəm dī-škeræ h* ‘the girl who was good’ (= the good girl), du. *ferīmi dī-šəkərtə*, pl. *fərhəm dī-škar*, or as a *nomen agentis*: *dī-yhōrək* ‘who (m.) robs’ (= robber).

6.7.3. Adverbial clauses

6.7.3.1. Temporal clauses

Temporal clauses are introduced by a subordinative conjunction, some of which are always followed by the subjunctive.

After *te* meaning ‘until’, the verb is in the subj., but in the indic. when meaning ‘when’:

MQn *ašlōb ḥallīw te lǧalēk* <subj.> *ūrūt* ‘I am waiting for the night until I see the moon’; ML *te gẓōt ḥayāwm* ‘when the sun(f.) went down’

SAK *ho^h šīnk teš tə ntəf* ‘he saw him when he felt’

MQnB *hes wāzūm tēs deǧēǧ* *ḵazūt* ‘when he brought the chicken to her, she refused (it)’

Hb(Hf) *hes isīyur ḥōf inōka^o bə-tōmər* ‘when he goes to Hawf, he brings dates’

JL *ḥākt ēr* <ε + ber> *šéké ʿiyyéʿl ḥa-néheḵ hóhum* ‘when they have watered the camels we’ll call them’

SQa *lōd [ẓōd] itēbəl... ikēsəl ṭáhrer* ‘when they come back ..., they meet wild goats’

SAK *ke ḵəṣṣəʿəh izīdā wáyə^o* ‘when/if she gets up, the pain increases’

SQa *kanémə^h ṭd géḥam lāxeym wukse ikəsə beyh šōdḥ* ‘when/if someone catches a shark, it happens that he finds a fish in it’.

6.7.3.2. Purpose clauses

Purpose clauses are not always introduced by a conjunction, but the verb is always in the subj. (except with *ker/ḵor*, *kor* in S).

Without conjunction:

MQn *hēt lūni māgrāf d-ḥmo ləbrēd beh* ‘you, bring me a tumbler of water (in order/ so that) I freshen up (myself) with it’

With a conjunction:

MGha *siyērš te būma leḡirēh təḡarīb mehrīyāt* ‘you (sg.f.) came up to here in order to learn Mehri’

JL *embéré ḥōḡōr tō hēr l-əzēmš* <subj.> *sé* ‘the boy waited for me to give him something’

SQaB *nʿāmər ukən nārəbən* <subj.1pl.> ‘we (shall) act in order to deliberate’

SQa *yəḡtəri ḡémhəl kər tigīdhən* ‘he calls his she-camels so that they come’

6.8. Copula

The verb ‘to be’, in all moods, or an aspectual-temporal particle + a suffix pronoun referring to the subject, act as copula.

kēn, kun, kən ‘be’ is a copula of existence:

MQnB *tūnən bər bəhīl* (adj.) ‘they(f.) are already ready’.

Hb(Hf) *ʿafarēt tkun his tet* ‘the demon(f.) is like a woman’.

JL *ʾinēt tətʾlén kərʾfšəsən ... hēr atkénən lēnāti* ‘women make up their faces ... to look (to be) white’.

In S, like any verb, the copula can be preceded by the conjugated verb modifier *ber* (see 5.8.4.).

SQa *berəh kənoh fham* ‘it(f.) was already (completely reduced to) coal’.

der + pronoun referring to the subject is a copula in nominal clauses:

MQn = MJb = Hb *bərs* [bərs] (or *bərseh* [bərsch]) *bə-šāfōr* ‘she is (now) in Dhofar’.

In JL, conjugated *ber* is in a cleft sentence, the verb of which is in ipft. preceded by *d-*. *ber d-ikštəb* ‘he is already writing’ (*lit.* here he is who is writing); *nḥan bérən ed-nəḡəfəl ʿar šūḡlən* ‘we’ve been neglecting our work’ (here we are who ...).

wīka (ʿ) <wķʿ> ‘be, become’ can be used as a copula (in M, H) in existential and possessive sentences:

MQn *axšdəm lḡérēh lkā* <subj.> *šī drēhəm* ‘I work to have money’ <I.work/ in_order_to/ I.should.be /with.me/ money>.

(ʿ)*ād/ʿō/əd* + suf. pr. referring to the subject (M, H) or conjugated in the pft. (J, S) is an existential copula ‘be, stay’.

In J *d-* occurs before the copula in positive clauses:

JL *əmbéré d-ʾōd bún* ‘the boy is still here’.

6.9. Existential and possessive expressions

Nominal sentences (without copula or particle) may express existence, attribution or possession:

MQn *ḥarmēt brek bēt* ‘the woman (is) at home’. Hb *ʿali ġa dā-fūl* ‘Ali is Ful’s brother’; SQb *b-ʿamḵ d-ḥadībo^h u-ḥāwlāf šek* ‘between Hadibo and Hawlef, (there is) Sheq’

6.9.1. Existential particles

The existential particle is *śi* ‘there is’, that shares the same rules as any word in negative sentences (in M, Hb, H, J): *śi la?*, *ʔal śi la?* ‘there is not’. In S however, *bīśi* ‘there is not’, but *ino(h)* ‘there is’.

MQn *śi ḥmo* = SQb *ino rīho* ‘there is water’; MQn *ḥmo śi lá?* = SQb *bīśi rīho* ‘there is no water’.

6.9.2. Possessive construction

Possessive constructions are formed by a locative or attributive preposition + suf.pr. referring to the possessor: *b-* ‘in, at’, *l-* ‘to, for’ *š-* ‘with’:

MQn *bīs ġaġġan tat* ‘she has <with.her> one son’; MJd *śi ḥmo lá?* ‘I have <with.me> no water’; SQb *śi ho hāri* ‘I have a canoe’.

In S, the expression may be combined with the copula:

SHo (*byūtāt*) *inoḥ bes dirīšeh* ‘(the room (f.)) it has a window’ <there_is/ to.her/ window>

7. Conclusion

This overview of the linguistic characteristics of the MSAL highlights their originality and importance within the Semitic group. At the same time it notes numerous gaps in MSAL studies and invites further research in this domain, in both dialectology and the oral literature (Simeone-Senelle 2001, 16–25; 2002a, 392). It is necessary to protect this extraordinary linguistic heritage before it is too late (Simeone-Senelle 1997b; in press, 18).

List of the abbreviations related to language names and places

The names of languages may be followed by the abbreviation of place names (for the data of my fieldwork) or by reference to the source. All examples in Hobyot come exclusively from the Simeone-Senelle corpus.

B	Baḥari (Morris 1983, Morris’ data in ML)
H	Harsūsi
HL	<i>Ḥarsūsi Lexicon</i> (Johnstone, 1977)
Hb	Hobyot (different places in Yemen)
Hb(Hf)	Hobyot from Hawf
aHb(Ht)	Hobyot from Hedemet, in the mountain, about 10 kms from Hawf
Hb(Mn)	Hobyot from the village of Mertewon
Hb(Rn)	Hobyot from Rehen
J	Jibbāli (from Johnstone’s works)

cJ	central dialect of Jibbali
eJ	eastern dialect of Jibbali
JL	<i>Jibbāli Lexicon</i> (Johnstone, 1981)
M	Mehri
MDt	Mehri from Damqawt
MMf	Mehri from Muhayfif (near al-Ghayda)
MGa	Mehri from al-Ghaydha
MHf	Mehri from Hawf
MJd	Mehri from Jadib
ML	<i>Mehri Lexicon</i> (Johnstone, 1987)
MO	Mehri of Oman (from Johnstone's works)
MQn	Mehri from Qishn
MQnB	Bedouin dialect of the area of Qishn
MSr	Mehri from Saqer (coastal village in the Qishn area)
MY	Mehri of Yemen
S	Soqotri
SAK	Dialect of ʿAbd-al-Kuri island (recorded on the mainland)
SDm	Dialect from Deksam (western inland area)
SHo	Soqotri from Hadiboh (northern coast)
SHr	Soqotri from the Hagher mountain (centre)
SJms	Soqotri from Johnstone's manuscript notes (in my copy of Leslau, 1938)
SL	Soqotri from Leslau (1938)
SNd	Soqotri from the area of Noged (southern coast)
SQa	Soqotri from Qalansiya (far western coast)
SQaB	Bedouin dialect of the area of Qalansiyah
SQb	Soqotri from Qadhub (northern coast, west of Hadibo)

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VII. The Semitic Languages and Dialects V: Ethio-Semitic Languages

65. Ethio-Semitic in General

1. Scope and pre-history
2. The question of the genetic unity of ES
3. The position of ES within Semitic
4. Internal classification of ES
5. ES as part of the Ethiopian convergence area
6. References

Abstract

This chapter provides an overview the Ethio-Semitic sub-family, i.e. the Semitic languages spoken in Ethiopia and Eritrea, past and present. The pre-history of the family is addressed, as are questions of whether Ethio-Semitic forms a genetic unity, the position of Ethio-Semitic within the Semitic language family (especially in relation to Epigraphic and Modern South Arabian), the internal classification of Ethio-Semitic and the role of Ethio-Semitic in the Ethiopian convergence area.

1. Scope and pre-history

The term ‘Ethio-Semitic (languages)’ (ES) or ‘Ethiopian languages’ is used for the Semitic languages spoken in Ethiopia and Eritrea, past and present. These include the following:

- (a) Gəʿəz (see ch. 66)
- (b) Tigre (see ch. 67)
- (c) Tigrinya (see ch. 68)
- (d) Amharic (see ch. 70)
- (e) Argobba (see ch. 70)
- (f) Gafat (spoken in Blue Nile district, now extinct, cf. Voigt 2005)
- (g) Harari (see ch. 73)
- (h) Gurage (see ch. 72).

In a series of articles, Simeone-Senelle has claimed that Dahalik, the language variety spoken by the inhabitants of the Dahlak archipelago, is not a dialect of Tigre, but an independent NES (Northern ES) language (cf. among others Simeone-Senelle 2006). This view is not accepted by all researchers (cf. Morin, ch. 67; Voigt 2008, 173). The alternative term *Afro-Semitic* for ES (in contrast to the Semitic languages of South-West Asia), recently coined by Simeone-Senelle (2006), is rejected by Voigt

(2008, 173) as imprecise. Needless to say, Arabic is not part of ES, although it is spoken in Eritrea both by nomads and as a trade language, as well as in educated circles and is even one of Eritrea's official languages. However, it still has great relevance as a contact language for most ES languages.

Earlier claims that the ES languages are descendants of South-Arabian languages brought to Northern Ethiopia by Sabaeen settlers who founded the D'mt-culture during the first half of the first millennium B.C. (e.g. Gragg 1997, 242; Kienast 2001, 10 f.; 298 f.; 306), can be disproved. Besides linguistic arguments which show that there does not exist any closer relationship between Epigraphic South Arabian (ESA) and ES (see 3.), evidence can be found in the so-called Ethio-Sabaeen inscriptions (Bernand/Drewes/Schneider 1991 ff., nos. 1–179): These texts were written in Sabaeen in the 8th/7th century B.C., at a time when the D'mt-culture flourished in Yäḥa and neighbouring regions of Tigray. The phonology, syntax and lexicon of Ethio-Sabaeen show that the greater part of these texts was written by non-native speakers. Some lexical items suggest that the native language of the authors was an early variety of ES. For example, the noun *mtry* is attested with the meaning 'possession' (Bernand/Drewes/Schneider 1991 ff., no. 37, no. 47, no. 62), and while the root *try* is unattested in Yemenite Sabaeen, it is well attested in ES (Leslau 1987, 597). It is difficult to avoid the conclusion that this is a calque from an early variety of ES in the Sabaeen matrix-text (cf. Müller 2007, 157). ES was therefore an independent subgroup of Semitic already present in Ethiopia when the South Arabian colonists brought their language and culture to Ethiopia. Hence, either ES should be regarded as having arisen from a much earlier wave of immigration, or Hudson's suggestion (2002; as already proposed by Murtonen 1967), based on geo-linguistic arguments and on the principle of archaic heterogeneity that the Ethiopian region is the origin of Semitic should be considered.

2. The question of the genetic unity of ES

Many studies and handbooks agree or take for granted that ES languages form a genetic unit within the Semitic language family (e.g. Hetzron 1972, 17–19; Hetzron 1975, 112–114). M. Cohen's suggestion (1931, 38–40) of a multiple origin of ES, as a result of several waves of immigration from South Arabia, is nowadays generally regarded as being obsolete. On the other hand, only a few grammatical features of ES can be interpreted as shared innovations setting this group apart from the Semitic languages of South-West Asia:

- (a) Agent noun with the pattern *CāCaCi(y) replacing the Proto-Semitic participle *CāCiC-.
- (b) Existential verb **hlw*.
- (c) Ending of the infinitive *-ot.

Other features common in ES are either retentions from earlier stages of Semitic that are also present in other branches, like, for example, the representation of PS 'emphatics' as ejectives, or can be interpreted as areal features, like, for example, verbal compounds with 'to say' (see 5.). Furthermore, many of the archaisms of SES listed by Leslau (1951) to stress the genetic unity of ES are in fact retentions. Kogan (2005) adduces additional evidence for the genetic unity on the basis of shared lexical items.

Following Faber (1997, 12), one might summarize that although there is little evidence for a single ES branch which later split into NES and SES, there is no ‘evidence that the diverse forms attested in North and South Ethiopic do not reflect a stage of shared descent’, so ES is certainly more than a ‘geographical and historical-cultural concept only’ (Kogan 2005, 369).

3. The position of ES within Semitic

ES was traditionally classified as ‘South Semitic’, together with Arabic (see ch. 44–62), ESA (ch. 63) and Modern South Arabian (MSA, see ch. 64). One of the main arguments for this classification was the internal (‘broken’) plural of nouns. This argument is nowadays regarded as obsolete, as scattered traces of the internal plural can also be found in North-West Semitic, but it is almost completely absent in SES (cf., e.g. Goldenberg 1977, 473 ff.). Leslau (1943) classified ES, ESA and MSA as ‘South-East Semitic’, as did Hetzron (1975, 17), who stated that there could be no doubt that ‘Ethiopian Semitic and South Arabian [i.e. both ESA and MSA!] constitute one branch of Semitic’, on the basis of the morphology of the imperfect of the basic stem (pattern $yvCvCCvC$), thus excluding Arabic from South-Semitic (as ‘South Semitic’ also in Lipiński 1997, 78 ff., as ‘Frühjungsemitisch: Südarabisch/Aethiopisch’ in Kienast 2002, 18 f.). It has since become known that Sabaean (and perhaps also the other Epigraphic South Arabian languages) has no vowel between the first and the second radical (pattern $yvCCvC$, cf. Nebes 1994) and therefore has to be classified more closely with Arabic (Appleyard 1996). This would leave MSA and ES as a sort of ‘core’ South-Semitic. And indeed, as Müller (1964) has already argued, these two groups share many features:

- (a) Representation of Proto-Semitic emphatics as ejectives.
- (b) System of seven vowels.
- (c) **ā*-Ablaut for feminine adjectives (e.g. *ḥaddis* ‘new’, fem. *ḥaddas* in Gə‘əz).
- (d) Nominal plural ending *-ān*.
- (e) Suffixes with *-kv* for 1st and 2nd person Sg. in the perfect.
- (f) Existence of the two prefix-conjugations non-past indicative (imperfect) and jussive (subjunctive), the first of which has a vowel after the first radical in the basic stem, the latter without a vowel.
- (g) Combination of causative, reflexive and causative reflexive morphemes with 0₂/0₃-stems in the verbal derivation.
- (h) Existence of quadri- and quinque-radical verbal roots.

While (a), and partly also (f) can be regarded as retentions and not shared innovations, and feature (e) is also present in ESA, the other morphological features as well as many shared lexemes point to a closer affinity of ES with MSA (cf. also Marrassini 2002; Marrassini 2003). Marrassini (1991) highlighted the possibility that feature (e) may be due to diffusion, and that the complex picture of South Semitic could be the result of a more recent wave of immigration into an already existing Semitic-speaking population. Rodgers’ proposal to classify ES and ESA closer vis-à-vis MSA on the basis of the behaviour of Gə‘əz converbs and Sabaean infinitives as well as a

lexicostatistic study (1991) seems hardly convincing. Girma Demeke (2001) goes as far as proposing a bifurcation ES vs. Asian Semitic (i.e. all the rest), which is certainly exaggerated.

4. Internal classification of ES

ES is usually divided into a Northern group (called ‘North Ethiopic’ or ‘North Ethio-Semitic’ [NES]) consisting of Gəʼəz, Tigre and Tigrinya and a Southern group (called ‘South Ethiopic’ or ‘South Ethio-Semitic’ [SES]) consisting of Amharic, Argobba, Gafat, Gurage and Harari (cf., e.g., Leslau 1960, Leslau 1970; Hetzron 1975, 22 ff., Leslau 1975, Faber 1997, 12).

Features frequently mentioned as typical for NES are:

- (a) Preservation of the laryngeals ʾ, *h* and pharyngeals ʿ and *ħ*.
- (b) Morpheme *-t* / *-ät* for feminine nouns.
- (c) Internal (‘broken’) plurals for nouns (e.g. Gəʼəz *bayt* ‘house’ vs. *ʾabyat* ‘houses’).
- (d) Simple middle radical in the perfect of A-type verbs (e.g. Tigrinya *säbärä* ‘he broke’) and C-Type verbs (e.g. Tigrinya *baräkä* ‘he blessed’).
- (e) Lengthened consonant as middle radical in the imperfect of A-Type verbs (e.g. Gəʼəz *yäräkkäb* ‘he will find’).
- (f) Pattern $C_1\ddot{a}C_2C_3\ddot{a}C_4$ - for the perfect of B-Type verbs.
- (g) Pattern $C_1\ddot{a}C_2C_3\ddot{a}C_4$ - for the perfect of quadri-radical verbs.
- (h) Flexible word order.
- (i) Numeral ‘nine’ is cognate with the PS root **tš*.

Features frequently mentioned as typical for SES are:

- (j) Loss of pharyngeal and laryngeal consonants to a large extent.
- (k) Existence of prepalatal consonants *š*, *ž*, *č*, *č̣*, *ğ*, *ñ*.
- (l) Representation of the original ejective affricate **ʃ* as plosive *t*.
- (m) Simple middle radical in the imperfect of A-Type verbs.
- (n) Gemination of the second radical in the perfect.
- (o) Different patterns for quadri-radical verbs in the perfect (e.g. $C_1\ddot{a}C_2\ddot{a}C_3C_4\ddot{a}C_4$ - in Amharic).
- (p) Word order qualifier-qualified.
- (q) Numeral ‘nine’ is *zä/əñ/ra* (or similar).

The NES-SES distinction was introduced by M. Cohen in his book on SES (1931), although he refrains from actually presenting a strict taxonomy (cf. esp. 1931, 52). However, it must be stressed that hardly any of the above-mentioned features occurs in all the languages of the group and no language shows all the features of its group. Leslau (1975, 129) carefully states that NES and SES can be distinguished ‘from a descriptive point’. The question remains whether there have ever been entities like ‘Proto-NES’ and ‘Proto-SES’ as classificatory nodes. Although the diagrams in Hetzron (1972, 119), Hetzron/Bender (1976, 29) and Faber (1997, 6) might suggest that this is the case, linguistic reality is more complex. Several conflicting isoglosses do exist, e.g.: *ħ* is preserved in Argobba and Harari (contra feature j). Some SES languages have a non-geminated perfect (contra feature n). Voigt (2009) highlighted these problems and

challenges the very existence of the NES-SES split. Hudson (2007) on the other hand maintains the NES-SES split and argues that SES is more innovative.

Within NES, Tigre and Tigrinya are classified by Hetzron (1972, 119) as more closely related to each other than to Gəʿəz, which is hardly surprising when the large time span is taken into account. However, Bulakh/Kogan (2010) give the following picture on the basis of an analysis of Tigre verbal morphology: first Gəʿəz split off from ES, then Tigre, then Tigrinya, leaving the rest of ES as SES as we know it.

The classification of SES developed by Hetzron (1972; 1975) is still the standard model, with only slight improvements. In reaching an internal classification of SES, it is fundamental not to treat the Gurage cluster as a single unit. Instead, East Gurage has close affinities with Amharic and Argobba (the latter being very close to Amharic) and even closer ones with Harari (Wagner 2009). Together they form a group dubbed by Hetzron ‘Transversal South Ethiopic’ because their territory stretched from the North-West of the SES region to the South-East. Northern Gurage has closer affinities with Gafat. Together with Western Gurage they form a group which Hetzron called ‘Outer South Ethiopic’. A possible explanation for this situation is that during the turmoil of the 16th century former dialect continua were disrupted by immigrating Oromo and other ethnic groups, leaving the Semitic-speaking areas as linguistic islands. For further details on the classification, cf. ch. 72.

5. ES as part of the Ethiopian convergence area

It has long been acknowledged, at least since Praetorius (1889), that ES has been subject to large-scale effects of language contact with adjacent ‘Hamitic’ languages. Apart from numerous loanwords which already appear in Gəʿəz as well as in modern ES, several structural features common to ES, North, Central and East Cushitic, Omotic and Nilo-Saharan Kunama lead to the assumption of an Ethiopian convergence area (alternative terms: *Linguistic area* or the German term *Sprachbund*), first postulated by Ferguson (1970 and 1976). Features frequently mentioned as typical for the area are:

- (a) Ejective consonants.
- (b) Palatalization.
- (c) Lengthening (‘Gemination’) of consonants.
- (d) Central vowels.
- (e) Basic word order SOV.
- (f) Anteposition of subordinate clause before matrix clause.
- (g) Anteposition of main verbs before auxiliaries.
- (h) Existence of Converbs.
- (i) Postpositions.
- (j) Special negative paradigms.
- (k) Constructions with the verb ‘to say’.

There is no language of the area that shares all of these features. Modern ES languages tend to share more of these features than Gəʿəz. Taking into account the persistent influence of language contact (Leslau 1962; Kapeliuk 2004), this is hardly surprising.

The size of the area is disputed. While Ferguson restricted the term to Ethiopia proper (then including Eritrea), with the inclusion of the feature ‘cleft sentence’ by Appleyard (1989), the area would cover the whole of the Horn of Africa. Heine (1975, 41–42) even enlarged this area to a ‘Chad-Ethiopia Area’ on the basis of word order typology.

Taking into account the fact that nearly all members of the area (with the exception of Kunama) are related at least remotely on the Proto-Afro-Asiatic level (see ch. 5), questions have arisen over whether the assumption of convergence really does make sense (Tosco 2000, 336–339). However, as Cushitic has a sub-family outside the area (South Cushitic) and so does Semitic (East, North-West and Central Semitic), these provide opportunities to check if certain common features are genetic or areal in nature. These features can indeed be found. Most typical features of the Ethiopian language area cannot be found in Asian Semitic. Crass (2002) also regards the absence of pharyngeal fricatives in a large part of the Ethiopian language area as an areal feature, taking the view that they can be reconstructed for both Semitic and Cushitic.

While earlier studies in the field (e.g. Leslau 1945) stress Cushitic influence on ES supposedly due to imperfect language acquisition during expansion of Semitic languages, Zaborski (1991) points to the fact that the Ethiopian area is composed of at least six sub-areas and Crass/Bisang (2004) make their point that adaptive processes in the area are by no means unidirectional, but rather the result of complex relations between speech communities. In Crass/Meyer (eds. 2007) syntactic features of the Ethiopian convergence area are discussed.

Abbreviations: ES: Ethio-Semitic. ESA: Epigraphic South Arabian. MSA: Modern South Arabian. NES: North Ethio-Semitic. PS: Proto-Semitic. SES: South Ethio-Semitic

6. References

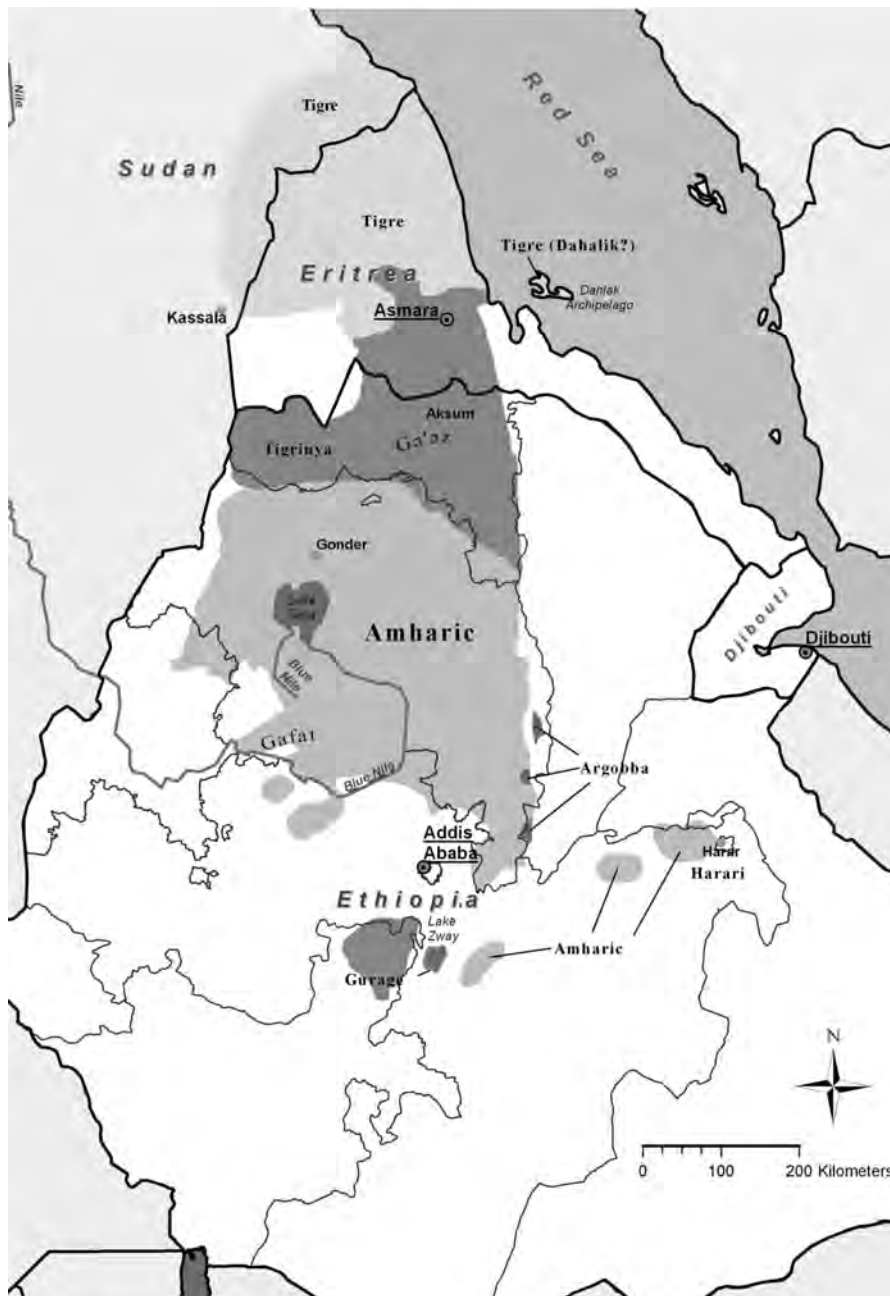
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Map 65.1: The Semitic languages of Ethiopia and Eritrea (map by Sebastian Achilles and the author, based on the *Ethnologue* maps 'Djibouti, Eritrea and Ethiopia' and 'Southwestern Ethiopia' (2009) and relevant articles from *Encyclopaedia Aethiopica*).

66. Old Ethiopic

1. Names, location and history
2. Writing system
3. Phonology
4. Morphology
5. Syntax
6. Lexicon
7. References

Abstract

This chapter provides an overview of Classical Ethiopic, the dominant written language from antiquity up to the 19th century in pre-modern Ethiopia, and highlights prominent features of phonology, morphology, syntax and lexicon.

1. Names, location and history

The indigenous name for the classical language of Ethiopia is ‘Gəʼəz’. The name Gəʼəz is probably connected to the ethnonym *ʾagʼazi* mentioned in some sources (Sima 2003), and etymologically related to the adjective *gəʼuz* ‘free’. In Western discourse, the language is usually referred to as either ‘Old Ethiopic’, ‘Classical Ethiopic’ or just as ‘Ethiopic’. In more recent times the indigenous name has also been often used to avoid possible confusion with notions like ‘Proto-Ethiopic’ (as a presumptive ancestor language) or ‘Ethio-Semitic’ (as designation of a presumptive sub-family of Semitic, see ch. 68).

Gəʼəz is first attested in more than 200 inscriptions from the region of what is nowadays Northern Ethiopia and Eritrea (RIÉ 180–268, 310–443, for additions see Avanzini et al. 2007, 159–163). They vary considerably in length, are written on stone, rock or pottery, and date from the 3rd century A.D. Some differences exist between this epigraphic Gəʼəz and literary Gəʼəz (Bausi 2005; Bulakh 2009). As the language of the city-state of Aksum and the empire it subsequently conquered, Gəʼəz gained significant status.

Around 370 A.D. Aksum officially adopted Christianity. In the wake of this profound change, many texts central to Christian belief were translated from Greek into Gəʼəz. These include the Bible (and several of the Apocryphal books), patristic texts like the Pastor Hermas, Pachomius’ Regulations of Monastic Life, and the Physiologus, and most important the Christological writings of Cyrillos of Alexandria. Apart from the possible exception of the Gospel manuscript Abba Gärima 1 (Uhlig 1988, 175–176), all texts of this translation literature are preserved only in post-13th century manuscripts. This poses several problems. As the orthography was subject to later changes (cf. 2.), this creates some problems for reconstructing phonology and morphology (cf. 3. and 4.). Furthermore, as Biblical texts were revised according to Arabic Bible texts

in several stages in the period after the 14th century, this creates difficulties for the syntax (cf. 5.) and lexicon (cf. 6.). Apart from the inscriptions and translated texts, to date no other texts from the Aksumite period have been identified.

During the 8th century the Aksumite Empire suffered a considerable decline and ceased to be a regional power in North-East Africa and the Indian Ocean. By the end of the millennium the polity had ceased to exist as a state. Contributing factors to the fall of Aksum's power were environmental degradation through over-exploitation, and drastic changes in the structure of international economic relations caused by the rise of Islam. Despite the end of Aksum as a polity, Gə'əz maintained its role unchallenged as the written prestige language of Ethiopia through the following centuries, although the kings of the Zagwe dynasty (12th–13th centuries) were of Cushitic stock. The rise of the so-called 'Salomonic' dynasty (1270–1974) saw the beginning of an immense Gə'əz literature. Although the language of the court was Amharic (see ch. 73), the role of Gə'əz as the predominant language of written communication remained nearly unchallenged until the 19th century, when the written use of Amharic was promoted in an attempt to modernize the country. Even today, Gə'əz holds considerable prestige as the *lingua sacra* of the orthodox churches of Ethiopia and Eritrea. Gə'əz is also the liturgical language of the Betä 'Əsra'el (or Fälaša, 'Ethiopian Jews', as they were known) who have now almost entirely migrated to Israel.

Post-Classical Gə'əz literature (i.e. texts from the 13th century onwards) is much larger than the corpus from the Aksumite period and comprises genres like hagiography, liturgy (including liturgical poetry), legends, homilies, chronicles, legal texts and even magical amulets. Translations made from Christian-Arabic texts of the Coptic church of Egypt contributed considerably to the post-13th century Gə'əz literature of Ethiopia. The linguistic character of this post-classical literature varies to a great extent depending on the linguistic background. While some are written in a simple style that could well be a continuation of Aksumite models, others are deeply influenced by Arabic syntax, semantics and style (Kropp 1986; Weninger 1999b; 2001a, 337–340). Still others are strongly influenced by the Amharic vernacular of their authors (Strelcyn 1967; Sima 2010).

European research into Gə'əz started as early as the 16th century. The second edition of Dillmann's grammar (published originally 1857), edited and revised by Bezold (Dillmann 1899), is still the most complete and comprehensive Gə'əz grammar. A slightly enlarged English edition was published by Crichton in 1907. Smaller grammars are those by Chaîne (1938) and Conti Rossini (1941). A new reference grammar of Gə'əz is certainly a desideratum.

2. Writing system

The first Gə'əz texts were written with a dextrograde (left-to-right), vowelless alphabet developed from a cursive version of the Sabaean (see ch. 63) alphabet. The reason for the change in writing direction from Middle Sabaean 'right-left' to Gə'əz 'left-right' can only be speculated, but the strong influence from Greek literary culture is one possible explanation (Hammerschmidt 1994, 317). In the course of the adaptation, the angular forms of the Sabaean letters were changed to rounded forms (table 66.1). The

forms of the South Arabian minuscule letters (used for writing on wood) may also have played a certain role (Frantsouzoff 2006).

In the 4th century a system for the representation of the seven vowels was introduced. In this system the vowels are represented by changes in the forms of the letters, e.g. by additional horizontal lines on the right side of the letters (middle or low), by adding rings or half rings to the lower or upper right side, by shortening either the right or left leg of the letter, etc. (cf. examples in table 66.2). While the notation of some vowels, e.g. *a*, *e* and *o* is fairly consistent, the notation of *ə* is largely irregular. The seven forms of each consonant symbol are conventionally called ‘orders’. The characters of the first order (representing *ā*) are the basic forms. The sixth order is ambiguous. It is the representation of the un-rounded central vowel *ə* as well as of vowelless consonants at the end of a syllable. The overall character of this system, known as *fidäl*, could be called quasi-syllabic. Whether this peculiar system of vowel-notation was influenced by Indian scripts, as suggested among others by Littmann (1926, 409–410), or is an inner-Ethiopian innovation, as stated by Grohmann (1918, 84), is still open to discussion. More innovations were also introduced in the 4th century. As the Sabaean alphabet had no letters for voiceless labial plosives, the two characters **ṭ** *p* and **ṣ** *p* were introduced. Signs for labiovelars were also developed as part of the same reform process. As is the case in Sabaean, the Gəʿəz script marks boundaries between words by a word divider (:). Unlike Sabaean, Gəʿəz also developed signs for marking sentences and paragraphs. At the end of a line, a word can be divided at any place.

Tab. 66.1: Ethiopian letters in traditional sequence and in their basic forms (1st order)

ሀ	ለ	ሐ	መ	ሠ	ረ	ሰ	ቀ	በ	ተ	ኀ	ነ	አ
<i>h</i>	<i>l</i>	<i>h</i>	<i>m</i>	<i>s</i>	<i>r</i>	<i>s</i>	<i>k</i>	<i>b</i>	<i>t</i>	<i>ḥ</i>	<i>n</i>	<i>ʾ</i>
ከ	ወ	ዐ	ዘ	የ	ደ	ገ	ጠ	ጸ	ጸ	ፀ	ፌ	ፐ
<i>k</i>	<i>w</i>	<i>ʿ</i>	<i>z</i>	<i>y</i>	<i>d</i>	<i>g</i>	<i>t</i>	<i>p</i>	<i>ṣ</i>	<i>ṣ</i>	<i>f</i>	<i>p</i>

The traditional alphabetic order of the characters partly resembles the Sabaean letter order, but is not identical to it. The Gəʿəz numerals are adapted from the Greek numerals, i.e. Greek letters with numerical values. Apart from certain palaeographic details (Uhlig 1988), the Gəʿəz writing system remained essentially unchanged up to modern times. The only exception being the introduction during the Middle Ages of additional signs for the representation of consonants occurring in Amharic and other vernacular languages.

3. Phonology

Possible sources for the reconstruction of Gəʿəz phonology (Weninger 2010), not all of which were utilized in Gragg’s phonological outline (1997), are: a) the orthographic system of Gəʿəz, b) transcriptions of Gəʿəz words in contemporary languages, c) transcriptions and loan words from contemporary languages in Gəʿəz, d) the traditional pronunciation of Gəʿəz as practiced by Ethiopian church scholars, e) the phonology of daughter languages, f) comparative evidence from other Semitic languages. While some

of these sources are less banal than may seem at first sight (esp. a), some yield only scanty information (esp. b). The value of d) for reconstructing Gəʼəz's phonology in Aksumite times is subject to a long and controversial debate (cf. Littmann 1917–1918; M. Cohen 1921; Mittwoch 1926; Brockelmann 1929; Ullendorff 1955; 29–32, Makonnen Argau 1984).

Tab. 66.2: Examples of Gəʼəz vowel notation

	ä	u	i	a	e	ə	o
k	Ⲫ	Ⲫ	Ⲫ	Ⲫ	Ⲫ	Ⲫ	Ⲫ
k	Ⲭ	Ⲭ	Ⲭ	Ⲭ	Ⲭ	Ⲭ	Ⲭ
š	Ⲫ	Ⲫ	Ⲭ	Ⲫ	Ⲭ	Ⲫ	Ⲫ

3.1. Consonants

The presence of lateral consonants, ejectives, and labialised velar obstruents, are salient features of Gəʼəz's consonantal system. Including the latter, Gəʼəz has 30 consonantal phonemes (table 63.3). The presumptive presence of the lateral obstruents š and š (Weninger 1999a) is a retention from Proto-Semitic. The representation of Proto-Semitic 'emphatics' as ejectives (in contrast to their representation as velarized or pharyngealized consonants in modern Arabic and Aramaic) is also generally considered an archaism. The rise of the labiovelars, a type of phoneme unknown in Asian Semitic, is an areal feature of the Ethiopian language area. Nevertheless, several cases of labiovelars can easily be explained by the presence of *u in the respective proto-forms, e.g. *kʷəll-* 'all' < **kull-* (Kuryłowicz 1933).

Tab. 66.3: Conspectus of Gəʼəz consonants

	labial	labio- dent.	alveolar	pal- atal	velar	labio- velar	pharyn- geal	glottal
voiceless stop	<i>p</i>		<i>t</i>		<i>k</i>	<i>kʷ</i>		ʔ
voiced stop	<i>b</i>		<i>d</i>		<i>g</i>	<i>gʷ</i>		
ejective stop	<i>p̣</i>		<i>ṭ</i>		<i>ḳ</i>	<i>kʷ̣</i>		
voiceless fricative		<i>f</i>	<i>s</i>		<i>ħ</i>	<i>ħʷ</i>	<i>ħ</i>	<i>h</i>
voiced approximant	<i>w</i>			<i>y</i>				
voiced fricative			<i>z</i>				ʕ	
ejective			<i>š</i>					
affricate								
nasal	<i>m</i>		<i>n</i>					
trill			<i>r</i>					
lateral fricative			<i>š [ʃ]</i>					
lateral ejective			<i>š [ʃʼ]</i>					
lateral approximant			<i>l</i>					

Protosemitic interdentals and *š [*s_l*] merged with the sibilants: **ṭ*, **s* [*s_3*], *š [*s_l*] > *s*; **ḍ*, **z* > *z*, **ṭ*, *š > š (Voigt 1989). Proto-Semitic **g̣* was largely merged with **c̣*

yielding ϵ (Weninger 2002), although exceptions are noteworthy, where $*\dot{g}$ merged with $*h$ yielding h (Kogan 2005). In literary Gəʿəz, i.e. not in the language of the inscriptions, two voiceless phonemes occur: p and p as loan phonemes in non-Semitic loan words (table 63.4). In the so-called traditional pronunciation of Ethiopian clerics, ϵ and ϵ are merged to ϵ [IPA ϵ , or nearly $\emptyset$], h , h , and h to h [IPA h], s and $\dot{s}$ to s [IPA s] and $\dot{s}$ and $\dot{s}$ [IPA ϵs].

Tab. 66.4: Representation of Proto-Semitic Consonants in Gəʿəz

PS	G.	PS	G.
-	p	$*\dot{s}$	$\dot{s}$
$*b$	b	$*l$	l
-	p	$*y$	y
$*w$	w	$*k$	k
$*m$	m	-	k^w
$*p$	f	$*g$	g
$*t$	t	-	g^w
$*d$	d	$*k$	k
$*t$	t	-	k^w
$*s, *š, *t$	s	$*h, (*\dot{g})$	h
$*z, *d$	z	-	h^w
$*š, *t$	$\dot{s}$	$*h$	h
$*n$	n	$*\epsilon, *g$	ϵ
$*r$	r	$*\epsilon$	ϵ
$*\dot{s}$	$\dot{s}$	$*h$	h

3.2. Vowels

Gəʿəz has seven vowel phonemes corresponding to the seven ‘orders’ of the *fidāl*: $\ddot{a}$, u , $\dot{i}$, a , e , $\dot{a}$, o . In its modern ‘traditional’ pronunciation, the Gəʿəz vowel system shows only qualitative oppositions, but no quantitative ones. The system evolved through the merger of PS $*u$, $*i > \dot{a}$, (partial) monophthongization of the diphthongs $*ay$ and $*aw$ to $\ddot{e}$ and $\ddot{o}$ and the subsequent loss of phonemic length resulting in the fronting of $*a > \ddot{a}$ (cf. Voigt 1983, Correll 1984, Diem 1988). The development of the Proto-Semitic vowels to the vowels of Gəʿəz can be summarized as shown in table 66.5.

3.3. Phonotactic rules, syllable and stress

Gəʿəz consonants show little tendency for assimilation. The only noteworthy exception in literary Gəʿəz is the assimilation of t in imperfect forms of the T-stems with dentals and sibilants as first radical, e.g. $\epsilon\dot{a}\dot{t}\dot{t}\dot{a}m\dot{m}\dot{a}k$ ‘I will be baptised’ $< * \epsilon\dot{a}\dot{t}\dot{t}\dot{a}m\dot{m}\dot{a}k$ (root $\dot{t}m\dot{q}$) or $y\dot{a}ss\dot{a}gg\dot{a}d$ ‘he is worshiped’ $< *y\dot{a}ts\dot{a}gg\dot{a}d$ (root sgd). In epigraphic Gəʿəz, an instance of assimilation of m and b is attested: $\epsilon b\dot{h}rm$ [$*\epsilon b-b\dot{h}eromu$] ‘from their land’ RIÉ 185 I 5 = 185 bis I 7 / II (B) 8 (preposition ϵm).

Vowels show interesting phenomena in connection with ‘laryngeals’ (i.e. pharyngeal and glottal consonants, including *ḥ* that is pronounced as *h* in ‘traditional’ learned pronunciation), e.g. *ä* > *a* before syllable-final laryngeals: *mahräkä* ‘he plundered’ (<**mähräkä*, root *mhrk*); vowel-assimilation with intra-vocalic ‘laryngeals’: *yä‘abbi* ‘he grows’ (<**yä‘äbbi*, root ‘*by*’) or *kəḥido* ‘having denied (3M.SG)’ < **kähido* (cf. on laryngeals M. Cohen 1927, Diem 1988, Devens 1991). Laryngeals cannot be geminated.

As both etymology and traditional pronunciation show, Gə‘əz has distinctive consonant length (‘gemination’), although it is not expressed in the writing system, e.g. *ḥad-ägu* ‘they abandoned’ vs. *ḥadäggü* ‘I abandoned’.

Tab. 66.5: The development of the Gə‘əz vowels

PS	I	II	III
* <i>a</i>	* <i>a</i>	* <i>a</i>	<i>ä</i>
* <i>i</i>	* <i>ə</i>	* <i>ə</i>	<i>ə</i>
* <i>u</i>			
* <i>ā</i>	* <i>ā</i>	* <i>ā</i>	<i>a</i>
* <i>ī</i>	* <i>ī</i>	* <i>i</i>	<i>i</i>
* <i>ū</i>	* <i>ū</i>	* <i>u</i>	<i>u</i>
* <i>ay</i>	* <i>ē</i>	* <i>e</i>	<i>e</i>
* <i>aw</i>	* <i>ō</i>	* <i>o</i>	<i>o</i>

According to the traditional pronunciation, syllables begin with one consonant (the word for Christ *krəstos* being the only exception). With the exception of the demonstrative pronoun *zə*, no word ends with shwa.

Traditional pronunciation has a tendency for stress on the penultimate of verbs and the ultimate stem-syllable of nouns, while clitics attract stress (e.g. [*wä-tägáb’u bəzuhán’əskä* ‘*i-yagämmərōmu mäkán* (lit.: and-gather.REFL.PL many until NEG-contain.them place) ‘and many were gathered together, so that there was no longer room for them’ Mk 2:2, cf. Littmann 1917–1918, 659). The extent to which this reflects the original rules for stress in Aksumite times is an open question.

4. Morphology

4.1. Pronominal elements

The independent personal pronouns of the first and second person are largely identical with those of Central Semitic: ‘*anä* ‘I’, ‘*antä* ‘you (M.SG)’, ‘*anti* ‘you (F.SG)’, *nəḥnä* ‘we’, ‘*antəmu* ‘you (M.PL)’, ‘*antən* ‘you (F.PL)’. The glottal stop in *wə‘ətu* ‘he’ and *yə‘əti* ‘she’ has cognates, e.g. in Sabea *h’/hw’* ‘he’ and *h’* ‘she’ and in the orthography of the Hebrew pronouns *hū* <*hw’*> ‘he’ and *hī* <*hy’*>. The *t* has parallels in oblique forms, e.g. Akkadian *šuāti*, Ugaritic *hwt* [**huwūti*] or Sabaean *hwt* ‘his; him’. The plural forms ‘*əmntu* ‘they (M)’ and ‘*əmantu* ‘they (F)’ are more difficult to explain. The forms *wə‘ətomu* ‘they (M)’ and *wə‘əton* ‘they (F)’ are secondary formations of the masc. singular pronoun with the enclitic pronouns

The clitic pronouns are largely common Semitic: *-yä* ‘my’, *-ni* ‘me’, *-kä* ‘your/you (M)’, *-ki* (F), *-hul-ul-(əw/əy)o* ‘his/him’ (<*-*hū*), *-(h/əw/əy)a* ‘her’, *-nä* ‘our/us’ *-kəmu* ‘your/you (M)’, *-kən* (F), *-(h/əw/əy)omu* ‘their/them (M)’, *-(h/əw/əy)on* (F). The rules governing cliticization are rather complex.

The demonstrative pronouns are formed from elements known from other Semitic demonstratives, **d*, **n*, **l*, **k*, **t*, cf. e.g. the demonstrative pronouns of proximity: *zəntu* ‘this (M.SG)’, *zäntä* (M.SG.ACC), *zatti* (F.SG), *zattä* (F.SG.ACC), *ʾallontu* ‘these (M.PL)’, *ʾallontä* (M.PL.ACC), *ʾallantu* (F.PL), *ʾallantä* (F.PL.ACC).

Other pronominal elements comprise the independent possessive pronoun, e.g. *zīʾayä* ‘mine’, *zīʾakä* ‘yours’ etc., the relative pronoun *zä-* (M.SG), *ʾəntä* (F.SG), *ʾallä* (PL) and the interrogative pronouns like *männu* ‘who’ and *mənt* ‘what’.

4.2. Roots

In accordance with other ancient Semitic languages, the bulk of both nominal and verbal morphology is governed by the root-pattern principle. The majority of roots are tri-consonantal. The weak roots (roots with *w* and *y* in the position of *R*₂ or *R*₃) in many cases have forms identical with forms of the strong roots.

Gəʾəz also has many quadri-consonantal roots. As Old South Arabian lacks this root-type, this clearly sets Gəʾəz and the rest of Ethio-Semitic apart from Old South Arabian. On a purely formal level, Gəʾəz quadri-consonantal roots could be connected with the quadri-consonantal roots of Arabic, but there are hardly any convincing lexical etymologies that bind single Arabic and Gəʾəz quadri-radicals together (cf. the material presented in Boekels 1990, 40–48). It is therefore probable that Arabic and Gəʾəz quadri-radicals are not reflexes of Proto-Semitic quadri-radical roots but are due to parallel developments (*pace* Gensler 1997). In addition, there are quadri-radical roots with a (historical) long vowel *e* or *o* in *R*₂ position, e.g. *degänä* ‘he pursued’, IMPF *yədeggan*, participle *deggan* or *mokəḥa* ‘he imprisoned’, IMPF *yəmokkəḥ* and *mokəḥ* ‘chain’. Although an analysis as roots with a weak *y* or *w* as *R*₂ seems possible, there is little comparative evidence to corroborate this analysis. It is therefore preferable to accept roots with a vocalic radical as types of their own, at least from a synchronic point of view. Quinque-radical roots, absent in Asian Semitic, usually employ reduplication, e.g. *däläkläkä* ‘to be shaken’.

4.3. Verbal morphology

Verbal inflection in Gəʾəz is remarkably regular with very few exceptions. The grammatical categories of the Gəʾəz verb comprise person (1st, 2nd and 3rd), gender (M and F), number (SG and PL, but no dual), and a set of TMA-categories, i.e. the relative tenses perfect and imperfect, the moods imperative and jussive, and the converb (traditional misnomer: ‘gerund’).

4.3.1. Derivation of the verbal stems

Internal means of verbal derivation (lengthening of *R*₂ or vowel *a* < **ā* after *R*₁) can be combined with external markers (affixes *ʾa-*, *tä*, and *ʾastä-*), so that in principle tri-

radical verbal roots can form 12 verbal stems (0₁, 0₂, 0₃, A₁, A₂, A₃, T₁, T₂, T₃, AST₁, AST₂, AST₃, table 66.6). However, in many cases, only ‘vertical’ combinations of stems are found, indicating a tendency to lexicalize the Semitic stem-system. Zaborski (2005) goes so far as to state that there is no functional distinction between X₂ and X₃ stems, which is certainly an exaggeration (Voigt 1999, 215–216). ‘Horizontal’ combinations are very productive, the A-stems being causatives of 0-stems and T-stems passives and reflexives. The AST-stems show a great variety of functions, e.g. causative, factitive-resultative, estimative (Waltisberg 2001). In quadri-radical roots, the freedom to combine the derivational morphemes is much lower. Only 0₁, A₁, T₁, T₃, AST₁, AST₃, AN₁ can be found (table 66.7).

4.3.2. Inflection of the verb

In the paradigm of the perfect (suffix-conjugation), the original Semitic *-t-/*-k- alternation of the 1st and 2nd person singular and 2nd person plural is unified by analogy as -k-. The ending -a < *-ā of the 3rd person fem. pl. is retained. In forms without object suffixes, the *-nā of the 1st person pl. is shortened to *-na > nā. The singular markers are as follows: -ä (3M), -ät (3F), -kā (2M) -ki (2F), -ku (1C). The plural: -u (3M), -a (3F), -kamu (2M) -kən (2F), -nä (1C).

Tab. 66.6: System of 3-radical verbal stems (perfect, imperfect and jussive forms; roots: *ktl* ‘to kill’ and *lbs* ‘to dress’)

	X ₁	X ₂	X ₃
0	<i>ḳätälä/läbsä</i> <i>yəḳättəl</i> <i>yəktəl/yəlbäs</i>	<i>ḳättälä</i> <i>yəkettəl</i> <i>yəḳättəl</i>	<i>ḳatälä</i> <i>yəḳattəl</i> <i>yəḳatəl</i>
A	<i>ʾaḳtälä</i> <i>yəḳättəl</i> <i>yəktəl</i>	<i>ʾaḳüttälä</i> <i>yəḳettəl</i> <i>yəḳättəl</i>	<i>ʾaḳatälä</i> <i>yəḳattəl</i> <i>yəḳatəl</i>
T	<i>täḳätälä</i> <i>yətkättäl</i> <i>yətkättäl</i>	<i>täḳättälä</i> <i>yətkettäl</i> <i>yətkättäl</i>	<i>täḳatälä</i> <i>yətkattäl</i> <i>yətkatäl</i>
AST	<i>ʾastäḳtälä</i> <i>yastäḳättəl</i> <i>yastäḳtəl</i>	<i>ʾastäḳüttälä</i> <i>yastäḳettəl</i> <i>yastäḳättəl</i>	<i>ʾastäḳatälä</i> <i>yastäḳattəl</i> <i>yastäḳatəl</i>

The two prefix conjugations are differentiated not by their inflection, but by their stem morpheme, e.g. *yənäggär* ‘he talks; he will talk’ (impf) vs. *yəngär* ‘he should talk’ (jussive) in 0₁. The prefixes have retained their original consonantal onsets. The vowel alternation *-i- (3SG and PL and 1PL) vs. *-a- (2 and 1SG), if we accept the Akkadian vowels as original, is levelled to -ə- (< *-i-). The suffixes are very conservative: -i (2F.SG; < *-ī), -u (3 and 2M.PL; < *-ū) and -a (3 and 2F.PL; < *-ā). The two prefix-conjugations are retentions from Proto-Semitic (cf. Akkadian *iprus/iparras*), and not innovations of Ethio-Semitic (pace Stempel 1999, 133).

The converb is formed by an infinitive-like form with -i- in the last stem syllable in the adverbial accusative with the clitic personal pronouns, e.g. *sāmīʿo* ‘hearing.3M.SG’

Tab. 66.7: System of 4-radical verbal stems (perfect, imperfect and jussive; roots *dnḡṣ* ‘be terrified’, *mndb* ‘torment’, *g^wrg^wr* ‘murmur’)

	X ₁	X ₃
0	<i>dāngäṣä</i> <i>yädänäggəṣ</i> <i>yädängəṣ</i>	—
A	<i>’adängäṣä</i> <i>yadänäggəṣ</i> <i>yadängəṣ</i>	—
T	<i>tämändäbä</i> <i>yətmänäddäb</i> <i>yətmändäb</i>	<i>täsānasälä</i> <i>yəssänassäl</i> <i>yəssānasäl</i>
N	<i>’ang^wärg^wärä</i> <i>yang^wärägg^wər</i> <i>yang^wärg^wər</i>	—

4.4. Nominal morphology

4.4.1. Derivation

Common Semitic noun patterns like *XäXX* or *XəXuX*; derivational prefixes like *mä-* or *tä-* and suffixes like *-an* are retained in Gə’əz. Specific are derivational formations like the suffix *-anna* plus a tendency for *ə*-vowels in the preceding word to express abstracts, e.g. *’ərḡanna* ‘nakedness’ from *’ərūk* ‘naked’.

For masculine nouns, both inflectional (‘external’, ‘sound’) and derivational (‘internal’, ‘broken’) plural morphemes exist. Most plural patterns have cognates in Classical Arabic, with the exception of *’aXXuX*, as in *hagär* ‘town’, pl. *’ahgur* (for lack of vowels, it is difficult to compare the patterns of Epigraphic South Arabian). But on the level of individual lexemes, they differ in most cases; cf. Gə’əz *rə’s* ‘head’, pl. *’ar’əst* vs. Arabic *ra’s*, pl. *ru’ūs*. So to summarize, on an abstract level the patterns as morphemes have cognates, but on the level of actual lexemes, the plural forms in the majority of cases do not have cognates.

4.4.2. Inflection

The Proto-Semitic case endings of the singular (NOM **-u*, GEN **-i*, ACC **-a*) are reflected as follows: NOM and GEN merged due to the phonological merger of **u* and **i* to an ending **-ə* that was certainly still present when the written norms of Gə’əz were established during Aksumite times (Dillmann 1890, 1–8). Only later was word-final *ə* dropped altogether, with the resulting paradigm *-Ø* (NOM-GEN), *-ä* (ACC). That NOM and GEN actually merged as grammatical categories and did so not only in their phonological representation can be demonstrated with forms like *’abu-kä* (father-your; < *’abü-ka*), which is used for both NOM and GEN. Here, the proto-form had a paradigm with long vowels (**ū*, **ī*, **ā*), so although the NOM-GEN distinction

should have been preserved, it is not. Nouns ending with *-i* have *-e* (< **-i-ä* via contraction) in the ACC.

The ending of the construct state (the form of the noun before a genitive) is identical with the accusative. Tropper's (2000) interpretation of this situation as a reflex of a hypothetical Proto-Semitic 'absolute case' is hardly convincing.

Case inflection of the SG is transferred to the plural endings. The endings of the plural are *-an* (M) and *-at* (F). While the latter is a clear retention from Proto-Semitic, the etymology of the former is less clear-cut, but traces of Semitic **-ān*-plurals are attested as part of some Arabic plural patterns (Arabic *ġilmān* 'young men', SG *ġulām*) or in pleonastic plurals in Syriac, e.g. *qaššišānē* 'priests' (SG *qaššišā*). The F plural is (contrary to Asian Semitic) attached to the F.SG endings *-āt* and *-t*, e.g. *nəgəštat* 'queens' (SG *nəgəši*). It is also used for some clearly masculine nouns (e.g. *pappasat* 'patriarchs') or as pleonasms together with derivational plurals (*'ar'əstat* 'heads', SG *rə's*, PL *'ar'əst*).

The dual is hardly an operative category in Gə'əz (Heide 2006) and has left only a few traces in the morphology, e.g. *haq'e* 'hip, loin' (cf. Arabic *haqw* 'hip') where the *-e* can easily be explained as a monophthongized **-ay*, i.e. the old dual ending of the oblique case, as in Arabic.

4.5. Numerals

The roots of the numerals are mostly proto-Semitic; only the numeral for two (**iṇ-*) was replaced by *kə'l'e* (i.e. 'both', with a fossilized dual ending). Gender polarity usually operates loosely, i.e. M forms are mainly used with F nouns (e.g. *šālas* 'three') and F forms are used mainly with M nouns, the latter having in addition to the F *-t*-an ending *-u* (probably of pronominal origin), ACC *-ä*, e.g. *sāba'tu māla'əkt* 'seven angels'. Several variant forms of numerals exist, without clear distribution.

The tens are formed with an *-a* (e.g. *ḥamsa* 'fifty'). Ordinal numbers follow the pattern *XaXəX* (e.g. *sadəs* 'sixth'), multiplicative numbers the scheme *XəXuX* (e.g. *rəbu'* 'four-fold'), and the numbering of week-days or days of the month the pattern *XäXuX* (e.g. *täsu'* 'the ninth day of the month').

4.6. Prepositions

Gə'əz has a set of prepositions, but despite the beginnings of a drift toward SOV-syntax, it has no postpositions. Several prepositions are retentions, e.g. *bä-* 'in', sometimes with slight changes, e.g. *la'lä* 'upon' (vs. Arabic *'alā* or Syriac *'al*). Many prepositions are of unclear etymology, e.g. *ḥabä* 'toward, near to'. Nouns are subordinated to prepositions in the (NOM/) GEN. Consequently, most prepositions have the ending *-ä* which is identical with the construct state. Prepositions are an open class. New prepositions can be formed from nouns by putting them into the construct state, e.g. *māthəṭ* 'low, lower part, abyss' and *māthəṭä* 'under, below, beneath'. Compound prepositions are frequent, e.g. *bä-wəstä* 'within' (lit.: 'in-inside').

4.7. Conjunctions and particles

Some Gəʿəz conjunctions and particles can be traced to common Semitic, e.g. *wä-* ‘and’ (< **wa-*) or *ʾaw* ‘or’ (< **ʾaw*). Some have parallels in modern Ethio-Semitic or even Cushitic, e.g. *-ssä* ‘but’ (cf. Tna. *-s*, *-si*, Amh. *-(ə)ssä*, Khamir *-s*), but not in Asian Semitic. Others do not have an apparent etymology, like *-hi* ‘also’. *ʾo-* ‘ye’ (vocative particle) is probably onomatopoeic. There are a number of discourse particles suffixed to nominal and verbal forms, like *-ke* ‘now, then’, *-hi* ‘also’, *-mmä* (emphasis) or *-ne* (direction).

5. Syntax

5.1. General tendencies

Generally, Gəʿəz syntax has the character of a VSO language, like the other West-Semitic languages of antiquity. On the other hand, word order is quite flexible (Gai 1981) and the presence of converbs and suffixed discourse particles indicate the beginnings of a drift toward the SOV character of modern Ethio-Semitic (Weninger 2001b).

Concord in gender and number is strict only with regard to persons. With abstracts and non-animate nouns, concord is rather loose, e.g. *bəzuḥ ʾahzab* ‘many peoples’ Gen. 17:4 (lit.: many.SG.M people.PL.M) or *ʾalbas sännayt* ‘beautiful clothes’ Gen. 24:53 (lit.: clothes.M.PL beautiful.F.SG).

An analytical tendency is visible in frequent periphrastic constructions, both on the level of the noun phrase and the clause construction (Correll 1980). Instead of the synthetic construct state, e.g. genitive construction *betä nəguś* (lit.: house-CST king.GEN) ‘the king’s house’, quite often a periphrasis with a suffixed pronoun and a resumptive preposition *lä-* ‘to, for’ is employed: *bet-u lä-nəguś* (lit.: house-his for-king). Similar tendencies appear in the construction of verbal clauses: The accusative of the direct or indirect object is more often than not replaced by the analytic construction with pronoun and *lä-*: *kätäl-o lä-bəʾəsi* (lit.: he.killed-him for-man) ‘he killed the man.’

Cleft sentences, which are extremely frequent in modern Ethio-Semitic and in the languages of the Ethiopian convergence area as a whole, are present already in Gəʿəz (cf. Kapeliuk 1985), e.g. *wä-baʿädä-ni bəzuḥa zä-mäharomu lä-həzb* (lit.: and-other.ACC-also many.ACC REL-he.taught.them to-people) ‘And also many other things he taught the people.’ (Lk 3:18), where the relative pronoun *zä-* resumes the matrix clause. They ‘serve not only for foreground nominal components, adverbs and subordinate clauses (...), but also verbs corresponding to the predicate of the underlying plain sentence.’ (Kapeliuk 2002).

5.2. Noun phrase

Gəʿəz has no article, but in the translated texts of the Aksumite period, there are several occasions where a (formally) possessive pronoun with concord to its head noun

is used to render a Greek article, e.g. *’asmä bäggä’-u zä-ḳädmä mänbär-u yäre’äyomu* (lit.: because lamb-his that-before throne-his will.pasture.them) ‘for the lamb before the throne will be their shepherd.’ (Apoc. 7:17), where the possessive pronoun translates the definite article in τὸ ἄρνιον (Correll 1991). This construction is obviously the origin of the article in Amharic.

5.3. Nominal clause

Nominal clauses, i.e. clauses without a verbal predicate, usually have a pronoun as copula, similar to the nominal clause in Classical Syriac. The reason for this copula is probably to avoid ambiguities between predicates and attributes or appositions that could easily occur in a language without formal means of determination. The pronominal copula agrees either with the subject or the predicate, as in the following example: *wä-’agzi’abäher wä’ätu ḳal* (lit.: and-God he word) ‘and the word was God’ (Jn 1:1), where *wä’ätu* ‘he’ serves as copula (Grébaut 1948–1951; D. Cohen 1984, 156–209; Zewi 2007; Kapeliuk 2009).

5.3. Tense and mood categories of verbal predicates

As is the case in the majority of the classical West-Semitic languages, the function of the perfect is, generally speaking, relative anteriority, be it relative to the presence of the speaker as the tense for past events (*wä-wä’ätä ’amirä mäṣ’a ’Iyäsus ’äm-Nazret* [lit.: and-this time came Jesus from-Nazareth] ‘in those days Jesus came from Nazareth.’ Mk 1:9) or states (*wä-ḥaywä ’Addam 200 wä-30 ’amät* [lit.: and-lived Adam 200 and-30 year] ‘Adam lived for two hundred and thirty years’ Gen 5:3), or relative to a non-present reference point (*’äm-kämä gäsäsku ṣanfä läbsu ’ahayyu* [lit.: if-how I.touch fringe.CST garment.his I.life] ‘if I only will touch the fringe of his garment, I shall live’. Mt 9:21).

The imperfect is used for contemporary or posterior situations: contemporary to a past situation, e.g. *’anzä ’ahawwär räkäbku ’äṣä* (lit.: while I.go I.found tree) ‘while I was going I found a tree.’ ParJer 6:22), present or future situations, e.g. *nahu-’a zä-tafäkkär yädäwwi* (lit.: behold-QUOT REL-love.2M.IMPF be.ill.3M.IMPF) ‘behold, he, whom you love is ill.’ Jn 11:3; *nahu ’ädämässəsomu wä-lä-mədr-əni* (lit.: behold I.destroy.them and-to-earth-also) ‘behold, I will destroy them with the earth.’ Gen 6:13.

In the literature, the jussive is mostly called the ‘subjunctive’. But since the jussive occurs not only in subordinated clauses but also in matrix clauses, this term seems hardly tenable. The jussive is the mood for deontic modality, i.e. volitive (*wa-yädängəṣu ’äm-kämä säm’u sämäkä* [and-shall.tremble.PL if-how heard name.ACC.your] ‘they shall tremble, when they hear your name!’ Dtn 2:25), cohortative (*nəndək hagärä* ‘Let us build a city!’ Gen 11:4), negated imperative (*’i-təfrähi Maryam* ‘do not be afraid, Mary!’ Lk 1:30) or in final clauses (*wä-mäṣ’u mäṣäbbəhan-əni yaṭməḳomu* [lit.: and-came tax=collectors-also baptise.them] ‘also tax collectors came, so that he would baptise them.’ Lk 3:12).

The converb is an innovation of Gə’əz shared by several languages of the Ethiopian language area. Having originated in an adverbial construction, it requires a matrix

sentence with a verbal predicate and is hardly ever negated. Converbial clauses can depend from all kinds of verbal predicates. The converbial clause and the matrix sentence are not linked by a conjunction. The matrix sentence usually follows the converbial clause, but reverse order and embedded construction are also possible. The grammatical subjects are quite often, but not necessarily, identical. The converb expresses either previous events (*wä-zäntä bähilo Barok sārärä nəsṛ məslä māṣḥaf* [lit.: and-this.ACC say.CONV Baruch flew eagle with letter] ‘after Baruch had said so, the eagle flew away with the letter.’ ParJer 10:8), concomitant states (*wä-täzäkkirayä ’ägäbbä’ wəstä beti* [and-commemorating.CONV I.return in house.my] ‘thinking of this, I return to my house.’ ParJer 11:18) or a modal adjunct (*wä-kätäləwo säkilomu dibä ’aṣ* [lit.: and-killed.him hang.CONV.PL on tree] ‘they put him to death by hanging him on a wood.’ Acts 10:39).

Compound tenses with verbs of being, in analogy to, for example, Classical Arabic *kāna yaf’alu*, are extremely rare in Aksumite texts, e.g. *wä-bahəttu-ssä həzḅ māl’altä ’awgər halläwu yä’aṭṭənu* [lit.: and-only-but people on hills were fumigate.IMPF.PL] ‘but the people still were offering incense upon the high places.’ (2Chr. 33:17), where the combination of the verb of being *halläwu* in the (morphological) perfect and the imperfect *yä’aṭṭənu*, both marked in the 3rd pers. masc. pl. is a facultative expression of a past iterative. But they are frequent in some post-Aksumite texts, especially as calques from Arabic constructions, e.g. *wä-konät tətwekkäf-omu lä-k’əllomu ’əllä yəbäṣṣəḥu ḥabe-ha* (lit.: and-was.FEM entertain.FEM-them to-all.PL REL come.PL to-her) ‘she used to entertain everybody who came to her.’ Synaxary (Näḥase 2nd), an iterative construction rendering the Arabic Vorlage *wa-kānat taqbalu* ‘she used to entertain’. See Weninger (2001a).

Desiderata for an in-depth study of Gə’əz syntax in a historical perspective are studies on the language of individual texts and authors, like that of Miles (1985) on the Greek-Gə’əz translation technique in the book of Esther, Bombeck (1997) on verbs of being in the Gospel of Mark, or Sima (2010) on Amharisms in the syntax of the *sälamat* in the Synaxary.

6. Lexicon

Due to the large amount of extant Gə’əz texts, a great portion of Gə’əz vocabulary is known. The Gə’əz-Latin dictionary of Dillmann (1865) especially covers Aksumite translation literature. Epigraphic material is not covered and post-Aksumite usage is covered only in a more general way. Dillmann (1865) is supplemented by Grébaut (1952). Da Maggiora’s tri-lingual Gə’əz-Italian-Latin dictionary (1953) is mainly based on Dillmann (1865) and indigenous Gə’əz-Amharic dictionaries (the so-called *sä-wasəw*). Leslau’s *Comparative dictionary* (1987) is based on the older dictionaries supplemented with many additional lexemes from the literature (albeit without references!) and gives ample material for etymology. Leslau’s *Concise dictionary* (1989) is a useful tool for reading Gə’əz texts.

The bulk of the Gə’əz vocabulary is inherited from Common Semitic. This holds for many verbal roots, nouns for body parts, kinship terms, domestic and wild animals, etc. (Weninger 2005, 466–467). There are a significant number of cultural terms that

are common to Arabic, Sabaean and Gəʿəz to the exclusion of other Semitic languages. It is likely, but difficult to prove, that this is due to South Arabian cultural influence from the 8th century B.C. to the 6th century A.D. when Yemen was the dominant culture of the region (Weninger 2009). Nevertheless, many lexemes with Cushitic etymology can be found due to extensive language contact with Central Cushitic languages (Leslau 1988), although admittedly the lexical relationship with Cushitic is more complex (Gragg 1991). Due to massive Greek influence both from trading activities in the Red Sea and from Christianization, many Greek loanwords can also be found in Aksumite Gəʿəz (Weninger 2005, 469–471). Several Aramaic loans have been noted already by Nöldeke (1910, 32–46). Their precise origin is not quite clear, but many of them are cultural terms, especially from the sphere of religion. Minor elements of the Aksumite vocabulary are of Indic, Coptic and Latin origin.

In post-classical Gəʿəz, the situation alters considerably. The bulk of the Gəʿəz vocabulary from Aksumite times continues to be used. Exceptions are rare words and *hapax legomena*, especially rare Greek loans that require special explanation. Through intensive contacts with the Coptic church of Egypt and through many translations of Christian Arabic literary texts, a large number of Arabic loanwords entered the Gəʿəz lexicon. A further source of Arabic loans in post-classical Gəʿəz can be found in the vernaculars spoken by Muslim groups in Ethiopia and adjacent regions (Weninger 2004). Needless to say, through Arabic many words of different origins also entered Gəʿəz, e.g. from Coptic, Persian, Latin, Aramaic, etc.

In some genres of post-classical Gəʿəz, especially in chronicles and legal texts, many Amharic words occur. These words are mostly technical terms or terms for items of material culture, for which Gəʿəz words cannot easily be found (Kropp 1992).

Abbreviations: ACC = accusative; C = communis; CONV = converb; CST construct state; F = feminine; GEN = genitive; IMPF = imperfect; JUSS = jussive; M = masculine; NEG = negation; NOM = nominative; PERF = perfect; PL = plural; REL = relative pronoun; QUOT = quotative particle; RIÉ = Bernand et al. 1991–2000 ff.

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67. Tigre

1. Location
2. Number of speakers
3. Dialects
4. Script
5. Texts
6. References

Abstract

Tigre (təgre) is one of three North Ethiopic languages (the others are Tigrinya and the now-extinct Gəʿəz). Tigre's traditional linguistic area encompasses the Sudan-Eritrean grazing lowlands and the Mansa plateau, with Keren as its main town. Four dialects are recognized corresponding to geographical divisions: the Eritrean plateau (or Mansa') dialect, and three Lowland dialects which are grouped under the label 'Beni-Amer'. Due to historical and sociological factors, the language identified as Tigre includes very different varieties ranging from those influenced by Beja and/or Arabic, and Tigrinya hybrids.

1. Location

Tigre (*təgre*), also known as *ḥāsa* (Arabic *al-ḥāṣṣiya*), together with Tigrinya and Gəʿəz (now extinct), comprise the three North Ethiopic languages. The glossonym *təgre* should not be confused with *təgray*, which is the name of the Tigrinya-speaking people and of the Təgray region of Ethiopia (French 'Tigré') where Tigrinya (not *təgre*) is spoken. From a diachronic perspective, Tigre is more closely related to Gəʿəz than to Tigrinya, in which numerous linguistic innovations have taken place. Tigre has remained the language of mainly agro-pastoralist groups, in comparison with Tigrinya which became the national language of the independent Eritrea, and Gəʿəz, whose cultural dominance dates as far back as the Aksumite period. Historically, the term *təgre* has also been applied to vassal groups, as opposed to *nabtāb* 'the ruling caste'. Up to the beginning of the war with Ethiopia, which would disorganize traditional society, a division existed which contrasted *maw'ilāy* 'shepherds, owners of their flock'

and *talāy* ‘watchmen’. Tigre’s traditional linguistic area encompasses the Sudan-Eritrean grazing lowlands and the ‘*rora Mansa*’, the Mansa plateau, with Keren (ca. 32,000 inhabitants) as its main urban area. Spoken in Eritrea (in the Northern Red Sea province, Ansäba, Gaš-Barka, and the Dahlak Archipelago), Tigre is also spoken in Kassala and Tokar in the Sudan where it continues to replace Beja, a Northern Cushitic language formerly spoken by the Beni-Amer (*beni-‘āmar*) tribes. The southernmost limit of Tigre on the Red Sea shore is Arkiko (Hirgīgo) in Eritrea, including the port of Massawa, whose original name (Bāše‘) is Tigre. Until recently, Tigre was spoken in Ginda‘, a village on the road to Asmara, where it was in contact with Northern Saho.

2. Number of speakers

In 2004, the population of Eritrea was estimated at 4 million, of which 22% were speakers of Tigre. A similar percentage was given in the 1997 census, which put the number of speakers at some 800,000 (Gordon 2005, 112). According to the Eritrean Department for Primary Education (Curriculum Branch, 1996), 31% of Eritreans speak Tigre. These figures must be considered approximate, and do not distinguish which of these speakers have Tigre as a mother tongue, or use it as a second (or even third) language. Whatever the actual figures may be, Tigre (with Tigrinya) is not considered to be a minority language, unlike Beja, Kunama or Afar and Saho in Eritrea. If not equal to Tigrinya, the national language of Eritrea, Tigre is politically associated with the long fight for independence. It was in Tigre-speaking areas that Eritrean fighters successfully entrenched and from there resisted the Ethiopian forces, finally gaining independence in 1993. Most Tigre speakers are Sunni Muslim, although many tribes were formerly Christian and forced to convert during the Dervish uprising in the late 19th century.

3. Dialects

The unsettled history of the region had consequences for the spoken varieties of Tigre. The long Ethio-Eritrean conflict, changes in religious affiliation (Christianity to Islam), and changes in language (including communities changing from Beja to Tigre, and Tigre to Tigrinya, as well as the influence of Arabic which was favoured by the Italians during the colonial period) have left their trace on the spoken varieties of Tigre. According to the Eritrea Dialect Survey (Bulakh 2010), seven dialects are currently identified: Sāḥil, on the coast, Barka, Samhar, Mansa‘, Bet Guk, Mārya Qayyih (‘the Red Marya’) and Mārya Ṣallim (‘the Black Marya’). Morin (1996) recognizes four dialects according to geographical divisions: the Eritrean plateau (or Mansa‘) dialect, and three Lowland dialects which are generally undifferentiated under the label ‘Beni-Amer’. The dialects of the ‘Beni-Amer’ are Gaš-Barka (with Agordat as its main town), Sāḥil (including Tokar), and Samhar (from Waqiro, north to Massawa, and Arkiko). In the Gaš-Barka area, Tigre is in contact with Beja, locally known as Hidārab (Hidāreb). In the Samhar plain, Tigre coexists with Saho, a Cushitic language close to Afar. In all

communities the influence of Tigrinya is felt through the media and education. From a socio-linguistic perspective, the Lowland or ‘Beni-Amer’ dialects are considered by the speakers themselves to be of less value than the written Keren dialect.

Due to historical circumstances and sociological factors, varieties identified as Tigre include a range of dialects which have been subject to different linguistic influences. For example, in bilingual groups such as Bet ‘Awad or Labad in the Sāḥil which speak a language influenced by Beja, the sentence ‘Have you seen a donkey in this dry-bed river?’ is produced as:

1. *tūn-ḥilīl* ’*adig* *hoy reḥeta*
this-dry-bed river donkey have you seen

whereas another Tigre-speaker will say:

2. *dib-ba-ḥilīl* ’*adig* *re’eka*
in-the-dry-bed river donkey have you seen

These examples contain Beja morphemes (*tūn*, *ta*, *hoy*) and Tigre lexemes (*ḥilīl*, *ʔadig*). The Arabic loanword *raʔā* ‘to see’ is conjugated in the first example (*reḥeta*) resembling the Beja paradigm *riḥita*, and in the second example as a Tigre verb (*re’e-ka*). In another example, ‘*āšōbat* ‘a fish’ from collective ‘*ašōb* (not plural, Nakano/Tsuge 1982, 112) parallels a Beja form (object case ‘*aš-ob*, lexically ‘*āši* ‘fish’), whereas other Tigre dialects use ‘*āša*. The Tigre singulative suffix *-at* regularizes the hybrid ‘*āšōb-at* from a grammatical point of view. In addition, compare:

- maqaddan i-kʷoy* *tu*
jealousy neg.-good is (copula)
‘Jealousy is not good’

The adjective *kʷoy* from the Beja verb *kʷat(im)* ‘to be good’ replaces Tigre *sanni* (*sanni ikon*) but follows Tigre syntax with the presence of the copula *tu*.

Due to the morphological and lexical diversity found in varieties of Tigre, one must concentrate on the common features shared by the different Tigre dialects, in particular those found in the lowlands and on the coast of Eritrea and Sudan. Taking as a basis for comparison the better-known Mansa dialect (Raz 1983), the following description explores the phonemic inventory and syntax. Hereafter, the following abbreviations are used: BA, common Beni-Amer form; BAR, Tigre of the Barka valley; GA, Tigre of the Gaš valley; MA, Mansa dialect; SAH, coastal Tigre of Sāḥil; SAM, coastal Tigre of the Samhar plain. / / is used to denote a phonemic transcription and [] is used to denote a phonetic transcription.

3.1. Phonetic inventory

3.1.1. Vowels

There are six vowels in Tigre (/i/, /e/, /a/, /ā/, /o/, /u/). Vowel quantity is only relevant between a/ā, e.g. *baʔal* ‘husband’, *baʔāl* ‘feast’; MA paucative: *waʔat* ‘a cow’, *waʔāt* ‘some cows’. Except for /ā/, all vowels are liable to variation, especially through vocalic harmonization, e.g. MA *la-zəlām* ‘the rain’, BA *lā-dəlām*. In BA there is a general, although

not systematic, tendency to vowel lengthening and emphasis, in a stressed syllable, e.g. MA *sa'ayat* 'hope', BA *sa'ayōt*; MA *ra'ay* 'see' (pl. imperative), BA *ra'āiy*; MA *lohan* 'these', BA *lōhan*. This vowel lengthening is not stable in relation to stress shift, e.g. SAH 'abbay 'big', GA *li-sit 'abbāy* 'the big woman' (MA 'abbāy). Short /a/ has many allophones. It is close to Amharic /ä/ before /n/, e.g. MA *man* 'who?'; BA *mān-mān* 'right'; or after mid-front /e/ realized [ē], e.g. BA *hēsas* [hēsäs] 'ghee'. This mid-central [ä] appears also in loans, e.g. *la-higya* (MA *hīga*) *habäš* 'the Tigrinya language'. In MA, the vowel [ə] is defined as the 'allophone of a zero phoneme' (Raz 1983, 10). It may correspond to [i] in BA, e.g. MA *bəzuḥ soldi* 'much money', BA *bidoh solādi* (or *solde*); or stand as a [ə], if sonants /r/ and /n/ are syllable summits, e.g. MA *krn* 'voice' BA *kərən*; MA *ət-gālab ənābbrr* 'I live in Galab', BA *ət-galab 'ənabbərr* (or *dib-galab isak-kín*) showing a stress shift on the last syllable. Whereas MA admits a double CC or triple consonant sequence CCC, BA has a dominant -CV- structure. MA admits a CyVC sequence whereas BA has CVyVC where [i] is in consonant position, e.g. 'piece of wood': MA 'əč'yay, GA ʔəč'ayay (or ʔəčiyay), SAH 'ič'iyay; 'tree' MA 'əč'yat, GA 'əč'ayat (or 'əč'ayət), SAH 'əč'ayət.

3.1.2. Consonant inventory

There are 22 consonants and two approximants (semivowels) [w], [y] which are the realization of /i/ and /u/ in consonantal position.

Labials: [p], [b], [f], [m], [w]
 Alveolars: /t/, /d/, /t̪/, /n/, /l/, /r/
 Fricatives: /s/, /z/, /ʃ/
 Palatals: /ʃ/, /ǰ/, /č'/, [č], [y]
 Velars: /k/, /g/, /q/, [ħ]
 Pharyngeals: /ħ/, /ʕ/
 Glottals: /h/, /ʔ/

Three consonants are added to the inventory: [ħ] which appears in Arabic loan words; the Ethiopian grapheme [ḫ] which is pronounced as such in educated circles, or as [p] (*polis* 'police'); the voiceless palato-alveolar affricate [č] which is the realization of /t/ in contact with a palatal, e.g. MA *masānit* 'friends', *masāničče* 'my friends' (**masānit-ye*). All consonants except pharyngeals, glottals and semivowels can be geminated, a possibility which does not exist in the lexicon of the Beni-Amer varieties influenced by Beja where double consonants are not relevant, e.g. MA 'assit 'woman', BA *sit(t)*. Characteristic of the Arabic or Beja-speaking Beni-Amer is the voiced palato-alveolar fricative [ž], instead of the voiced velar stop /g/ or /ǰ/ (e.g. *hiž* 'first lunar month' instead of *hig*). Among the most Arabized, the ejective /q/ tends to be pronounced as the uvular /q/.

3.1.2.1. Pharyngeals and glottals

In GA and BA the pharyngeal /ʕ/ is replaced by [ʔ], a shift explained by the influence of Beja which has no pharyngeal, e.g. 'the goat-shepherds graze their goats':

MA:	<i>ʿad-ʿaṭāl</i>	<i>ʿaṭāl</i>	<i>ʾawʿīlo</i>
	goat-shepherds	goats	they graze
BA:	<i>ʾad-ʾaṭāl</i>	<i>ʾaṭāl</i>	<i>ʾawʾīlo</i>

3.1.2.2. Fricatives and ejectives

In BA /z/ is pronounced as [d]:

MA:	<i>ʾətyopya</i>	<i>bəzuḥ</i>	<i>maḥāzāt</i>	<i>bədiba</i>
	Ethiopia	many	rivers	there are
BA:	<i>ʾətyopya</i>	<i>bədoh</i>	<i>maḥādāt</i>	<i>bədiba</i>

Apart from /q/ (which is attested in all dialects), the three ejectives in MA correspond in BA to:

Tab. 67.1: Correspondence of ejectives

MA	SAM	SAH	GA-BAR
/ṭ/	[ṣ]	/ṭ/	/ṭ/
/ṣ/	/ṣ/	[ṭ]	[ṭ] or [č̣]
/č̣/	[ṣ]	/č̣/	/č̣/

For example: MA /ṭ/: *hoṭa* (or *hoša*) ‘sand’, SAM *ḥōṣā*, SAH *ḥōṭā* (or Arabic *raml*), GA-BAR *ḥōṭā*; MA (and SAM) /ṣ/: *ḥaṣabko* ‘I washed’, SAH and GA-BAR *ḥaṭabko*; MA *ṣifər* ‘nail’, pl. *ʾaṣfər*, *ʾaṣfərtu* ‘his nails’, GA-BAR *č̣ʾəfər*, *ʾač̣ʾfər*, *ʾač̣ʾəfru*; MA /č̣/: *ʾač̣əm* ‘bone’, SAM *ʾašim*, SAH *ʾač̣im*, GA-BAR *ʾač̣im*.

3.2. Syntactic and morphological features shared by Tigre dialects

3.2.1. Word-order

As a SOV language the verb in Tigre is at the end of the sentence. The initial position of the subject is relevant as the direct object is unmarked:

<i>rabbi</i>	<i>ʿastar</i>	<i>wa-mədər</i>	<i>faṭra</i>
God	stars	and-earth	he created
‘God created heaven and earth’			

Complements with a preposition are usually at the beginning of a sentence in MA:

<i>qadam</i>	<i>la-zəlām</i>	<i>ṣaḥay</i>	<i>ʿāla</i>
before	the-rain	sun	there was
‘There was sun before the rain’			

They may end the sentence, in BA:

hadūd sama'na qadam lə-dəlām
thunder we hear before the-rain
'We hear the thunder before the rain'

A copula-pronoun is obligatory between two member sentences in juxtaposition where each of them is a noun (eventually an adjective or an interrogative pronoun):

BA'ana mən gabil bet-ğuk 'ana
me of tribe Bet-Guk copula
'I am from the tribe of Bet-Guk'

BA *həbr-u mī tu*
color-his what copula
'What is his color (*həbər*)?'

In a negative clause (see 3. *maqaddan i-kwoy tu*) *tu* is the suppletive form of *ʔikon* 'it is not'. The first and second persons are identical to the first and second person personal pronoun. In the third person, the forms are: sg. masc. *tu*, fem. *ta*; pl. masc. *tom*, fem. *tan*. Sentence adverbs and conjunctions are normally at the beginning of the clause. Apart from stylistic variations, in complex sentences, the subordinate clause precedes the main clause:

kəm baṣṣhaka salɸ mi wadeka
when you arrived first what you did
'Having arrived, what did you do first?'

Of a total of almost fifty prepositions (Raz 1983, 80–84) nine out of ten are identical in all Tigre dialects, with four exceptions in BA which are: 'in the middle', 'because', 'in front of', and 'opposite to' (Morin 1996, 258):

SAH *bet-e dib-qablat bēt-u ta*
house-my opposed to house-his is
MA *be-čče 'ət qablat bēt-u ta*
'my house is at the opposite of his house'

One should note here that since Beja, and any other Cushitic language in contact with Tigre, are also SOV languages, it is sometimes difficult to clearly identify 'pure' Tigre sentences and hybrid varieties.

3.2.2. Verb

The verb can be simple, derived or in composition with an auxiliary (*kōna, halla*). The latter is close to English 'present continuous', e.g. *ra'aše ḥammanni halla* 'I have a headache'.

Four types of verbs are identified (Raz 1983, 52), of which three are derived stems. Type A, unmarked, transitive or intransitive, e.g. *sabra* 'to break', *kabra* 'to be honoured'. Type B, which may or may not have verbs of type A, e.g. *kabbara* 'to give

news'. Type C, triradicals with intensive meaning, e.g. *säbara* 'to break in pieces' (from *sabra*). Type D expresses the frequentative or conative, e.g. *sabābara* 'to break thoroughly'.

The derivation (with prefixes) opposes the passive: *tə-mazzana* 'to be weighed'; the causative: *'a-garrama* 'to beautify'; the causative of intransitive verbs of *tə-* formation: *'at-gassa* 'to make sit' (from *təgassa* 'to sit down'), or the causative reciprocal: *'at-gādaba* 'to cause to fight each other' (from *təgādaba* 'to fight each other'); the factitive (or 'double' causative): *'atta-qtala* 'to cause to be killed' (from type A *qatla* 'to kill').

Verbs conjugated for person, number and gender have four inflexions (e.g. *mazzana* 'to weigh'): perfect *mazzanko* 'I weighed'; imperfect: *ṁmazzən* 'I weigh'; jussive: *təmazno*; imperative (2 sg.): *mazzən*.

The copula *tu* with preposition *əḡəl* and jussive is used to express futurity: *'əḡəl nəmazzən tu* 'we will weigh'. Negation is expressed by the prefix *'i-*: *'i-sarqa* 'he did not steal'.

3.2.3. Nouns and adjectives

All Tigre dialects have nouns and adjectives. Noun indefiniteness is unmarked, and definiteness is marked with the prefix *la-*: MA *'əsitt*, 'a woman', BA *sitt*: *la-sitt* 'the woman'. The article is assimilated by stops: *dib-ba* [*dib la] *dāmər* 'in the village'; *wasatṭa* [wasat la] *dāmər* 'in the middle of the village'. Regarding the gender distinction in nouns and adjectives, the masculine is unmarked and the feminine is marked with suffixes *-(i)t*, *-at*, particularly when sex is semantically expressed: *fəluṽ* 'bull-calf', *fəlīt* 'female-calf'; *ḥaməq* 'weak', (fem.) *ḥamqat*.

The plural is also marked with various suffixes: *-āt*, *-otāt*, *-(a)č*, and/or by internal vowel change including 'broken' plurals: MA *'akān* 'place', pl. *'akānāt*; *mathət* 'lowland', BA *mathet*, pl. *mataḥēt*; MA *'əssit* 'woman', pl. *'anəs*; *walat* 'young girl, daughter', pl. *'awāləd*.

The lexicon opposes nouns which are or are not subject to the semantic distinction 'one/more than one'. The first enter a singular/plural correlation, the latter opposes a collective form to a countable singular on which a plural may be formed. According to their semantics, nouns may have paucative, diminutive (or pejorative) derivation: *karāy* 'hyena'; pl. *'akarrit*, *karač*; paucative *'akarritām* 'some hyenas'; *gabil* 'people, tribe, nation' (coll.); countable sing. *gabilat* 'one tribe'; pl. *gabāyəl* 'tribes, people'; *sab* 'men, people' (coll.); paucative *sab'etām* 'a few people'; paucative-pejorative *sab'etāt* 'some poor people'.

The demonstratives have eight forms in BA (with eight variants in MA):

Tab. 67.2: Demonstratives

	Near Sing.	Pl.	Far Sing.	Pl.
Masc.	<i>əlli</i>	<i>əllom</i>	<i>lōhay</i>	<i>lōhom</i>
Fem.	<i>'əlla</i>	<i>əlla</i>	<i>'əllan</i>	<i>lōha</i>

Demonstratives are prefixed to nouns: *əllan* *'am'əlāt* 'these days'. They may also be suffixed in redundant forms:

alli-bet-əlli nāy-ka tu
 this-house-this of-your is (copula)
 ‘Is this house yours?’

In SAH and GA, the article *li* (mixing *əlli* and article *la*) appears to be under the influence of Arabic *al*:-

*li-masʒid wasaʃta [ʔ*wasat la] dāmər-na halla*
 the-mosque middle-the village-our is
 ‘The mosque is in the middle of our village’

Possessives are suffixed to nouns: 1 sg. *-ye*, 2 sg. masc. *-ka*, fem. *-ki*, 3 sg. masc. *-u*, fem. *-a*, 1 pl. *na*, 2 pl. masc. *kum*, fem. *-kən*, 3 pl. masc. *-om*, fem. *-an*: *ʔab(u)-hu* ‘his father’.

Complements and qualifiers precede or follow the word they qualify or complement: *la-bāb* ‘*abi*’ ‘the big gate’ (*la-bāb*), ‘*abi bet mähro*’ ‘a big school’. In a sequence qualifier + qualified, the article is prefixed to the qualifier: MA *la-gəndab* ‘*ənās*’ ‘the old man’; in BA it can be prefixed to the noun: GA *li-sit* ‘*abbāy re’eko*’ ‘I saw the big woman’.

The numerals (up to ten) precede the noun. After ten, the tens precede the units, which are coordinated by optional *wa* in BA. The counted noun is usually singular: ‘*asər wa səs ʔənās*’ ‘sixteen men’, but sometimes plural in BA: ‘*asər ač’abə’iče*’ ‘my ten fingers’ (sing. *č’ab’it* ‘finger’, MA *č’ab’it*).

As seen, the possessive particle *nāy* ‘of’ is used with personal inflection as a possessive pronoun: *nāy-ka* ‘yours’; *nā-ye i-kon* ‘it is not mine (of me)’. It also corresponds to a ‘genitive’ construction. It can be elided in BA, e.g. ‘girls’ school’:

BA	<i>bet</i>	<i>darāsət</i>	<i>awāləd</i>
MA	<i>bet</i>	<i>mähro</i>	<i>nāy awāləd</i>
	house	study	of girls

Deverbal nouns are formed with different affixes in order to form abstract nouns: *gəbərə-nnat* ‘slavery’, or nouns denoting an instrument: *ma-ktab-i* ‘writing implement’ (from verb *katba*, type A); a name of place: *məbyāt* ‘dwelling place’ (root *byt*); the result of an action: *ħərrād* ‘what is slaughtered’.

3.2.4. Pronouns

Pronouns are independent or bound to a conjugated verb. Independent pronouns are: 1 sg. ‘*ana*’, 2 sg. masc. ‘*ənta*’, fem. ‘*ənti*’, 3 sg. masc. *ħətu*, fem. *ħəta*, 1 pl. *ħəna*, 2 pl. masc. ‘*əntum*’, fem. ‘*əntən*’, 3 pl. masc. *ħətom*, fem. *ħətān*. 3.2.4.2. Subject pronouns in conjugation are associated with a tense (vocalic) marker. They are suffixed in the perfect and prefixed in the imperfect and jussive (e.g. verb *mazzana* ‘to weigh’), see table 67.3.

Object pronouns in conjunction with verbs are suffixed, as can be seen in table 67.3. For example: *hab-nə-hu* ‘we gave (*haba* ‘to give’) him’; *rakab-kä-hu* ‘you (*ka*) found (*rakba* ‘to find’) him (*hu*)’; *kəra-wo* ‘put (*kara*, masc. pl.) it (masc. sing.) down’.

Tab. 67.3: Subject pronouns in conjugation

Pronouns	Perfect	Imperfect
1. sg.	<i>mazzan-ko</i>	<i>ʾə-mazzən</i>
2. masc.	<i>mazzan-ka</i>	<i>tə-mazzən</i>
2. fem.	<i>mazzan-ki</i>	<i>tə-mazni</i>
3. masc.	<i>mazzan-a</i>	<i>lə-mazzən</i>
3. fem.	<i>mazzan-at</i>	<i>tə-mazzən</i>
1. pl.	<i>mazzan-na</i>	<i>ʾən-mazzən</i>
2. pl. masc.	<i>mazzan-kum</i>	<i>tə-mazno</i>
2. pl. fem.	<i>mazzan-kən</i>	<i>tə-mazna</i>
3. pl. masc.	<i>mazzan-aw</i>	<i>lə-mazno</i>
3. pl. fem.	<i>mazzana-ya</i>	<i>lə-mazna</i>

Table 67.4: Object pronouns

Person	Singular	Plural
1 st common	<i>-n(n)i</i>	<i>-n(n)a</i>
2 nd masc.	<i>-k(k)a</i>	<i>-k(k)um</i>
2 nd fem.	<i>-k(k)i</i>	<i>-k(k)ən</i>
3 rd masc.	<i>-o, wo, yo</i> <i>-hu, -yu</i>	<i>-(w)om, yom</i> <i>-hom</i>
3 rd fem.	<i>-a, wa, ya</i> <i>-ha</i>	<i>-(w)an, yan</i> <i>-han</i>

The alleged *haka na Dahālik* ('language of the Dahlak Islands'; *hīga nāy Dahālik* 'language of the Dahlak inhabitants') has been presented as 'an original unit within the Northern Ethio-Semitic group' (Simeone-Senelle 2005, 70). As can be seen, it is clear that this language is actually a spoken variety of Tigre, close to the SAH dialect with seemingly only one ejective /č'/ and a greater influence of Arabic on the lexicon as seen in the 'ten-word list' (*op. cit.*, 71). To the 'Dahālik' list in table 67.5 are added corresponding items from MA and BA. In the few published materials (Simeone-Senelle 2010) the presence of various Ethio-Semitic morphemes should be noted. These show, as do other hybrid Tigre varieties, secondary (if not idiolect) differences which by no means necessitate identification of a fourth language in North Ethiopic.

4. Script

Tigre is written in the Gəʿəz script initially introduced by Swedish missionaries. Although challenged by Tigrinya (which uses the same syllabic writing) in everyday communication, the script is taught in primary schools and adult literacy programs. As Gəʿəz script is linked to Christianity, Arabic alphabet is still in use in Muslim communities.

Table 67.5: The ‘ten-word list’ in Tigre

	MA	‘Dahālik’	BA
“one”	(m.) <i>woro(t)</i> (f.) <i>hatte</i>	<i>hente</i>	<i>’ōrōt</i> , <i>hatte</i>
“two”	(m.) <i>kəʔot</i> (f.) <i>kəʔe</i>	<i>kile</i>	<i>kəlōt</i> , <i>kiʔe</i>
“three”	<i>salas</i>	<i>salas</i>	<i>salas</i>
“blood”	<i>dam</i>	<i>dam</i>	<i>dam</i>
“tongue”	<i>nəssal</i>	<i>lisan</i>	<i>līsān</i>
“tooth”	<i>nibāt</i>	<i>sin</i>	<i>nīb</i>
“fire”	<i>əsət</i>	<i>’isat</i>	<i>’isat</i>
“moon”	<i>wäreḥ</i>	<i>warəḥ, qamar</i>	<i>wariḥ</i>
“sun”	<i>šaḥay</i>	<i>aḥya</i>	<i>ṭaḥay</i>
“water”	<i>may</i>	<i>may</i>	<i>may</i>

5. Texts

For a long time, the scarcity of available texts was paralleled by the lack of grammars and dictionaries (Littmann/Höfner, 1962). Wolf Leslau’s *Short Grammar of Tigre* (1945) was the only scientific description of Tigre until Shlomo Raz’s *Tigre Grammar and Texts* (1983), after Palmer (1962). The first collections of texts were published by Conti Rossini (1901) and Littmann (1910–1915). They are still considered to be the best available texts in Tigre. With the arrival of Rodén in Galab in 1890 the Swedish Mission in Eritrea became very active, publishing the New Testament in Tigre in 1902. Since Eritrean independence, the corpus of literature (novels, written poetry) has grown. The first novel in the language *’amanini* [Trust me] by Mahammad Ali Ibrahim has been commented on by Gianfranco Lusini (2007) and Rainer Voigt (2008).

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68. Tigrinya

1. Introduction
2. Phonology and transliteration
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Abstract

Tigrinya, the third-largest Semitic language after Arabic and Amharic, has preserved the old Semitic morphology very well. The language has so far only been sufficiently analysed in its verbal syntax. In the following a morphological description is attempted where a variety of junctures are employed.

1. Introduction

Tigrinya with its numerous dialects that have so far not been described properly is spoken in the independent state of Eritrea (Erythraea) and the Ethiopian state/province of Tigray where it has gained the status of an official and school language with more than 5 million speakers. The language is written with a slightly modified Classical Ethiopic script (fidäl).

Tigrinya together with Tigre and Old or Classical Ethiopic (Ge'ez, more precisely Gə'əz, pronounced Gə'əz by Tigrinophones), the latter nowadays only being used as a church language, belongs to the languages spoken in the North of Ethiopia and Eritrea. The linguistic classification introduced by M. Cohen and R. Hetzron according to which Old Ethiopic split into a Northern and a Southern branch is based on unsound criteria and should be abandoned (Voigt 2009). However – compared to the geographically Southern languages Amharic, Argobba, Gafat, Gurage, Harari – the geographically Northern languages betray in many ways a more archaic character because they resemble more closely Old Ethiopic with its diverse dialects. In view of the close relationship of these languages especially in verbal features a dialectological model relying on isoglosses is preferable. Unfortunately the preliminary researches for this undertaking have not yet been done.

2. Phonology and transliteration

Accurate research into the phonetic realization of sounds in Tigrinya is rare, but cf. the works by Kiros Fre Woldu (e.g. 1985).

2.1. Consonants

The consonant block of Tigrinya differs from that of Ge'ez (see Voigt 1989) due to the following developments:

- The merger of the voiceless lateral $\acute{s}$ and the emphatic voiceless lateral $\acute{\$}$ with the respective alveolars s and $\$$ which results in the abandonment of the consonantal series in the lateral place of articulation. In spelling this distinction is partially still upheld. But in the (new) Tigray orthography < $\acute{\$}$ > is generally written for $/\acute{s}/$.
- The merger of the uvular $ḥ$ with the pharyngeal $ḥ$ (trad. $ḥ$). In the 'Catholic' orthography this distinction is still upheld in writing.
- Spirantization of b , k , k^w , k and k^w , when postvocalic or the sound itself is not lengthened. There are, however, strong regional differences. It is noteworthy that these sounds do not constitute a phonetic class. The spirantization of the labial is never expressed in the orthography contrary to the (labio)velars which are normally indicated. Word-initial spirantization arising in sentence-sandhi is only expressed in writing in some cases, $\acute{\partial}ti \underline{k}^w\acute{\partial}ri$ 'the/this number'.
- Palatalization of alveolars (s , $\$$, z), dentals (t , $\acute{t}$, d) and occasionally velars. This results in the development of a new articulatory series: $\acute{s}$, $\acute{\$}$, $\acute{z}$, $\acute{t}$, $\acute{d}$.
- The existence of marginal phonemes $\tilde{n}$, p , v , $\acute{z}$ due to the influence of Amharic and Western languages, e.g. $\tilde{n}aw \acute{b}\acute{a}l \equiv \acute{a}$ 'he meowed', $pol\acute{a}tika$ 'politics', $viza$ 'visa', $\acute{z}\acute{a}m:\acute{a}r \equiv \acute{a}$ as a variant of $\acute{g}\acute{a}m:\acute{a}r \equiv \acute{a}$ 'he began, started'.

Without the semivowels (w , y), the nasals (m , n , $\tilde{n}$) and liquids (l , r) the consonantal phonemes can be arranged in the phonetic matrix shown in table 68.1.

Tab. 68.1: Tigrinya consonants

	fricative		occlusive and affricate glottalised	fricative	
	voiceless	voiceless		voiced	voiced
labial	f	$[p]$	$\acute{p}$ [p']	b [b , β]	$[v]$
dental		$\acute{t}$	$\acute{t}$ [t']	d	
alveolar	s	-	$\acute{s}$ [s']	z	
palatalized	$\acute{s}$	$\acute{\$}$	$\acute{\$}$ [$\acute{s}'$]	$\acute{z}$	$[\acute{z}]$
velar	$\rightarrow$	k [k , χ]	$\acute{k}$ (q) [k' , χ']	g	
labiovelar	$\rightarrow$	k^w	$\acute{k}^w$ (q^w)	g^w	
		$[k^w$, $\chi^w]$	$[\acute{k}^w$, $\acute{\chi}^w]$		
pharyngeal	$\acute{h}$ ($ḥ$)	-	-	-	$\acute{c}$ ($\acute{c}'$)
glottal	h		$\acute{c}$ ($\acute{c}'$)		

With consonants certain assimilatory processes can be observed. Thus a voiced stop assimilates to a voiceless stop or a sentence-juncture, e.g. perf. $0_2 \acute{a}d:\acute{a}g \equiv ka$ [$\acute{a}d:\acute{a}k \equiv ka$] thou (m.) boughtest', $\acute{h}asab\# [\acute{h}asab]$ 'thought'. Some assimilation phenomena are expressly marked in writing, like e.g. the phonetic and dialectal variants $\acute{h}awti$, $\acute{h}\acute{a}ḥti$ [$\acute{h}\acute{a}ḥti$], $\acute{h}\acute{a}ḥti$ 'sister'.

All consonants, with the exception of pharyngeal and glottal consonants, can be lengthened, e.g. perf. $0_1 g\acute{a}ḥ\acute{a}r \equiv \acute{a}$ 'he made' vs. $0_2 g\acute{a}b:\acute{a}r \equiv \acute{a}$ 'he paid tribute', juss. $0_1 y\acute{a} \equiv \underline{k}^w\acute{\$} \acute{a}r \equiv$ 'he ought to count' vs. impf. $T_1 y\acute{a} \equiv \underline{k}^w\acute{\$}:\acute{a}r \equiv$ 'he is counted'. The lengthen-

ing of the laryngeals – historically a recent innovation – is only found word-initially in a special morphological formation, e.g. *ḥah-ḥadä* (< **ḥad-ḥadä*) ‘one at a time’.

Amongst the many cases of consonantal lengthening (CC) morphological lengthening, which is part of grammar, is indicated differently (C:), e.g. perf. 0₂ *säd:äd*≡*ä* ‘he was undisciplined’ (cf. *säd:är*≡*ä* ‘he measured by spans’) vs. *sädd*≡*i* ‘bad manners’ (cf. *sädr*≡*i* ‘span’). Lexical lengthening and assimilatory length are indicated by CC.

2.2. Vowels

The vocalic system of Tigrinya does not seem to differ from that found in Ge‘ez, consisting of five full vowels (*a e i o u*) and two central vowels *ə* and *ä*. The full vowels are potentially long, but the quantitative phonetic realization of that length has so far not been established. The two central vowels, whose precise place of articulation has not yet been determined, when in connection with front vowels or palatal consonants turn into the respective front vowels without becoming potentially long, e.g. *šətta*, *šitta* [*šitta*] ‘odour, smell’. With back vowels and labiovelars the central vowels are realized as (short) back vowels and are sometimes written as <*u*>, e.g. *kəbur* [*kübur*] <*kubur*> ‘honourable (m.sg.)’, *šəttol*, *šuttol* ‘scimitar’.

Central *ä* in connection with [i.e. before or after] laryngeals is realized as *a*, e.g. perf. 0₁ **mäšä*≡*ku* (cf. *säbär*≡*ku* ‘I broke’) > *mäša*≡*ku* ‘I came’, **ämän*≡*ä* (cf. *säbär*≡*ä* ‘he broke’) > **amän*≡*ä* ‘he believed’. The ≡ juncture blocks this rule, v. perf. 0₁ *mäš*≡*ä* (cf. *säbär*≡*ä* ‘he broke’), ger. 0₁ *mäši*≡*än* ‘they (f.pl.) have come’, observe that they do not turn into unreal *°mäš*≡*a* or *°mäši*≡*an* respectively.

Tab. 68.2: Tigrinya vowels

	front	central	back
close	<i>i(:)</i>		<i>u(:)</i>
	<i>e(:)</i>	<i>ə</i>	<i>o(:)</i>
		<i>ä</i>	
open		<i>a(:)</i>	

Indeterminacy and articulatory weakness are a peculiarity of vowels in open syllable before laryngeals (i.e. the traditional collective term for uvular, pharyngeal and glottal sounds). In one way this is shown in the vacillating spelling; thus a certain sentence particle can be found written as <*də’a*, *dä’a*, *da’a*>. For these fluctuating vowels I use the symbol *ɐ* (*dɐ’a*). Furthermore this vowel has a tendency to elide. Thus ‘his house’ *gäza*=*’u* can also be pronounced *gäzə*=*’u*, (with vowel assimilation) *gäzü*=*’u* and with vowel-elision *gäz*=*’u* with respective representations in spelling.

Shwa’ is in almost all cases an auxiliary vowel which is inserted according to firm rules, e.g. impf. 0₂ [*ym:l:s*] *yə*≡*məl:əs*≡ ‘he answers’, impf. T₁ [*ygb:är*] *yə*≡*gəb:är*≡ ‘he is made’, [*msk:r*] *məsək:ər* ‘testimony’, [*člmlm*] *čələmləm* ‘glimmer’. Word-initially and word-finally two consonants (#CC or CC# resp.) are not allowed, neither are three

consecutive consonants (CCC) allowed word-internally. Identical sequences of two consonants ($C_1C_2C_1C_2$) are vocalized in such a way that they form two identical syllables ($.C_1\bar{a}C_2.C_1\bar{a}C_2.$), e.g. $|trgrg| \text{ } t\bar{a}r\bar{a}gr\bar{a}g \text{ } b\bar{a}l \equiv \bar{a}$ 'he flowed'.

With verbs of the mediae laryngeal class vocalization follows the syllable structure of strong verbs. Thus impf. $0_1 y\bar{a} \equiv s\bar{a}h\bar{a}k \equiv$ 'he laughs' (cf. $y\bar{a} \equiv s\bar{a}b:\bar{a}k^w \equiv$ 'he mixes') must not be posited as $|y\bar{s}h\bar{k}|$ because this would result in unreal $^o y\bar{s}h\bar{a}k$.

There are other cases of a phonemic shwa', as found in the infinitives, e.g. inf. of $T_4 \text{ } m\bar{a}g:\bar{a}b\bar{a}r$ 'to be reciprocal, reciprocity'. Here the explanation lies in the stem from which it is derived, i.e. perf. $T_4 \text{ } t\bar{a}g\bar{a}b\bar{a}r \equiv u$ 'they interacted', whose long vowel $\bar{a}$ corresponds to the phonemic shwa'.

In some rare cases the notation of an $\bar{a}$ -phoneme is necessary. Normally a distinction is made only between $C\bar{a}$ and $(*C\bar{a} >)$ Ca when C is non-laryngeal, but with laryngeals no such distinction between $(*L\bar{a} >)$ La and $(*L\bar{a} >)$ La is made. Subsequently I shall transcribe 'La' deriving from $L\bar{a}$ as $L\bar{a}$, e.g. perf. $T_4 \text{ } t\bar{a}r\bar{a}'\bar{a}'ay \equiv u$ 'they looked at one another' (cf. $t\bar{a}s\bar{a}b\bar{a}r \equiv u$ 'they broke one another'), $s\bar{a}h\bar{a}k\bar{i}$ 'laughter' (cf. $s\bar{a}b\bar{a}r\bar{i}$ 'breaker'), $\bar{h}\bar{a}msay$ 'fifth' (cf. $s\bar{a}lsay$ 'third'). It would in fact be more precise to mark long $\bar{a}$ in this way after C as well: $\bar{h}\bar{a}ms\bar{a}y$, $s\bar{a}ls\bar{a}y$, but this was not pursued any further for the sake of not deviating too much from the familiar transcription.

2.3. Junctures

The following junctures are used in this contribution:

- (a) $\equiv$, i.e., the strongest juncture between obligatory prefixes and suffixes and the kernel morpheme, as in impf. $0_1 y\bar{a} \equiv s\bar{a}br \equiv u$ 'they (m.pl.) break', perf. $A_1 \text{ } 'aw\bar{s}\bar{a}' \equiv \bar{a}$ 'he caused to go out'. Instead of $\equiv \emptyset$ (i.e., an obligatory zero suffix) we write $\equiv$, and instead of $\equiv \emptyset =$ (i.e., an obligatory zero suffix plus a facultative suffix) $\equiv =$ is used, e.g. $y\bar{a} \equiv s\bar{a}bb\bar{a}r \equiv$ 'he breaks', $y\bar{a} \equiv s\bar{a}br \equiv =o$ 'he breaks him/it'.
- (b) $=$, i.e., the juncture for (facultative) object and possessive suffixes, as in impt. $0_1 \text{ } n\bar{a}g\bar{a}r\bar{a} \equiv nni$ 'tell (m.sg.) me!', ger. $A_1 \text{ } 'am\bar{s}i' \equiv u=kka$ 'he has brought you (m.sg.)'. Further examples are the prefixed negative morpheme $'ay=$, as in perf. $0_1 \text{ } 'ay=g\bar{a}b\bar{a}r \equiv na=yo-n$ 'we did not do it (m.sg.)' as well as the relative particle $z(\bar{a})=$ and the conjunction $k(\bar{a})=$, e.g. $z\bar{a}=g\bar{a}b\bar{a}r \equiv \bar{a}=ll\bar{a}y$ 'which he made for me', $z=\bar{a}y=n\bar{a}g\bar{a}r \equiv ka=yyo$ 'what thou (m.) didst not say'.
- (c) $-$, i.e., the weak juncture which connects the proclitic and enclitic elements to the more central morphemes, as in $n\bar{a}ss=\bar{a}ka-k\bar{a}$ 'what about ($-k\bar{a}$) you (m.sg.)', $\bar{h}\bar{a}d\bar{a}-kk^w\bar{a}$ 'not even ($'akk^w\bar{a}$) one'. Observe also the suffixed negative element $-(\bar{a})n$, which only occurs in the main clause.
- (d) The juncture marked $\smile$ connects substantives in a construct state juxtaposition, e.g. $\bar{h}\bar{a}zbi\smile Ert\bar{a}ra$ 'people of Erythraea (Eritrea)'. The prepositional phrase could be included here, $'ab\smile Somal$ 'in Somalia'.
- (e) Sometimes $'$ serves as an unspecified hyphen.

2.4. Laryngeal Rules

The 'laryngeals' ($L = h, \bar{h}, ', \bar{'}\bar{}$) trigger some phonological processes in connection with the two (centralised) vowels $\bar{a}$ and $\bar{a}$. The result of these processes is (partly) expressed in the orthography. Consider the following rules (L_0 and L_{1-4}):

L₀: The reduction of a lengthened laryngeal (*LL* and *L*: > *L*) which is documented already in Ge'ez (or rather Proto-Ge'ez) may serve as the initial rule on which the following rules are based.

L₁: *ä/L___* > *a*, e.g., perf. 0₁ **häräs*≡*ät* > *haräs*≡*ät* 'she bore' (cf. *säbär*≡*ät* 'she broke'), **sähäk*≡*ät* > *sähak*≡*ät* 'she laughed' – the rule does not apply when the laryngeal is followed by a ≡ juncture: (**bälä*'≡*ä* >) *bäl'*≡*ä* 'he ate'.

L₂: *ä/___L* > *a*, e.g., juss. 0₁ **yə*≡*mšä*'≡ > *yə*≡*mša*'≡ 'may he come' (cf. *yə*≡*sbär*'≡ 'may he break'), **mä*'*käl* > *ma*'*käl* (< Ge'ez) 'center' (cf. *märkäb* 'ship' < Arabic); this rule is obviously not applicable to more recent formations like *mähsäbi* 'means for making one remember'.

L₃: *ə/___Lä* > *e*, e.g., imper. 0₁ **səhüb*'≡ > *səhüb*'≡, i.e. *səhab*'≡, *sähab*'≡, *sahab*'≡ 'draw (m.sg.)!' (cf. *səbär* 'break (m.sg.)!').

L₄: *ä/___LV[≠a]* > *ə*, e.g., impf. 0₁ **yə*≡*wäh*(:)*əz*'≡ > *yə*≡*wəhəz*'≡ 'he flows' (cf. *yə*≡*säb:ər*'≡ 'he breaks').

L₁ and L₂ lead to an opening and lengthening (?) of the vowel *ä* before and after a laryngeal. In L₃ and L₄ the phonological opposition between the two centralised vowels *ə* and *ä* is reduced through a kind of vowel assimilation. Furthermore the open vowel *a* gets drawn into the indeterminacy of *ə* and *ä* before laryngeal, see impf. T₁ **yə*≡*ssəhab*'≡ > *yə*≡*ssəhab*'≡, *yə*≡*ssähab*'≡, *yə*≡*ssahab*'≡ (i.e. *yə*≡*ssəhab*'≡) 'he is dragged' (cf. *yə*≡*səbbär*'≡ 'he is broken apart').

2.5. Shortening rules

The (long) vowel **u* is shortened and centralized to *ə* in a closed syllable, e.g., *kəbur*, f. (**kəbur*=*t*≡*i* >) *kəbər*=*t*≡*i* 'honoured', *šəb:uk* [šüb:uk], f. (**šəb:uk*=*t*≡*i* >) *šəb:ək*=*t*≡*i* 'pretty, good'. A (long) **a* in a closed syllable becomes *ä*, e.g., *käd:amay*, f. (**käd:amay*=*t*≡*i* >) *käd:amäy*=*t*≡*i* 'first'. Vowel shortening might occur in cases like *käb:id*, f. *käb:ad*, pl. *käb:äd*=*t*≡*i* [*käb:ätti*] 'heavy' as well, if we derive the plural from the feminine-based **käb:ad*=*t*≡*i*.

3. Pronoun morphology

3.1. Personal pronouns

The personal pronouns of the first persons directly continue the Old Ethiopic forms. The personal pronouns of the 3rd and 2nd persons are innovations of Tigrinya, they are

Figure 68.3: Independent pronouns in Tigrinya:

	sg.	pl.
3 rd m.	<i>nəss</i> = <i>u</i>	<i>nəss</i> =(<i>at</i>) <i>om</i>
f.	<i>nəss</i> = <i>a</i>	<i>nəss</i> =(<i>at</i>) <i>än</i>
2 nd m.	<i>nəss</i> = <i>əkä</i>	<i>nəss</i> = <i>ək</i> (<i>atk</i>) <i>um</i>
f.	<i>nəss</i> = <i>əki</i>	<i>nəss</i> = <i>ək</i> (<i>atk</i>) <i>ən</i>
1 st	<i>'anä</i>	<i>nəhna</i>

derived from a base *näss=* which is said to go back to *nəfs/näfs* ‘soul’, cf. the personal pronoun *näss=u* in Ḥamasen (Kolmodin 1912). To these are added the nominal personal suffixes. The plural base can be expanded with *=at*≡ (or in the 2nd persons with *=kat*≡ as well) which requires the addition of the plural personal suffixes.

The old Semitic personal pronouns of the 2nd persons ‘*ant-* or ‘*att-*’ are preserved as forms of address: ‘*an*≡*ta*, ‘*at*≡*ta* ‘oh you (m.sg.)’, with the other personal affixes ≡*ti*, ≡*tum(at)*, ≡*ən(at)* in the remaining persons.

The possessive suffixes will be given in table 68.4. with nouns ending in two consonants (*kälb*≡*i* ‘dog’ with its presuffixal form *kälb*≡) as well in a vowel (*gäza* ‘house’ with its presuffixal form *gäza/(ə)=*).

Tab. 68.4: Possessive suffixes in Tigrinya:

		C=	V=
sg.	3 rd m.	<i>kälb=u</i>	<i>gäza=u</i> , <i>gäz(ə)=u</i>
	f.	<i>kälb=a</i>	<i>gäza=a</i> , <i>gäz(ə)=a</i>
	2 nd m.	<i>kälb=əka</i>	<i>gäza=ka</i>
	f.	<i>kälb=əki</i>	<i>gäza=ki</i>
	1 st	<i>kälb=äy</i>	<i>gäza=y</i>
pl.	3 rd m.	<i>kälb=(at)om</i>	<i>gäza=(at)om</i> , <i>gäz(ə)=(at)om</i>
	f.	<i>kälb=(at)än</i>	<i>gäza=(at)än</i> <i>gäz(ə)=(at)än</i>
	2 nd m.	<i>kälb=ək(atk)um</i>	<i>gäza=k(atk)um</i>
	f.	<i>kälb=ək(atk)ən</i>	<i>gäza=k(atk)ən</i>
	1 st	<i>kälb=əna</i>	<i>gäza=na</i>

The shwa’ vowel when following a noun’s final two consonants is an auxiliary vowel (*|kälb=ka|* *kälb=əka*) in contrast to the form *šähafə=ka* ‘your (m.sg.) scribe’, where the phonemic shwa’ vowel represents the word-final *-i*-sound of the noun *šähafi=* (in contrast to *kälb*≡*i*). The difference between these two nouns becomes clear when the suffixes of the 3rd persons are added, e.g. 3rd m.sg.: *šähafə=u* ‘his scribe’ vs. *kälb=u* ‘his dog’. The two different *i*-endings are differentiated in my transcription by the different junctures.

3.2. Object suffixes

With verbs the object suffix of the 1st sg. is *=n(:)i*, that of the 3rd sg. *=w(:)/y(:)/:/o*. With the other persons the above-mentioned possessive suffixes are used if one disregards consonantal length (e.g. ger. 0₂ *räs:ə*≡*ä=k:i* ‘I forgot you (f.sg.)’) and semivocalic glides (ger. 0₁ *kätil*≡*u=w:om* ‘he killed them (m.pl.)’). In a more precise analysis the variants of those morphemes must be taken into consideration to which the object suffixes are added, e.g. ger. A₁ ‘*afkir*≡*a*, ‘*afkir*≡*at=:o* ‘she loved (him)’, ‘*afkir*≡*än*, ‘*afkir*≡*äna=ka* ‘they (f.pl.) loved you (m.sg.)’, perfect 0₁ *šäla*’≡*kum*, *šäla*’≡*kumu=ni* ‘you (m.pl.) hated (me)’. Even the core morpheme which contains the root can be altered through the addition of an object suffix, e.g. impf. 0₁ *yə*≡*säbr*≡*o* ‘he breaks

into pieces ($yə \equiv s\bar{a}b:\bar{a}r \equiv$) him/it', imper. 0₁ $k\bar{a}t\bar{a}l \equiv$, $k\bar{a}t\bar{a}l \equiv =:o$ (i.e. $k\bar{a}t\bar{a}l \equiv \emptyset =:o$) 'kill (him)!'.¹

The differentiation between variants of the object suffixes and presuffixal morpheme variants is useful. This allows an explanation for the different pronunciation of ' (a vs. $\bar{a}$) in imper. 0₁ $s\bar{a}ma'a \equiv$, $s\bar{a}ma'a \equiv =n:i$ 'hear (me)!' and ger. 0₁ $s\bar{a}mi' \equiv \bar{a}n$ 'they (f.) have heard'. Thus $s\bar{a}ma'a \equiv$ (better $s\bar{a}m\bar{e}'a \equiv$) is the variant of $s\bar{a}ma' \equiv$ (i.e. $s\bar{a}ma' \equiv \emptyset$) before several object suffixes. With strong verbs (without laryngeal as 3rd radical) imper. 0₁ $\bar{h}ad\bar{a}g \equiv$ 'leave (m.sg.)!' has the variant $\bar{h}ad\bar{a}g\bar{a} \equiv$ when preceding some object suffixes. While $\bar{a}$ after laryngeal is morpheme-internally realized as a , the initial $\bar{a}$ of the gerundial personal suffix $\equiv \bar{a}n$ does not suffer such change since it is blocked by a $\equiv$ juncture.

Besides the object suffixes there is a series of verbal suffixes containing the element $l(:)$ - which appears before the object suffix, sg. 3rd m. $=l(:)u$, f. $=l(:)a$, 2nd m. $=lka$, 2nd f. $=lki$, 1st sg. $=l(:)\bar{a}y$, etc., e.g. $m\bar{a}l:\bar{a}s \equiv \bar{a}=l:u$ 'he answered him', $t\bar{a}mal\bar{i}' \equiv u=l:a$ (a) llo 'it was accomplished for her'. In independent usage the old Semitic preposition l - turned to $n\bar{a}$ -, e.g. $n\bar{a}=u$ 'to him'.

3.3. Demonstrative pronouns

The initial syllable of all forms is omitted in sentence-sandhi after a vowel, e.g. $b\bar{a}=za'ba-zi$ 'therefore'. Demonstratives precede but can be repeated after the noun. In

Tab. 68.5: Demonstrative pronouns in Tigrinya

		'this'	'that'
sg.	m.	($\bar{a}$) zi , ($\bar{a}$) $z=u$, ($\bar{a}$) zuy	($\bar{a}$) ti , ($\bar{a}$) $t=u$, ($\bar{a}$) tuy
	f.	($\bar{a}$) $z=a$, ($\bar{a}$) $zi'=a$	($\bar{a}$) $t=a$, ($\bar{a}$) $ti'=a$
pl.	m.	($\bar{a}$) $z=om$, ($\bar{a}$) $zi=(at)om$	($\bar{a}$) $t=om$, ($\bar{a}$) $ti=(at)om$
	f.	($\bar{a}$) $z=\bar{a}n$, ($\bar{a}$) $zi=(at)\bar{a}n$	($\bar{a}$) $t=\bar{a}n$, ($\bar{a}$) $ti=(at)\bar{a}n$

this position the expanded forms seem to be preferred, e.g. $\bar{a}z=om$ $k^w\bar{a}l'u-zi'=om$ 'these children'.

The standard form of the demonstrative pronoun indicating proximity – contrary to its representation in some reference works – is $\bar{a}zi$, not $\bar{a}zu$. It is used in the translation of the Bible, the Eritrean newspaper *Haddas Ertära* and the Tigray newspaper *Mäkaläh Təgray*. The forms $\bar{a}z=a$, $\bar{a}z=om$ presuppose a base form $^o\bar{a}z=$. The dialectal form $\bar{a}zuy$ did presumably develop by metathesis from $^*\bar{a}zi'=u$.

Formation and use of the demonstrative pronoun indicating distance, which often has the function of a definite article, is identical in its formation with that of proximity, however $-z-$ has to be replaced by $-t-$, e.g. $b\bar{a}_1-ti_2$ $m\bar{a}ng\bar{a}st \equiv i_3$ $z\bar{a}=g\bar{u}b\bar{a}r \equiv \bar{a}_4=l:\bar{a}y_5$ $\bar{h}ag\bar{a}z_6$ 'through₁ the₂ help₆ the government₃ has given₄ to me₅'.

3.4. Relative pronouns

The relative pronoun $z\bar{a}=$ is used with the perfect (e.g. 0₁ $z\bar{a}=m\bar{a}š' \equiv \bar{a}$ 'who came') and imperfect. In the imperfect the following personal element $t \equiv$ (of the 2nd and 3rd

persons) and $n \equiv$ (of the 1st pl.) is lengthened, e.g. $z\dot{a}t=t \equiv g\ddot{a}br=o$ ‘which thou (m.sg.) makest’. For this the form $\dot{a}t=t\dot{a} \equiv g\ddot{a}br=o$ occurs as well, just as in the 1st pl., where $z\dot{a}n=n\dot{a} \equiv g\ddot{a}br=o$ occurs beside $\dot{a}n=n\dot{a} \equiv g\ddot{a}br=o$ ‘which we make ($n\dot{a} \equiv g\ddot{a}b:\dot{a}r \equiv$)’. The forms $\dot{a}t=$ and $\dot{a}n=$ could possibly be related to the Old Ethiopic relative pronouns $\dot{a}nt\ddot{a}$ - and $\dot{a}ll\ddot{a}$ -. The variant $\dot{a}t=$ also occurs in the perfect of the T-stem: $\dot{a}t=t\ddot{a}s\ddot{a}br \equiv \ddot{a}$ ‘which was broken’.

If $z\dot{a}=$ comes to stand before an imperfect form of the 1st sg. ($\dot{a} \equiv$) and 3rd m.sg. and 3rd m./f. pl. ($y\dot{a} \equiv$), then these personal elements are omitted: $z\dot{a}=\emptyset \equiv s\ddot{a}br \equiv o$ ‘which I/he break(s) ($\dot{a}/y\dot{a} \equiv s\ddot{a}b:\dot{a}r \equiv$)’. Orthographically the two forms are occasionally distinguished: $\langle z\dot{a} \rangle$ vs. $\langle z\dot{i} \rangle$.

If $z(\dot{a})=$ comes to stand before a perfect form of an A-stem (e.g. A₁ $\dot{a}sh\dot{a}k \equiv o$ ‘he caused him (=o) to laugh’), then the glottal stop is elided and the underlying $\ddot{a}$ vowel of the causative prefix surfaces again: $z=\ddot{a}sh\dot{a}k \equiv o$ ‘which he caused him to laugh’, $z=\ddot{a}llo$ ($\langle *z\dot{a}=\dot{a}llo \rangle$) ‘which exists (m.sg.)’. It must be remembered that the $\ddot{a}$ -vowel was only realized as a due to the preceding laryngeal.

4. Nouns

Nouns can end in consonant or vowel (except $\dot{a}$). Substantives that end in two consonants take on a word-final i -vowel: $\dot{a}dd \equiv i$ ‘village, home, region’ ($\langle |\dot{a}dd\#| \rangle$). This vowel represents a strengthened version of the ‘nominative/genitive’-ending $\equiv \dot{a}$ of Old Ethiopic (Voigt 2007). As the case may be, when suffixes are added this vowel disappears ($\dot{a}dd=u$ ‘his village’) or, respectively, is reintroduced ($\dot{a}dd=\dot{a}ka$ ‘your (m.sg.) home’ $\langle |\dot{a}ddk| \rangle$). In combined sentence speech i is pronounced as $\dot{a}$, but generally not written as such, e.g. $\dot{A}dd=\dot{a} \ k\ddot{a}yy\ddot{a}h$ ‘(‘red place’ >) place-name (in Akkälä Guzay)’.

4.1. Plural formation

Depending on the final sound of nouns the following plural formations can be distinguished:

- C: $s\dot{a}ra\dot{h}$, pl. - $\dot{a}t$ ‘work’, $gudday$, pl. - $\dot{a}t$ ‘affair’,
- V: $s\ddot{a}wra$ ($\langle$ Arab.), pl. - $\dot{a}t$ ‘revolution’, $\dot{a}yyo$, pl. - $\dot{a}t$ ‘labor’,
- ay: $\dot{h}ar\dot{a}stay$, pl. $\dot{h}ar\dot{a}stot$ ‘ploughman’.

A final (epenthetic) $\equiv i$ is treated either as $-*\emptyset$ or $-V$. It is consequently either seen as an auxiliary vowel that is elided when the plural ending $=\dot{a}t$ is added, or as a phoneme that is reduced to $\dot{a}$ in front of the suffix $=\dot{a}t$: $\dot{a}dd \equiv i$, pl. $\dot{a}dd=\dot{a}t$, $\dot{a}dd\dot{a}=\dot{a}t$ ‘home(town)’.

The formation patterns of broken plurals in substantives are manifold, e.g. $\dot{h}aw$, pl. $\dot{a}hwat$ ‘brother’, $\dot{a}yn \equiv i$, pl. $\dot{a}y\dot{a}nt \equiv i$, ($>$) $\dot{a}int \equiv i$ ‘eye’, $f\ddot{a}r\ddot{a}s$, pl. $\dot{a}fras$ ‘horse’, $\dot{a}dg \equiv i$, pl. $\dot{a}dug$ ‘donkey’. The formation of plurals from plurals is not uncommon, e.g. $b\ddot{a}k\dot{l} \equiv i$, pl. $\dot{a}b\dot{k}\dot{a}lt \equiv i$, $\dot{a}b\dot{a}k\dot{a}l$, $\dot{a}b\dot{a}k\dot{a}lt \equiv i$ ‘mule’. Substantives with four radicals or which are seen as having four radicals have the nominal form $g\ddot{a}b\dot{a}b\dot{a}r(t \equiv i)$ for

indicating plural: e.g. *mäskäl*, pl. *mäsakäl* ‘cross’, *doro*, pl. *därahu* (< **därahaw*) ‘chicken’, *k^wäl’a*, pl. *k^wäl’u* (< **k^wäl’a’əw*) ‘child’, *gäza*, pl. *güzawətt* ≡ *i* ‘house’, *näbr* ≡ *i*, pl. *’anabər* (pl. of pl. **anbər*) ‘leopard’.

4.2. Noun formation

Substantives and adjectives can be recognized according to their nominal forms and their special feminine and plural forms. Only adjectives show special feminine forms. The plural formation of adjectives is restricted.

The most common adjectival formations are:

- *gəbur* [*güβur*], f. *gəbər=t* ≡ *i* (< **gəbur=t* ≡ *i*), pl. *gəbur=at*: This form is used to derive passive participles from the basic stems of three and four radical roots:
 - *kəfut* ‘open(ed)’ – correlated to 0₁ *käfüt* ≡ *ä* ‘he opened’,
 - *bəd:ul* ‘offended’ – corr. to 0₂ *bäd:äl* ≡ *ä* ‘he offended’,
 - *buruk* ‘blessed’ – corr. to 0₃ *barük* ≡ *ä* ‘he blessed’,
 - *ṭərnuf* ‘coherent, compact’ – corr. to the four radical verb *ṭärnäf* ≡ *ä* ‘he put together’.
- *gəbəri*, f. *gəbəri=t*, pl. *gəbər=o*, *gəbär=t* ≡ *i*: This active participle can also be formed from stems other than the basic stems:
 - *kəfati* ‘who opens’ – corr. to 0₁,
 - *bäd:ali* ‘abuser’ – corr. to 0₂,
 - *baraki* ‘who blesses’ – corr. to 0₃,
 - *ṭärnafi* ‘who collects, headman’ – four radical root,
 - *täkär:abi* ‘s.o./s.th. that is being prepared’ – corr. to T₂,
 - *təkafali* ‘participant’ – corr. to T₃,
 - *’ashäki* ‘humorist’ – A₁ *’ashak* ≡ *ä* ‘he caused to laugh’,
- *gäb:ir*, f. *gäb:ar*, pl. *gäb:ärt=i*:
 - *käb:id* ‘heavy’ – corr. to 0₁ *käbäd* ≡ *ä* ‘he was heavy’,
 - *ḥad:is* ‘new’ – corr. to 0₂ *ḥad:äs* ≡ *ä* ‘he renewed’.

4.3. Word formation prefixes

In the nominal sphere, only in substantives can word-formation prefixes be found. The frequent *’a-* occurs with broken plurals as well as with the nominal form *’ag:(äb)abəra*, e.g. *’af:aləḥā*, *’af:älaləḥā* ‘manner of boiling (coffee)’. Many substantives with *t-*prefix originate from Old Ethiopic, like *təmhərt* ≡ *i* ‘learning’, *tə’bit* ‘pride’.

Some nominal forms begin with *mä-*, like *mägbəri* (corr. to 0₁, A₁) / *mägäb:əri* (corr. to 0₂, A₂) etc., which are related to the respective verbal stems, e.g. *mäfləhi* (< **mäflähi*) (corr. to 0₁, A₁) ‘serving for boiling’, *mäb:azähi* ‘means of increase’ (corr. to T₁ *täbüzḥ* ≡ *ä* ‘he increased’).

The *mə-*prefix is used for the formation of all infinitives. In this process no distinction is made between the outer verbal derivations like 0, A, T, but only between the inner derivations X₁, X₂, X₃:

- 0₁, A₁, T₁: *māšbar* ‘breaking, to break, to let break, to be broken’,
- 0₂, A₂, T₂: *māḡəb:ar* ‘paying tax, causing to pay tax’,
- 0₃, A₃, T₃: *māḡərak* ‘blessing, cause to bless, being blessed’.

With the reduplicating stems the distinction can be made either according to 0₁ or 0₂ resp. serving as the stem from which derivations are made.

- 0₄, A₄, T₄ (on the basis of 0₁, e.g. *sāḡār* ≡ *ä* ‘he broke’): *mās:əḡəḡar* ‘breaking to pieces’
- 0₄, A₄, T₄ (on the basis of 0₂, e.g. *bād:äl* ≡ *ä* ‘he offended’): *māb:ədəd(:)al* ‘offending, being offended repeatedly’,

The infinitive for At₃ is *māḡ:əḡar*, e.g. *mən:əkās* ‘causing to bite each other’ which belongs to *ʾan:akäs* ≡ *ä* ‘he caused to attack each other’.

4.4. Word formation affixes

Beside the different final vowels (like *-o* in *hədmə* ‘traditional (stone) house’ and *-a* in *färäḡa* ‘half’) there are amongst others the endings *-ät*, *-at*, *-ya* (*wərrəša* ‘inheritance’), *-ta* (*mäḡäm:ärta* ‘beginning’), *-ot*. Adjectives can have the ending *-ay* (*ʾamḡaray* ‘Amhara’), *-awi*, *-an*, *-am*, *-äñña* (< Amh., for which true Tigrin. *-äyna*). See also the *-t* and *-t* ≡ *i* suffixes that are encountered in some feminine and plural formations, as well as *-i* with the participles (e.g. 0₁ *sāḡari*) and *mäsbari*-formations.

4.5. Prepositions

Most frequently occurring are the two single consonant prepositions *bə-* ‘in, with, by’ and *nə-* (< *lə-* as preserved in Southern Tigrinya) ‘to, for; nota accusativi’ (cf. the L-suffixes of the verb), both with a phonetic shwa, i.e. *bə=ʾu* ‘in him’. Commonly the reinforced presuffixal forms *bəʾa=* and *nəʾa=*, e.g. *bəʾa=ḡa* ‘by you (m.sg.)’, are found. With suffixes of the third persons the forms *bəʾə=* and *nəʾə=* occur due to suffix-initial *ʾ*, e.g. *bəʾə=ʾu* ‘in him’ or with vocalic assimilation *bəʾü=ʾu* respectively. Glottal stop can in this case be strengthened to *ʾain*: *bəʾa=* und *nəʾa=*.

Most prepositions are bi-radical like *ʾab* ‘in, at’, *nab* (< **nə-ʾab*) ‘to(ward)’, (*ʾən*)*kab* ‘from’, *mās* ‘with’, *kām* ‘as, like’. Tri-radical are *kənd* ≡ *i* ‘instead’, *məʾənt* ≡ *i* ‘for, because’, *kəsab*, *kəsəʾ* ‘till’. With some prepositions the prenominal form is distinct from the presuffixal form, as in *kab* ‘from’, *kaḡa=*, e.g. *kab~maʾkäl~* ‘from (the midst of)’, *kaḡ=ʾu* (< *kaḡa=ʾu*) ‘from him’, just as with *mās* ‘with’, *məsa=ḡa* ‘with you (m.sg.)’, *kām* ‘as, like’, *kāma=y* ‘like me’.

Some prepositions are of nominal origin and are usually found in connection with primary prepositions, e.g. *ʾab ləʾl* ≡ *i~*, *ʾab laʾl* ≡ *i~* ‘above, upon’, *ʾab wəst* ≡ *i~* ‘in, among’.

5. Verbs

A verbal form can be described according to the following indications:

- verbal root:
 - three or four radicals, very rarely two radicals,
 - nature of radicals: with strong radicals, laryngeals or semi-vowels,
- verb stems, e.g. causative stem,
- tense/aspect/mood forms (as for the participle and infinitive see Nouns): perfect, imperfect, gerund, jussive, imperative,
- person (1st–3rd, sg. or pl.).

In the following only certain phenomena will be analysed.

5.1. Verbal stems

The system of verbal stems is determined by the combination of three types of formation:

- external verbal derivation (X): basic stem (0), causative stem (A), reflexive/passive stem (T), causative-reciprocal stem (At), et alia,
- internal verbal derivation (1–3): simple basic stem (X₁), geminate stem (X₂), and lengthening stem (X₃),
- reduplicative/frequentative stem derivation (R) from an externally and internally formed verbal stem, e.g. 0_{1R} *säbäḥär* ≡ *ä* (from 0₁ *säḥär* ≡ *ä*), T_{2R} *täḥädad* (:) *äl* ≡ *ä* (from T₂ *täḥäd* : *äl* ≡ *ä*).

Restricting ourselves to the most frequent 0-, A- and T-stems and the internal derivations X_{1–3}, a picture of nine verbal stems emerges, to which their respective perfect forms are quoted in table 68.6.

Tab. 68.6: Verbal stems in Tigrinya

stems	Basic stem	Causative	Passive/Reflexive
simple	0 ₁ <i>gäḥär</i> ≡ <i>ä</i> 'he made'	A ₁ 'agḥär ≡ <i>ä</i>	T ₁ <i>tägäḥr</i> ≡ <i>ä</i>
geminate	0 ₂ <i>gäḥ:är</i> ≡ <i>ä</i> 'he payed tribute'	A ₂ 'agäḥ:är ≡ <i>ä</i>	T ₂ <i>tägäḥ:är</i> ≡ <i>ä</i>
lengthening	0 ₃ <i>baräk</i> ≡ <i>ä</i> 'he blessed'	A ₃ 'aḥaräk ≡ <i>ä</i>	T ₃ <i>täḥaräk</i> ≡ <i>ä</i>

Membership of the basic stems (0_{1–3}) is in almost all cases lexically determined. But there are some remnants of the old Semitic derivational option 0₁ → 0₂, e.g. 0₁ (**zäw-är* ≡ *ä* >) *zor* ≡ *ä* 'he walked, went round' → 0₂ *zäw:är* ≡ *ä* 'he turned'. Membership of a verb belonging to the simple, geminate or lengthening basic stem remains intact with all further derivations.

Verbs of the simple (and geminate) basic stems frequently form T₃-stems, e.g. (0₁ *zor*≡ä ‘he walked’ →) T₃ *tāzawär*≡ä ‘he visited’, (0₁ *ked*≡ä, *käd*≡ä ‘he went’ →) T₃ *tākayäd*≡ä ‘he/it functioned’, (0₁ *mārmär*≡ä ‘he examined’ →) T₃ *tāmāramär*≡u ‘they asked each other’, (0₂ *wäs:än*≡ä ‘he established, delimited’ →) T₃ *tāwasän*≡ä ‘he bordered’. This expresses the mutuality / reciprocity of the action, which is often reinforced with the reduplicating T₄-formation, e.g. (T₃ *tāmasäl*≡ä ‘he resembled’ →) T₄ *tāmāsasäl*≡u ‘they resembled one another’.

0₃ verbs can also form a T₃ and T₄-stem: (*baräk*≡ä ‘he blessed’ →) T₄ *tābāraräk*≡u ‘they blessed each other’. Apart from that the T₃-stem is also the passive stem for 0₃, e.g. (*baräk*≡ä ‘he blessed’ →) *tābāräk*≡ä ‘he was blessed’.

The causative stem for all T₃-stems, that do not constitute the passive for 0₃, is the At₃-stem (with assimilation of the *t* to the first radical), see the At₃-stems of the above-mentioned verbs: *’azzawär*≡ä ‘he caused to visit’, *’akkayäd*≡ä ‘he managed’, *’ammāramär*≡ä ‘he caused to examine each other’. The causative for the T₄-stem is the At₄-stem: (T₄ *tāsāmamē*≡u ‘they agreed on’ →) At₄ *’assāmamē*≡ä ‘he caused to agree’, *’ammāsasäl*≡ä ‘he caused to resemble’. With verbs having a laryngeal as first radical, these stems are realized in the form Attä₃ and Attä₄, e.g. (T₃ *tā’aräk*≡u ‘they were reconciled’ →) Attä₃ *’attä’aräk*≡ä ‘he reconciled’, (T₄ *tā’asasär*≡u ‘they tied one another’ →) Attä₄ *’attä’asasär*≡ä ‘he interlinked, combined’, whereby *’attä-* can also be realized as *’att-* oder *’atta-* (i.e. *’attē-*).

5.2. Verbal forms

In addition to the perfect already cited the other relevant verbal forms gerund, imperfect, jussive (all in the 3rd m.sg.) and imperative which is morphologically closely re-

Table 68.7: Verbal forms in Tigrinya

	0		T	
·1	<i>gäbär</i> ≡ä <i>yə</i> ≡ <i>gäb:ər</i> ≡ <i>yə</i> ≡ <i>gbär</i> ≡	<i>gäbir</i> ≡ <i>u</i> ¹⁾ (<i>yə</i> ≡ <i>gäbr</i> ≡ <i>u</i>) <i>gəbär</i> ≡	<i>tägäbr</i> ≡ä <i>yə</i> ≡ <i>gəb:är</i> ≡ <i>yə</i> ≡ <i>ggäbär</i> ≡	<i>tägäbir</i> ≡ <i>u</i> ²⁾ (≡ <i>u</i>) <i>tägäbär</i> ≡
·2	<i>gäb:är</i> ≡ä <i>yə</i> ≡ <i>gəb:ər</i> ≡ <i>yə</i> ≡ <i>güb:ər</i> ≡	<i>gäb:ir</i> ≡ <i>u</i> (≡ <i>u</i>) <i>gäb:ər</i> ≡	<i>tägäb:är</i> ≡ä <i>yə</i> ≡ <i>gəb:är</i> ≡ <i>yə</i> ≡ <i>ggüb:är</i> ≡	<i>tägäb:ir</i> ≡ä (≡ <i>u</i>) <i>tägüb:är</i> ≡
·3	<i>baräk</i> ≡ä <i>yə</i> ≡ <i>ḥarək</i> ≡ „	<i>barik</i> ≡ <i>u</i> (≡ <i>u</i>) <i>barək</i> ≡	<i>täḥaräk</i> ≡ä <i>yə</i> ≡ <i>bbarək</i> ≡ „	<i>täbarik</i> ≡ <i>u</i> (≡ <i>u</i>) <i>täḥarək</i> ≡
	A			
·1	<i>’agbär</i> ≡ä <i>y</i> ≡ <i>ägəb:ər</i> ≡ <i>y</i> ≡ <i>ägbər</i> ≡	<i>’agbir</i> ≡ <i>u</i> (<i>y</i> ≡ <i>ägbər</i> ≡ <i>u</i>) <i>’agbər</i> ≡	perf. ger. impf. (impf. 3 rd pl.) juss. imper.	
·2	<i>’agäb:är</i> ≡ä <i>y</i> ≡ <i>ägäb:ər</i> ≡ „	<i>’agäb:ir</i> ≡ <i>u</i> (≡ <i>u</i>) <i>’agäb:ər</i> ≡		
·3	<i>’aḥaräk</i> ≡ä <i>y</i> ≡ <i>aḥarək</i> ≡ „	<i>’aḥaräk</i> ≡ä (≡ <i>u</i>) <i>’aḥarək</i> ≡	(1) besides <i>gäyr</i> ≡ <i>u</i> (2) besides <i>tägäyr</i> ≡ <i>u</i>	

lated to the jussive must also be considered. The gerund is a special verbal form known in some Ethiosemitic languages. Depending on the verb class it denotes the result of an action in the past or a simultaneous action or state. The following picture emerges of the five verbal forms in the six most current verbal stems (as shown in table 68.7.). The core morphemes are in each case unchanged – with the exception of the imperfect in the 0₁ and A₁-stem, where the consonant lengthening is abandoned when (personal and object) suffixes are added. The respective forms are shown in brackets. Lengthening of the last radical in the jussive and imperative in some cases is not indicated, e.g. *gəbär* = *o* (i.e. *gəbär* = $\emptyset$ = *o*, i.e. in the usual transcription *gəbärro*) ‘do (m.sg.) it!’. Note also that the perfect personal element of the 3rd m.sg. $\equiv \ddot{a}$ has the variant $\equiv \emptyset$ before vowel-initial object suffixes, e.g. perf. A₁ *’afkär* $\equiv \ddot{a}$, *’afkär* = *a* (i.e. *’afkär* = $\emptyset$ = *a*) ‘he loved (her)’.

5.3. Conjugational morphemes

According to the junctures the five verbal forms of every stem formation can be divided into three conjugational classes:

$y \equiv [\dots] \equiv$, $(\equiv) [\dots] \equiv$	prefix (and suffix) conjugations (i.e. impf. and jussiv/imperative):
$y \equiv [\dots] \equiv$ (imperfect and jussive)	
$(\equiv) [\dots] \equiv$ (imperative)	
$[\dots] \equiv \ddot{a}$	suffix conjugation (perfect)
$[\dots] \equiv u$	gerund

The endings of the imperative are identical with those of the two prefix conjugations. The core morphemes marked by [...] are in each case different. Perfect and gerund, which display the same junctures, are however vocalized differently. The core morpheme in the perfect is as a rule vocalized with *ä* (after laryngeal *a*), *a* (after laryngeal *ā*) and *ə/∅* (before laryngeal). With gerund, an *i* vowel takes the position between the 2nd and 3rd radical all other vowels being preserved. Because of the *i*-vowel that is characteristic and never omitted the gerund is always easily identified.

The prefixes and suffixes of the three conjugation types are shown in table 68.8. The personal prefixes $y \equiv V$ and $yə \equiv C$ (resp. with $t \equiv$, $' \equiv$, $n \equiv$) are conditioned by the

Table 68.8: Conjugational morphemes in Tigrinya

	$\equiv [\text{Impf./Juss.}] \equiv$	$(\equiv) [\text{Imper.}] \equiv$	$[\text{Perf.}] \equiv$	$[\text{Ger.}] \equiv$
sg. 3 rd m.	$y \equiv [\dots] \equiv$	-	$\equiv \ddot{a}$	$\equiv u$
f.	$t \equiv [\dots] \equiv$	-	$\equiv \ddot{a}t$	$\equiv a$
2 nd m.	$t \equiv [\dots] \equiv$	$[\dots] \equiv$	$\equiv ka$	$\equiv ka$
f.	$t \equiv [\dots] \equiv i$	$[\dots] \equiv i$	$\equiv ki$	$\equiv ki$
1 st	$' \equiv [\dots] \equiv$	-	$\equiv ku$	$\equiv \ddot{a}$
pl. 3 rd m.	$y \equiv [\dots] \equiv u=ta$	-	$\equiv u=ta$	$\equiv (at)om$
f.	$y \equiv [\dots] \equiv a=ta$	-	$\equiv a=ta$	$\equiv (at)\ddot{a}n$
2 nd m.	$t \equiv [\dots] \equiv u=ta$	$[\dots] \equiv u$	$\equiv ((k)at)kum$	$\equiv ((k)at)kum$
f.	$t \equiv [\dots] \equiv a=ta$	$[\dots] \equiv a$	$\equiv ((k)at)kən$	$\equiv ((k)at)kən$
1 st	$n \equiv [\dots] \equiv$	-	$\equiv na=ta$	$\equiv na=ta$

segment that follows them (vowel or consonant); in this case the information $|y \equiv|$ would be sufficient. After the consonantal element of the personal prefix $t \equiv$ and $n \equiv$ no shwa' is present if it closes a syllable, as in $k\partial = t \equiv mäs:\partial' \equiv$ '(so)that ($k\partial =$) thou (m.sg.) comest ($t\partial \equiv mäs:\partial' \equiv$)'. After the prefixed negation particle $'ay =$ the personal prefix of the 1st sg. ($'$) is omitted: $'ay = \emptyset \equiv mäs:\partial' \equiv = \partial n$ 'I do/will not come'. After the relative particle $z =$ and the conjunction $k =$ the personal prefix ($y \equiv$) of the 3rd m.sg. and 3rd m./f. pl. is also elided: $*k\partial = ' \partial \equiv mäs:\partial' \equiv$ 'that I come' / $*k\partial = y\partial \equiv mäs:\partial' \equiv$ 'that he comes' $> k\partial = \emptyset \equiv mäs:\partial' \equiv$. In this case in some spelling conventions of Tigrinya a distinction is made in the orthography between $<ki>$ (3rd m.sg./pl.) and $<k\partial>$ (1st sg.).

Not taken into consideration are the forms of the obligatory personal suffixes before object suffixes, e.g. perfect $A_1 'aflät \equiv kumu = ni$ 'you (2nd m.pl. $\equiv kum$ without object suffix) informed me ($= ni$), ger. $At_3 'akkayid \equiv at = :o$ 'she (3rd f.sg. $\equiv a$ without object suffix) has managed it ($= o$), v.s.

5.4. Weak verb classes

Verbs are called 'weak' if they contain either a semi-vowel (u, i , usually transcribed as w and y) or a 'laryngeal' (i.e. glottals $'$, h and pharyngeals $\hbar, ' \epsilon$) as first, second or third radical. The modifications that ensue from this can in general easily be understood. Here only a few rules can be mentioned. In many cases the original forms in tandem with the standard forms can still be found preserved in dialects.

II w : $\ddot{a}w\ddot{a} > o$ (perf. $0_1 \ddot{s}äw\ddot{a}r \equiv \ddot{a} > \ddot{s}or \equiv \ddot{a}$ 'he carried'), $\ddot{a}w > o$ (impf. $y\partial \equiv \ddot{s}äw\ddot{a}r \equiv u > y\partial \equiv \ddot{s}or \equiv u$ 'they (m.) carry'), $\ddot{a}wi > \ddot{a}^wi > oy$ (ger. $\ddot{s}äw\ddot{a}r \equiv u > \ddot{s}oyr \equiv u$ 'he has carried'),

II y : $\ddot{a}y\ddot{a} > (e >) \ddot{a}$ (perf. $0_1 k\ddot{a}y\ddot{a}d \equiv \ddot{a} > ked \equiv \ddot{a} > k\ddot{a}d \equiv \ddot{a}$ 'he went'), $\ddot{a}y > (e >) \ddot{a}$ (impf. $y\partial \equiv k\ddot{a}y\ddot{a}d \equiv u > y\partial \equiv k\ddot{a}d \equiv u$ 'they (m.) go'), $\ddot{a}yi > \ddot{a}^yi > \ddot{a}y$ (ger. $k\ddot{a}y\ddot{a}d \equiv u > k\ddot{a}yd \equiv u$ 'he has gone'),

The rules for verbs with w or y as third radical are similar. See also the rules $\partial y > i$ ($y\partial \equiv sät:\partial y \equiv > y\partial \equiv sät:i \equiv$ 'he drinks') and $iw > iy > y$ ($fät\ddot{w}ir \equiv u > fät\ddot{y}ir \equiv u > fät\ddot{y}ir \equiv u$ 'he has loved') – by the way, the realisation of i and y depends on the position in the syllable.

More interesting are forms that are morphologically deviant like juss. $0_1 y\partial \equiv \ddot{s}ur \equiv$ 'may he carry' (with the recognizable vocalisation $y\partial \equiv \ddot{s}w\ddot{a}r \equiv$) vis-a-vis $y\partial \equiv sb\ddot{a}r \equiv$ 'may he break'.

With verbs that contain laryngeals the laryngeal rules must be observed (v.s.). Morphologically deviant is e.g. the imperfect of $T_1 (= T_2)$ $y\partial \equiv s:\ddot{a}h\ddot{a}b \equiv$ (with indeterminacy of the vowel before laryngeal) 'he is pulled' vis-a-vis $y\partial \equiv s\ddot{a}b:\ddot{a}r \equiv$ 'she is broken to pieces'. Instead of the second laryngeal consonant which cannot be lengthened ($\hbar$), lengthening is therefore transferred to the first radical. This form is the remnant of the old form to be reconstructed $*y\partial \equiv g:\ddot{a}b:\ddot{a}r \equiv$, which with regard to consonant lengthening has been preserved in Amharic impf. $T_{1/2} y\partial \equiv g:\ddot{a}b:\ddot{a}r \equiv$.

5.5. Irregular verbs

$hab \equiv \ddot{a}$ 'he gave': The first radical $*w$ has been elided in most forms (ger. $0_1 [*w\ddot{a}] h\ddot{a}b \equiv u$ 'he has given', impf. $y\partial \equiv [*w\ddot{a}] h\ddot{a}b \equiv$ 'he gives'), but is preserved in some cases: T_1 perf. $t\ddot{a}w\ddot{a}h\ddot{a}b \equiv \ddot{a}$ 'he was given'.

haz $\equiv$ *ä* 'he seized': The etymologically posited first radical **ʔ* never appears: ger. 0₁ *hiz* $\equiv$ *u* 'he has seized', imper. *haz* $\equiv$ *=:o* 'seize him!'. In the derived verbal stems *t* acts as first radical (root $\sqrt{thz}$): perf. A₁ *'athaz* $\equiv$ *ä* 'he caused to grasp', perf. T₁ *tätahz* $\equiv$ *ä* / *tätəhaz* $\equiv$ *ä* 'he was seized', impf. *yə* $\equiv$ *təhaz*.

bäl $\equiv$ *ä* 'he said': Statistically this is the most frequent verb in Tigrinya texts. In some forms it shows a weakness of the first radical *b* ($> \emptyset >$); in other forms the second radical *h* is often elided in the basic stem: ger. 0₁ *bil* $\equiv$ *u* / *'il* $\equiv$ *u* 'he has said', perf. A₁ *'abbäl* $\equiv$ *ä* ($< *abhal \equiv ä$) 'he caused to say', infin. 0₁/A₁/T₁ *məbbal* ($< *məbhal$), perf. Ast₁ *'astəbhal* $\equiv$ *ä* 'he noticed'.

5.6. Negation

Of the verbal forms only perfect, imperfect and jussive can be negated. In the perfect and imperfect the negative morphemes are *'ay=...-(ə)n*, e.g. *'ay=yə* $\equiv$ *mäs:ə'* $\equiv$ *ən* 'he does not come'. For the negated gerund the negated perfect fulfils this function: *mäs'i* $\equiv$ *u* 'he has come' – *'ay=mäs'* $\equiv$ *ä-n* 'he did not come'. In the 1st sg. of the imperfect the glottal stop is omitted: (**'ay=ə* $\equiv$ *mäs:ə'* $\equiv$ *ən* $>$) *'ay=* $\equiv$ *mäs:ə'* $\equiv$ *ən* 'I do/will not come' – thus the opposition to the 3rd m.sg. is preserved. The $\equiv$ of the 2nd f.sg. is treated like an auxiliary vowel and reduced to *ə*: *'ay=tə* $\equiv$ *mäs'* $\equiv$ *ən* 'you (f.sg.) does/will not come'.

5.7. Conjunctions

Only the perfect and imperfect as well as to a lesser degree the gerund can be subordinated to another verb, chiefly the main verb, with the help of conjunctions. Here are a few examples:

Perfect: *'anna-* *'anna-tähag^w:äs* $\equiv$ *ä* *'əyyu* *zə* $\equiv$ *zzarəbä* $\equiv$ *nni* 'joyful (it is, that) he spoke with me', *'əntä-* *'əntä-gäläs* $\equiv$ *ka=lläy* 'if thou explainest it to me', *käy=* ($< k=ay=$): *käy=həbä'* $\equiv$ *kum nəgär* $\equiv$ *u=ni* 'tell ye (m.pl.) me openly (i.e. without you concealing (anything))!', *məs:* *məs šälmät* $\equiv$ *ä* 'as it grew dark',

Gerund: *'əntä-* *'Amlak fəḵad=u* *'əntä-koyn* $\equiv$ *u* 'God willing (i.e. if it is God's will)',

Imperfect: *'əntä-zə-* *'abbo* *'əntä-zə* $\equiv$ *həl:əw* $\equiv$ *ä=nni* 'if I had a father (lit. if a father were to me)', *käm-zäy=* ($< käm-zə=ay=$): *käm-zäy=yə* $\equiv$ *konä* $\equiv$ *lläy* 'so that it may not occur to me', *kə=* of simultaneity, i.e. action at the same time as that of the main verb: *mələ't* $\equiv$ *i mə'alt* $\equiv$ *i kə=* $\equiv$ *käy:əd* $\equiv$ *wä'al* $\equiv$ *ku* 'I spent the whole day running', reinforced *kə=[Impf.] k=ällo* $\equiv$, *kə=* of posteriority, i.e. action after that of the main verb: *mäzäk:ärta* *kə=* $\equiv$ *konä* $\equiv$ *lläy* 'that it be (*yə* $\equiv$ *käw:ən*) a memory for me', negated *käy=*, *mə'ənt* $\equiv$ *i kə=* 'in order that'.

5.8. Periphrastic verbal construction

Very often the five verbal forms do not occur alone but combine with auxiliary verbs to form periphrastic expressions. The participant auxiliary verbs are the verbs of being

kon≡*ä* (impf. *yə*≡*kāw:ən*≡), *'allo* (< **'allāw*≡*ä*, perf. 0₂ conjugation except 3rd f.sg. *'alla*) (impf. 0₂ *yə*≡*həl:u*≡), *nābār*≡*ä* (impf. *yə*≡*nāb:ər*≡) and the copula (*'əyy*≡*u*, *'əyy*≡*a*, gerundial conjugation) as well as *šānh*≡*ä* 'he waited' and the verbs of time (e.g. *wä'al*≡*ä* 'he spent the day', v.s.). Here are only a few examples (for details see Voigt 1977): *kə*≡*mäs:ə'*≡ *'əyy*≡*ä* 'I shall/will come', *kə*≡*n*≡*mälläs*≡ *sälä-zə*≡*nābār*≡*ä*≡*nna* 'because we had to return', *täḵ*^w*a'it*≡*a* *zə*≡*šānh*≡*ät* 'which had been dug (some time ago)', *'ay*≡*fälät*≡*ku-n* *näyr*≡*ä* (< *nābir*≡*ä*) '(in those days) I did not know', *yə*≡*mmähar*≡*u* *nābār*≡*u* 'they used to learn', *'anna-täsakäy*≡*u* *'ənk*≡*ällāwu*≡ 'while they suffer, through their suffering'.

6. Syntax

Generally the determining parts of a sentence precede those they determine. Thus a demonstrative, adjective and a relative clause precede the substantive. A marked exception is the construct state combination (marked by the $\sim$ juncture), in which the governed noun follows the governing noun, e.g. *māngəst*≡*i*~*'Ertəra* 'government of Eritrea', *zätä*~*sälam* 'peace talk', *mäsäl*~*däḵḵ*≡*i*~*säbat* 'Human rights', *kəl:əl*~*Təgray* 'state of Tigray'. The governed noun can only precede the governing one with the help of *nay* 'of': *nay resa sanduk* 'coffin (box for a dead body)'. A reversed sequence is also possible (v. Voigt 2003): *kəltafä nay səhfät* 'fastness of writing'.

Since the syntactically dependent parts of the sentence as well as the subordinated verbal forms precede in a sentence, the verb must be positioned at the end of the sentence (SOV).

Elaborately developed and very popular is the formation of broken sentence constructions. The copula sentences (cleft sentences), in which the main verb (of the sentence) is relativized, can be divided into two groups. In the personal copula sentence there is a direct concord between the copula, which follows the predicate, and the subject of the relativized verbal form, e.g. *kämzi 'əyy*≡*ä* *gäbär*≡*ku* 'it is I that I made (it) thus', *'anä 'ay*≡*ku-n* *zə*≡*wäd:ək*≡ 'I shall not fall (it is not I who shall fall)'. In the impersonal (or abstract) copula sentence this direct concord does not hold, e.g. *kab zə*≡*hasb*≡*o* *näw:iḥ* *gize koynu 'əyy*≡*u* *zə*≡*bäl*≡*ku=ki* '(lit.) it has been for as long a time ago as I can think of that I have been telling thee (this)'. From the copula sentences the copulative sentences can be distinguished in which the copula stands at the end of the sentence: (personal) *'az:əy*≡*u* *däss z*≡*ebbäl*≡ *'əyy*≡*u* 'it is very pleasing', (impersonal/abstract) *nəss=əka 'ət*≡*tə*≡*mäs'*≡*o* *dəhr*≡*i*~*šəbāh* *'əyy*≡*u* 'thou (m.sg.) must come the day after tomorrow (that thou comest is the day after tomorrow)' (see Voigt 1977).

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69. Tigrinya as National Language of Eritrea and Tigray

1. Designation
2. Distribution
3. Native speakers
4. History
5. War of Liberation
6. School education
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Abstract

Tigrinya, after Amharic, is the second largest (Ethio-)Semitic language spoken in the Horn of Africa. In spite of T. developing its own literature in the 19th century its status was that of a ‘minority language’ that had to struggle vis-à-vis Italian and Amharic. Since the end of the Därg-Regime (1991) T. has been enjoying the status of a language used in school and administration in Eritrea and Tigray (Ethiopia).

1. Designation

Tigrinya – with its numerous dialects which are spoken in Eritrea and the regional state (or Ethiopian province) of Tigray – had originally a shared history with the closely related Tigre which is spoken in the Eritrean lowland north, east and west to the central highland (*käbäsa*). This explains the very similar designations *Təgray* ‘Tigrinya’ (in Tigrinya) and *Təgrāyīt* ‘Tigre’ (in Tigre). Nowadays in order to avoid any confusion with the Ethiopian state of Tigray, in Eritrea the Amharic term *Təgrāñña* is generally used, which ironically had the original meaning of ‘language of Tigray’.

There are native attempts to replace the Amharic ending *-əñña* (which mainly designates languages, cf. *galləñña*, *oroməñña* ‘Oromo language’) with home-grown formations (substituting [nj] with [jn], e.g. *unätäyyna*, *unätäñña* ‘true’ from *unät* ‘truth’), thus *Təgräyyna* (see Sälomon Gäbrä-Krastos 1993), which is reminiscent of the Italian designation (*lingua*) *tigrina*.

In Eritrea on occasions when the Latin script is used – as on the 1 Nfa (*nakfa*) stamp of 2000 – preference is often given to the Italian spelling of the word: *Tigrigna*. Agostinos Tädlä (1994) would like to resurrect the term *Ḥabäša*, more precisely *ḵ^wank^wa* or *zäräḥa Ḥabäša* ‘lingua abissina, language of (tigrinophone or ethiosemitophone) Abyssinia’ (Amharic speakers would use the term *Aḥäša*).

In Eritrea the word Tigrinya is used as an ethnographic term; more explicit is the expression *bäher(ä) Təgrāñña* ‘nationality of the Tigrinya(-speaker)’. But in this case

speech and ethnic community do not (fully) coincide. The Muslim tigrinophones, called Gäbärti, see themselves as an ethnic group in their own right.

So far a precise term for the speakers of Tigrinya in both countries has been lacking. But the term Tigrinya is used overarchingly without any specific geographical reference. Otherwise the terms Tigrayans (*Təgrayot*, *Təgaru*) or Eritreans (*ʿErtərawəyan*) which comprise all inhabitants or natives of the country are used. The use of Tigrinya as cover term is justifiable insofar as in Tigrinya usage a language name and a people's name can be identical, e.g. *Talyan*, *Təlyan* 'Italian(s), It. language', *Šäho*, *Saho* 'Saho(s), S. language'. This is why *Təgray* is used for the region's name as well as that of the speaker(s). Besides there is an ethnonym *Təgraway*, f. *Təgrawäyti* 'Tigrayan (Tigraian), native of Tigray' (Smidt 2005).

As a useful term for speakers living in both countries English can employ *Tigrinyans* (or *Tigrinians*), German *Tigriner* and Italian *Trigrini*. The Amhara like to call the region, its inhabitants and the speakers of this language *Tigre*, without distinguishing between the *Tigrinyans* and the speakers of *Tigre* (perhaps: Tigreans).

2. Distribution

Tigrinya is spoken in the three classical Eritrean provinces of ʾAkkälä Guzay, Ḥamasen and Säraye/Säraʿe and in the upland parts of Tigray (in its former borders) as well as in the adjacent districts of Wollo and Bägemdär. As a result of the internal reorganization of Ethiopia in 1994 the tigrinophone areas were united and the *källäl Təgray*, i. e. the 'Federal State of Tigray', was enlarged by gaining areas originally belonging to the provinces (Amh. *awrağğa*) of Səmen and especially Wägära of the Administrative Region (called in Amh. *käflä-hagär*, later *täkläy gəzat*) Gondär (also called Bägemdär–Səmen or Bägemdär). The additional areas in today's *wäräda* terminology are:

Šällämti (capital May-šäbri, Amh. May-šämra),
Kafta Ḥumära (capital Ḥumära),
Wälkayit/Wälkäʾit (capital 'Addi Rämäs, Amh. Addi Rämät), and
Šägädä (capital Kätäma-nəgus).

These regions did however not form part of the 'Greater' Eritrea within the *Africa Orientale Italiana* which also contained, apart from Tigray, the greater part of Wällo (except Wäldiya and Dässe and the areas to the west of these). Of the historical Wällo only a small tigrinophone area belongs now to the *källäl Təgray*. These are the regions to the south of May-Čäw (which formerly was part of the two *awrağğa* of Wag and Rayya-nna Kəbbo), and they are now incorporated in the *wäräda*'s of Oflla, Alamaṭa and Rayya 'Azäbo (part of which used to belong to Rayya-nna Azäbo). The whole of the Eastern lowland with its large tigrinophone minority is now part of the *yä-Afür källäl* 'Afar Regional State'. All data here used are based on the two atlases *Märräğa kartawočč* (1979) and *Mädbälä karta Təgray* (1998).

In the independent Eritrea (1991 and officially after a plebiscite (*räfärändäm*) in 1993) the classical division of the three tigrinophone provinces of ʾAkkälä Guzay (capital 'Addi-ḳäyyəḥ), Ḥamasen (capital ʾAsmära) and Säraye / Säraʿe (capital Mändäfära, formerly called 'Addi Wägri/Ugri) was initially upheld. In the new division into provin-

ces of 1995 the five provinces (*zoba*, pl. *zobatat*) are numbered consecutively and given geographical designations. The provinces (5th) *Däbub* ‘South’ and (6th) *Ma’käl* ‘Centre’ do comprise roughly the traditionally tigrinophone areas of these provinces, however, some tigrinophone regions are now part of the provinces (2nd) *Sämenawi käyyäh bahri* ‘Northern Red Sea (province)’ (3rd) *Ansäba* and especially (4th) *Gaš Barka*.

3. Native speakers

The number of Tigrinya speakers can only be roughly estimated based on the available numbers for the total populations of both countries, i. e. Eritrea and Ethiopia. According to the *Fischer Weltalmanach 2009* Ethiopia has a population of 77 million, a figure extrapolated from that of 2006. Of these 9%, i. e. 7 million, are ‘Tigray’ speakers within the Federal State of Tigray. For Eritrea the figure is ‘ca. 50 %’ of a total population of 4.7 million. This would suggest – taking into account a population increase since 2006 – a figure of ca. 10 million native speakers of Tigrinya. In spite of this figure being possibly too high, it still confirms Tigrinya as the third largest Semitic language after Arabic and Amharic.

4. History

For many centuries it was the old Ethiopic language (Ge‘ez) with its literature that was taught in the traditional Ethiopian orthodox church schools and in convents, and similarly in the Arabic Qur‘ān schools it was the Arabic language and literature.

In the 19th c. for the first time Tigrinya became a subject taught in Protestant and Catholic mission schools. This missionary activity began from 1866 on by the Swedish Lutherans (first in Mokullu) and from 1872 on by the French Lazarists (first in Keren). With the Italian conquest and penetration of the country (founding of Colonia Eritrea 1890) the Italian influence was in the ascendancy. The Italian education system was however – as in the Italy of the time itself – underdeveloped; only very few Italian government schools were established, and the native population received instruction only up to class 4. Adapting to changed circumstances the mission schools included Italian in their curriculum. By 1905 ca. 500 children were taught in 7 Swedish mission schools (Monkullu, Gäläb, Bäläsa, Zazzäga, Asmära). In the Catholic mission schools the French Lazarists were replaced for national reasons by the Italian Capuchins of the Order of Friars Minor (Cappuccini dei Frati Minori, in short: Minori Cappuccini). The school system made a distinction between schools for natives and for ‘whites’, i. e. Italians, Europeans, white Oriental and assimilated persons; ‘assimilati’ were mostly children with Italian fathers and Eritrean mothers. According to a survey by the governor (1897–1907) Ferdinando Martini (1841–1928) for Europeans and assimilati there were in Eritrea in 1907 three government schools (Asmära, Kärän, ‘Addi Ugri) and four mission schools (Massawa, Säganäyti, Asmära, Kärän). For Eritreans there were 9 Swedish and 6 Catholic mission schools, a private Italian school (1887–1927, run by padre Luigi Bonomi, 1841–1927) as well as 59 traditional (Christian and Is-

lamic) schools. In 1909 a modern Italian school was established in ‘Addi Ugri for the sons of the native ‘nobility’.

It is reported that in the 1920’s over 1,100 pupils frequented the Swedish missionary schools. Altogether Eritrea is supposed to have had only 20 elementary schools with 4,177 pupils in 1938–39 (Gottesman 1998, 77). This shows that the extent of schooling was quite low at that time.

The schools for Eritrean pupils used Tigrinya school books, cf. the bibliography in Agostinos-Tädlä (1994). Examples are the five volumes of *Ḳʷāḻa bə-nəʿusu ḳorbāt bə-rəḥusu* (‘As long as a child is small and its skin is still fresh’) written by padre Giandomenico da Milano (1875–1936) which served as a primer (*Libro per le scuole indigene della Colonia Eritrea*) from the 1st to the 5th class (Asmara: Franciscan printing office, 1923–1930 (?)). Special mention must be given to the 8 voluminous bilingual school books (Collezione di manuali e libri scolastici) that were printed between 1912 and 1930 by the Tipografia Franciscana in Asmara (Tekeste 1987, 72 f.). The first volume is the *Mäṣḥaf mällamäd təmhərti ṭəbāb – məʾanti ṭəḳmi dāḳḳə ʾəzi haḡär ʾItyōpya* (‘instruction manual for use by children (/nationals) of this country Ethiopia’) / *Manuale di istruzione ad uso degli indigeni*, (1905 / [=] 1912); the fourth volume is entitled *ʾErtəra gəzʾat ʾIṭalyawəyan–Nay təmhərti mäṣḥaf bə-ʾiṭaləñña-n bə-təgrəñña-n nə-tāməharo dāḳḳə-haḡär kəṭäḳḳəm ...* (‘Eritrea, Colony of the Italians – text book in Italian and Tigrinya for the use of pupils, children of this country’) / *La Colonia Eritrea – Manuale d’istruzione italiano-tigrai ad uso delle scuole indigene* (1909 [a.-mā.] / [=] 1917).

During the time of the British Protectorate 1941–1952 (with its two phases: British Military Administration 1941–1949 and British Civil Administration 1949–1952) Tigrinya enjoyed some support through the production of school books and the publication of newspapers in Tigrinya and Arabic. Important for the development of the language was the publication of the newspaper *Nay ʾErtəra sāmūnawī gəzəṭṭa* ‘Eritrean Weekly News’, which was issued in Asmara between 1942–1952. Its editor was Wāldä-Ab Wāldä-Maryam, who is often called the Father of the modern Tigrinya language. In addition there were other periodicals like *Ḥanti ʾErtəra* ‘One Eritrea’ (1950–1952) with its bilingual (Tigrinya and Arabic) successor *Dāḡay ʾErtəra* ‘Voice of Eritrea’ (1952–1954), *Zāmān* ‘Times’ (1953–1962), *ʾItyōpya* ‘Ethiopia’ (1947–1962). From 1956 onward Amharic pressure becomes noticeable in schools and the public sector, a pressure that increases after the forced union with Ethiopia 1962 Eritrea becoming an Ethiopian province.

5. War of Liberation

It was the neglect and suppression of Tigrinya – which was seen by the historically pertinent highland dwellers as their national language – that was the main reason for national resistance and the growing of the liberation movement in Eritrea officially founded in 1961 that was to cause the central government in Addis Abeba more and more difficulties. Concerning the language question the two main liberation fronts: the ELF (Eritrean Liberation Front, Arab. *Ġabhat taḡrīr Iritīryā*) and the EPLF (Eritrean People’s Liberation Front, Tigr. *Həzbawī gənbār ḡarənnāt ʾErtəra*) pursued different

plans. The EPLF was in favour of schooling in all indigenous languages, while the ELF at first only envisaged Tigrinya and Arabic as languages for instruction in school.

In tandem with the EPLF gaining predominance Tigrinya (and Tigre) were gradually introduced in the 'liberated' areas as languages of instruction and in school primers. In 1976 in Eritrea (first in *Bä'at Betay*) the Zero schools (*bet tāmharti säwra*) were set up which also organized a national adult literacy campaign (*zämätä mǝffa' mähay-yāmännät*) with the dispatch of 451 Zero School students to serve as teachers. This campaign is said to have reached 56,000 adults (Gottesman 1998, 89 ff.). In 1985–86 24,000 pupils in 154 schools were taught in Tigrinya and Tigre.

6. School education

At the coming of independence for **Eritrea** in 1991 (or officially 1993) and regional autonomy for Tigray in 1991, educationalists were able to build further on the foundations laid during the War of Liberation in terms of primers and teachers. In Eritrea the principle of offering primary education in the mother tongue (officially nine languages: Tigrinya, Tigre, 'Afar, Saho, Hedareb (Beja), Bilen, Kunama, Nara (Barya), Rashaida) has been gradually extended from Tigrinya and Tigre to the other ethnic groups of the country. Hitherto in spite of all these efforts teaching materials are not yet available in all nine languages coupled with a lack of vernacular speaking teachers. This principle does also apply in Ethiopia but is not upheld in Tigray because of the small number of minorities.

In the trigrinophone areas of Eritrea Tigrinya is the language of instruction in the kindergartens (for 2 years) and in the Elementary Level (*māḥa'ta dārāḡa*, consisting of 5 classes). In the subsequent Middle Level (*ma'kālay dārāḡa* lasting 3 years) the official language of instruction is English. The two levels make up the basic education (1–8: *mäsārätawi tāmharti*). In the Secondary Level (*ka'ay dārāḡa*, classes 9–12, high school) and the Tertiary Level (*la'laway dārāḡa*, colleges and universities) English is used.

According to the 'Concept Paper of Eritrean Educational Transformation' (2002) all nine indigenous languages of Eritrea are the medium of instruction in the Elementary Level (1–5), as long as teachers are available for all these languages. Tigrinya is a compulsory subject for those who are taught in the Elementary Level in Tigrinya. In contrast Arabic is a compulsory subject for all pupils in classes 1–12; however full implementation has so far been delayed due to a lack of teachers of Arabic.

In view of the limited spread of English and the at times inadequate qualifications of teachers one suspects that in-class instruction will be mainly conducted in Tigrinya even though the school books are written in English. This situation continues into university education where a similar discrepancy between official and actual use of the language of instruction can be observed.

In **Tigray** the language of instruction is Tigrinya in the first eight classes (Primary School, *ḡadamay bärki bet tāmharti*, Amh. *andäñña dārāḡa tāmhartä bet*) with Amharic and English being school subjects. In classes 9–10 (Secondary School, *ka'ay bärki bet tāmharti*, Amh. *hulättäñña dārāḡa tāmhartä bet*) teaching is officially in English but in reality will probably be mainly in Tigrinya.

Preparation for university is offered by the Preparatory School (classes 11–12, *mässä-nadä'o bet tāmḥarti*). At university one can assume that Amharic still plays a considerable role due to the diverse origin of teaching staff from other parts of Ethiopia.

7. Position of the language

The importance of Tigrinya has been growing strongly in **Eritrea** since independence in spite of the recognition now accorded to the nine indigenous languages (see above) as languages of instruction in schools. With the help of the tigrinophone media (numerous publications, television, music and films) and due to the fact that in the capital and for the running of the affairs of state communication is in Tigrinya – just as it was in Italian during the Italian period and Amharic during the Ethiopian period – Tigrinya has grown to a dimension that it has never enjoyed before. Tigrinophone highland dwellers who make up about one half of the population are now also living in all of the country's bigger cities and towns like Assab ('Asäb), Massaua (Məşəwwa'), Keren (Kärän), Barentu (Baräntu), which is leading to a certain 'Tigrinyanization of Eritrean society' (Gaim 2008, 320).

Arabic is mother tongue only to the small group of Rashaida (north of Massaua), the smallest Eritrean minority who migrated to Eritrea in the 19th century. However, many Muslims who make up diplomatically speaking 50% of Eritrea's population see Arabic as 'their' language even though their mother tongue may be Tigre or Tigrinya. But due to the predominant use of the latter two languages in the media (print media, radio-television, music) Arabic seems to be losing some of its importance. However, among speakers of other ethnic groups Arabic can serve as a means of communication between fellow-Muslims with different mother tongues, e.g. 'Afar and Tigre, unless they use Tigre or Tigrinya, the spread of which goes well beyond their native speaker communities, and both often function as quasi official languages.

There is a small group of tigrinophone muslim highlanders in Eritrea and Tigray who do not want to be identified by their language. They consider Arabic as their cultural language.

In Eritrea an official national language does not exist, Tigrinya und Arabic are said to be the two working languages, but *de facto* Tigrinya alone has gained this status in Eritrea.

In near-monolingual **Tigray** the introduction of tigrinophone instruction in school made Tigrinya develop for the first time from a minority language heavily dominated by Amharic into a language that predominates in the public domain. Tigrinya's strong position in Tigray stems from the fact that the TPLF was founded there and (with the help of the EPLF) took over power in Addis Abeba in 1991. Yet Amharic – in spite of a gradual decrease in its knowledge and use – maintains its importance as the language of intra-Ethiopian communication.

8. Language standardisation

Tigrinya dialects can be considerably divergent from each other but these dialectal differences do not often show up in the written language which developed based on

the dialect of Aksum and Adua (‘Adwa) and was turned into a written norm by the Swedish mission with regard to certain northern features still to be determined. Thus the translation of the Bible (*Mäṣṣaf kəddus*), parts of which date from the middle of the 19th c, is seen as linguistically and stylistically exemplary. The most important isoglossal boundaries are found not between Eritrea and Tigray but between the north western and the southern dialects, with the latter being particularly divergent (Voigt 2006). The fact that the southern varieties are spoken in Tigray may create the false impression of a special Tigray variant of Tigrinya although the Aksum/‘Adwa region is part of Tigray. The speech variant that is generally aimed for is that of Asmara, which is the largest tigrinophone town by far. If reception is possible people in Tigray like to view Eritrean television which offers more programmes in Tigrinya than Ethiopian television which has to cater for other languages as well, e.g. Oromo and Somali, in its transmissions. However, sporadically southern dialect features intrude into the written language, presumably not for any reasons of language policy, rather for reasons of lack of training in the written language, e.g. of those responsible for authoring school books, etc. Consequently one is more likely to come across the spelling ማእከል: *ma’käl* (with spirant *k*) in more spiranticizing southern Tigray than in Eritrea where the normative form ማእከል: *ma’käl* (with the plosive pronunciation of *k* after consonant) is used in writing.

One orthographic variant is now an immediate give-away as to whether a text originates from Tigray or from Eritrea. Just as in Amharic, Tigrinya does not distinguish in pronunciation between ሰ <ʰ> *sä’äsät* and ሠ <ʃ> *sä nägus*, or between ጸ <ʃ> [‘s’] *ṣä ṣälmät* and ፀ <ʃ> *ṣä ṣäḥay*, all these letter names conveniently containing the sounds they represented in Classical Ethiopic. The Ethiopian Academy in Addis Abeba has recently decreed that in the first case in disregard of the etymology the more common symbol <ʰ> is to be used, a decision that can be defended, however, in the second case the much rarer <ʃ> is to be preferred. This leads to an orthographical difference with Eritrea writing መጽሐፍ: *mäṣṣaf* ‘book’, whilst Tigray spells መፀሐፍ: . This is an immediate clue as to the origin of a text, comparable to Swiss German where in imitation of French orthography the spelling of <ß> as <ss> even after long vowel (‘schliesslich’ but Austro-German ‘schließlich’) instantly betrays a text’s Swiss origin.

The forms quoted above for ‘book’ are written in the new orthography whereby both countries write Tigrinya /*ha*/ [*ha*(:)] ሐ <*hā*> with a vowel of the 4th (*rābā’*) series (i. e. long vowels) whilst ሐ <*hā*> with a vowel of the first series (*gə’əz*) is to be pronounced /*hü*/ which rarely occurs in the spoken language. In the older spelling ሐ was also read as /*ha*/; thus ‘book’ was written as መጽሐፍ: . What was said about *h* is also valid for the other pharyngeals (ʕ) and glottals (ʔ and *h*).

Texts published by the Catholic mission can easily be identified by their orthography. In them the distinctions known from Old Ethiopic (Ge’ez) between *s/š*, *ʃ/š* (vide supra) and *h/ḥ* are observed. Thus e.g. *haw* ‘brother’ is usually spelled ሐው: (formerly ሐው:) but in Catholic literature ጎው: <*ḥāw*> (or respectively in the newer spelling of the *a*-vowel ኃው: <*ḥāw*>) in imitation of Old Ethiopic እጎው: እጎው: *’əḥw*, *’əḥ*”. Similarly ህዝብ: *həzbi* ‘people’ is represented as ሕዝብ: <*həzbi*> imitating Old Ethiopic spelling habits. Catholic orthography is etymological, Protestant and secular spelling is more phonetically oriented.

Further amongst the regional and denominational spelling variants one must count the facultative elision of the imperfect personal prefix *yə-* when a prefixed conjunction

is added, e.g. ገላጺብ: zəzzaräb (< *zə-yəzzaräb) ‘who speaks’ as opposed to ሰላጺብ: zizzaräb (with *i* < əyə.) but pronounced in the same way as ə.

But all in all these and many other orthographic variants form no real obstacle to reading and understanding. Grammatical, semantic and stylistic differences that might impede an immediate understanding have so far not been investigated.

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70. Amharic

1. Genetic classification and overview on research history
2. Amharic varieties and Argobba
3. Grammatical overview
4. Remarks on the lexicon
5. References

Abstract

Amharic is considered the best documented of the Ethiosemitic languages. It has a long research tradition in Semitic studies and has also become a topic in general linguistics. Even within Ethiopia, research on Amharic is well established. Diachronically, Amharic varieties can be divided into two periods: before and after the mid-19th century. Synchronically, Amharic has a number of varieties along geographical and social lines, whereby the genetic relation between Amharic and Argobba is still a matter of research. The main section of this article discusses the significant phonological, morphological and syntactic features of Standard Amharic.

1. Genetic classification and overview on research history

Amharic is the main *lingua franca* in Ethiopia. Approximately 17.5 million people speak it as a mother tongue and five million people as a second language (see Grimes 2003, 109). Amharic is a South Ethiosemitic language and forms, together with Argobba, East Gurage languages and Harari, the Transversal sub-branch of South Ethiosemitic (cf. Hetzron 1972, 119).

No reliable information exists on when and where Amharic emerged as a language. Ullendorff (1955, 226 f.) is of the opinion that Amharic developed out of a southern variety of Gəʿəz after the 8th century. This view was modified by Hetzron (1972, 119 ff.) who considers Amharic not to be a direct descendent of Gəʿəz but an offspring of a common Ethiosemitic proto-language. Ahmed (2005, 681) locates the origin of the Amhara in the province Gäñ, to the south of Lake Hayq, where they apparently emerged around the 13th century. Today Hetzron's view is broadly accepted. Bender (1983, 46 ff.) presents a different view on the origin of Amharic, and assumes that Amharic did not originate from one single (proto-)language but evolved as a pidgin near the river Bashilo in northern Ethiopia at some time after the 4th century (cf. Girma 2009 for a critical evaluation of this hypothesis). First, Amharic may have served only for communication between Cushitic-speaking soldiers and Semitic-speaking officers. Subsequently, the children of the soldiers may have learnt it as mother tongue. Then peasants, too, started to speak Amharic so that it underwent a process of creolization and became the native language of people in the central Ethiopian highlands (cf. also Levine 1974, 72).

The first written attestations of Amharic are panegyrics, the so-called ‘royal songs’, which may have been composed in the 14th century or later (cf. Bartnicki/Mantel-Niećko 1978, 45 f.; Nosnitsin 2003, 238; Richter 1985, 113; Richter 1997, 543 ff.). Linguistically, the panegyrics contain some features of current Amharic but also of Gəʃəz (cf. Richter 1997, Gäzzahān 2006). However, their linguistic status is still a matter of discussion (cf. Ullendorff 1978, 1). Jonas (2006, 70) considers the language of a few panegyrics to be ‘completely incomprehensible as Amharic (contemporary or otherwise)’. Similar to Bender (1983), Jonas (2006) assumes that the language of these panegyrics probably displays a creolization process in which, in addition to Gəʃəz, several other languages took part in the formation of Amharic. A number of other extant texts written between the 17th and the mid-19th centuries closely resemble current Amharic, although they contain a number of peculiarities (cf. Appleyard 2003a, 233; Cowley 1974b; Getatchew 1979; Strelcyn 1965). The language of these texts is known as Old Amharic whereas today’s Amharic, as well as texts composed after the mid-19th century, is subsumed as Modern Amharic (Appleyard 2003b, 111). Another type of archaic Amharic occurs in the so-called *andämta* commentaries, i. e. Amharic explanations to religious texts written in Gəʃəz (cf. Cowley 1971/1974b). It is believed that these commentaries were first transmitted orally between teachers and pupils, but were eventually written down from the 18th century onwards (Stoffregen-Pedersen/Tedros 2003). In contrast to Old Amharic, the archaic language of these *andämta* commentaries is said to be still in use in church education (cf. Appleyard 2003b, 111; Cowley 1974a, 169 f.).

The first grammatical description of Amharic, Ludolf’s *Grammatica linguae Amharicae* and his *Lexicon Amharico-Latinum* (both printed in 1698), is a fortunate by-product of cooperation between the German Hiob Ludolf and the Ethiopian monk Abba Gorgorijus (Ullendorff 1978, 2 ff.). Only 150 years later, the scientific study of Amharic would be reanimated when European missionaries, travelers, and diplomatic and military envoys intensified their work in Ethiopia. From the mid-19th century until the Second World War, a number of grammatical descriptions and dictionaries of varying quality evolved (e.g. Isenberg (1841; 1842) as well as Mondon-Vidailhet 1898 and Armbruster (1908; 1910), etc.). This new material on Amharic was welcomed by scholars dealing with Semitic languages in Europe, in particular in Germany, whose linguistic endeavors have been encouraged by the achievements of the comparative method in Indo-European studies (Habte-Mariam 1990, 98). The work of well-known scholars, like Praetorius (1879), Guidi (1889; 1901; 1940), Cohen (1936; 1939), Yushmanov (1936), etc., set landmarks in the scientific description of Amharic. Further scholars like Cerulli, Conti Rossini, Littmann and Mittwoch, among others, undertook a variety of detailed studies on specific aspects of the Amharic language and literature (see Kratshkovskij 1955, 177 ff. and Ullendorff 1978, 140 ff. for further references). After World War II, research on Amharic diversified and the number of researchers increased (see Leslau 1995, XXVIII ff.; Abebe/Haileyesus 2001 for further references). The most important scholar of the post-war period was, without doubt, Leslau, who devoted the main part of his scientific life to research on Ethiosemitic languages. His major works with regard to Amharic are Leslau (1968; 1973; 1976; 1995). A new trend in Amharic studies began in the 1970s, when general linguists began to deal with Amharic from a theoretical point of view. Ethiopian linguists, often trained abroad, have played a major role in this new trend. In 1966 E.C. (1973/74), Hailu Fulass produced

a transformational grammar of Amharic, and was followed by Baye (1987 E.C. (1994/95)), who wrote an Amharic grammar using the government and binding approach. It is significant that both these grammars are written in Amharic! There are many articles which deal with various aspects of Amharic from a formalistic viewpoint. Recent functional or cognitive approaches to Amharic, like that of Mengistu (2002), and computer linguistic approaches, like that of Sisay (2004), should also be noted. Even before these theory-driven approaches, Ethiopian scholars played an important role in the research on Amharic. Afework (1905), for instance, was the first Ethiopian to write a descriptive Amharic grammar in Italian. In Ethiopia itself, the Amharic grammars of Märs?e Ha-zän 1935 E.C. (1942/43) and Täklä Maryam 1964 E.C. (1971/72) were used for generations by Amharic teachers and pupils until they were displaced by Getahun (1989 E.C. (1996/97); 1990 E.C. (1997/98)). The first monolingual dictionaries of Amharic are Täsämma 1951 E.C. (1958/59) and Dästa 1962 E.C. (1970). A revised and extended version of these dictionaries was published by the Ethiopian Language Research Center in 1993 E.C. (2000/01).

In summary, there are generally three groups of scholars dealing with Amharic, namely Semitists and Ethiopianists who focus on purely descriptive or historical-comparative aspects, general linguists who deal with Amharic from various linguistic theories, and linguists writing in Amharic whose concern is mainly pedagogical in nature.

2. Amharic varieties and Argobba

Compared to other Ethiosemitic languages, the linguistic variety within Amharic is remarkable. Written records justify the establishment of Old Amharic as a diachronic stage which differs from Modern Amharic. Within Modern Amharic, there are at least four major varieties in the Amharic-speaking homeland, namely the varieties spoken in the former regions of Gondär, Gojjam, Wällo and Mänz. In addition, the Standard variety spoken in Addis Ababa as well as varieties of Amharic spoken in multilingual areas and by occupational groups must be considered.

2.1. Old Amharic

Although Old Amharic encompasses a period of several centuries, it has some recurring peculiarities which are rare or do not occur in Modern Amharic. Old Amharic retains the distinction between the consonants *h* <ሀ>, *h* <ሐ> and *x* <ኀ>, as in *hand* (Modern Amharic *and*) 'one' (Appleyard 2003b, 114). Although some verbs optionally occur with either of the fricatives (cf. Richter 1997, 549), there is already in Old Amharic a tendency to reduce the fricatives to the vocalic radical *a* (cf. Appleyard 2003a, 234). The so-called weak root consonants *w* and *y* are in the process of disappearing (Getatchew 1983, 159 f.). The consonant *š* in Old Amharic occurs frequently in words in which Modern Amharic has *t*, like *laš* for Modern Amharic *laṭ* 'bark' (Getatchew 1983, 161; also Appleyard 2003b, 115; Richter 1997, 548). The subject marker for the 1p imperfective appears is *nə-* <ነ- > in Old Amharic but *ənənə-* <እነ- > in Modern Amharic (cf. Appleyard 2003a, 234; 2003b, 115). The prefix *yämm-* which regularly marks

a relative imperfective verb in Modern Amharic only occurs in the affirmative in Old Amharic; in negation *yä-* alone is prefixed to the verb (Appleyard 2003b, 115; Getatchew 1983, 164). The plural suffix in Old Amharic texts is *-ačč*, not *-očč*, as in Modern Amharic (Getatchew 1983, 162). Richter (1997, 550) observes that imperfective verbs and converbs in the Old Amharic panegyrics are never followed by the non-past auxiliary verb *all(ä)*. It is difficult to judge from the panegyrics alone whether the lack of the auxiliary is a grammatical feature of Old Amharic or only an aesthetic effect. However, Getatchew (1983, 165) observes in another text that converbs may optionally occur without the auxiliary. Note that ‘bare’ converbs still occur in the Gojjam variety of Modern Amharic (cf. 3.2.3). Appleyard (2003a, 234) and Getatchew (1983, 163) further show that the auxiliary verb *all(ä)*, if attached to converbs in Old Amharic, shows subject agreement in the 3p, like *täblä-w-all-u* (be_called:CNV-3p-AUX:NP-3p). In Modern Amharic, in contrast, the auxiliary occurs in the invariant form *-all* in this case. With regard to morpho-syntax, Old Amharic possesses a suffix *-t(t)* which probably functions as marker of identification focus or definiteness (cf. Getatchew 1979, 119f.). Getatchew (1983, 167f.) convincingly argues that this suffix cannot be considered a copula, as suggested by Goldenberg (1976) and later by Appleyard (2003a, 234), because the copula *näw* and the suffix *-t(t)* can co-occur in a single clause (cf. also Crass et al. 2005, 28ff.). The order of constituents in Old Amharic is not strictly SOV because qualifying clauses and objects may also follow the verb (Cowley 1974b, 606; Richter 1997, 550). Besides these grammatical features there are also lexical peculiarities in Old Amharic, like, for instance, the frequent use of *kämä* ‘like’ (Richter 1997, 550) or *ənbälä* ‘without’ (Appleyard 2003b, 115; Getatchew 1983, 163), which also occur in Gəʿəz but not in Modern Amharic.

2.2. Dialectal and sociolectal varieties of Modern Amharic

Several surveys in the monolingual Amharic speaker communities in northern and central Ethiopia revealed a number of phonological, lexical and grammatical peculiarities which suggest differentiation between Amharic varieties spoken in Gondär, Gojjam, Mänz and Wällo (cf. Abraham 1955, Amsalu/Habtemariam 1969, Dämässe 1965 E.C. (1972/73), Getahun 1983, Habte-Mariam 1973, Hailu/Getatchew/Cowley 1976, Leslau 1964). These varieties form a continuous, almost monolingual area without clear-cut borders. Another variety spoken outside the home area is that of Addis Ababa, which represents Standard Amharic.

In Gojjam and Mänz, there is palatalization of the voiceless velar stops *q* and *k* to *č^j* and *čⁱ*, respectively, if they are followed by the vowels *i* or *e*. Thus, the Standard Amharic words *qit* ‘buttocks’ and *wäkil* ‘agent’ occur as such also in Gondär and Wällo but as *č^jit* and *wäčⁱil* in Mänz and Gojjam (Hailu/Getatchew/Cowley 1976, 93). Diphthongization of *o* to *ʷä* and *e* to *ʷä* can frequently be observed in Gojjam, Wällo and Mänz, but it is less frequent in Gondär and usually does not appear in Addis Ababa (Hailu/Getatchew/Cowley 1976, 91 and 93):

ADDIS ABÄBA	GONDÄR	GOJJAM/WÄLLO/MÄNZ	
<i>bet</i>	<i>bet</i>	<i>b'ät</i>	‘house’
<i>mot</i>	<i>mot / m^ʷät</i>	<i>m^ʷät</i>	‘death’

While in most Amharic varieties verb-final *l* is palatalized to *y* when a suffix *-i* or *-e* follows, the variety of Mänz does not palatalize it (Hailu/Getatchew/Cowley 1976, 92), as in *bälle* (Mänz) vs. *biyye* (remaining varieties) 'I having said'. Another characteristic feature of the Mänz variety is the debuccalization of the velar ejective between vowels. The initial *q* in *qän* 'day', for instance, changes to *ʔ* in *läʔän* in Mänz but remains *q* in the other varieties, i. e. *läqän* 'for a day' (Hailu/Getatchew/Cowley 1976, 92). With regard to morpho-syntax, the Standard Amharic prefix *kä-* 'from, if' and the conjunction *s-* 'while' occur as *tä-* or *t-*, respectively, in Mänz, Gojjam and Wällo. In Gondär the two prefixes *kä-* and *tä-* are reported to be optional variants but Standard Amharic *s-* is used instead of *t-* (Hailu/Getatchew/Cowley 1976, 94). The variety of Gojjam is known for the use of 'bare' converbs as full verbs in affirmative and negative clauses which is ungrammatical in other varieties (Hailu/Getatchew/Cowley 1976, 95).

(1) (a) <i>ənnässu bältä-w.</i> they eat:CNV-3p They have eaten/ate.	(b) <i>əssu al-bälto-m.</i> (Gojjam) he NEG-eat:CNV:3sm-NEG 'He did not eat'
(2) (a) <i>ənnässu. bälta-w-all.</i> they eat:CNV-3p-AUX:NP 'They have eaten/ate'	(b) <i>əssu al-bälla-mm.</i> (elsewhere) he NEG-eat:PV:3sm-NEG 'He did not eat'

The nominal plural marker *-očč* can be attached to relative clause verbs in the Gojjam variety but usually not in other varieties. Another feature of the Gojjam variety is the use of the prefix *yä-* to mark the addressee of a verbal action, where the other varieties employ the prefix *lä-* instead (Hailu/Getatchew/Cowley 1976, 96).

- (3) *bərr yä-ləğ-u* (SA: *lä-ləğ-u sätt'ä-hu-t.*
money FOR-child-DEF give:PV-1s-o3sm
'I gave money to the boy'

A typical feature of Gondär Amharic is the use of bare object markers on the verb in the function expressed by the applicative marker *-bb* in other varieties (Hailu/Getatchew/Cowley 1976, 96):

(4) <i>bäre-wə-n əräs-u-t!</i> ox-DEF-ACC plow:IMP-2p-o3sm 'Plow (p) with the ox!'	Standard: <i>əräs-u-bbät</i> plow:IMP-2p-APL:o3sm

Beside dialectal varieties in predominantly monolingual areas, there are additional varieties of Amharic which have evolved due to its use as a *lingua franca* in multilingual speaker communities. Here, however, almost no information is available except the pioneering surveys from Drewes (1966), for the use of Amharic among Silt'e mother tongue speakers, and from Beniam (2006), for the Amharic variety spoken in Harar. Amharic also possesses sociolects whose linguistic peculiarities strongly correlate with specific social groups. Takkele (1992), for instance, argues that *š* is not an original Amharic phone but has been borrowed from Gəʕəz. As *š* is usually interchangeable with *t*, as in *šäbäl-täbäl* 'holy water' or *anaši~anaši* 'carpenter', Takkele (1992, 107 ff.) considers them to be allophones which evolved because certain Amharic speakers replaced *š* in loan words by *t*, while people who knew Gəʕəz retained the pronunciation as *š*. Consequently, the *š* pronunciation became a symbol of a social status, i. e. learned or well-educated people. Some occupational or social groups, like merchants or shoeshiners, also developed specific in-group varieties which are based on Amharic (cf. Leslau 1949/1952; Mäkonən 1968 E.C. (1975/76); Teshome/Bender 1983).

2.3. Argobba and Amharic

The Argobba live in dispersed settlements in central and eastern Ethiopia, i. e. in parts of Wällo, Shäwa and Harär (cf. Wetter 2006, 899f.). The Argobba are described as being usually bi- or multilingual with Amharic, Afar and/or Oromo (Siebert/Zealelem 2001). Although approximately 62,000 people consider themselves as (ethnic) Argobba, only 14,000 people still speak the language (cf. Voigt 2003). Previous linguistic research on Argobba (Leslau 1997b, Siebert/Zealelem 2001) states that Argobba can be considered a dialectal variety of Amharic due to immense similarities in lexicon and grammar. Recent research in the villages of T'ollaha and Shonke in Southern Wällo, however, revealed a more archaic variety of Argobba which differs considerably from the hitherto described varieties (cf. Wetter 2006; 2010) and also Getahun (2009).

A number of distinctive features between Argobba and Amharic in general are summarized in Leslau (1997b, 128 ff.) and for T'ollaha-Argobba in particular in Wetter (2006). T'ollaha-Argobba preserves the fricatives *h*, *x*, *ħ*, *ʃ* and the glottal stop as phonemes, while in the remaining Argobba varieties they are reduced to *h*, as in Amharic (cf. 3.1.1). With regard to verb morphology, all Argobba varieties mark type B verbs with a vowel *e* after the root-initial consonant, as in *beddäl* 'discriminate' which does not occur in Amharic. The lack of the 3sm subject agreement marker *-ä* in word-final position is a specific feature of T'ollaha-Argobba. The medio-passive prefix *tä-* in T'ollaha-Argobba may totally assimilate to the first root consonant in the perfective and imperfective conjugations yielding a geminated word-initial consonant, like *äbbelläd* 'be born' (for Amharic *täwəllädä*). The affirmative and negative perfective conjugations may use different vocalization patterns in T'ollaha-Argobba but not in the remaining varieties. With regard to agreement, T'ollaha-Argobba reduces the subject marking prefix *t-* of the imperfective to *ə-* if it occurs word-initially: *ə-mätəlləx* 'you (sm) come' (for Amharic *tə-mätəlläh*). The subject and object agreement markers and pronouns may vary considerably between the Argobba varieties. The plural marker in Argobba is *-ačč*, as in Old Amharic, but *-očč* in Amharic. T'ollaha-Argobba adopted the singulative marker *-čči* (m.) / *-tti* (f.) from Oromo as definite marker. The personal pronouns for the third person are based on *kəss-* plus possessive clitics, which Leslau (1997b, 20) considers to be cognate with *kärs* 'stomach', the second person pronouns contain *-k* instead of Amharic *-t*: *ank* 'you (sm)' (for Amharic *antä*). Instead of the Amharic prefix *kä-* 'from, if', Argobba may use *əntä-*.

In order to define the genetic relationship between Argobba and Amharic, more research is needed. It seems that the Argobba varieties described by Leslau (1997b) and Siebert/Zealelem (2001) underwent a drastic linguistic change towards Amharic, while T'ollaha-Argobba is more resistant. The few resemblances between Old Amharic and Argobba may be an indicator of a common ancestor.

3. Grammatical overview

The following grammatical overview selectively summarizes the main linguistic features of Amharic. The most recent Amharic grammar is Anbessa/Hudson (2009). However, the most comprehensive description of the language, presenting the data in a

traditional way, is still Leslau (1995). Hartmann (1980), in contrast, uses functional and typological approaches but has a strong bias towards biblical Amharic. Sketchy descriptions of Amharic are Cowley/Bender/Ferguson (1976), Hudson (1997), and Apleyard (2003a). If not indicated otherwise, the data presented in this section were gathered during several visits to Ethiopia in the last ten years. They represent the Standard Amharic variety from Addis Ababa.

3.1 Phonology

3.1.1 Phoneme inventory

Table 70.1 displays the consonantal phones which are considered to be phonemic in Amharic and their related graphemic representations in the Amharic syllabary (cf. Leslau 1997a, 399 f.; Hudson 1997, 458). Note that the syllabary grapheme consists of a consonant followed by the vowel *ä*.

Table 70.1: Consonants

		LABIAL	ALVEOLAR	PALATAL	VELAR PLAIN + LAB	GLOTTAL PLAIN + LAB
PLOSIVE	VL	p ፐ	t ተ	č ሸ	k ከ k ^w ከፌ	ʔ አ/ዐ
	VD	b ብ	d ደ	ḡ ጀ	g ገ g ^w ገፌ	
	EJ	ḑ ጰ	ṭ ጠ	č ጸ	q ጥ q ^w ጥፌ	
FRICATIVE	VL	f ፈ	s ሰ/ሠ	š ሸ		h ሀ/ሁ/ሐ h ^w ከፌ
	VD	v ሸ	z ረ	ž ገፍ		
	EJ		ʃ ጸ/ፀ			
NASAL		m ጠ	n ነ	ɲ ጽ		
VIBRANT			r ረ			
LATERAL			l ለ			
APPROX.		w ጦ	y ሃ			

A typical feature of the Amharic consonantal system is the distinction between voiceless, voiced and ejective articulation of obstruents. The ejective articulation, which is produced by the glottalic airstream mechanism, is also found in other Ethiosemitic and South Arabic languages. Not all consonants in Table 73.1 are commonly accepted as phonemes. The occurrence of *p*, *ḑ*, and *v* is restricted to loan words from European languages, for example *ḑ* appears in relatively old loan words which can be traced back to Greek, as, for instance, *ityopḑpya* ‘Ethiopia’ (Hudson 1997, 458). The same may hold true for the consonant *ʃ*. Although *ʃ* appears frequently in Standard Amharic, it alternates with or is even replaced by *ṭ* in other varieties of Amharic (cf. Podolsky 1991, 23; Takkele 1992). The consonants *ɲ*, *ʔ* and *ž* are marginal phonemes. The nasal *ɲ* does not occur in syllable-initial position; the glottal stop *ʔ* never in the coda of a syllable. The phonemic status of *ʔ* is doubted by Rose (1997, 7) because it prevails in word-initial position preceding a vowel. It rarely appears in word-medial position, as in *bäʔal* ‘holiday’. Voigt (1981) argues that the glottal stop disappeared as a consonant in verb roots which had an effect on the vocalization of templates. The sound *ž* is usually the result of a morpho-phonemic process in which *z* has been palatalized. The labialized fricative *h^w* is considered to be an allophone of *k^w*.

Although the labialization of velars is considered a typical feature of Ethiosemitic languages, their phonemic status is controversially discussed. The existence of minimal pairs, like *g^wäddälä* ‘lack’ vs. *gäddälä* ‘kill’ or *q^wäṭṭärä* ‘count’ vs. *qäṭṭärä* ‘employ’ alone (Leslau 1997, 403), or a unique graphemic symbol for them (Ullendorff 1955, 76; Hudson 1997, 458) is not significant because the sequence of velar consonant and labial element *w* can either be considered a single segment (as probably done by Hudson 1997, Leslau 1997a) or as consisting of two segments (cf. Hayward 1986, 309 ff.). In addition to the labialized velars in Table 70.1, labial and alveolar consonants can also be labialized, as in *b^wamb^wa* ‘tube’ or *t^wat* ‘morning’. Generally, labialization seems to be restricted to the syllable-onset (Hayward 1986, 311). In Standard Amharic the sequence *C^wä* is pronounced as *Co*, i. e. /*g^wäddälä*/ > [goddälä] ‘lack’ (cf. Podolsky 1991, 18). All consonants, except the glottal stop and the fricative *h*, can be geminated. With regard to *ñ*, gemination seems not to be a distinctive feature (Hayward/Hayward 1999, 46). Gemination conveys lexical distinctions (*alä* ‘say’ vs. *allä* ‘exist’) as well as grammatical information (*säbbärä* ‘he broke’ in the perfective vs. *səbär* ‘Break it (sm)!’ in the imperative).

The existence of various graphemes for the representation of a single consonant may evidence diachronic sound changes. While merging of <ñ> *s* and <w> *t* (?) into *s*, and <ṣ> *ṣ* and <θ> *ṭ* (?) into *ṣ* are already known in Gəʕəz, the language from which Amharic adopted its script, the merger of <ḥ> *ʔ* and <θ> *ʔ* into *ʔ*, and of <u> *h*, <ɣ> *x* and <ħ> *h* into *h* are younger because they are still represented as distinctive signs in Old Amharic texts (cf. Podolsky 1991, 21 ff.).

Amharic has seven vowels which are summarized in Table 70.2 (cf. Hayward/Hayward 1999, 47; Hudson 1997, 460).

Table 70.2: Vowels

	FRONT	CENTRAL	BACK
HIGH	i		u
HIGH-CENTRAL	e	ə	o
LOW-CENTRAL		ä	
LOW		a	

The vowels *i* and *u* occur as allophones of *ə*, and the vowel *ə* as allophone of *ä*. The vowels in Table 70.2 represent distinct qualities; vowel quantity is not phonemic. The vowel *ä* symbolizes a sound between IPA [ə] and [a], most probably [e] (cf. Devens 1983, 122). The phonetic value of the central vowels *ä* and *ə* is symbolized variously in the literature: the vowel *ə* in Table 70.2 may be given as *i*, and *ä* in Table 70.2 also appears as *ə* or *ε*, as, for instance, in Hayward (1999) or Rose (1997). The high-central vowel *ə*, i. e. schwa, has an ambiguous phonemic status. There are a number of nouns which contain an unpredictable, i. e. unchangeable, schwa in their stem, like *sər* ‘root’ in *bä-sər-u* (**bäsru*) (on-root-DEF) ‘on the root’ as compared to *mədər* ‘earth’ in *bä-mədr-u* (**bämədru*) (on-earth-DEF) ‘on the earth’. In the lexicalization process of roots into verbs, the vowel schwa seems exclusively to function as epenthetic vowel dissolving impermissible sequences of consonants or marking morpheme junctures (see Podolsky 1991, 58 ff.). Except for *ä* and *ə*, vowels may occur in every position within a word. The vowel *ä* does not occur in word-initial position, except in the interjection

ärä ‘alas, yeah’, and *ə* not in word-final position, except in the archaic question marker *-nə*. Sufficient research on the stress system of Amharic is still a desideratum (Rose 1997, 9 f.; Hudson 1997, 460).

3.1.2. Syllable

Depending on the status of *ʔ*, the minimal syllable in Amharic is either V or CV, as in *(ʔ)a* *(ʔ)a.lä* ‘yawn, start to speak’ or *(ʔ)a.hun* ‘now’. The maximal syllable is CVCC (cf. Hayward 1986, 304), whereby the consonants in the coda may represent a single geminated consonant (*zəmm alä* ‘be quiet’) or a sequence of two consonants in which the sonority of the preceding consonant exceeds that of the following one, as in *bərd* ‘cold’, *habt* ‘wealth’. In words like *mädf* ‘gun’ the voiced plosive *d* and the voiceless fricative *f* seem to be of equal sonority status. A syllable-initial sequence CCV is permitted if the second consonant is more sonorous than the first one, as in *bla* ‘eat (sm)!’ or *gza* ‘buy (sm)!’ (cf. Devens 1981; Leslau 1997a, 427 ff.).

3.1.3. Morpho-phonological processes

All alveolar consonants, except *r*, can be palatalized when they are followed by the vocalic suffixes *-i* or *-e* which function as 2sf gender marker or as 1s subject marker in converbs, respectively. The vowel *i* of the agentive template CäCaCi also triggers palatalization. Note that the palatalized counterpart of *l* is *y*.

Table 70.3: Palatalization

	3SM PV		2SF IMP		NOMEN AGENTIS		1S CNV
(a)	<i>säbbärä</i>	‘break’	<i>səbär-i</i>		<i>säbar-i</i>		<i>säbərre</i>
(b)	<i>wäddädä</i>	‘love’	<i>wodäğ(i)</i>		<i>wädağ</i>		<i>wädəğğe</i>
(c)	<i>fällätä</i>	‘split’	<i>fäläç(i)</i>		<i>fälaç</i>		<i>fäləççe</i>
(d)	<i>ammänä</i>	‘believe’	<i>əmāñ(i)</i>		<i>amañ</i>		<i>amməññe</i>
(e)	<i>gäddälä</i>	‘kill’	<i>gədey</i>		<i>gäday</i>		<i>gäddəyye</i>

In word formation, the nasal *n* as root consonant regularly assimilates in place of articulation to the following consonant, i. e. immediately before labials it is uttered as *m* but before velars as *ŋ*, as in *näffäsä* ‘blow’ vs. *yimfäs* ‘may it blow!’, *näkkäsä* ‘bite’ vs. *yinkäs* ‘may he bite!’ The alveolar plosive *t* of the medio-passive prefix *tä-* totally assimilates to a following consonant: *täsäbbärä* ‘it broke’ vs. *yissäbbärall* (< **yitsäbbärall*) ‘it will be broken’. The loss of ejective articulation occurs with *t* in converb forms. If a verb root ends in the ejective *t* and is followed by the plosive *t*, the ejective loses its glottalization: *aṭṭa* ‘miss’ but *atto* (rarely *aṭəto*) ‘he missing’, *ṭäṭṭa* ‘drink’ but *ṭäṭto* ‘he drinking’ (rarely *ṭäṭṭəto*). Debuccalization from *q* to *ʔ* is restricted to the variety of Mänz (cf. 2.2). Lenition from *k* > *h* occurs with 1s and 2sm subject markers of perfective verbs. If *k* follows a verb base ending in a consonant it is uttered as [k] but after a vowel as [h]: *säbbär-k* (break:PV-2sm) ‘you (sm) broke’ but *ṭäṭṭa-h* (drink:PV-2sm) ‘you (sm) drank’.

The central vowels *ə* and *ä* may change their quality in the environment of approximants or labio-velars, as in **yə-hid* (3sm-go:IMP) > [yihid] ‘he should go!’, **wəsäd* (take:IMP:2sm) > [wösäd] ‘take (sm)!’, or **wässäd-ä* (take:PV-3sm) > [wössädä] ‘he took’, etc. If the vowels *ä* and *u* meet in the converb base of a verb, they assimilate into *o*: **säbrä-u* (break:CNV-3sm) > [säbro] ‘he having broken’ (cf. Hartmann 1980, 150f.). In the juncture of vowels, *ə*, *ä* and *a* may be deleted (cf. Leslau 1997a, 422f.). The deletion of *ä* in the medio-passive prefix *tä-* is morpho-syntactically conditioned. The vowel *ä* appears in perfective verbs and in the imperative but not in imperfective and jussive verbs:

<i>tägäddäl-ä</i>	(be_killed:PV-3sm)	‘he/it was killed’
<i>al-tägäddäl-ä-mm</i>	(NEG-be_killed:PV-3sm-NEG)	‘he/it was not killed’
<i>tägädäl</i>	(be_killed:IMP:2sm)	‘Be (sm) killed!’ but
<i>yiggäddälall</i>	/y-tägäddäl-all/ (3sm-be_killed:IPV-AUX:NP)	‘he/it will be killed’
<i>yiggädäl</i>	/y-tägädäl/ (3sm-be_killed:JUS)	‘he/it should be killed’

The vowel *a* as root-final vocalic radical is deleted, when the feminine gender marker *-i* or the plural marker *-u* is attached: *ṭäṭṭa* ‘drink (sm)!’ vs. *ṭäččä* ‘drink (sf)!’ or *ṭäṭṭu* ‘drink (p)!’

3.2. Morphology

As Amharic is a Semitic language, a major part of word formation is ruled by non-concatenate morphology. A consonantal root which encodes the semantics fuses with a template, i. e. a prototypically vocalization and gemination pattern, into a word base. With regard to Amharic, this type of morphology is very productive in the lexicalization of verbs but less productive in the nominal domain which contains a large number of fully vocalized underived words in the lexicon. Besides the major word classes, verbs and nominals, Amharic possesses a closed class of pronouns and pronominal clitics, of prefixes denoting grammatical relations and of interjections. Adjectives and adverbs can morphologically be considered subclasses of nominals.

3.2.1 Pronouns and pronominal clitics

Independent personal pronouns distinguish between feminine and masculine gender in the second and third person singular but not in the plural. Gender agreement occurs only with animate nouns; inanimate singular nominals are referred to by the 3sm pronoun. Amharic possesses two honorific pronouns for the second and third person singular which are indifferent to gender. Note that except for the present-tense copula honorifics are referred to by 3p agreement markers on the verb.

The third person pronouns and the honorific pronouns originate historically in a base **ərs* (< *rəʔəs* ‘head (archaic)’) or perhaps from Argobba *kəss-* (cf. 2.3)) followed by possessive clitics. The *r* optionally occurs in pronounced speech: *ərs-u~əss-u* ‘lit. his head’, *ərs-wa~əss-wa* ‘lit. her head’. The plural pronouns in the second and third person can be parsed into the associative prefix *ənnä-* and the corresponding singular, masculine pronouns. Honorific pronouns are commonly used when a younger individual ad-

Table 70.4: Independent personal pronouns

	Singular	Plural
3m	<i>əssu</i>	<i>ənnässu</i>
3 f.	<i>əsswa</i>	-
3h	<i>əssaččäw</i>	-
2m	<i>antä</i>	<i>ənnantä</i>
2 f.	<i>anči</i>	-
2h	<i>əsswo</i>	-
1	<i>əne</i>	<i>əñña</i>

dresses an older individual or when the speaker recognizes a social distance between him and the addressee. People of the same age usually do not use honorific pronouns even if they do not know each other (cf. Hoben 1976). The second person honorific pronoun *əsswo* is commonly used in Standard Amharic but *antu* appears instead in Wällo Amharic (Hailu/Getatchew/Cowley 1976, 95).

The possessor of an entity is commonly referred to by clitic pronouns.

Table 70.5: Possessive clitics

	Singular	Plural
3m	-u (after consonants) -w (after vowels)	-aččäw
3 f.	-wa	-
2m	-h	-ačču
2 f.	-š	-
2h	-wo	-
1	-e (after consonants) -ye (after vowels)	-aččin

The honorific possessive clitic for the third person is identical with the 3p clitic, i. e. *bet-aččäw* ‘(a) his/her house (honorific), (b) their house’.

Reflexive intensifiers are based on the noun *ras* ‘head’, to which a possessive clitic is attached which denotes the reference noun.

- (5) (a) *almaz ras-wa mättačč.* (b) *käbbädä ras-u-n yi-wədd-all.*
 Almaz head-her come:PV:3sf Kebede head-his-ACC 3sm-love:IPV-AUX:NP
 ‘Almaz herself came.’ ‘Kebede loves himself.’

The reciprocal intensifier *ərsbärs-* consists of the reduplicated archaic morpheme **ərs* ‘head’ which is intersected by the prefix *bä-* ‘by’. The plural possessive clitics must be attached for reference.

- (6) *ərs-bä-rs-aččäw täwaddäd-u.*
 head-by-head-their love_each_other:PV-3p
 ‘They love each other.’

The actual concept of reflexivity and reciprocity is encoded in the verb stem. The intensifiers are only used for emphasis (cf. Mengistu 2002, 61 ff.).

Demonstrative pronouns distinguish between near and far entities with the speaker as deictic center.

Table 70.6: Demonstrative pronouns

	PROXIMAL		DISTAL	
	FREE	BOUND	FREE	BOUND
3 ^M	<i>yih</i>	<i>-zzih</i>	<i>ya</i>	<i>-zziya</i>
3 ^F	<i>yičč(i)</i>	<i>-zzičč</i>	<i>yačč(i)</i>	<i>-zziyačč</i>
3 ^P	<i>ənnäzzih</i>	<i>-nnäzzih</i>	<i>ənnäzziya</i>	<i>-nnäzziya</i>

When the singular demonstrative pronouns are preceded by a prefix, the initial approximant *y* of the free forms changes into *-zzi*. This change can also be observed with the free plural demonstrative pronouns, which consist of the associative prefix *ənnä-* plus the respective masculine, singular demonstrative. The personal pronoun *əssu* ‘he, it’ can also function as a demonstrative pronoun when the speaker refers to an entity which is far from him but close to the addressee (cf. Getatchew 1967).

- (7) *əssu dabbo səṭä-ññ!*
 he/it bread give:IMP:2sm-o1s
 ‘Give (sm) me that bread (which is near to you)!’

The demonstrative pronouns function as demonstrative adjectives (*yih dabbo* ‘this bread’) or as demonstrative adverbs, as in *ə-zzih* (at-this) ‘here’ or *bä-zziya* (at-that) ‘there’. The presentative pronoun *yihäw* ‘here it is!’ can be augmented by the applicative suffix agreeing with the addressee, like *yihäw-lləh* or *yihäw-lləš* ‘here it is for you (sm)/(sf)’.

Interrogative pronouns occur as either basic pronouns, like *man* ‘who’, *mən* ‘what’, *yät* ‘where, to which place’, *mäčče* ‘when’, *sənt* ‘how much’, or complex pronouns with additional prefixes, like *lä-mən* (for-what) ‘why’, *ket* < /kä-yät/ ‘from where’, etc. The pronoun *yät* also serves as the base for the interrogative adjectives *yātu* ‘which (local)’ or *yätinña-w/yätinña-wa/yätinñ-očču* ‘which (m)/(f)/(p)’. When interrogative pronouns are followed by the suffix *-mm*, they function as indefinite pronouns, like *mannəmm* ‘whoever, nobody’, *mənnəmm* ‘whatever, nothing’ or *mäččəmm* ‘whenever, never’. Further indefinite pronouns are *əgäle/əgälit* ‘somebody (m)/(f)’ or *əntən/əntəna* ‘the so-and-so (inanimate/human)’.

3.2.2. Nominals

Most nominals are fully vocalized words, like *bilawa* ‘knife’, *dəmmät* ‘cat’, *abbat* ‘father’ *mätfo* ‘bad’, *dähna* ‘good, well’, etc. There is no clear-cut boundary between common nouns and adjectives and sometimes even between nouns and adverbs. The actual function of *dähna* ‘good, well’ in (8), for instance, can only be identified by the morphosyntactic context (see Kane 1990, 1703 f.).

- (8) (a) *kä-dähna täwäläd wäym kä-dähna täṭäga!* (common noun)
 from-good be_born:IMP:2sm or with-good be_near:IMP:2sm
 ‘Be (sm) born into a well-to-do [family] or be (sm) a protégé of one!’
 (b) *dähna säw* (adjective)
 good person
 ‘good, honest, polite person’

- (c) *dähna ədär!* (adverb)
 good spend_night:IMP:2sm
 ‘Good night! (lit. Spend (sm) the night well)’

Only few nominals function almost exclusively as adverbs, like temporal expressions (*ahun* ‘now’, *nägä* ‘tomorrow’, etc.) or words like *bätam* ‘very’, *əğğag* ‘much, very’, *bəčča* ‘only’. Many adverbs consist of a relational prefix plus a nominal or pronoun, like *wädä-tačč* ‘downwards (lit. towards-down)’ or *kä-hwala* ‘behind (lit. from-backside)’, or are converbs, like *qädmō* ‘afore, ahead’, *dägmō* ‘again, in addition’, *labb blo* ‘carefully’, *tolo blo* ‘fast’, etc. A few frozen imperfective forms also function as adverbs, like *yiləq* ‘exceeding’, *yibälṭ* ‘surpassing’ or *yahəl* ‘being similar’.

There are a number of semi-productive templates which transform a consonantal root into a nominal. Quite frequent is the template $C_1\ddot{a}C_2aC_3i$ which forms agentive nouns, like *säbari* ‘one who breaks’ (< $\sqrt{\text{sbr}}$ ‘BREAK’), *gäday* ‘killer’ (< $\sqrt{\text{gdl}}$ ‘KILL’). A number of affixes change a nominal stem of a certain category into another nominal category. Most common derivations are the formation of instrumental or locational nouns by suffixing *-iya* to the verbal noun (cf. 3.2.3.7.), as in *mätträg-iyä* ‘broom (tool for sweeping)’, *maräf-iyä* ‘place for sleeping’; the formation of agent nouns from abstract nouns by the suffix *-ännä*, as in *qäld-ännä* ‘joker’ (< *qäld* ‘joke’), *gazeṭännä* ‘journalist’ (< *gazeta* ‘newspaper’); the formation of language names by suffixing *-ñña* to the name of the ethnic group, like *amari-ñña* (< *amara* ‘Amhara’), *oromi-ñña* ‘Oromo (language)’ (< *oromo* ‘Oromo (people)’); or the formation of abstract nouns from common nouns by the suffix *-nnät*, like *säwännät* ‘body’ (< *säw* ‘man, human’). Some ethnic names can be formed from place names by the suffix *-awi*. These derived names are always marked for gender and/or number. The bare suffix *-awi* denotes a single male individual but if followed by the morphemes *-t* or *-an*, a female individual or various individuals, respectively, are referred to, as in *gärmän-awi* ‘a male German’, *gärmän-awi-t* ‘a female German’, *gärmän-awy-an* ‘Germans’ (< *gärmän* ‘Germany’). Amharic has a number of nominal compounds which follow a Gəʕəz pattern. These compounds consist of a head marked by the suffix *-ä* which is followed by a modifying noun, like *bal-ä bet* ‘spouse (lit. owner-of house)’ or *bet-ä krəstyān* ‘church (lit. house-of Christians)’.

3.2.2.1. Number

Common nouns productively form their plural by the suffix *-očč*: *bet* > *betočč* ‘house(s)’, *färäs* > *färäsočč* ‘horse(s)’, etc. Adjectives, in contrast, can form their plural by partial reduplication of a consonant with or without the insertion of the vowel *a*: *addis* > *adaddis* ‘new’ or *təlləq* > *təlləlləq* ‘big’. Note that adjectives may also mark plurality by the suffix *-očč* which can be attached to the singular or plural form, like *addisočč* or *adaddisočč* ‘new (plural)’.

Instead of using *-očč*, some nominals may form an optional plural by ablaut, or by the suffixes *-an* or *-at*: *kokäb* > *käwakəbt* ‘star(s)’, *qän* > *qän-at* ‘day(s)’, *kəbur* > *kəbur-an* ‘honored person(s)’. As with adjectives, these nominals may also occur with the regular plural suffix, like *kokäb-očč* or *käwakəbt-očč* ‘stars’, etc. The optional plural morphemes, i. e. ablaut, *-an* and *-at*, often occur in loan words from Gəʕəz. The unpro-

ductivity of these morphemes can clearly be observed with the noun *bet* ‘house’ which has, in addition to a regular plural *betočč*, the ablaut plural *abyat* ‘houses’. The use of the ablaut plural, however, seems to be restricted to the nominal compounds *betä krästyān* > *abyatä krästyānat* ‘church(es)’ (less frequent *betä krästyānočč*) or *betä mäṣahəft* > *abyatä mäṣahəft* (or *betä mäṣahəftočč*), which are both loan words from Gəʿəz.

Certain morpho-syntactic constructions in Amharic suggest that unmarked common nouns are rather number indifferent, i. e. in general number.

- (9) (a) *mist allä-ññ.* (b) *?mist alläčči-ññ.*
 wife exist:PV:3sm-o1s wife exist:PV:3sf-o1s
 ‘I have a wife.’

- (10) (a) *bəzu bet allä-ññ.* (b) *bəzu bet-očč all-u-ññ.*
 many house exist:PV:3sm-o1s many house-PL exist:PV:3p-o1s
 ‘I have many houses.’

Although the noun *mist* in (9a) is inherently feminine, it is referred to on the verb by a 3sm subject marker. Example (9b) can only be used in contexts in which the speaker reports in a belittling manner about his wife, i. e. he evokes the idea as were his wife an object. In example (10a), the noun *bet* has inherently a plural reading due to the quantifier *bəzu* ‘many’. However, it lacks the plural marker *-očč* and is referred to by the 3sm subject marker on the verb. In example (10b), in contrast, *bet* is marked for plural. The two clauses in (10) display a pragmatic difference: in (10a) *bet* is number indifferent and therefore unspecific, but the plural marked *betočč* in (10b) refers to a specific number of houses in the physical world. Thus, overt number marking has a connotation of specificity which number-unmarked nouns lack. The unspecific reading occurs also in (9a) in which the speaker does not refer to his actual wife but only to the fact that he is married.

3.2.2.2. Gender

Many animate nouns in the singular inherently distinguish between feminine and masculine gender but plural nouns do not. The gender distinction is expressed by agreement marking on the verb, on demonstratives or on the definite article:

- (11) (a) *yičči lam-e nat.* (b) *yih bäre-ye näw.*
 this:f cow-my be:3sf this(:m) ox-my be:3sm
 ‘This is my cow.’ ‘This is my ox.’
- (12) (a) *dəmət-wa* (b) *dəmət-u*
 cat-DEF:f cat-DEF(:m)
 ‘the (female) cat’ ‘the (male) cat’

3.2.2.3. Definiteness

The definite article for animate singular nouns is identical to the respective possessive clitics (cf. 3.2.1.), which yields ambiguity in isolation: *bäre-w* ‘the/his ox’ or *lam-wa* ‘the/

her cow'. The definite article for inanimate and plural-marked nouns is as for masculine singular nouns: *gānzāb-u* 'the/his money' or *betočč-u* 'the/his houses'. Most ethnic names as well as nouns like *set* 'woman' or *sāw* 'man' have a special singulative marker *-yyä* which precedes the definite article: *seti-yyä-wa* 'the single woman', *sāw-yyä-w* 'the single man'. The singulative marker may also function as a vocative (cf. Baye 1996, 63 ff.).

The definite article (or the possessive clitic) is attached to the modifier of a head noun. However, if the possessive clitic and the definite article cooccur in a noun phrase, the possessive clitic is attached to the head noun but the definite article to the modifier: *təlləq-u bet* (big-DEF-/his house) 'the/his big house' but *təlləq-u bet-u* (big-DEF house-his) 'his big house'.

3.2.2.4. Case

Amharic is a nominative-accusative language, whereby the nominative is the unmarked case. The accusative is expressed by the suffix *-n*. Accusative marking is only obligatory when the noun is definite.

- (13) *ambässa* / *ambässa-w-n* *gäddäl-ä*.
 lion(:ACC) / lion-DEF-ACC kill:PV-3sm
 'He killed a lion / the lion.'

Accusative marking may also occur with indefinite nouns if they are considered to be generic terms.

- (14) *əgziyabher* *säw-ü-n* *fäṭṭär-ä*.
 God man-ACC create:PV-3sm
 'God created man.'

3.2.3. Verb

3.2.3.1 Types of roots and simplex stems

Lexical roots in Amharic most frequently consist of two, three or four consonants. Only a few roots possess a single consonant or more than four consonants (cf. Baye 1999a, 57 f.). Biconsonantal roots are often considered to originate from triconsonantal roots with weak consonants, i. e. the approximants *w*, *y* or the so-called laryngeals *ʔ*, *ʕ*, *x*, *h* or *ħ*, which either completely disappeared in the course of time or were transformed into vocalic radicals (see Hudson 1985; Podolsky 1986; 1991; Voigt 1981). The Amharic verbs *bälla* 'eat' and *gäbba* 'enter', for instance, are cognate with the Gəʕəz verbs *bälʕa* and *gäbʕa*, respectively. The distinction between the pharyngeal fricative *ʕ* and the glottal plosive *ʔ* in Gəʕəz is dissolved in the vocalic radical *a* in Amharic. If the weak consonant appears as a penultimate root consonant, it yields a special type of verb which synchronically lacks gemination, as in **kyd* > *hedä* 'go', **mwt* > *motä* 'die' or **šhf* > *šafä* 'write'.

Gemination of a root consonant in conjugational templates is an important classificatory feature of Amharic verbs. Four gemination types, called A, B, C and zero, can be distinguished (cf. Hudson 1991, Klingensheben 1964, Mantel-Niećko 1964). In verbs of type A, gemination only occurs in the perfective aspect, but in verbs of type B, in all conjugations. Usually, bi- and triconsonantal roots belong to these two types. Verbs following type C display gemination in the perfective and imperfective conjugation but not in the jussive/imperative. This type of gemination occurs with quadriconsonantal roots, reduced quadriconsonantal roots, and with triconsonantal roots with a vowel *a* following the first consonant. Note that the four gemination types are purely lexical in character.

3.2.3.2. Conjugational templates, agreement markers and applicatives

Consonantal roots are lexicalized into base stems by conjugational templates, i.e. a specific vocalization and gemination pattern. Generally, four conjugational templates are of importance: the perfective, the imperfective, the jussive/imperative and the converb (cf. Hudson 1985; 1986).

Table 70.7: Conjugational templates of simplex stems (selection)

	PERFECTIVE	IMPERFECTIVE	JUSSIVE	CONVERB
TYPE A	C ₁ äCC ₂ äC ₃	C ₁ äC ₂ C ₃	C ₁ C ₂ äC ₃	C ₁ äC ₂ C ₃ ä
TYPE B	C ₁ äCC ₂ äC ₃	C ₁ äCC ₂ C ₃	C ₁ äCC ₂ C ₃	C ₁ äCC ₂ C ₃ ä
TYPE C	C ₁ aCC ₂ äC ₃	C ₁ aCC ₂ C ₃	C ₁ aC ₂ C ₃	C ₁ aC ₂ C ₃ ä
	C ₀ äC ₁ äCC ₂ äC ₃	C ₀ äC ₁ äCC ₂ C ₃	C ₀ äC ₁ C ₂ C ₃ -	C ₀ äC ₁ C ₂ C ₃ ä
ZERO	C ₁ aC ₃	C ₁ C ₃	C ₁ aC ₃	C ₁ C ₃ ä
	C ₁ eC ₃	C ₁ eC ₃	C ₁ iC ₃	C ₁ iC ₃ ä
	C ₁ oC ₃	C ₁ oC ₃	C ₁ uC ₃	C ₁ uC ₃ ä

Note that the above templates are predicated on a triconsonantal root, i.e. C₁ and C₃ represent the root-initial and -final consonants, the medial consonant C₂ is the only one which can be geminated. The initial consonant of quadriradical verbs is marked as C₀ in order to keep C₂ in geminating position. Bi- and triconsonantal roots whose last consonant has been deleted or is represented by the vocalic radical *a* have the consonant *t* as C₃ in the converb template (and in the verbal noun): *bälla* (PV), *bäla* (IPV), *bla* (JUS) but *bältä* (CNV) ‘eat’. In order to lexicalize a verb, a subject agreement marker must be attached to the templates.

Perfective verbs and converbs use a suffix set for subject agreement, but imperfective and jussive verbs a combination of prefixes and suffixes (cf. Girma 1994). The suffix set of the converbs is related to the possessive clitics (cf. Table 70.5). Imperfective and jussive use almost the same set of affixes with one major difference: 1s subjects are marked by *ə-* with affirmative imperfective verbs but by *l-* on jussive verbs or on negated imperfective verbs. The suffix *-u* in the second or third person plural imperfective is omitted if it is immediately followed by the non-past tense auxiliary *-all*, as in *yisäbrallu* /y-säbr(-u)-all-u/ (3p-break:IPV(-3p)-AUX:NP-3p) ‘they will break’. The suffix *-u*, however, occurs if it is followed by an object marker or by another auxiliary: *yi-säbr-u-t-all* (3p-break:IPV-3p-o3sm-AUX:NP) ‘they (will) break it’ or *yi-säbr-u näb-*

Table 70.8: Subject agreement markers

	PERFECTIVE	IMPERFECTIVE	JUSSIVE	CONVERB
3SM	<i>säbbär-ä</i>	<i>yí-säbr-</i>	<i>yí-sbär</i>	<i>säbro</i> (<i><*säbrä-u</i>)
3SF	<i>säbbär-äčč</i>	<i>tə-säbr-</i>	<i>tə-sbär</i>	<i>säbr-a</i> (<i><*säbrä-a</i>)
2SM	<i>säbbär-k</i>	<i>tə-säbr-</i>	(<i>t-</i>) <i>səbär</i>	<i>säbrä-h</i>
2SF	<i>säbbär-š</i>	<i>tə-säbr-i-</i>	(<i>t-</i>) <i>səbär-i</i>	<i>säbrä-š</i>
1S	<i>säbbär-k^w</i>	<i>ə-säbr-</i> (<i>-l-säbr</i>)	<i>lə-sbär</i>	<i>säbərre</i> (<i><*säbrä-GEM_e</i>)
3P (= 2/3H)	<i>säbbär-u</i>	<i>yí-säbr-u-</i>	<i>yí-sbär-u</i>	<i>säbrä-w</i>
2P	<i>säbbär-aččuh</i>	<i>tə-säbr-u-</i>	(<i>t-</i>) <i>səbäru</i>	<i>säbraččuh</i> (<i><*säbrä-aččuh</i>)
1P	<i>säbbär-ən</i>	<i>ənənə-säbr-</i>	<i>ənənə-sbär</i>	<i>säbrä-n</i>

bär (3p-break:IPV-3p AUX:P) ‘they used to break’. The imperative forms of the second person appear only in the affirmative and lack the prefix *t-*. In negation the jussive is used instead. These forms are always preceded by the prefix *t-* which optionally is geminated: *səbär* ‘break (sm)!’ vs. *a-(t)tə-sbär* (NEG-2sm-break:JUS) ‘don’t break (sm)!’

Besides subjects, Amharic verbs can optionally refer to objects or adjuncts by object markers or applicative suffixes plus object markers.

Table 70.9: Object markers and applicatives with 3sm subjects

	OBJECT MARKER	APPLICATIVE - <i>ll</i>	APPLICATIVE - <i>bb</i>
3SM	<i>gäddälä-w</i>	<i>gäddälä-llät</i>	<i>gäddälä-bbät</i>
3SF	<i>gäddäl(ä)-at</i>	<i>gäddälä-ll-at</i>	<i>gäddälä-bb-at</i>
2SM	<i>gäddälä-h</i>	<i>gäddälä-ll-əh</i>	<i>gäddälä-bb-əh</i>
2SF	<i>gäddälä-š</i>	<i>gäddälä-ll-əš</i>	<i>gäddälä-bb-əš</i>
1S	<i>gäddälä-ññ</i>	<i>gäddälä-ll-əññ</i>	<i>gäddälä-bb-əññ</i>
3P	<i>gäddäl(ä)-aččäw</i>	<i>gäddälä-ll-aččäw</i>	<i>gäddälä-bb-aččäw</i>
2P	<i>gäddäl(ä)-aččuh</i>	<i>gäddälä-ll-aččuh</i>	<i>gäddälä-bb-aččuh</i>
1P	<i>gäddälä-n</i> ‘he killed him, etc.’	<i>gäddälä-ll-ən</i> ‘he killed for him, etc.’	<i>gäddälä-bb-ən</i> ‘he killed to his detriment, etc.’

Except for the 3sf, 2p and 3p, the object marker starts with a vowel *ä* which, however, only occurs if the verb ends with a consonant. This vowel does not occur after the applicative suffixes with the exception of the 3sm. Note that in the 3sm, the object marker *-(ä)w* appears as *-t* after the back vowels *-u* and *-o*: *gäddälu-t* ‘they killed him’. When the object marker is attached to a bivalent verb it refers to the direct object, as in Table 70.9, but to the second, non-direct object if the verb is trivalent (cf. Girma 2006; Hetzron 1970, 305 ff.; Mengistu 2005, 301 ff.).

- (15) *gänzäb-e-n* *särräq-u-ññ*.
 money-my-ACC steal:PV-3p-o1s
 ‘They stole the money from me.’

In experiencer constructions the subject of a verb is empty. It is marked by the default 3sm on the verb. The experiencer is indicated with object markers:

- (16) *däbbär-ä-n.*
 feel_bored:PV-3sm-o1p
 ‘We feel bored.’

The applicative suffix *-ll* indicates that the referred entity is the beneficiary of a verbal event. The applicative suffix *-bb*, in contrast, may express locative, instrumental and malefactive functions (see also Mengistu 2002, 55 ff.).

- (17) (a) *bä-zzih alga täñña-bbät.*
 at-this bed sleep:PV:3sm-APL:3sm
 ‘He slept at this bed.’
 (b) *bä-qulf-u bärr käffät-ä-bbät.*
 with-key-his door open:PV-3sm-APL:3sm
 ‘He opened the door with his key.’
 (c) *sukk^{war} alläq-ä-bbät.*
 sugar be_finished:PV-3sm-APL:3sm
 ‘The sugar is finished to his detriment.’

In addition to the subject, only one object or adjunct can be referred to by object markers or applicative suffixes.

3.2.3.3. Aspect, tense and *aktionsart*

Verbs in the perfective and imperfective aspect encode information about the internal constituency of a verbal state of affairs, whereby the perfective focuses on the borders but the imperfective on the ongoing activity or state as such (cf. Girma/Meyer 2001, Meyer 1996). The imperfective may further refer to habitual events. The temporal deixis is either expressed implicitly by the context, by adverbs or auxiliaries. Affirmative imperfective verbs in main clauses must obligatorily indicate tense with the clitic auxiliary *-all* for non-past tense or with the invariable auxiliary *näbbär* for past tense.

- (18) (a) *nägä yi-mätall*
 tomorrow 3sm-come:IPV:AUX:NP
 ‘He will come tomorrow.’
 (b) *təlantanna qän mulu yi-täñña näbbär.*
 yesterday day entire 3sm-sleep:IPV AUX:P
 ‘He was sleeping all the day yesterday.’

Beside the two aspectually marked verbs, Amharic possesses a converb, which is also called a ‘gerund’ in the literature. The converb is a non-finite verb which is used to express a sequence of events (cf. (19a)) or to modify a reference verb with regard to manner (cf. (19b)).

- (19) (a) *säwnät-u-n taṭṭäbo bälto wəṭṭa.*
 body-his-ACC wash:CNV:3sm eat:CNV:3sm go_out:PV:3sm
 ‘He went out after he washed his body and ate.’
 (b) *roṭo mätṭa.*
 run:CNV:3sm come:PV:3sm
 ‘He came running.’

The converb followed by the non-past tense auxiliary *-all* can occur as the main clause verb. In this case it expresses a perfect, i.e. a verbal event which started in the past but is still of relevance at the moment of speaking.

- (20) *käbbädä ahun mätto-all*. [*< mätto-all*]
 Kebede now come:CNV:3SM-AUX:NP
 'Käbbädä has come now (i.e. he is still present).'

Amharic further possesses *aktionsarten* in main clauses, like the progressive and the intentional. Both are based on a copula clause. In the progressive, the predicate nominal is a perfective verb marked by the prefix *əyyä-* but in the intentional it is an imperfective verb marked by *l-*.

- (21) (a) *yä-bet sra əyyä-särračč nāw*.
 of-house work PROG-work:PV:3sf COP:NP:3sm
 'She is doing housework.'
 (b) *dabbo lə-ttä-gäza nāw*.
 bread INT-3sf-buy:IPV COP:NP:3sm
 'She is going to buy bread.'

3.2.3.4. Negation

The negative marker is *al-* for perfective verbs but *a-* for imperfective and jussive verbs: *al-hed-ä-mm* (NEG-go:PV-3sm-NEG) 'he did not go', *a-y-hed-əmm* (NEG-3sm-go:IPV-NEG) 'he does not go'. The suffix *-mm* is an obligatory part of negative perfective and imperfective verbs in main clauses but it does not occur in subordination and with jussive verbs: *k-al-hed-ä* (if-NEG-go:PV-3sm) 'if he does not go', *a-y-hid!* (NEG-3sm-go:JUS) 'He should not go!' The non-past auxiliary *-all* is never attached to negated verbs. The verbal noun (cf. 3.2.3.7.) can be negated by the prefix *alä-*, as in *alä-mähed-u* (NEG-go:VN-his) 'his not-going'. The progressive and intentional *aktionsart*, as well as the perfect, cannot be negated; instead a negated perfective or imperfective verb is used.

3.2.3.5. Copulas

Amharic basically has three copula morphemes: *n-* for the present tense, *näbbär-* for the past tense and *allä* as an existential copula (cf. Crass et al. 2005). The present-tense copula uses object pronouns (cf. 3.2.3.2.) to refer to the subject but the past-tense copula and the existential copula the subject marker of perfective verbs.

- (22) (a) *astämari nä-ññ / näbbär-ku*.
 teacher COP:NP-1s / COP:P-1s
 'I am / was a teacher.'
 (b) *däbdabe-w bä-ṭäräpeza lay nāw / näbbär-ä*.
 letter-DEF on-table top COP:NP:3sm / COP:P-3sm
 'The letter is / was on [the] table.'

- (c) *almaz alläčč!*
 Almaz exist:PV:3sf
 ‘Almaz is there! / Almaz is alive!’

Different copulas distinguish between location and existence. Existential expressions are statements about the general existence of an entity, i.e. they are basically monovalent (cf. (22c)). Locational expressions, in contrast, equate two constituents, namely the subject and the locational phrase (cf. (22b)). However, existential copula clauses, too, may occur with an additional locational phrase.

- (23) *käbbädä ə-bet wosʔ allä.*
 Kebede in-house inside exist:PV:3sm
 ‘Kebede is in [the] house.’

For past-tense expressions only the copula *näbbär-* is used. In negative clauses, the past-tense copula is preceded by the negative marker *al-* (cf. 3.2.3.4.). The present-tense copula and the existential copula, however, employ the suppletive morphemes *aydällä-mm* and *yällä-mm*, respectively, which are conjugated like perfective verbs.

The existential copula and the past-tense copula are further used to express possession and obligation (cf. Hetzron 1970, 307 ff.). A possessive clause encompasses a possessed entity, which is referred to by subject markers on the copula, and a possessor, which is denoted by object markers (cf. also Ahland 2009).

- (24) *hulät läğg-očč all-u-ññ / näbbär-u-ññ.*
 two child-PL exist:PV-3p-o1s / COP:P-3p-o1s
 ‘I have / had two children.’

In verbal obligation the copula agrees with an invariant 3sm subject and the obligee is encoded by the applicative suffix *-bb*.

- (25) *mähed allä-bbə-ññ.*
 go:VN exist:PV:3sm-APL-o1s
 ‘I have to go.’

The obligatory event is denoted by the verbal noun.

3.2.3.6. Phrasal verbs

Phrasal verbs consist of an invariable element encoding the verbal semantics which is followed by a supporting verb, usually *alä* ‘say’ or *adärrägä* ‘make’, which contains grammatical information (cf. Wetter 1999, 68 ff.). The invariable elements encompass various entities, like onomatopoeic words (*qʷa alä* ‘burst, crack’, *həqq alä* ‘hiccup’), ideophones (*bəlləčč alä* ‘twinkle’), nouns (*čäw čäw alä* ‘be salty (lit. say salt salt)’ and other elements (*əšši alä* ‘agree (lit. say yes)’). Phrasal verbs based on *alä* usually express that the subject is affected in some way by the verb semantics, as in *qučč alä* ‘sit down’ where the subject initiates the action but is also affected. Only if the subject totally controls the verbal action does the verb *adärrägä* appear as supporting verb, as in *qučč adärrägä* ‘put down’. Phrasal verbs form a single morpho-syntactic unit, i.e. except morphemes attached to the supporting verb (like agreement markers, negation marker, conjunctions) no other morpheme can intersect between verb and invariable element.

3.2.3.7. Derivation

The most frequent verbal derivation encompasses the formation of medio-passive, causative, reciprocal and iterative stems. The medio-passive stem is characterized by a prefix *tä-* and a conjugational template of gemination type C which has an invariant vowel *ä* after C_1 and C_2 . Thus, the medio-passive stem of the simplex verb *ḡämmärä* ‘start (tr.)’ (Type B) is *tä-ḡämmär-ä* (MP-start:PV-3sm) ‘it started (itr.)’ / *yī-ḡämmär-all* (3sm-MP:start:IPV-AUX:NP) ‘it will start (itr.)’ / *yī-ḡämmär* (3sm-MP:start:JUS) ‘it should start (itr.)’. The medio-passive bleaches out the agent of the related simplex (cf. Mengistu 2000, 313 ff.; 2002, 9 f., 66 ff.).

- (26) (a) *mammo bäre-w-n arräd-ä-w.*
 Mammo ox-DEF-ACC slaughter:PV-3sm-o3sm
 ‘Mammo slaughtered the ox.’
 (b) *bäre-w tarräd-ä.*
 ox-DEF MP:slaughter:PV-3sm
 ‘The ox is slaughtered.’

Direct and indirect causative stems emphasize the agent role of the subject (cf. Mengistu 2000, 317 ff.). The direct causative is derived by a prefix *a-* attached to the simplex, whereby in gemination type A the jussive base changes from $C_1C_2äC_3$ to $C_1C_2C_3$: *a-däkkäm-ä* (CSD-be_tired:PV-3sm) ‘he/it tired (someone)’ / *y-a-dkäm* (3sm-CSD-be_tired:JUS) ‘he should tire (someone)!’. The direct causative is mainly derived from monovalent roots but also from a few bivalent roots belonging to the semantic group of unaccusative verbs, like some verbs of food consumption (cf. Mengistu 2000, 317 ff.):

- (27) (a) *mammo dabbo bälla.*
 Mammo bread eat:PV:3sm
 ‘Mammo ate bread.’
 (b) *mammo ləḡḡ-u-n (dabbo) a-bälla-w.*
 Mammo child-his-ACC (bread) CSD-eat:PV:3sm-o3sm
 ‘Mammo fed his child (bread).’

The indirect causative is derived by the prefix *as-* attached to a root which then follows the gemination type B, as in *as-bälla* (CSI-eat:PV:3sm) ‘he/it facilitated/forced/ordered to eat’ / *y-as-bälla* (3sm-CSI-eat:JUS) ‘he/it should facilitate/force/order to eat’. The indirect causative can be derived from most roots regardless of their valence. The newly introduced subject in the indirect causative enables, enforces or orders the fulfillment of the verbal action but is not physically involved.

- (28) *mammo ləḡḡ-u-n as-bälla-w.*
 Mammo child-his-ACC CSI-eat:PV:3sm-o3sm
 (a) ‘Mammo forced his child to eat.’
 ((b) ‘Mammo made/ordered his child to be eaten.’)

In the direct causative in (27b), in contrast, the agent physically fulfills the verbal action. An exception are roots starting with the vocalic radical *a*. Here the formative *as-* may encode direct and/or indirect causation.

The reciprocal and iterative stems are formed by changes within the root. A reciprocal action is expressed by inserting the vowel *a* after C_1 . The reduplication of C_2 plus

insertion of the vowel *a* between the reduplicated consonants denotes an iterative or frequentative action. These derivations are often accompanied by the medio-passive or causative formatives: *fällägä* ‘look for’ > *fälallägä* ‘look here and there’, *säddäbä* ‘insult’ > *täsaddäbä* ‘insult each other’, etc.

In addition, there are a number of less productive derivations (cf. Baye 1999a), like *astä-*, *a(t)-*, *an-* for causative derivation or *tän-* for the medio-passive, as in *astämarä* ‘teach’, *astarräqä* ‘reconcile’, *azzägağğä* (< **at-zägağğä*) ‘prepare’, *an-qäṭäqqäṭä* ‘cause to shiver, shiver, tremble’, *an-ṭäläṭṭälä* ‘hang (tr.)’.

Phrasal verbs in which the invariable element is derived from an existing root may denote an increase or decrease of effectedness upon an entity. The medio-passive derivation *täsäbbärä*, for instance, simply denotes that an object is broken. If instead the phrasal verb *säbbärr alä* ‘be broken into many pieces’ is used, the result of being broken is intensified; by using *säbärr alä* ‘be partially fractured’ it is decreased. Generally, the vocalization patterns $C_1CC_2CC_3$ denotes intensification but $C_1äC_2äCC_3$ weakening. The pattern $C_1CC_2CC_3$ can still be augmented by reduplication of the second consonant, i.e. $C_1C_2CC_2CC_3$, as in *säbäbbärr alä* ‘be completely broken’ (cf. Mengistu 2000, 128 f.).

Verbal nouns are derived by a prefix *mä-* attached to the jussive template of a root which is modified by a vowel *ä* between C_2 and C_3 : *mä-ngär* ‘to speak’, *mä-baräk* ‘to bless’, etc. Note that roots with a weak root-final consonant obligatorily end in *-t*, as in *mä-bla-t* ‘eat’, *mä-sṭä-t* ‘give’, etc.

3.2.4. Relational prefixes and relational nouns/phrases

Relational prefixes form a closed class (cf. Hetzron 1970). They establish a grammatical relationship that links their complement to another word or phrase in a clause. Most relational prefixes can be attached to both nominals and verbs. In the latter case they function as conjunctions which mark adverbial clauses.

Table 70.10: Relational prefixes

	SEMANTICS WITH NOMINALS	(RELATIVE) VERBS
<i>yä-</i>	of (GEN)	which, who (REL)
<i>l(ä)-</i>	for (i.e. addressee, beneficiary)	in order to
<i>kä-</i>	from, with (comitative)	if (real condition)
<i>b(ä)-</i>	in, at, on, with, through, by, against (i.e. locative, instrumental, malefactive)	if (unreal condition), when (temporal)
<i>änd(ä)-</i>	like	that (complementizer), just as
<i>sälä-</i>	because of	because
<i>ask(ä)-</i>	until, to	until
<i>bästä-</i>	towards (restricted use)	-
<i>s-</i>	-	while, when
<i>wädä(-)</i>	towards	-
<i>(y)älä(-)</i>	without	-

The vowel *ä* of the prefixes is lacking if it is attached directly to an imperfective verb, as in *änd-i-mäṭa* (that-3sm-come:IPV) ‘in order that he comes’, but not if attached to

a relativized verb or a noun, as in *əndä-mm-i-mäta* (that-REL-3sm-come:IPV) ‘that he comes’ or *əndä-brät* ‘like iron’. The morphemes *wädä(-)* ‘towards’ and (y)*alä(-)* ‘without’ may occur as free morphemes or as clitics. The status of the prefix *ə-* is unclear (cf. Hetzron 1970, 304). Usually only one prefix can be attached to an entity. In colloquial speech, however, constructions like (29) are not uncommon:

- (29) *kä-b-alläf-ä-w* *samənt* *ğämməro*
 from-at-REL:pass_by:PV-3sm-DEF week start:CNV:3sm
 ‘starting from last week’

Instead of *kä-b-alläf-ä-w* in (29), *k-alläf-ä-w* may also occur, which omits the second prefix. If a prefix is attached to an entity marked by *yä-*, the prefix *yä-* is deleted: *yä-käbbädä bet* (of-Kebede house) ‘Kebede’s house’ > *bä-käbbädä bet* (in-of:Kebede house) ‘in Kebede’s house’. Phrases headed by a prefix can be followed by a relational noun, like *lay* ‘top’, *tač* ‘bottom’, *wosɿ* ‘inside’, etc., or by a combination of a prefix and a relational noun, like *bä-fit* (in-face) ‘before’, *fit-lä-fit* (face-for-face) ‘in front of’, etc. (cf. Hetzron 1970, 304f.). These relational expressions modify the reading of the semantically ambiguous prefixes. The phrase *kä-käbbädä* alone, for instance, may mean ‘from Kebede’ or ‘(together) with Kebede’. If the relational noun *gar* ‘together’ is added only one reading is possible: *kä-käbbädä gar* ‘together with Kebede’.

3.2.5. Discourse particles

The most frequent discourse particles in Amharic are the suffixes *-mm* and *-ss* which basically function as a contrastive focus marker or as a topic marker, respectively (cf. Girma/Meyer 2007). While the occurrence of the topic marker *-ss* is almost restricted to questions, the focus marker can appear in all clause types. Note that the suffix *-mm* is also part of negative expressions in main clauses (cf. 3.2.3.4.).

3.3. Syntax

3.3.1. Order of constituents

Amharic is a SOV language, i. e. the object precedes the verb and the subject precedes the object in the unmarked order of constituents in a clause. Further, embedded clauses precede main clauses and adjectives precede their heads. The order of direct and indirect object is relatively free. If an adverb which modifies a clause is added, it follows the subject in the unmarked order.

- (30) *käbbädä zare bunna yi-šät-all.*
 Kebede today coffee 3sm-sell:IPV-AUX:NP
 ‘Kebede sells coffee today.’

The clause-initial position is obligatorily reserved for topics, so that fronting of any constituent into the clause-initial position will change the information structure of the clause (cf. Girma/Meyer 2007, 34). This pragmatic constraint is responsible for the change of common word order in questions. As interrogative pronouns ask for new

information, they do usually not occur clause-initially unless they are the only overt nominal constituents.

- (31) (a) *təlantənnə man mätta?*
 yesterday who come:PV:3sm
 ‘Who came yesterday?’ (proper question)
- (b) *man təlantənnə mätta?!*
 who yesterday come:PV:3sm
 ‘Who came yesterday?!’ (rhetoric question)

The two questions in (31) represent pragmatically different speech acts. (31a) is a question in which the speaker expects a proper noun as the answer, although he is not sure if indeed somebody came. (31b) is a statement in which the speaker utters his doubt that anybody came yesterday. The use of cleft sentences instead of verbal clauses is very frequent in questions. Here, however, the interrogative pronoun commonly occurs clause-initially.

- (32) *man näw təlantənnə yä-mätta-w?*
 who COP:NP:3sm yesterday REL-come:PV:3sm-DEF
 ‘Who was it who came yesterday?’

3.3.2. Relative clause

Relative clause verbs are marked by the prefixes *yä-* or *yämm-* attached to perfective or imperfective verbs, respectively. Relativized subjects as head are not marked on the relative clause verb, as in *yä-hed-ä säw* (REL-go:PV:3sm man) ‘the man who went’. The direct object and the remaining constituents of a clause, however, are marked on the relative verb by object markers or applicatives, respectively (cf. Hailu 1972).

- (33) (a) *yä-mätta-h-at set əhət-e nat.*
 REL-hit:PV:2sm-o3sf woman sister-my COP:NP:3sf
 ‘The woman you (sm) hit is my sister.’
- (b) *bä-mmə-nnə-hedə-bbät mäkina säw yällä-mm.*
 at-REL-1p-go:IPV-APL:o3sm car man not_exist:PV:3sm-NEG
 ‘There are no people in the car we are going with.’

If a relative clause is complement to a relational prefix, as in (33b), the prefix *yä-* of the relative clause is deleted.

3.3.3. Subordinate clauses

Subordinate clauses in Amharic are adverbial modifications to a main clause. Only a few subordinate clauses are marked by conjunctions which are attached to verbs. The conjunctions *s-* ‘while, when (plus affirmative verb); before, without (plus negative verb)’ and *b-* ‘if (unreal condition)’ are prefixed to imperfective verbs but the conjunction *kä-* ‘if (real condition)’ to perfective verbs.

- (34) (a) *gäbäya s-ə-hed zənab yi-zämb näbbär.*
 market when-1s-go:IPV rain 3sm-rain:IPV AUX:P
 ‘When I was going to the market it was raining.’
 (b) *gäbäya kä-hed-k šənkurt gəza-llə-ññ!*
 market if-go:PV-2sm onion buy:IMP:2sm-APL-o1s
 ‘If you (sm) go to the market buy onions for me!’

In the majority of subordinate clauses, however, a relational prefix is attached to a relative clause verb:

- (35) *gäbäya əndä-mm-ə-hed näggär-ku-h.*
 market that-REL-1s-go:IPV tell:PV-1s-o2sm
 ‘I told you (sm) that I am going to the market.’

Furthermore, the verbal noun can express an adverbial modification.

- (36) *kä-mäznäb-u bäfit bet gäbba-n.*
 from-rain:VN-DEF before house enter:PV-1p
 ‘We entered a house before it rained.’

Adverbial clauses and converb clauses, which also can function as adverbial modifiers, precede the main clause.

3.3.4. Coordination

Several verbal events in a sequence are coordinated by the use of converbs (cf. 3.2.3.3.). An adversative coordination of clauses is expressed by (*nägär*) *gən* ‘but’ or *ənği* ‘but, yet, except’.

- (37) (a) *šay ə-wədd-alluh, bunna gən al-ṭäṭṭa-mm.*
 tea 1s-love:IPV-AUX:NP:1s coffee but NEG:1s-drink:IPV-NEG
 ‘I like tea but I don’t drink coffee.’
 (b) *šay ənği bunna al-ṭäṭṭa-mm.*
 tea except coffee NEG:1s-drink:IPV-NEG
 ‘I drink tea but not coffee.’

With regard to nouns, common coordinating conjunctions are *ənna/-nna* ‘and (additive)’ and *wäym* ‘or (disjunctive)’: *šay ənna/wäym bunna* ‘tea and/or coffee’. Note that the disjunctive conjunction appears as *wäys* in questions.

4. Remarks on the lexicon

The lexicon of Amharic is highly influenced by Cushitic languages (Appleyard 1979; Bender/Fulass 1978, 9 ff.; Girma 2009, 64 ff.). Bender (1983, 41) claims that approximately twenty five percent of the Amharic basic vocabulary is of general Cushitic stock, whereby Appleyard (2003a, 235) distinguishes between three successive Cushitic substrata on the Amharic lexicon: first, Agaw languages, second, Highland East Cushitic languages, and third Oromo. This scenario seems to be common to all Ethiopian

Semitic languages to a certain degree (cf. Kogan 2005). In addition to Cushitic, the lexicon of Amharic is to a lesser extent influenced by neighboring Ethiosemitic languages, including the extinct Gəʕəz (Appleyard 1979, 74 ff.), as well as by Arabic (Brzuski 1974, Leslau 1957) and European languages (Abraham 1963, Gerhardt 1975, Richter 1973). Various studies contain information on the lexicon of Old Amharic (cf., e.g. Getatchew 1970; 1979, Plazikowsky-Brauner 1914, Richter 1997) but only a few works deal in-depth with the diachronic development of the Amharic lexicon (e.g. Appleyard 1977, Leslau 1964, Wetter 1999). More frequent are studies of contemporary innovations (e.g. Chernetsov 1980, Klingenhoben 1968, Richter 1993; 1994). There exist a great number of mono- and bilingual Amharic dictionaries (cf. Kane 1990, XX ff. for a detailed list). Plenty of lexicographic studies focus on the development of new terms for science and technology as well as for Marxist-Leninist concepts during the Derg period (e.g. Abraham 1991, Amsalu 1983, Kapeliuk 1979, Richter 1989, Tubiana 1985, Poláček 1988). Other topics of interest in Amharic lexicography are idiomatic expressions (Amsalu 1988, Kane 1991, Richter 2005), the semantics and pragmatics of terms for addressing individuals (Aregga 1984, Becker 1962, Getie 1998, Hoben 1975, Wolk 2006, Zelealem 2003), and semantic and morphosyntactic features of specific lexical items (e.g. Baye 1997; 1999b; 2006, Mengistu 2003; 2007, Wetter 2003).

Abbreviations:

ACC	accusative
APL	applicative
AUX	auxiliary verb
CNV	converb
COP	copula
CSD	direct causative
CSI	indirect causative
DEF	definite article
E.C.	Ethiopian calendar
EJ	ejective
f	feminine
IMP	imperative
INT	intentional
IPV	imperfective
JUS	jussive
LAB	labialization
m	masculine
MP	medio-passive
NEG	negation
NP	non-past tense
o	non-subject reference
p	plural
P	past
PL	plural
PROG	progressive
PV	perfective
REL	relative clause marker
s	singular
VD	voiced

VL	voiceless
VN	verbal noun

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71. The Role of Amharic as a National Language and an African *lingua franca*

1. Introduction
2. Major periods in the development of Amharic as an Ethiopian *lingua franca*
3. Effects of Amharic as a *lingua franca* in the Ethiopian context
4. References

Abstract

This article outlines the development of Amharic from a language of the Ethiopian court to the national lingua franca. Four major periods in the use of Amharic for inter-group

communication are identified, based on varying degrees of its promotion as a national language by official institutions. Finally, the effects of the language policies with regard to bi- and multilingualism and identity are discussed.

1. Introduction

Amharic is the working language of the government of Ethiopia, a multi-ethnic state with more than eighty native languages (cf. Appleyard/Orwin 2008, 269ff.; Meyer/Richter 2003, 23ff.). Ethiopia was only occupied by Italy from 1935 to 1941, and this seems to be a major factor in Ethiopia's endoglossic language policy, which has favored Amharic as a *lingua franca* (cf. Heine 1968, 104ff., Heine/Reh 1982, 66ff.).

A *lingua franca* is a language which is commonly used by people with various mother tongues as means of communication (Heine 1968, 4). According to Grimes (2003, 109) 17.5 million people speak Amharic as a first language and approximately 5 million people as a second language. The homeland of rural monolingual Amharic speakers is the regions of Gojjam, Gondär, Western Wällo and Shäwa in northwest and central Ethiopia. Many monolingual Amharic speakers live in towns throughout the country (Appleyard 2003, 233, Meyer/Richter 2003, 55ff.). There is no clearly identifiable ethnic group *Amhara*. Until the 19th century, the term *Amhara* was a toponym of a region in the central Ethiopian highlands and not the name of a people (Chernetsov 1993, 97). At least until the reign of Haile Sellassie I, Amharic-speaking people identified themselves on a more local level, for instance, as *goğgame* 'person from Gojjam', *gondäre* 'person from Gondär', etc. (cf. Bahru 2004, 308, Levine 1974, 118). The Ethiopian ruling elite from Amhara, in contrast, preferred to call themselves 'Ethiopian' (Tegegne 1998, 119). Therefore, Chernetsov (1993, 101) concludes: '... 'Amhara' probably never had a close definition and always meant more social than ethnic group'. Thus, knowledge of Amharic is connected with a variety of social groups within Ethiopia: It was the language of the nobility in the Ethiopian court and the language of the soldier-settlers (i.e. *näfläñña*) in annexed areas, as well as the language of the Ethiopian Orthodox clerics. Later, Amharic was also perceived as the language of educated people from urban places. It became, thus, a major feature of a national 'Ethiopian' identity (Chernetsov 1993, 103).

2. Major periods in the development of Amharic as an Ethiopian *lingua franca*

2.1. Amharic as the 'language of the king'

At the end of the 13th century King Yäkuno 'Amlak (1270–1285) overthrew the hitherto ruling Zagwe dynasty and established the so-called Solomonid dynasty. From that time onwards, Amharic was known as the *lasanä nəgus* 'language of the king', and served as an oral *lingua franca* at the Ethiopian court (Ullendorff 1960, 124). Gə'əz, the language of the former Axumite rulers, survived only as a *lasanä şəhuf* 'language

of the literature' (Richter 1985, 113). Thus, as early as the 13th century a diglossic language situation developed in Ethiopia, with Gə'əz as medium for writing and as the liturgical language in the Ethiopian Orthodox Church, but with Amharic for oral communication (cf. Cooper 1976, 289). During the reign of Zär'a Ya'qob (1434–1468) the so-called *čäwa* troops (i.e. soldiers of the king who were responsible for collecting taxes) probably spread Amharic further into the south and adjacent regions in the central Ethiopian highlands (cf. Chernetsov 1993, 98f.). In the first half of the 17th century Hiob Ludolf, based on information from the Ethiopian monk *Abba Gorgoryos*, gave the following socio-linguistic profile of Amharic: 'Thus the *Amharic* Dialect, [...], being carry'd along with the Camp and Court over all the Kingdom, got the upper hand of all the other Dialects, [...]: and at length became so Familiar to all the Chief of the Abissines, that you may easily by the use of that one Dialect Travel the whole *Empire*' (Ludolphus 1982 [1682], 78). This report is evidenced by Catholic missionaries who used Amharic instead of Gə'əz for their religious endeavors at the end of the 16th and at the beginning of the 17th centuries (Kane 1975, 3, Nosnitsin 2003, 238, Ullendorff 1960, 124). Even among the Ethiopian Orthodox clerics, Amharic was most probably commonly known (cf. Getatchew 1979, 111).

2.2. Restrictive language policy towards Amharic as a unifying bond

From the middle of the 19th century, Amharic began to replace Gə'əz in its function as the *ḥasanä šəhuf*. Tewodros II (1855–68) and later Menelik II (1889–1913) were the first Ethiopian emperors to order their chronicles be written in Amharic rather than Gə'əz (cf. Bahru 2004, 309, Richter 1985, 116f., Ullendorff 1955, 16ff.). During the reign of Menelik II, who expanded the Ethiopian empire into its modern borders, Amharic was given a *de facto* official status as the national *lingua franca*, because Amharic-speaking officials administered the annexed territories in newly built towns (cf. Tesema 2006, 89). Haile Sellassie I (1930–1974) declared Amharic the official language of Ethiopia in 1955 (Negarit Gazeta 1955, § 125) in order to demonstrate the unity of all Ethiopian peoples as a nation (cf. Richter 1982, 245f.). The change of Amharic from a *de facto lingua franca* to the *de jure* official language of Ethiopia in 1955 was preceded by two events: the foundation of a printing press and the development of secular education. The first printing activities in Ethiopia date back to the reign of Tewodros II. They were mainly connected with foreign missionary activities but a governmental printing press was soon founded (Pankhurst 1963, 249ff.). In 1908 the first Ethiopian newspaper, a weekly called *A'imro* 'intelligence' appeared in Addis Ababa and in 1923 the still-active printing press *bərhanənna sälam* 'light and peace' started its work. After 1941 the printing activities further expanded through privately owned printing presses (Ayalew 1964, 33f.). The language of the new print media was almost exclusively Amharic (cf. Pankhurst 1963, 271), but rarely the hitherto common medium for writing, Gə'əz. The development of Amharic as a written language was enforced by changes in the educational system. Although at the beginning of the 20th century the first schools used French, English or Italian as the medium of instruction, Amharic very soon became the language of instruction in primary education and English the principal foreign language for secondary and higher education (Negarit Gazeta 1944, § 13, Perham 1969, 253). Only in remote regions, in which the people had a

very low command of Amharic, were vernaculars permitted for teaching Amharic (cf. Perham 1969, 253). A decree from 1944 urging missionary schools to use only Amharic as a means of instruction in primary education, indirectly promoted Amharic as a *lingua franca* in Ethiopia (cf. Haile 1976, 185). From 1956 to 1991, Amharic was the only official language in primary education, although educational experts suggested using a number of vernacular languages in the first elementary grades for teaching Amharic (cf. Tesfaye 1971, 76f.). The use of Amharic in its new function as a written language of the mass media and as a means of instruction in schools required a certain degree of standardization, in particular, for technical and scientific terms (cf. Amsalu 1982). In 1942, the *Ethiopian Academy for the Development of the Language (Amharic)* was founded, which became the *Ethiopian Language Academy* during the Derg period (Wedekind 1994, 817). A further economic and moral incentive for the use and development of Amharic was the *Haile Sellassie I Prize* which was awarded from 1964 until 1974 to individuals involved in the promotion of the Amharic language and literature (cf. Bahru 2004, 312, R. Pankhurst 2001).

The language policy of Haile Sellassie I promoted only Amharic as the official language of Ethiopia. This policy aimed to unify the various Ethiopian speaker-communities through an Amharic bond (Richter 1982, 245f.). Consequently, other vernacular languages and cultures were disregarded, and non-Amharic speakers may have perceived this policy as discriminatory (Dendir 1984, 422).

2.3. The beginning of linguistic liberalization during the Derg era

The socialist government, known as the Derg, changed the language policy during its reign between 1974–1991. The language rights of other Ethiopian speaker-communities were officially recognized (cf. Bahru 2004, 313ff., Richter 1985, 118f.). In fact, however, Amharic remained the only official language and means of instruction in primary schools (Griefenow-Mewis 1992, 136). The number of primary schools more than doubled between 1974 and 1984 (Ayalew 2000, 97) so that the spread of Amharic and its use in inter-ethnic communication increased rapidly (cf. Meyer/Richter 2003, 47ff., Richter 1983). The *Ethiopian Language Academy* in cooperation with the Addis Ababa University established a corpus of approximately 12500 standardized scientific Amharic terms in the 1980s to develop Amharic as a language of the sciences (Amsalu 1984, 13f., Richter 1984, 615). The change in language policy loomed large in the adult literacy campaigns which were conducted in fifteen languages in the late 1970s and 1980s (Meyer/Richter 2003, 33ff.). Even these campaigns contributed to the transmission of basic knowledge of Amharic into remote areas (cf. Griefenow-Mewis 1992, 128ff., Hoben 1994, 185). As the only official language in administration and primary education remained Amharic, a good command of it was required in order to obtain a position in government offices (Bahru 2004, 314). Furthermore, the rapid process of urbanization, the development of the transportation network of trade and commerce, and the growing influence of education and the mass media during the Derg era strongly affected the spread of Amharic as a *lingua franca* in Ethiopian towns (Cooper/Horvath 1976, 197, Meyer/Richter 2003, 73ff., Richter 1983, 93).

2.4. Linguistic pluralism in the language policy after 1991

The current Ethiopian government, which came to power in 1991, strongly promotes a policy of equal rights for all Ethiopian people and their languages (Negarit Gazeta 1994, § 5). In contrast to the Derg era, the liberal language policy after 1991 was successfully implemented and yielded an empowerment of other Ethiopian languages (cf. Ayalew 2000, 101, Cohen 2002, 48). In some federal states and districts, Amharic has been replaced by other languages as a working language and as a means of instruction in primary schools, although it remains a school subject. The former *Ethiopian Language Academy*, which primarily focused on the corpus planning of Amharic, became an integral part of the Addis Ababa University in 1997 as the *Ethiopian Languages Research Center*. Now, this institution deals with the description, codification and standardization of Ethiopian languages in general (cf. Baye 1999). The status of Amharic has changed from the only official national language into that of a working language of the federal government. Amharic is also used as a working language in some, but not all, of the new federal states (Daniel 1997, 438f.), and still functions as the *de facto lingua franca* in Ethiopian towns (cf. Meyer 2006, 129).

3. Effects of Amharic as a lingua franca in the Ethiopian context

3.1. Stable bilingualism with Amharic as one component

Bi- and multilingualism with Amharic as one component is a common phenomenon in most Ethiopian towns (Richter 1985, 119). Meyer/Richter (2003) observed that nearly one third of the non-Amharic mother-tongue speakers in towns use, in addition to their own mother tongues, Amharic as a second or third language. A similar type of bilingualism is also to be found in resettlement areas, in which various mother tongues are usually used for in-group communication but Amharic for inter-group communication (cf. Lusleged 1994, 531). Thus, the process of urbanization or of villagization through resettlements, which both involve multilingual communities, has served as another agent in the spread of Amharic (cf. Bahru 2004, 311, Meyer/Richter 2003, 73ff.). A number of socio-linguistic studies (cf. Drewes 1966, Cooper/Horvath 1973, 237) have recognized the important communicative function of Amharic for inter-ethnic communication in Ethiopia. Meyer/Richter (2003) and Meyer (2006) have shown that the policy of promoting only Amharic as the official language in Ethiopia until 1991 yielded a steady increase in the knowledge of Amharic among the younger generations as compared to their parents, but a decrease in the use of other languages. Thus, a remarkable number of parents have used Amharic instead of their mother tongue to communicate with their children who, consequently, acquired Amharic as their first language.

3.2. Amharic script

When Amharic became a written language it adopted the Gəʿəz syllabary, also known as *fidäl*. With the strong promotion of Amharic as the Ethiopian *lingua franca* its script

also became a sign of Ethiopian unity. Therefore, it was decided to use only the *fidäl* script for the languages taught in the adult literacy campaigns, even if other orthographies already existed, as in the case of Somali (cf. Griefenow-Mewis 1992, 128f., 136). The introduction of Oromo as the official language in Oromiya in 1992 became a politically sensitive matter. Instead of the *fidäl* script, Oromo uses a Latin-based orthography which was consequently used for the graphemic representation of other Cushitic and Omotic languages (cf. Baye 1997; Tilahun 1993).

An *ajäm* writing tradition also exists for Amharic among Ethiopian Muslims. In this tradition, Amharic is still written in a modified Arabic script (cf. Drewes 2007, Pankhurst 1994).

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72. Gurage

1. The term *Gurage*
2. Classification of Gurage varieties
3. Sociolinguistic features
4. Research on Gurage varieties
5. Linguistic features of Gurage languages
6. Concluding remarks
7. References

Abstract

The scientific study of Gurage varieties (a number of genetically related languages and/or dialects in central Ethiopia) started less than 150 years ago. Since then it has attracted various scholars from Semitic studies as well as from African Studies and General Linguistics. Most Gurage varieties serve only for face-to-face communication. Due to a lack of sufficient information on some varieties, in combination with widespread bi- and multilingualism, the classification of Gurage varieties is still a matter of discussion. The present article first presents a classificatory and sociolinguistic overview of the various Gurage varieties, including general remarks on the state of research on individual varieties. The main section discusses a selection of prominent phonological and morphological features in several Gurage varieties.

1. The term *Gurage*

Gurage (or also *Gʷərage*) is best understood as a geographical term for an area situated approximately 160 km south of Addis Ababa, and which more or less borders on the Rift Valley lakes in the east, on the River Awash in the north and on the River Gibe in the west and southwest (Hetzron 1972, 6f.; Goldenberg 2005, 924). The Semitic-speaking peoples who inhabit this area represent the southernmost pocket of Ethiose-

mitic. They are encircled by Cushitic- and Omotic-speaking peoples. The term *Gurage* in most linguistic descriptions, thus, refers neither to a common historical or cultural unit nor to a single language.

The term *Gerage* in the chronicle and in some versions of the Old Amharic panegyrics of Emperor ‘Āmdä Šəyon I, who reigned in the beginning of the 14th century, is often considered to be the earliest reference to *Gurage* (cf. Worku 2005, 929). Aläqa Tayyā (1946 E.C., 48f.) is of the opinion that the term *Gurage* is related to the place name *Gurāṣ* (written as *Gurṣa* in Amharic; but see Goldenberg (1977, 462) for the diction *Gurāṣ*) in Akkälä Guzay in today’s Eritrea. During the reign of Emperor ‘Āmdä Šəyon I, a certain Azmāč Səbḥat is said to have led troops from *Gurāṣ* to Aymäläl, a place in the northeast of the Kistane area, to ensure its incorporation into the Christian Ethiopian Empire. The settlement of Azmāč Səbḥat and his troops at that place laid the foundation for the *Gurage*, whereby *Gura-* refers to the place *Gurāṣ* and *-ge* stands for ‘land’. Another folk-etymology, also mentioned by Aläqa Tayyā, considers *gura* to be related to Amharic *gra* ‘left’ (cf. Worku 2005, 929). Hetzron (1972, 7) argues against the two etymologies and concludes: ‘Thus the etymology of the name *gurage* still remains unsolved’ (but see also Goldenberg 1977, 462).

According to oral traditions, some *Gurage* originate from Semitic-speaking people of the northern parts of Ethiopia who migrated into the south and settled there (cf. Crass/Meyer 2000; Dämbäru et al. 1987 E.C., 20ff.; Bahru 1972; Braukämper 1980, 183ff.; LeBel 1974; Shack 1966, 12ff.; Meyer 2000; 2001). Only the so-called *səbat bet gurage* ‘seven houses of *Gurage*’, i.e. the Chaha (and Gumär), Ezha, Gyeto, Muher (and Aklil), Inor, Endegen (and Enär), and Mäqorqor, commonly refer to themselves as *Gurage* (cf. Gabreyesus 1991, 1; Wäru 1983 E.C., 19ff.; Worku 2005, 929). The Kistane, Mäsqan, Dobbi, Silt’e, Wolane and Zay call themselves by their respective group name (cf. Goldenberg 2005, 924; Drewes 1996, 72; Hetzron 1996, 246). The Silt’e, Wolane and Zay are also called *adüre* by the surrounding Cushitic peoples (cf. Braukämper 1980, 184). At the end of the 19th century the term *Gurage* was commonly used as an external designation for all seasonal workers who came from the *Gurage* region to Addis Ababa or to other towns. Consequently, *Gurage* became a general term for the various *Gurage*-speaking communities outside their home areas (cf. Markakis 1998, 130ff.). Thus, it seems that *Gurage* originally was a geographical term for a region in central Ethiopia which then extended its meaning to the people living at that place.

2. Classification of *Gurage* varieties

Cohen (1931, 63–103) provides the first classification of the *Gurage* varieties. He considered *Gurage* a single language with a number of dialects, namely North-*Gurage*, East-*Gurage* and West-*Gurage*. This classification was adopted and elaborated by Leslau (1965; 1969, etc.). Hetzron (1972) contains the hitherto most detailed classification of the *Gurage* varieties, which is based on common morphological innovations. However, some features in Hetzron’s classification were severely criticized by Goldenberg (1977). In contrast to Leslau (1965), Hetzron (1972, 119) does not consider the several *Gurage* varieties to belong to a proto-*Gurage* language but to several genetic sub-branches of South Ethiosemitic (cf. Table 72.1).

Table 72.1: South Ethiosemitic (adopted from Hetzron 1972, 119)

1	Outer South Ethiosemitic
1.1	<i>n-group</i>
1.1.1	†Gafat
1.1.2	<i>Kistane-Dobbi group</i>
	Kistane (i.e. Kəstane)
	Dobbi
	†Gälila
1.2	<i>tt-group</i>
1.2.1	Muher (i.e. Mʷəhər)
1.2.2	<i>Western Gurage</i>
1.2.2.1	Mäsqaṇ
1.2.2.2	<i>Central and peripheral Western Gurage</i>
1.2.2.2.1	<i>Central Western Gurage</i>
	Chaha (i.e. Čäha), Ezha (i.e. Əža),
	Gumär (i.e. Gʷämarä), Gura (i.e. Gʷəra)
1.2.2.2.2	<i>Peripheral Western Gurage</i>
	Inor (i.e. Ənor), Enär, Endegeñ (i.e. Əndägän),
	Gyeto, †Mesmes (i.e. Məsməs)
2	Transversal South Ethiosemitic
2.1	<i>Central</i>
	Amharic
	Argobba
2.2	<i>Eastern</i>
2.2.1	Harari
2.2.2	<i>Eastern Gurage</i>
	Silt'e (i.e. Səlt'e)
	Wolane
	Zay

In contrast to Hetzron (1972), Bender (1971, 181) and Shiferaw (1994) incorporate Eastern Gurage into Hetzron's Outer South Ethiosemitic and put Gafat apart. The strong affinity of the Eastern Gurage languages to Harari, proposed by Hetzron (1972) on morphological grounds, was further confirmed by lexico-statistic comparison (Gardner/Siebert 1994). While Hetzron (1972, 119) classifies Silt'e-Wolane and Zay as two separate branches, Gutt (1997a, 509) considers Silt'e, Wolane and Zay as three dialects of a single language, which he calls the 'Silt'e group'. Girma (2001, 82) only considers Silt'e and Wolane to form Eastern Gurage but not Zay. While Kistane (also known as Soddo or Aymäläl), Dobbi (also referred to as Gog(g)ot), Muher (including Aklil, Desa, Oçe), and Mäsqaṇ are said to be independent languages in the Outer South Ethiosemitic branch, the Central Western Gurage languages (Chaha, Ezha, Gumär, Gura), and the Peripheral Western Gurage languages (Endegeñ, Inor, Enär, Gyeto) are considered two dialect continua (cf. Hetzron 1977, 20 ff.). However, the status of certain Gurage varieties as separate languages or as dialects of a single language is still a matter for discussion. Some Gurage varieties may have additional sub-varieties, like *anä-bet* and *ädi-bet* for Muher (cf. Hetzron 1972, 3) or Wulbareg, Azarnat, Enneqor, etc. for Silt'e (cf. Drewes 1996, 69); see also Meyer (2005c) for sub-varieties of Zay.

There is also evidence of two extinct Gurage varieties: Mesmes, which belongs to Peripheral Western Gurage (Ahland 2010, 2), and Gälila, which has some affinities to Kistane (Haberland 1960, 18).

The Gurage languages of the Outer South Ethiosemitic branch have a number of common typological, not genetically inherited features. Therefore, Hetzron (1977) aggregates them in a typological unit called *Gunnän Gurage*. There may be another typological sub-unit in Gunnän Gurage, namely the so-called Northern Gurage comprising of Kistane, Dobbi and Muher. It is commonly accepted that the typological units Gunnän Gurage and Eastern Gurage belong to two distinct genetic sub-branches of South Ethiosemitic. Hetzron (1972, 119ff.; 1996, 246ff.) identifies a bundle of features for Eastern Gurage, such as (a) the reduction of gemination in the verbal domain, (b) a nasal trace of lost initial laryngeals, (c) loss of gender distinction in the plural, (d) partial survival of the accusative marker *-ä*, and (e) obligatory use of temporal auxiliaries with main affirmative imperfective verbs.

The several genetic classifications of the Gurage varieties all have a tripartite division (cf. Fellman 1996/1997; Goldenberg 2005, 924ff.): (a) the so-called *säbat bet gurage* ‘seven houses of Gurage’ or Gurage proper, (b) Kistane, and (c) East-Gurage. The *säbat bet gurage* comprise Hetzron’s Peripheral and Central Western Gurage languages and Muher. The actual status of Dobbi, Muher and Mäsqaṇ, however, is still a matter of discussion.

Besides the lack of sufficient, comparable data for some Gurage varieties, their classification is impeded by the effects of an intense multilingualism (including Amharic, Oromo and Highland East Cushitic languages) among the majority of Gurage speakers and resulting language contact phenomena (cf. Leslau 1952; 1959a; Meyer 2006b).

3. Sociolinguistic features

Currently, the Gurage Zone is an administrative unit in the Southern Nation, Nationalities and Peoples Regional State. It is divided by the Gurage Mountains into western and eastern parts. The exact number of Gurage speakers is not available. The following approximations are based on Gordon (2005), if not indicated otherwise. East of the Gurage mountains, in the northeastern part of the Gurage Zone, live the Kistane. This speaking community encompasses approximately 360000 people. The major administrative center is Bui. South of the Kistane and west of the town Butajira live the Dobbi, the smallest Gurage community with 4000 speakers. South of the Dobbi but still near Butajira live the approximately 25000 Mäsqaṇ speakers. To the south and east of the Mäsqaṇ settled the Silt’e who encompass more than 760000 speakers. Their main administrative center is Worabe. The Zay are geographically separated from the remaining Gurage. They live on the islands of Lake Zway and its shores. Administratively, the Zay belong to the Oromia Regional State. 5000–14000 people speak Zay (cf. Meyer 2005a, 15). To the west of the Kistane, on the western part of the Gurage mountains, live the approximately 70000 Wolane speakers (cf. Meyer 2006a, 17). Their main towns are Mähal Amba and Jimma-Wolane. South of the Wolane settled approximately 90000 Muher speakers; their major town is Hawaryat. To the southwest of the Muher live the approximately 120000 Ezha speakers whose major town is Agenna. The 130000 Chaha speakers settled to the southeast of the Ezha and have Emdibir as their main administrative center. 20000 people around Gura Megenase to the south-

west of Emdibir speak Gura. The number of Gumär speakers who live to the west of the Chaha is not known. Gyeto is spoken by 80000 people to the south of the Gura and to the west of the Silt'e. Approximately 230000 Inor speakers live to the south of the Chaha and to the west of the Gyeto and Gumär. Their main town is Gunchire. The Enär live to the south of the Inor but no information is available on the number of speakers. The southernmost Gurage group are the 50000 Endegeñ speakers. The administrative center of the entire Gurage Zone (except Silt'e and Zay) is Wolkite. Over half a million Gurage people are said to live outside the Gurage Zone in various Ethiopian towns (Worku 2005, 929).

In most parts of the Gurage area the ensete plant, also known as 'false banana', is the main staple food. There are also regions where cultivation of grain or cattle breeding prevails (Worku 2005, 933f.). With regard to religion, Gurage speakers may follow traditional belief systems, or may be believers of the Ethiopian Orthodox Church, of Islam or even of the Catholic or Protestant Churches (cf. Leslau 1979a, x; Shack 1966, 68; Shack 1984; Worku 2005, 930f.).

Due to a long tradition of seasonal labor migration, intermarriage and a number of other reasons the majority of the Gurage are bi- or multilingual, i.e. many Gurage know more than one Gurage variety beside Amharic, Oromo and/or other Ethiopian languages. This has not only an impact on the language use of individuals (cf. Hetzron 1972, 2f.) but may also affect larger portions of the speaker communities (cf. Täkle 1997 E.C., 53ff.). According to Gutt (1980, 65) the degree of comprehension among Kistane, Silt'e and Chaha is less than 40%. On the other hand, Silt'e and Wolane are mutual intelligible (Gutt 1980, 72f.). Drewes (1996, 72) confirms Gutt's findings by his own fieldwork experience. Ahland (2010, 3ff.) postulates on the basis of recent intelligibility testing in Gunnän Gurage four 'communication centers', namely (a) Kistane-Dobbi, (b) *säbat bet gurage* including Muher and Hetzron's Central Western Gurage varieties, (c) Inor (including Gyeto, Endegeñ and Enär), and (d) Mäsqañ. Despite the results of the linguistic studies, political considerations and matters of ethnic identity may enhance distinctions between closely related varieties, as, for instance, between Silt'e and Wolane, so that these varieties must be considered separate languages (cf. Meyer 2006a, 19). Except for Silt'e, no Gurage variety is used as a language of instruction or as a subject in primary education. Even Silt'e started to be used in schools only recently. Thus, except for Silt'e, no Gurage variety has a standardized orthography or is frequently used as a written language. However, there exists a translation of the New Testament, a few novels in Chaha (cf. Goldenberg 2005, 927) as well as a short account of the culture and history of the Kistane people in Kistane (Wärqu 1987 E.C., 155ff.). These works in Chaha and Kistane are written in a modified Ethiopic script (cf. Goldenberg 2009).

4. Research on Gurage varieties

One of the first grammatical descriptions of a Gurage variety is found in an Amharic grammar because it was considered a dialect of Amharic (Praetorius 1879, 507ff.). Later it was identified as Kistane (cf. Goldenberg 1968, 65). Although the earliest attestation of Gurage lexemes in an Arabic manuscript reaches back to the 13th cen-

ture, more intense scientific research only started at the end of the 19th century (Goldenberg 2005, 924; see also Hetzron 1977, 24ff.; Leslau 1979a, xiv f. for a concise summary of the research history). But even today not all individual Gurage varieties are adequately documented.

The most prominent scholars who decisively influenced research in Gurage varieties are Wolf Leslau (1906–2006) and Robert Hetzron (1937–1997). Leslau (1979c, xv ff.) is a concise overview on the phonology of the Gurage varieties in general. Hetzron (1977, 1997) contain general information on the grammar of Gunnän Gurage; Hetzron (1996) and Gutt (1997a) on Eastern Gurage, whereby Gutt has a strong bias towards Silt'e. The most frequently mentioned Gurage variety in linguistic works is Chaha. Degif (2000) is a thorough description of its morphophonology while Leslau (1950, 1983), Ford (1986) and Rose (2007) contain general grammatical sketches. Information on the grammar of Ezha can be obtained from Polotsky (1938) and on the verb in Mäsqaṇ from Leslau (2004). A grammatical outline of Muher is to be found in Leslau (1981); on Kistane in Leslau (1969), Goldenberg (1968) and in Bedilu (2010). Berhanu/Hetzron (2000) is a description of Inor. With regard to Eastern Gurage varieties, Gutt (1997a, 1997b) deal with the main features of Silt'e. Wolane is described in Meyer (2006a), Zay in Leslau (1999) and Meyer (2005a, 2006c). Beside grammatical sketches, Leslau (1950, 1968; 1981) contain text collections in Chaha, Kistane, and Muher, respectively; Leslau (1983) provides texts on Chaha and Inor. Hetzron (1977) also contains texts in Kistane, Dobbi, Muher, Mäsqaṇ, Ezha, Gumär, Gura, Gyeto and Inor.

Despite the limited information on individual varieties, there is a bulk of literature on diachronic reconstructions and on morphophonological phenomena concerning Gurage varieties (cf. Leslau 1992, Hudson 1996 among others).

5. Linguistic features of Gurage languages

As the several Gurage varieties belong to various genetic and typological sub-groups only general phonological and morphological features are described in this section. Note that the described features are not of equal importance in all Gurage varieties. The transcription of quoted data in this article was generally adapted to the IPA convention in order to avoid inconsistencies due to competing transcriptions in the literature. Note that *ə* has been chosen to represent the closed-mid central vowel, while *ä* represents the open-mid central vowel. If not quoted otherwise the cited data are obtained from the present author's own field notes.

5.1. Phonology

Within a broader Ethiosemitic context Muher and Western Gurage varieties are quite exceptional due to their morphophonology while Kistane, Dobbi and Eastern Gurage varieties are less spectacular.

Table 72.2: Consonants in Gurage varieties

	LABIAL	ALVEOLAR	PALATAL	Velar	GLOTTAL
PLOSIVE	<i>p p^w</i> <i>b b^w</i>	<i>t</i> <i>d</i> <i>t'</i>		<i>k k^w k^j [c]</i> <i>g g^w g^j [ɟ]</i> <i>k' k'^w k'^j [c']</i>	<i>ʔ ʔ^w</i>
FRICATIVE	<i>f f^w</i> <i>β</i>	<i>s</i> <i>z</i>	<i>ʃ</i> <i>ʒ</i>	<i>x x^w x^j [ç]</i>	<i>h h^w</i>
AFFRICATE		<i>tʃ</i> <i>dʒ</i> <i>tʃ^w</i>			
NASAL	<i>m m^w</i>	<i>n</i>	<i>ɲ</i>		
LATERAL		<i>l</i>			
TRILL		<i>r</i>			
APPROXIMANT	<i>w</i>		<i>j</i>		

5.1.1. Consonants

The consonants given in Table 72.2 may occur in Gurage varieties (cf. Leslau 1979c, xxvi f.; Hetzron 1977, 37). The actual phonemic status of the consonants differs among the Gurage varieties and not all consonants occur in every variety. The glottal stop ʔ often represents an allophone of *k'* as result of a debuccalization process (see 5.1.5.2.). The glottal stop does not occur in Chaha and probably in the related varieties Ezha and Gumär (cf. Degif (2000, 1); but see also Ford (1986, 43) for a contrary analysis). In Gura, a glottal constriction seems to precede always a stressed syllable (Hetzron 1977, 43). The glottal stop occurs as an allophone of *k'* in Muher but it is a free variant of *k'* in Kistane and Dobbi (cf. Hetzron 1977, 38). In Eastern Gurage, it is a marginal phoneme (cf. Meyer 2005a, 35f.; 2006a, 27ff.) but in Peripheral Western Gurage it occurs as a (full) phoneme (cf. Hetzron 1977, 38f.; Berhanu/Hetzron 2000, 11f.; Prunet 1996a, 178ff.). With regard to *h*, Degif (2000, 1f.) and Leslau (1997, 381) do not consider it a phoneme (or even a phone) in Chaha (Central Western Gurage) (but see also Ford (1986, 42) for a less clear statement). Berhanu/Hetzron (2000, 10) do not mention *h* as a phoneme in Inor (Peripheral Western Gurage). Instead of *h* the fricative *x* occurs in these varieties as a phoneme. Hetzron (1977, 37ff. and 1997, 536), in contrast, lists *h* as a phone(me) for all Gunnän Gurage varieties; according to him the phone [x] should only be an allophone of *h* in Muher (Hetzron 1977, 38). In the Eastern Gurage varieties except Silt'e, however, *h* and its labialized variant *h^w* are phonemes (see Gutt 1997a, 510; Meyer 2005a, 27, 42ff.; Meyer 2006a, 23, 30f.).

The consonant *β* is considered to be a phoneme in Chaha, Gura, Gyeto and Inor while in the remaining Gurage varieties it can be considered an allophone of *b* (cf. Hetzron 1977, 37f., see also Degif 2000, 7 for Chaha). The consonant *p* in Kistane, Dobbi, Muher, Ezha and Mäsqa does only occur optionally in loanwords (cf. Hetzron 1977, 37). This situation is also found in Eastern Gurage (cf. Meyer 2005a, 37f.; Meyer 2006a, 34f.). In the remaining Gunnän Gurage languages, *p* and *p^w* are usually the allophonic realizations of geminate *ββ/bb* or *ββ^w/bb^w* (cf. Hetzron 1977, 39f.; Degif

2000, 7). The labialized consonant *b^w* is further weakened to *w* in intervocalic position in Muher (cf. (1)) and Chaha (Leslau 1997, 374f.; Degif 2000, 160ff.) and probably also in other Western Gurage varieties.

(1) Muher

ewä /e-b^wä/

(NEG:s3sm-go_down:IPV) 'he does not go downwards'

The nasal *ɲ* does not occur in Central Western Gurage (Hetzron 1977, 38). In the remaining Gurage varieties, it is a marginal phoneme that does not occur word-initially. The series *voiceless–voiced–ejective* among plosives and affricates, as well as the existence of labialized consonants are common features of Ethiosemitic languages. However, labialized consonants are not so frequent in Eastern Gurage varieties in which labialization often affects the vowel quality and disappears as a consonantal feature (cf. Meyer 2005a, 42ff.; Meyer 2006a, 29ff.). In Silt'e, labialization seems to appear only in the morpheme of the 1s perfective subject marker *-h^w*. The situation is different in Gunnän Gurage where labialization frequently occurs with non-coronal consonants, i.e. with labial, velar and glottal consonants (see 5.1.5.3). Although labialization in Gunnän Gurage may also affect the quality of a following vowel, it is clearly identifiable as a consonantal feature. Palatalized velars are a special feature of Gunnän Gurage because they are not recorded elsewhere in Ethiosemitic. The status of labial or palatal co-articulated consonants as monophonemic or biphonemic units is unclear. Hetzron (1977, 37), for Gunnän Gurage, and Ford (1986), for Chaha only, seem to consider them monophonemes. Leslau (1997, 376) points out that the labialized coronals represent monophonemes as well as biphonemes. Degif (2000, 39f.) considers neither co-articulated consonants nor the palatals and affricates monophonemes in Chaha. Berhanu/Hetzron (2000, 10ff.) present an identical analysis for Inor.

Another specific feature of most Gunnän Gurage varieties is the allophonic distribution between *n*, *l*, and *r*. Generally, the lateral consonant *l* is very rare in Central and Peripheral Western Gurage, in which it only occurs in a few suffixes and words (cf. Hetzron 1977, 38). The lateral consonant is more frequent in Muher, Mäsqa, Kistane and Dobbi but even here it may alternate with *n* and *r*. In Muher, for instance, *l* occurs geminated and non-geminated in the verb *sälla-m* (arrive:PV:3sm-DCM) 'he arrived' and *ji-sälo* (3sm-arrive:IPV:DCM) 'he will arrive'. In some instances, however, a geminated *ll* in cognate verbs from related languages occurs as *nn* and a non-geminated *l* as palatalization in Muher: *bänna-m* (eat:PV:3sm-DCM) 'he ate' (Amharic *bälla*) vs. *ji-βä-l-o* (3sm-eat:IPV-DCM) 'he eats' (Amharic *ji-bäl(a)-all* (3sm-eat:IPV-AUX:NP)). In Chaha, word-initial *n* may represent *r* or *l* in cognate roots from other Semitic languages. Word-initial *n* in Chaha changes into *r* when preceded by other elements (cf. Degif 2000, 128f.):

(2) Chaha

nak'ä-m 'grow' but *tä-rak'ä-m* 'be grown' (Muher *lakk'ä-m* 'grow')

nasä-m 'lick' but *tä-rasäm* 'be licked' (Amharic *lasä* 'lick')

The nasal *n* in Chaha may also represent a geminated *r* or *l* in related languages which occurs as *r* in Chaha when non-geminated (cf. Degif 2000, 126f.):

(3)

	Chaha	Muher	
PV:	<i>dänägä-m</i>	<i>därrägä-m</i>	'he hit'

JUS:	<i>jä-dərg</i>	<i>jä-dərg</i>	‘may he hit’
	Chaha	Amharic	
PV:	<i>bāna-m</i>	<i>bälla</i>	‘he ate’
JUS:	<i>jä-βra</i>	<i>ji-bla</i>	‘may he eat’

The juncture of a word-final *r* and a suffix beginning with *r* yields geminated *ll* in Chaha (cf. Hetzron 1977, 40), as in *k’allo* /k’ar-ro/ (thing-COP:3pm) ‘they are things’ (Ford 1986, 46).

Gemination of consonants seems to occur in most Gurage varieties but with different phonemic value and frequency (cf. Leslau 1979c, lxxiii ff.). In Chaha, for instance, gemination of consonants is almost nonexistent, except in a few lexical items, like *əmmat* ‘one, only one’, *attəm* ‘any’, etc. (Ford 1986, 45; Leslau 1997, 389). A similar situation seems to occur in Inor and Gyeto (cf. Rose 2006, 848). In Eastern Gurage, gemination is phonemic, i.e. it contrasts in minimal pairs, as in Silt’e *gawo* ‘forest’ vs. *gawwo* ‘foolish’ (Gutt 1997b, 899). However, gemination in Eastern Gurage is usually an invariable feature of a lexical entry and not part of conjugation patterns (Gutt 1997b, 899; Meyer 2005a, 39ff.; Meyer 2006a, 24f., but see also Drewes (1960) for a divergent sub-variety of Silt’e). In Ezha, a variety closely related to Chaha, and in Endegeñ gemination occurs as a morphophonemic feature in verb inflection.

Table 72.3 Gemination patterns in Gurage varieties (Rose 2006, 845)

	PV	IPV	PV	PV
Chaha	<i>gätärä-m</i>	<i>ji-gädər</i>	<i>zäkärä-m</i>	<i>nädäfä-m</i>
Endegeñ	<i>gättärä</i>	<i>ji-gädər</i>	<i>zäkkärä</i>	<i>nädäfä</i>
Ezha	<i>gäddärä-m</i>	<i>ji-gädər</i>	<i>zäggärä-m</i>	<i>näddäfä-m</i>
	‘put to sleep’		‘jump’	‘sting’

Table 72.3 demonstrates two features related to gemination in Western Gurage. First, gemination in Endegeñ in the perfective aspect is accompanied by devoicing of the geminated consonant. Note that Azarnat, a sub-variety of Silt’e close to the Endegeñ speaking area, exhibits gemination and devoicing with a few verbs (cf. Drewes 1960). Devoicing is the only trace of an ‘underlying’ geminated consonant in Chaha which, however, is realized as singleton (see also McCarthy 1987, 210ff.). Second, the occurrence or absence of geminated consonants in Endegeñ seems to depend on the overall duration of a phonetic word, i.e. gemination occurs when the ultimate and penultimate consonants have a relatively short duration (like plosives and *r*) but is blocked when either of them has a long duration (like fricatives) (Rose 2006, 846ff.; but see also Degif 2000, 22 for another analysis of this phenomenon in Chaha). Generally, all consonants except *ʔ* can be geminated (cf. Rose 2006, 843).

5.1.2. Frequent vowels and diphthongs

Table 72.4 contains the common vowel phonemes and diphthongs of most Gurage varieties (cf. Hetzron 1977, 34; Leslau 1979c, xv).

Table 72.4: Vowels and diphthongs in Gurage varieties

	FRONT	CENTRAL	BACK
CLOSE	<i>i</i>		<i>u</i>
CLOSE-MID	<i>e~ē</i>	<i>ə</i>	<i>o~ō</i>
OPEN-MID	<i>ä^j > ε</i>	<i>ä</i>	<i>ɔa > ō or ɔ</i>
OPEN		<i>a~ā</i>	

The close-mid central vowel *ə* has several allophones; it can be realized as central [ə], fronted [i]/[i] or rounded [u]/[u]. Hetzron (1977, 34) and Degif (2000, 3 and 25ff.) consider *ə* to be an epenthetic vowel and not a phoneme. However, it can hardly be predicted in all lexical entries. Degif (2000, 156f.), for instance, explains word-initial *ə* in Chaha as a prosthetic vowel due to the gemination of the word-initial consonant, as in *əddər* ‘cooperation’ or in *ənnet* ‘kind of bamboo’ which should represent /ddər/ and /nnet/, respectively. However, *ə* also appears word-initially in Chaha when the following consonant is not geminated, like *ədäggä* ‘extra amount given by the seller’ (Leslau 1979a, 4) or *ənet* ‘spring of water’ (Leslau 1979a, 17). In Muher, word-initial *ə*, like other word-initial vowels, triggers the deletion of a prefix vowel *ä*, as in *bəga* /bä-əga/ (LOC-water) ‘in the water’ but not **bäga* which could be expected if *ə* were an epenthetic vowel. This process also occurs in Chaha (Ford 1986, 44; Leslau 1997, 397) and cannot be explained by epenthesis. With regard to the non-concatenative morphology in verbal inflection and derivation, however, the occurrence of *ə* can usually be predicted by a set of rules (cf. Degif 2000, 25ff. for Chaha). Thus, the phonemic status of *ə* is ambiguous: it functions as an epenthetic vowel but there are also cases in which it must be considered a phoneme. Regarding epenthesis, the vowel *ä*, too, is of importance because it is frequently used as a prosthetic vowel in words beginning with *r* and *s*, like Muher *ärot’äm* /rot’äm/ ‘run’ or *äresa* /resa/ ‘corpse’ (cf. Hetzron 1977, 34; Leslau 1979c, xxiv). The close-mid vowels *e* and *o* are often but not always the result of assimilation of *äj* (or *ä^[+high, -back]*) or *äw* (or *ä^[+round]*), respectively (cf. Hetzron 1977, 35; Degif 2000, 3).

Beside the plain vowels, the diphthongs *ɔa* and *ä^j* may yield the vowels *o* (or *ɔ*) and *ε*, which occur in a number of Western Gurage languages and in Muher (cf. Hetzron 1977, 35; Degif 2000, 3; Leslau 1979c, xvi f.). Nasalized vowels are very frequent in Peripheral Western Gurage (cf. 5.1.5.3).

A phonological feature of Ethiosemitic languages in general is the loss of length as a phonemic feature of vowels (Ullendorff 1955, 159). There are two geographically distinct clusters of Gurage varieties which re-introduced vowel length. Phonemic vowel length in Zay and Silt’e probably evolved due to a long-lasting and intense contact with Oromo speakers in connection with extensive borrowing from Oromo (cf. Meyer 2006b, 819). Although in Zay the seven cardinal vowels still exist, they were reduced to the five cardinal vowels *i*, *e*, *a*, *u*, *o* in Silt’e, in which *i* also serves as epenthetic vowel (Gutt 1997b, 899). Wolane, which had less contact with Oromo, does not possess distinctive vowel length as a phonemic feature. The second cluster of Gurage varieties with phonemic vowel length is Peripheral Western Gurage. Here phonemic vowel length is mainly the result of diachronic processes yielding the loss of certain intersecting consonants (cf. Hetzron 1970; Leslau 1979c, xix f.).

5.1.3. Non-segmental features

Another prominent feature of Gurage varieties is the existence of two non-segmental, floating features: [+round] or ^{LAB}, which triggers labialization, and [+high, -back] or ^{PAL}, which triggers palatalization (cf. Rose 1994, MacCarthy 1983). In Western Gurage and Muher these features commonly affect non-coronal consonants:

(4) Muher

<i>ṣārräg^wim</i>	/ṣārräg- ^{LAB} -i-m/	(go:PV-IP-o3sm-DCM)	‘one went’
<i>sämm^wēm</i>	/sämmā- ^{LAB} -i-m/	(hear:PV-IP-o3sm-DCM)	‘one heard’
<i>dāʔ^wim</i>	/dāq- ^{LAB} -i-m/	(laugh:PV-IP-o3sm-DCM)	‘one laughed’
<i>tagjäβätt</i>	/t-gäbā- ^{PAL} -tt/	(2sf-enter:IPV-f-DCM)	‘you (2sf) enter’

These non-segmental features in Gunnän Gurage have a number of functions: they are used for agreement marking on verbs, for indicating the impersonal form of a verb and in nominal derivation. The non-segmental features also occur in Zay but not in Silt'e and Wolane. In contrast to Western Gurage and Muher, the non-segmental features in Zay, which only occur as part of subject markers, mainly affect vowels, not consonants:

(5) Zay (Meyer 2005a, 49ff.)

<i>soβorunu</i>	/säbär- ^{LAB} -n-u/	(break:PV-3sm-FOC-DCM)	‘they broke’
<i>tiβērkinēfo</i>	/t-bärk- ^{PAL} -n-ä-ǰä-u/	(2sf-bless:IPV-f-FOC-AUX:NP-2sf-DCM)	‘you (sf) bless’

5.1.4. Syllable structure

The common syllable structure of Ethiosemitic languages (cf. Rose 1997, 9) is found in Gurage, too. Depending on the status of the glottal stop the minimal syllable is either V or CV. The maximal syllable is C_a(C)_bV(C_c)C_d, whereas only certain consonants can occur in the position of C_b and C_c which are determined by principles of sonority (cf. Degif 2000, 23f. and Ford 1986, 45 for Chaha; Meyer 2005a, 52ff. for Zay and Meyer 2006a, 42ff. for Wolane).

5.1.5. Common morphophonological processes

5.1.5.1. Assimilations

The alveolar stop *t* is very instable in Gurage (cf. Degif (2000, 9f.) for Chaha and Gutt (1997a, 510) for Eastern Gurage). It totally assimilates to immediately following homorganic coronal consonants *s*, *š*, *z*, *ž*, *ṭ*, *ṣ* and *č* into geminated consonants:

(6) Muher

<i>assämmam</i>	/at-sämmam/	(CAUS-hear:PV:3sm:DCM)	‘facilitate to listen’
<i>aǰǰäkkätäm</i>	/at-ǰäkkätäm/	(CAUS-do:PV:3sm:DCM)	‘facilitate to prepare’
<i>aṭṭäbbäsäm</i>	/at-ṭäbbäsäm/	(CAUS-fry:PV:3sm:DCM)	‘facilitate to fry’

<i>aʒʒarrägäm</i>	/at-ʒarrägäm/	(CAUS-go:PV:3sm:DCM)	‘facilitate to go’
<i>atʃəatäm</i>	/at-tʃəatäm/	(CAUS-work:PV:3sm:DCM)	‘facilitate to work’

With regard to non-coronal consonants, the stop *t* partially assimilates to the following velar plosives *g*, *k*’ in the way of phonation, i.e. it is voiced *d* when preceding *g*, or ejective *t*’ when preceding *k*’:

(7) Muher

<i>at’k’ättəäm</i>	/at-k’ätt’əäm/	(CAUS-kill:PV:3sm:DCM)	‘facilitate to kill’
<i>adgäffäräm</i>	/at-gäffäräm/	(CAUS-leave:PV:3sm:DCM)	‘facilitate to leave’

In Zay, a syllable-final *t* may change to *x* (Meyer 2005a, 69): *ʔax.k’ītʃ* /ʔat-k’ītʃ/ (CAUS-kill:PV:3sm) ‘he ordered to kill’.

The nasal *n* assimilates in the place of articulation to following consonants. Thus, *n* > *m* occurs if *n* precedes *b* or *b*^w, *n* > *ɱ* if it precedes *f* or *f*^w, *n* > *ŋ* if it precedes a velar plosive or *n* > *ɲ* if it precedes palatal plosives (cf. Meyer (2006a, 34) for Wolane, Meyer (2005a, 66f.) for Zay, and Degif (2000, 131ff.), Leslau (1997, 390) for Chaha):

(8) Muher

<i>wəmbär</i>	/wä-nbär/	(VN-live)	‘to live’
<i>wəzəɱf</i>	/wä-znf/	(VN-hit)	‘to hit’
<i>aŋgära</i>	/an-gära/	(NEG-be_satisfied:PV:3sm)	‘he was not satisfied’
<i>aŋgäinna</i>	/an-giänna/	(NEG-fear:PV:3sm)	‘he did not fear’

The nasal *n* totally assimilates to *r* or *l* into geminated *rr* or *ll*, respectively, if *l* occurs in the individual variety. Furthermore, it may assimilate to a preceding vowel *a* yielding its nasalization when it occurs as the last element in a prefix which is attached to a stem beginning with a fricative:

(9) Muher

<i>arraßänn</i>	/an-rab-ä-nn/	(NEG-be_hungry:PV-3sm-o3sm)	‘he is not hungry’
<i>allägädä</i>	/an-lägäd-ä/	(NEG-touch:PV:NEG-3sm)	‘he did not touch’
<i>āhʷənä</i>	/an-hʷän-ä/	(NEG-be:PV-3sm)	‘he is not’

A geminated nasal *nn* does not assimilate to following consonants: Muher *annann-bäβä* /an-annbäb-ä/ (NEG-flower:PV-3sm) ‘it did not flower’.

5.1.5.2. Debuccalization

Debuccalization of non-geminated ejective plosives occurs in a number of Gurage varieties but with varying intensity and triggers. With regard to Eastern Gurage, debuccalization of the three ejective stops *k*’, *t*’ and *tʃ*’ seems not to occur in Silt’e (cf. Gutt 1997b) and is relatively rare in Zay (cf. Meyer 2005a, 72f.), but debuccalization of *k*’ is frequent in Wolane (Meyer 2006a, 46). The debuccalization in Zay only occurs optionally with ejectives in the coda of a closed syllable which is followed by another syllable, i.e. *CVC’C... > CVʔC.C...*; debuccalization in Zay does not usually occur when the ejective is in intervocalic position:

(10) Zay (Meyer 2005a, 72f.)

<i>jī.näʔ.lä.nä</i>	/j-näk’l-n-ä/	(3sm-take:IPV-FOC-AUX:NP)	‘he takes’

jä.k'ä.bä?tey /jä-k'äbät'-t-äy/
 (REL-miss:PV-3sf-DEF) 'that what she missed'

In Wolane, *k'* obligatorily changes to *ʔ* in intervocalic position and in the coda of a closed syllable word-finally:

(11) Wolane (Meyer 2006a, 27ff.)

<i>jī.ʔäb.rān</i>	/j-k'äbr-ān/	(3sm-plant:IPV-AUX:NP)	'he plants'	but
<i>k'ä.bä.rä</i>		(plant:PV:3sm)	'he planted'	
<i>täʔ.täl</i>	/tä-k'täl/	(3sf-kill:JUS)	'she may kill'	but
<i>k'ä.tä.lä</i>		(kill:PV:3sm)	'he killed'	

The debuccalization in Wolane also occurs in nominals, as in Zay *fīk'* > Wolane *feʔ* 'goat' (cf. Meyer 2006a, 28 and 72).

In Kistane the debuccalization seems to be optional and only to affect *k'*: *daʔä~dak'ä* 'laugh' (cf. Leslau 1979c, lxvi and 216). In Muher and probably also in Dobbi, debuccalization of *k'* (but not of *t'* and *tʃ'*) is obligatory in intervocalic position and in the coda of a closed syllable (cf. Hetzron 1977, 38). Ejectives in Mäsqa and in Central Western Gurage seem not to undergo debuccalization (cf. Leslau 1997, 378 for Chaha). In Peripheral Western Gurage, in contrast, ejectives are frequently debuccalized (cf. Hetzron 1977, 38f.), as in Chaha *näk'ärä* > Inor *näʔärä* 'pull out' (Berhanu/Hetzron 2000, 11).

5.1.5.3. Palatalization and labialization

Palatalization of coronal plosives and fricatives frequently occurs in all Gurage varieties (cf. Rose 1994; Leslau 1997, 385f.), i.e. *t* > *tʃ*, *d* > *dʒ*, *t'* > *tʃ'*, *s* > *ʃ*, *z* > *ʒ*, and, less frequently, *n* > *ɲ*, *l* > *j* (only Eastern Gurage) and *r/n* > *j* (only Western Gurage). This morphophonological process is triggered either by the front vowel *i* or by the floating feature [+high, -back] which is usually observable with the subject marker of the 2sf imperfective and imperative.

(12) Zay	Wolane	Muher/Chaha
<i>kəʃät</i> (m) vs. <i>kifetʃ</i> (f)	<i>kəʃät</i> (m) vs. <i>kəʃätʃi</i> (f)	<i>kəʃt</i> (m) vs. <i>kəʃtʃ</i> (f)
	'Open (m)/(f)!'	

The trigger of the palatalization in Zay, Muher and Chaha is the floating feature [+high, -back], but in Wolane it is the high front vowel *i*. The floating feature [+high, -back] is totally absorbed by the final coronal plosive in Muher and Western Gurage, but in Zay it triggers palatalization of the final coronal obstruent and, in addition, it affects the vowels in the template. A similar type of palatalization, which affects consonants and vowels simultaneously, is found in Kistane and Dobbi (cf. Rose 1994, 114; Rose 1997, 56). In some Western Gurage varieties, a final *r* is palatalized to *j*, but *n* may not change into *ɲ* in all varieties:

(13) (a) Chaha (Degif 2000, 22) (b) Inor (Rose 1994, 120)
səβər (m) vs. *səβi* (f)
 'Break (m)/(f)!'

t'än (m) vs. *t'än* (f)
 'Give birth (m)/(f)!'

tän (m) vs. *tän* (f)
 'Come (m)/(f)!'

Furthermore, Muher and Western Gurage varieties but not Eastern Gurage varieties palatalize the velar plosives (and the glottal fricative), i.e. x (or h) > ζ , g > g^j , k > k^j/ζ and $k' > k'^j$ (cf. Rose 1994, 113f.).

(14) Muher

fräh (m) vs. *fräç* (f) 'Be able (m)/(f)!'

sakk (m) vs. *sakk^j* (f) 'Erect (m)/(f)!'

mərg (m) vs. *mərg^j* (f) 'Plaster with mud (m)/(f)!'

If the last consonant in a root is not palatalizable, the floating feature [+high, -back] is realized on the vowels, whereby a is palatalized into $\ddot{a}$, ε or e but $\ddot{a}$ into e :

(15) (a) Muher

səma (m) vs. *simä* (f)
 'Hear (m)/(f)!'

(b) Chaha (Rose 1994, 114)

səräf (m) vs. *səref* (f)
 'Be scared (m)/(f)!'

Labialization as a morphophonological process only occurs in Zay, Dobbi, Muher and in Western Gurage. Here it often interacts with palatalization to mark the impersonal form of a verb but may also occur in other functions (cf. Rose 1994, 113ff.). Labialization affects non-coronal obstruents, thus, $p > p^w$, $b > b^w$, $\beta > \beta^w/w$, $f > f^w$, $m > m^w$, $x/h > x^w/h^w$, $g > g^w$, $k > k^w$ and $k' > k'^w$. In contrast to palatalization, labialization may also affect non-coronal consonants in non-final position which are followed by coronals:

(16) Chaha (Rose 1994, 115)

<i>dänäg^{wim}</i>	/dänäg- ^{LAB/PAL} -i-m/ (hit:PV-IP-o3sm-DCM)	'one hit'
<i>g^wätärim</i>	/gätär- ^{LAB/PAL} -i-m/ (put_bed:PV-IP-o3sm-DCM)	'one put to bed'
<i>käfwätfim</i>	/käfät- ^{LAB/PAL} -i-m/ (open:PV-IP-o3sm-DCM)	'one opened'

Hetzron (1971) suggests that diachronically labialization originates in a suffix $*-\ddot{u}$. The change from long $*-\ddot{u}$ to short $*-u$ triggered labialization within a root, i.e. $*käfät\ddot{u} > *käfwät\ddot{u}$. Then the final short $*-u$ underwent a dissimilation to $*-i$ which became the reason for palatalization of the last root consonant: $*käfwät\ddot{u} > *käfwät\ddot{i} > *käfwätf$ (cf. Goldenberg 1977, 468). According to Rose (1994, 116) this analysis is problematic because it does not account for the spread of the labial feature into the root and for cases which only show palatalization but no labialization. Synchronically, Rose (1994) postulates that [labial] precedes [+high, -back] in the attachment process as a marker of the impersonal. Degif (2000, 22 and 185ff.) postulates only a floating labiodorsal vocoid /U/ as a suffix which triggers labialization as well as palatalization.

5.1.5.4. Nasalization

Nasalization of vowels may occur sporadically in all Gurage varieties (Leslau 1979c, xx f.). However, it is a very prominent phonological feature of Peripheral Western Gurage, where spirantization processes involving the phonemes /n/ and /m/ (and proba-

bly also /β/) trigger nasalization of vowels and of $r/n > \tilde{r}$, $\beta/m > \tilde{m}$, of $w > \tilde{w}$ and $j > \tilde{j}$ (Hetzron 1977, 44f.; Berhanu/Hetzron 2000, 16f.). The nasalization first affects the immediately adjacent vowels and other nasalizable elements and spreads further until it is stopped by obstruents other than the glottal stop:

(17) Inor (Berhanu/Hetzron 2000, 16)

PV	IPV	
<i>näʔär</i>	<i>ʃi-rãʔãʔãʔ</i>	‘uproot’
<i>nätär</i>	<i>ʃi-rãdär</i>	‘bore a hole’
<i>mäsär</i>	<i>ʃi-mãsär</i>	‘resemble’

Even on nominal entities, nasals from cognate items in related languages may have disappeared in Inor but left a trace through nasalization, as in Chaha *ənt’ar* > Inor *ãʔär* ‘stick’ (Hetzron 1977, 44).

5.2. Morphology

Most verbs but only some nominals are formed by means of non-concatenative morphology in Gurage, i.e. words or base forms of words are formed by combining a root morpheme, which usually consists of consonants, with a template, i.e. a pattern with contains information on vocalization and gemination of a (consonantal) root in a specific word form (cf. Prunet 1996b).

5.2.1. Pronouns and verbal agreement markers

Two general pronominal systems occur in Gurage varieties, which differ with regard to gender agreement in the second and third person plural. While Eastern Gurage varieties commonly refer by a single pronoun or agreement marker to either gender in plural, the Gunnän Gurage languages distinguish between feminine and masculine gender in the second and third person plural. The second and third person plural pronouns and agreement markers also function as honorifics.

5.2.1.1. Personal pronouns

The personal pronouns for Wolane (cf. Meyer 2006a, 164f.) and Zay (Meyer 2005a, 77) are given in Table 72.5. The Silt’e personal pronouns are similar to Wolane (cf. Gutt 1997b, 911). Major exceptions are the 1p and 3p, which appear as *ina* and *uhnu* in Silt’e. The personal pronouns in Gunnän Gurage are given in Table 72.6.

Note that the pronouns provided in Hetzron (1977, 58) and Hetzron (1997, 511) for Muher and Western Gurage have *h* instead of the *x* in Table 72.6 (cf. also Goldenberg 1977, 471). The pronouns of the second and third person plural are also used as honorifics (cf. Fekede 2006, 759; Meyer 2005a, 77, Meyer 2006a, 165). In addition, Wolane and Silt’e have the vocative pronouns *tō* (m) and *tē* (f) (Meyer 2006a, 158; Gutt 1997b, 911) for addressing single individuals. These pronouns are unknown in Zay and in Gunnän Gurage varieties.

Table 72.5: Personal pronouns in Eastern Gurage varieties

	WOLANE	ZAY
3SM	<i>ʒuhä</i>	<i>ʒut ~ wut</i>
3SF	<i>ʒifä</i>	<i>ʒit ~ yit</i>
2SM	<i>ʒatä</i>	<i>ʒatä</i>
2SF	<i>ʒafä</i>	<i>ʒatfi (ʒaf-)</i>
1S	<i>ʒihe ~ yihe</i>	<i>ʒeyä</i>
3P	<i>ʒuhun</i>	<i>ʒinom(mu)</i>
2P	<i>ʒatum</i>	<i>ʒatum(mu)</i>
1P	<i>ʒijrä</i>	<i>ʒijrä</i>

Table 72.6: Personal pronouns in Gunnän Gurage varieties

	KISTANE (GOLDENBERG 1968, 69)	MUHER (LES LAU 1981, 12)	EZHA (FEKEDÉ 2006, 754)	INOR (BERHANU/HETZRON 2000, 51)
3SM	<i>k^wa</i>	<i>x^wa</i>	<i>x^wət(a)</i>	<i>xuda</i>
3SF	<i>k^ha</i>	<i>h^ha</i>	<i>h^hət(a)</i>	<i>xida</i>
2SM	<i>dähä</i>	<i>axä</i>	<i>axä</i>	<i>axä</i>
2SF	<i>däf</i>	<i>ahⁱ</i>	<i>ahⁱ</i>	<i>aša</i>
1S	<i>ädi</i>	<i>anä</i>	<i>əjja</i>	<i>ija</i>
3PM	<i>kənnäm(u)</i>	<i>xənnäm^w</i>	<i>xənno</i>	<i>xunoa</i>
3PF	<i>kənnäma</i>	<i>xənnäma</i>	<i>xənnäma</i>	<i>xənnäa</i>
2PM	<i>dähəm(u)</i>	<i>axəm^w</i>	<i>axxu</i>	<i>axua</i>
2PF	<i>dähma</i>	<i>axma</i>	<i>axxəma</i>	<i>axaa</i>
1P	<i>əjra</i>	<i>əjra</i>	<i>jənnä</i>	<i>ina</i>

5.2.1.2. Possessive pronouns

There are two ways of referring to the possessor by pronouns in all Gurage varieties. One possibility is to prefix the genitive marker to the personal pronouns, as in Zay *yä-wut gār* (GEN-3sm house) ‘his house’ (Meyer 2005a, 80). The other, more frequent means of indicating a possessor is to use possessive suffixes attached to the possessum. The possessive suffixes are summarized in Table 72.7. The alternation between *h* and *k* as first consonant in Table 72.7 is phonologically conditioned: after a vowel it is *h*, otherwise *k*. With regard to Wolane, the vowel *a* of the second person possessive suffixes occurs only when the possessum ends with a consonant but not when it ends with a vowel, as in *gar-af* ‘your (sg) house’ vs. *tʃʰəlo-f* ‘your (sf) child’. Note that the 2sm possessive suffix *-(ä)ha* is the result of a metathesis from **(a)hä* (see Meyer 2006a, 171). The possessive suffixes in Silt’e (Gutt 1997b, 911) and in Zay (Meyer 2005a, 81) differ in some aspects from those in Wolane. One major difference in Zay is that it uses the suffixes *-nī* and *-nā* for the 3sm and 3sf, respectively. Note that in the Gunnän Gurage varieties the possessive suffixes closely resemble the personal pronouns of Table 72.6. For diachronic processes in the formation of the possessive suffixes see Hetzron (1977, 59f.).

Table 72.7: Possessive suffixes in selected Gurage varieties

	WOLANE (MEYER 2006b, 171)	KISTANE (GOLDENBERG 1968, 75)	MUHER (LESLAU 1981, 12)	EZHA (FEKEDE 2006, 757)	INOR (BERHANU/HETZRON 2000, 52)
3SM	-hä~-kä	-(ä)w, -u -k ^w an~-h ^w an	-(ə)ˀxta	-ott(a)	-x ^w a
3SF	-jä	-ki ~ -hi	-(ə)çta	-oçt(a)	-ja
2SM	-(ä)ha	-dä	-axä	-axä	-ax
2SF	-(a)f	-däf	-aç	-aç	-af
1S	-jä	-ddi	-äjja	-ona	-ja
3PM	-nim	-kənnäm(u)~-hənnäm(u)	-xənnäm ^w	-ox ^w na	-xunoa
3PF		-kənnäma~-hənnäma	-xənnäma	-oxnäma	-xənaa
2PM	-(a)hum	-dähəm(u)	-axəm ^w	-axu	-axua
2PF		-dähma	-axma	-axma	-axaa
1P	-jja	-jja	-ənna	-onda	-nra

An important structural difference between Eastern Gurage and Gunnän Gurage occurs in nominal predication. If the predicate nominal is marked by a possessive suffix the copula *-n* intersects between the nominal and the suffix in Eastern Gurage but not in Gunnän Gurage (see Meyer 2007):

(18) (a) Silt'e (Gutt 1997b, 945)

wēzi-n-fā-j (children-COP:3sm-POS:3sf-DEF)
'They are her children.'

(b) Muher (Leslau 1981, 15)

x^wa g'äbbe-jja-n (3sm brother-POS:1s-COP:3sm)
'He is my brother.'

5.2.1.3. Agreement markers

Agreement markers are bound morphemes, which are attached to the verb in order to establish a reference to the subject or the object in a clause. While the subject markers are obligatory in most circumstances, the use of object markers is usually optional. There are two sets of subject markers, which are in complementary distribution based on the aspect or mood of the verb. The verbs in the perfective aspect are conjugated by a set of suffixes while verbs in the imperfective aspect or in the jussive/imperative use a combination of pre- and suffixes. A general outline of the morphemes for Eastern Gurage and Gunnän Gurage is provided in Table 72.8 (cf. Hetzron 1977, 78ff.; Hetzron 1997, 54; Gutt 1997a, 521ff.; Goldenberg 1977, 481ff.). While the markers *t-* and *j-* are found in the imperfective aspect, the markers *tä-* and *jä-* occur in the affirmative jussive/imperative, as in Wolane *ji-säbr-ān* (3sm-break:IPV-AUX:NP) 'he breaks' vs. *jä-sbär* (3sm-break:JUS) 'he may break!' In Gunnän Gurage, the vowel *ä* occurs only after the prefix *j-* but not after *t-* in the jussive/imperative. Furthermore, the 1s imperfective

Table 72.8: Subject markers for affirmative main clause verbs

	EASTERN GURAGE SUFFIXAL SET	CIRCUMFIXAL SET	GUNNÄN GURAGE SUFFIXAL SET	CIRCUMFIXAL SET
3SM	-ä~-ø -V _[open]	j(ä)-	-ä	j(ä)-
3SF	-t(ä)	t(ä)-	-ätt or -ättf	t-
2SM	-kä~-hā	(t-)	-hā	(t-)
2SF	-f	(t-)...-i (t-)...-PAL	-h ^j or -f	(t-)...-PAL (t-)...-i
1S	-ku/-k ^w ~-hu/-h ^w ~-w	j- or lä-	-h ^w	ä- n(n)-
3PM	-u or -LAB	j-...-u j-...-LAB	-mu or -o or -ua	j-...-ämu or -o
3PF			-äma or -aa	j-...-äma
2PM	-kumu~-hum/-mmu	(t-)...-u (t-)...-LAB	-həmu or -hu(a)	(t-)...-ämu or -o
2PF			-həma or -haa	(t-)...-äma
1P	-nä	j(ä)-...-nä or lä-...-nä	-nä	n-...-nä or n-

appears as *ä-* in affirmative main clauses (and in the converb based on the imperfective) but in all other cases as *n(n)-*: Muher *ä-säβr-u* (1s-break:IPV-DCM) ‘I break’ vs. *a-nnə-säβər* (NEG-1s-break:IPV) ‘I don’t break’ or *tə-nnə-säβər* (while-1s-break:IPV) ‘while I break’ or *nə-sβər* (1s-break:JUS) ‘I shall break’.

There are some differences in subject marking among the several varieties. Zay, but not Silt’e and Wolane, deletes a short vowel word-finally so that the 3sm perfective forms in Zay usually end in a consonant (cf. Meyer 2005a, 55 and 94) but in *-ä* in Silt’e and Wolane (cf. Gutt 1997b, 918ff.): Zay *säbär* vs. Wolane *säβärä* ‘he broke’. Verbs ending in a palatal consonant in Wolane and Silt’e regularly have the vowel *-ē* instead of *-ä* in the 3sm perfective (cf. Gutt 1997a, 517): Silt’e/Wolane *sätfē* ‘he drunk’. This vowel also occurs in some verbs which do not end with a palatal consonant (cf. Gutt 1997a, 517): Silt’e/Wolane *nōzē* ‘he was angry’. In Zay, verbs ending with a palatal consonant have a vowel *ī* in the 3sm perfective which only occurs when the verb is followed by additional suffixes (cf. Meyer 2005a, 136): *ʒīʒ* vs. *ʒīʒī-n-u* (arrive:PV:3sm-FOC-DCM) ‘he arrived’. This difference, however, seems to have a historical origin because the changes *e > i* and *o > u* regularly occur in cognate items from Silt’e/Wolane vs. Zay, as in Wolane *yēnzē* vs. Zay *ʔinz* ‘hold’ or in Wolane *gōrä* vs. Zay *gūr* ‘slaughter’. A few Zay verbs may have the vowel *ū* in the 3sm perfective, like *box* vs. *bohū-n-u* (ferment:PV:3sm-FOC-DCM) ‘it fermented’. Verbs ending in *-ū* seem not to exist in Silt’e or Wolane. Another difference between Silt’e/Wolane and Zay occurs in the circumfixal subject marker set. While in Silt’e/Wolane the (segmental) vowels *-i* and *-u* mark gender and number, in Zay non-segmental features occur in the same function (cf. 5.1.3 and 5.1.5.3).

The 1s of the circumfixal conjugation in Kistane differs from all the remaining Gunnän Gurage varieties because it lacks the suffix *-nä*:

- (19) (a) Kistane (Leslau 1969, 20)
 (ən)nə-bädr-u (1p-be_ahead:IPV-DCM) vs.
 (b) Muher

nə-βädrə-no /n-bädr-nä-u/ (1p-be_ahead:IPV-1p-DCM)
 ‘we are ahead’

The negative marker for perfective verbs is *al-* in Eastern Gurage (see Gutt 1997a, 522) and Kistane (Leslau 1968) but *an-* in the remaining Gunnän Gurage varieties (Hetzron 1977, 87). The situation with negated imperfective and jussive/imperative verbs is complex. Verbs with reference to second person subjects are usually negated by a prefix *a-* (cf. Hetzron 1977, 87). A quite unusual way of negation for imperfective verbs in the main clause is found in Kistane (Leslau 1969, 21). The negative marker is *t-* with full verbs in the imperfective aspect but *a-* with subordinate imperfective verbs:

(20) Kistane (cf. Leslau 1969, 21)

<i>tik'ärs</i>	/t-j-k'ärs/	(NEG-3sm-begin:IPV)	‘he doesn’t begin’
<i>tajkäfəl</i>	/t-a-j-käfl/	(SUB-NEG-3sm-pay:IPV)	‘without (his) paying’

In Silt'e (cf. Gutt 1997b, 922f.) and Wolane, negated imperfective full verbs in the first and third person differ from their affirmative counterparts. In Wolane, for instance, the marker for the 1s in the negative imperfective of a main clause verb is the prefix *əllə-* followed by gemination of the root-initial consonant, but in the affirmative it is *j-* instead:

(21) Wolane (Meyer 2006a, 109ff.)

<i>ji-säbr-äw</i>	(1s-break:IPV-AUX:NP:1s)	‘I break’ vs.
<i>əlläsäbər</i>	(NEG:1s:break:IPV)	‘I don’t break’
<i>ji-säbr-än</i>	(3sm-break:IPV-AUX:NP)	‘he breaks’ vs.
<i>ələ-säbər</i>	(NEG:3sm-break:IPV)	‘he doesn’t break’

Both East and Gunnän Gurage varieties have an additional ‘fourth’ person, the so-called impersonal, in which the subject is marked as a default person, like ‘one’ or ‘people’ in English or ‘man’ in German. The impersonal in Eastern Gurage is marked by a suffix *-j~-i* following the base form of the verb (cf. Gutt 1997b, 918 for Silt'e): Wolane *ʔat'äβ-i* (wash:PV-IP) ‘one washed it’ or *ji-ʔätl-i nār* (3-kill:IPV-IP AUX:P) ‘one used to kill’. This suffix *-j~-i* differs morphophonologically from the object marker *-j~-i* in these varieties because it directly attaches to a consonantal base while the object marker is preceded by the vowel *ä*: Wolane *ji-ʔätl-äj nār* (3-kill:IPV-o3sm AUX:P) ‘he had killed him/it’. Note that in the perfective conjugation there is no subject marker (except *-j~-i*) while in the imperfective and jussive conjugation the impersonal occurs with the third person subject marker *j(ä)-*. Zay differs from Silt'e and Wolane because it marks the impersonal by labialization followed by *-j*:

(22) Zay (Meyer 2005a, 98f. and 329f.)

<i>nok'oli</i>	/näk'äl- ^{LAB} -j/	(take:PV-IP)	‘one took (it)’ vs.
<i>nok'oluj</i>	/näk'äl- ^{LAB} -j/	(take:PV-3p-o3sm)	‘they took it’

In most Gunnän Gurage varieties, the impersonal is marked only by the non-segmental features which yield labialization and palatalization of root consonants (cf. Rose 1994).

(23) Muher (Leslau 1981, 25)

<i>säbb'ärim</i>	/säbbär- ^{LAB/PAL} -i-m/	
	(break:PV-IP-o3sm-DCM)	‘one broke it; it was broken’

Any object marker or applicative suffix can follow the impersonal. In this case, the final *-j~-i* is omitted.

- (24) Muher
bokkā /bäi-^{LAB/PAL}-kkä-m/
 (say:PV-IP-o2sm-DCM) ‘one called you (2sm)’
säbbwärebba /säbbär-^{LAB/PAL}-bbwä-m/
 (break:PV-IP-APL:3sm-DCM) ‘one broke to his detriment’
säbbwäranom /säbbär-^{LAB/PAL}-nno-m/
 (break:PV-IP-APL:3sm-DCM) ‘one broke to his favor’

Object markers attached to the verb can refer to direct objects of transitive verbs or to indirect objects of ditransitive verbs. Adjuncts or not prototypical arguments of a verb can be introduced by two applicative suffixes: the locational, instrumental or malefactive suffix **-b* ‘in, at, on, from, by, to the detriment of’ and the beneficiary or addressee suffix **-n* ‘for, in favor of’. The applicative suffixes are followed by object markers, which agree in person, number and gender with the referred entity. Zay, for instance, has the following forms:

- (25) Zay (Meyer 2005a, 99ff.)
näk’älhux /näkö’äl-hw-ähä/
 (take:PV-1s-o2sm) ‘I took you (sm)’
färadänax /färad-ä-n-hä/
 (judge:PV-3sm-APLB-2sm) ‘he judged for your (sm) favor’
färadäbax /färad-ä-b-hä/
 (judge:PV-3sm-APLL-2sm) ‘he judged for your (sm) detriment’

The object markers and applicatives for Zay are summarized in Table 72.9 (cf. Meyer 2005a, 98ff.). Most object markers and applicatives in Zay have a different appearance word-finally and when followed by additional suffixes. This distinction does not occur in Silt’e (Gutt 1997b, 930ff.) nor in Wolane (Meyer 2006a, 112ff.).

Table 72.9: Object markers and applicatives (Zay)

	OBJECT MARKER	LOCATIVE APPLICATIVE	BENEFICIARY APPLICATIVE
3SM	-(ä)j	-b-i or -b-ī-	-n-i or -n-ī-
3SF	-ä ~ -ā-	-b-ä or -b-ā-	-n-ä or -n-ā-
2SM	-(ä)x ~ -(ä)hā-	-b-ax or -b-ahā-	-n-ax or -n-ahā-
2SF	-(ä)ff(ä)	-b-if(ä)	-n-if(ä)
1S	-(ä)n(ä)	-b-īn(ä)	-n-īn(ä)
3P	-om ~ -omū-	-b-om(ū)	-n-om(ū)
2P	*-(ä)h ^w m(ä): [-ohum] ~ [-oxmä-]	-b-hum(ä)	-n-hum(ä)
1P	-(ä)n(ä)	-b-ən(ä)	-n-ən(ä)

The vowel *ä* precedes the object marker in Table 72.9 when the verb ends in a consonant but it does not occur when the object markers are attached to the applicative suffixes. Note that only one object marker or applicative suffix can occur per verb. With regard to Gunnän Gurage, the allophonic distribution of object markers and applicatives forms a very complex system (see Rose (1996) for Muher, Degif (2000, 261ff.) for Chaha, Völlmin (2010) for Gumär, Goldenberg (1968, 81ff.) for Kistane). The object marker and applicatives for the Muher variety investigated by Hetzron (1977, 65) are given in Table 72.10. Note that these markers partially differ from the

Muher variety investigated by Leslau (1981) which, in turn, also differs from that investigated by Rose (1996), i.e. although the same system of object marking occurs in all Muher varieties there are slight differences in the representation of the morphemes.

Table 72.10: Object markers and applicatives (Muher)

	OBJECT MARKER			BENEFICIARY APPL		LOCATIVE APPL	
	LIGHT	N-BASED	HEAVY	LIGHT	HEAVY	LIGHT	HEAVY
3SM	<i>-_{LAB/PAL} + GEM</i>	<i>-nn</i>	<i>-j/-w</i>	<i>-no</i>	<i>-nno</i>	<i>-wä</i>	<i>-bb^wä</i>
3SF	<i>-_{GEM} + -ä</i>	<i>-nna</i>	<i>-ja/-wa</i>	<i>-na</i>	<i>-nna</i>	<i>-ba</i>	<i>-bba</i>
2SM	<i>-xä</i>	<i>-nnaxä</i>	<i>-kkä</i>	<i>-nxä</i>	<i>-nnäkkä</i>	<i>-bxä</i>	<i>-bbäkkä</i>
2SF	<i>-h^j</i>	<i>-nnah^j</i>	<i>-kk^j</i>	<i>-nh^j</i>	<i>-nnäkk^j</i>	<i>-bh^j</i>	<i>-bbäkk^j</i>
1S	<i>-e</i>		<i>-ṇ(ṇ)</i>	<i>-nni</i>	<i>-nni</i>	<i>-bi</i>	<i>-bbi</i>
3PM	<i>-_{GEM} + -äm^w</i>	<i>-nnäm^w</i>	<i>-jäm^w/ -wäm^w</i>	<i>-näm^w</i>	<i>-nnäm^w</i>	<i>-bäm^w</i>	<i>-bbäm^w</i>
3PF	<i>-_{GEM} + -äma</i>	<i>-nnäma</i>	<i>-jäma/ -wäma</i>	<i>-näma</i>	<i>-nnäma</i>	<i>-bäma</i>	<i>-bbäma</i>
2PM	<i>-xäm^w</i>	<i>-nnaxm^w</i>	<i>-kkäm^w</i>	<i>-nxäm^w</i>	<i>-nnäkkäm^w</i>	<i>-bxäm^w</i>	<i>-bbäkkäm^w</i>
2PF	<i>-xma</i>	<i>-nnaxma</i>	<i>-kkäma</i>	<i>-nxäma</i>	<i>-nnäkkäma</i>	<i>-bxäma</i>	<i>-bbäkkäma</i>
1P	<i>-änä</i>		<i>-nnä</i>	<i>-nnänä</i>	<i>-nnänä</i>	<i>-bänä</i>	<i>-bbänä</i>

Hetzron (1977, 60ff.) distinguishes two major sets of object markers and applicatives which he calls ‘light’ and ‘heavy’ suffixes because the initial consonant of the suffix may occur either as singleton or geminated, as the object markers in example (26).

(26) Muher

<i>zännäfhukkäm</i>	/zännäf-h ^w -kkä-m/	
	(hit:PV-1s-o2sm-DCM)	‘I hit you (sm)’ vs.
<i>äzämḡəho</i>	/ä-zänf-hä-u/	
	(1s-hit:IPV-o2sm-DCM)	‘I (will) hit you (sm)’

There is a further set of object markers based on *-nn*, which often occurs after 3sm subjects or with verbs in the perfective aspect:

(27) Muher

<i>zännäf-ä-nnə-m</i>	(hit:PV-3sm-o3sm-DCM)	‘he hit him/it’ vs.
<i>zännäf-ätt-u-m</i>	(hit:PV-3sf-o3sm-DCM)	‘she hit him/it’

The light 3sm object suffix encompasses gemination of the root-final consonant and labialization/palatalization in the Muher variety investigated by Hetzron (1977). Alternatively, the *n*-based suffix can be used.

(28) Muher (Hetzron 1977, 65f.)

<i>jisäwərr-</i>	/j-säbr- ^{LAB/PAL+GEM} -/	
	(3sm-break:IPV-o3sm)	‘he breaks it’ vs.
<i>ji-säβr-ənn-</i>	(3sm-break:IPV-o3sm)	‘he breaks it’

5.2.1.4. Demonstrative pronouns

In most Gurage varieties a binary distinction between proximal and distal is expressed by demonstrative pronouns. In Gunnän Gurage, the proximal demonstrative is usually

zi~zə(x) and the distal one *za(x)*. In Chaha and Ezha, a third demonstrative pronoun based on *x-* has been reported (see Hetzron 1977, 56). Peripheral Western Gurage uses the demonstratives *waa* and *haa* for near and far deixis, respectively. Demonstrative pronouns in Gunnän Gurage do not usually agree in gender and number with their head noun. However, the plural can be marked on them by the associative prefix (see Hetzron 1977, 57; Hetzron 1997, 542).

In Eastern Gurage, the binary spatial distinction is expressed by morphemes which contain the vowels *i* and *a* for proximal and distal distances, respectively. In contrast to Gunnän Gurage, in Zay the demonstrative pronouns obligatorily agree in gender and number with the head noun, as shown in Table 72.11 (Meyer 2005a, 85).

Table 72.11: Demonstrative pronouns in Zay

	PROXIMAL	DISTAL
SM	<i>ʔihij~jihij~jij</i>	<i>jāhāj~jāj</i>
SF	<i>ʔitāj~jitāj</i>	<i>jātāj</i>
P	<i>ʔināttfu~jināttfu</i>	<i>jānāttfu</i>

The initial consonant in these pronouns is deleted when preceded by a prefix, as in *bāhāj* /bä-jāhāj/ (LOC-that) ‘at that’, but usually no other morphophonemic changes occur. In Wolane, in contrast, a free and a bound form of the demonstrative must be distinguished (Meyer 2006a, 166ff.). The free forms, *ʔənnä* ‘this’ and *ʔənnä* ‘that’, are used with subject and direct object constituents. They only mark gender and number when they are used as head of a noun phrase but not as modifiers. When a prefix expressing a grammatical relation is attached to the demonstrative pronouns the bound forms *-i-* and *-a-* are used for proximal and distal deixis, respectively. The prefix (P) itself is reduplicated using the templates *P-i-PPi-DEF* for proximal or *P-a-PPi-DEF* for distal deixis. These expressions are always followed by the definite article *-j*: *tittī aftō gən* (with:this girl together) ‘with this girl’. Silt’e has only bound forms of the demonstratives whereby they may omit the first P-element, thus *(P)iP(P)* for proximal deixis and *(P)aP(P)* for distal deixis (Gutt 1997b, 912). The consonant *t* is used with subjects but *n* with direct objects as P-element in Silt’e.

5.2.2. Nominals

Common nouns (like Wolane *gār*, Muher *bet* ‘house’), adjectives (like Wolane *gumärä*, Muher *gʷād* ‘white’), and adverbs (Wolane *ʔahu*, Muher *ahuyña* ‘now’) can be considered nominals. Morphologically, the majority of nominals consist of vocalized stems. Often the consonants of those stems cannot be traced back to a root from which productively verbs can be derived. There are, however, also nominals whose radicals occur in verbs, as in Muher *gurz* ‘old’ vs. *gärräzām* ‘become old’.

The boundaries between common nouns and adjectives and/or adverbs are not clear-cut. The Muher entry *mamʷä* ‘good, well’, for instance, functions as an adjective in *mamʷä dʒäβāna* ‘a good coffeepot’, as an adverb in *mamʷä addär-xä-m* (good spend_night:PV-2sm-DCM) ‘Did you (sm) spend the night well?’, and as a noun in *bä-mamʷä gəβa* (in-good enter:IMP:2sm) ‘Return (sm) (lit. enter) in health!’

5.2.2.1. Gender and number

Gurage varieties distinguish between male and female gender only with human and/or animate nouns. The gender distinction is not marked directly on nouns but by agreement on verbs:

- (29) Zay (Meyer 2005a, 225)
māmō māt'ā-n-u. (Mammo:m come:PV:3sm-FOC-DCM) 'Mammo came.'
ʔalmāz māt'ā-tə-n-u. (Almaz:f come:PV:3sf-FOC-DCM) 'Almaz came.'

The grammatical indication of female gender differs among the several Gurage varieties. While Zay (cf. Meyer 2005a, 224) and Gunnän Gurage (cf. Hetzron 1977, 52) usually only mark female gender with nouns referring to humans, Silt'e (cf. Gutt 1997a, 512) and Wolane (cf. Meyer 2006a, 154) also indicate gender with animals.

- (30) (a) Zay (b) Wolane
jihij lām-ən-u. *ʔannä lām-ən-t.*
 (this cow-COP:3sm-DCM) (this cow-COP-3sf)
 'This is a cow.'

Eastern Gurage varieties may indicate female gender also on modifiers or on the definite article by a suffix **(a)*, as in Zay *t'it-tā-j ʔalmāz* (small-f-DEF Almaz) 'the small Almaz'.

Most nouns in Gurage varieties are in general number, i.e. they do not distinguish between singular and plural when indefinite (cf. Hetzron (1977, 53) for Gunnän Gurage and Gutt (1997a, 512) for Eastern Gurage). With the exception of Kristane, Dobbi and probably Mäsqa, the noun morphology in Gunnän Gurage varieties does not usually distinguish between singular and plural number. Only a few nominal concepts occur in lexical pairs, which distinguish between singular and plural. These pairs either consist of suppletive items, as in Muher *maft* '(single) woman' vs. *ʔəttä* '(two or more) women', *ənnam* '(single) cow' vs. *gəzz* '(two or more) cows, cattle'; or a base noun with a derived plural noun, as in Muher *g'äbbe* 'brother' vs. *g'äbbaβü* 'brothers'. The distinction between plural and singular for the majority of definite nouns is expressed through singular or plural agreement markers on the verb.

- (31) Muher
 (a) *mākina-we t'äffa-m.* (b) *mākina-we t'äffa-mu-m.*
 (car-DEF break:PV:3sm-DCM) (car-DEF break:PV:3pm-DCM)
 'The car broke down.' 'The cars broke down.'

A plural reading of adjectives is often obtained by reduplication, like Muher *mamwä* 'good (general number)' vs. *mamwä-mamwä* 'good (pl)'. Eastern Gurage (cf. Gutt 1997b, 906; Meyer 2005a, 226ff.; Meyer 2006a, 148ff.) has a number of morphemes which derive the plural from a base noun, like the suffix *-tʃä~-tʃä* (often attached to nouns ending in a consonant, as in Silt'e/Wolane/Zay *gār > gār-tʃä* 'house(s)'), reduplication of the last consonant in combination with a specific vocalization ...*C_LāC_Lo/u* (often formed from nouns ending in a vowel, as in Wolane *kältä > kältāto* 'small ax(es)' or Zay *fibāhaltä > fibāhaltātu* 'small ax(es)'), or a combination of both morphemes (as in Silt'e *bofo > bofäʃtʃä* 'young ensete plant(s)'). Zay borrowed the Oromo morphemes *-itti* (sf) and *-(i)tʃä* (sm) for indicating the singulative of proper names designating ethnic units (cf. Meyer 2005a, 229f.), like *zāj* 'Zay people (general number)' vs. *zāj-itti*

‘a single Zay woman’ / *zāj-ttǃä* ‘a single Zay man’ vs. *zājāju* ‘Zay individuals.’ In Wolane (cf. Meyer 2010) and Silt’e (Gutt 1991), the combination of semantic noun classes, the female marker, the definite article and/or plural markers form a complex system for indicating number and definiteness.

The plural marker *-ottf* which Hetzron (1977, 53) reports for Kistane, Dobbi and Mäsqaṇ is most probably a loan from Amharic (cf. Mondon-Vidailhet 1902, 90). In addition to *-ottf*, nouns in Kistane can also mark the plural by the suffix *-attf* or by the reduplication of the last consonant according to the pattern ...*C_LāC_Lä* (cf. Bedilu 2010, 21f; Leslau 1968, 9).

5.2.2.2. Definite article

The definite article in Eastern Gurage, Kistane, Dobbi and Mäsqaṇ is the suffix *-j* (cf. Gutt 1997a, 513; Hetzron 1977, 56), which can be preceded by a suffix **(a)* when the referred nominal is female. While Muher and Ezha have *-we* as an invariant definite article, the remaining Gurage language are said to use the possessive suffixes in the function of the definite article (Hetzron 1977, 56). Note that the definite article in all Gurage varieties is attached to the modifier of a head noun: Wolane *yägädärä-j gār* ‘the big house’ or Muher *addis-we surre* ‘the new trousers’.

5.2.2.3. Case

Some Gurage varieties clearly belong to the group of nominative-accusative languages, whereby the accusative case is the marked one. However, there is some variation in the morphology and semantics of case marking.

Eastern Gurage varieties have two accusative case markers: *-n(ä)*, which is basically attached to proper nouns and most pronouns, vs. *-ä*, which is attached to all other nouns (cf. Gutt 1997a, 514; Meyer 2005a, 220). The accusative is only overtly marked in Eastern Gurage when the direct object is definite, i.e. identifiable by the speaker. In this case, accusative marking on the direct object is often accompanied by the use of object markers on the verb.

(32) Wolane (Meyer 2006a, 157f.)

šāmil-nä wädätt-ey.
(Shāmil-ACC love:PV:3sf-o3sf)
‘She loved Shāmil.’

In Gunnän Gurage varieties, in contrast, overt accusative marking is relatively rare even with definite nouns. The use of accusative marking seems to follow a pragmatic constrain rather than a syntactic one (cf. Meyer 2005b for Muher). Furthermore, it seems that the accusative marker in Gunnän Gurage is homonymous with the prefix referring to an indirect or dative object and to the prefix marking a possessor, i.e. *ä-* in Peripheral Western Gurage and Gura, *jä-*, *lä-* or *nä-* in Kistane, and only *jä-* elsewhere (cf. Hetzron 1977, 54).

All Gurage varieties seem to possess a vocative case based on *-o~-äw* or *-ē*. The vocative can optionally be used for addressing single individuals (cf. Gutt 1997b, 908; Meyer 2005a, 232f.; Meyer 2006a, 158f.; Hetzron 1977, 55).

5.2.2.4. Derivation

The verbal noun is productively formed by imposing a specific vocalization pattern, which usually occurs in the jussive/imperative base, on a root plus affixation, as in Silt'e *nikät* 'beat (sm)!' > *nikät-öt* 'to beat' (Gutt 1997b, 930), Muher *zəmf* 'hit (sm)!' > *wä-zəmf* 'to hit'. With regard to the affix used in the formation of the verbal noun, Silt'e and Wolane employ a suffix *-öt* while Zay has a prefix *wä-* (cf. Meyer 2005a, 200f.; Meyer 2006a, 86f.). Except for Peripheral Western Gurage, these two affixes are also found in all other Gunnän Gurage varieties. In Peripheral Western Gurage, the verbal noun is formed by a combination of a prefix *ä-*, a suffix *-t* and labialization/palatalization applied to the jussive/imperative base (cf. Hetzron 1977, 110).

Except for the verbal noun, derivation involving non-concatenative morphology, i.e. the imposition of a template (and affixes) on a root morpheme, is usually not productive. An exception occurs in Silt'e, where the agent noun is productively derived from a triradical root by employing the template $C_1\ddot{a}C_2\ddot{a}C_3$, as in **hrm* 'stay a year' > *härämi* 'somebody who stays a year' (Gutt 1997b, 930). In the remaining Gurage varieties such formations are usually limited to a specific number of entries, i.e. they are lexicalized (cf. Hetzron 1977, 110f.; Meyer 2005a, 234ff.; Meyer 2006a, 143ff.).

Some suffixes are very productive in the derivation of nominal stems (cf. Gutt 1997b, 908f.; Hetzron 1977, 53f.). The suffix *-nät~-nätf~-näd*, for instance, is frequently used in the formation of abstract nouns from nominals, as in Zay *bäju* 'child' > *bäj-nätf* 'childhood' (Meyer 2005a, 249), in Wolane *däbō* 'kin' > *däb-nät* 'kinship' (Meyer 2006a, 143) or Inor *däb wä* 'kin' > *däb w-näd* 'kinship' (Hetzron 1977, 54).

5.2.3. Verbs

5.2.3.1. General remarks on conjugation

Most Gurage verbs are formed from a root through the imposition of a specific template to form a simplex or derived stem. From a historical perspective two major types of roots seem to exist, namely triconsonantal roots $C_1C_2C_3$ and quadriconsonantal roots $C_0C_1C_2C_3$. Due to the diachronic changes of the so-called weak consonants, i.e. the obstruents $\text{ʔ } \text{ʃ } \text{h } \text{ħ } \text{x}$ and the approximants w and j , tri- or quadriconsonantal roots may synchronically appear with only one or two consonants and, in some cases, an additional vocalic radical (cf. Degif 2000, 32ff.; Gutt 1997a, 516ff.; Hetzron 1977, 74ff.; Hetzron 1997, 543f.). Any triconsonantal root (and its biconsonantal derivatives) belongs to one of three basic verb types: A, B or C. A typical feature of type B is a thematic vowel *e~i* between C_1 and C_2 (e.g. Silt'e *bēk'ärä* or Zay *bikk'är* 'decorate') or the palatalization of C_1 (e.g. Muher *ʃäkkämä-m* 'taste') while the occurrence of a thematic vowel *a* between C_1 and C_2 (e.g. Muher *zarrägä-m* 'go') is the main feature of verb type C. The absence of these morphemes is the indicator for verb type A (e.g. Muher *säbbärä-m* 'break'). Eastern Gurage languages may have a further verb type which is characterized by a thematic vowel *o~u* between C_1 and C_2 , as in Silt'e *gōrä* 'slaughter' (cf. Gutt 1997b, 914). Some verbs in Eastern Gurage varieties may have a nasal *n* immediately preceding C_2 which does not count as a root consonant, like Zay *andärä* 'spend the night' but Muher *addäräm*, or Silt'e *ēnzä* 'hold' but Muher *äzäm*). The

verb type of a stem is a purely lexical feature (except for loan verbs which usually occur as type B). A verb stem may have different templates (or base forms) for the formation of the perfective aspect, imperfective aspect or the jussive/imperative mood.

Table 72.12: Base forms of types A and B for conjugation of Zay and Muher verbs

	PERFECTIVE		IMPERFECTIVE	JUSSIVE	GLOSS
	AFFIRMATIV	NEGATIVE	AFFIRMATIVE	AFFIRMATIVE	3SM
Zay					
Type A	<i>däläs-änu</i>	<i>ʔal-däläs-o</i>	<i>ji-däls-ənā</i>	<i>jä-dlās</i>	‘wait’
Type B	<i>bikk’är-änu</i>	<i>ʔal-bīqqār-o</i>	<i>ji-bīqqār-ənā</i>	<i>jä-bēqqār</i>	‘decorate’
Muher					
Type A	<i>zännäf-äm</i>	<i>ā-zännäf-ä</i>	<i>ji-zämf-u</i>	<i>jä-zəmf</i>	‘hit’
Type B	<i>fäkkät-äm</i>	<i>ā-fäkkät-ä</i>	<i>ji-fäkkät-u</i>	<i>jä-säkkät</i>	‘prepare’

The affirmative template differs from the negative template for type A verbs. In Eastern Gurage the jussive template is used with negated perfective verbs while in Gunnän Gurage a geminate C_2 may occur as a singleton or palatalized root consonant as their depalatalized counterparts. Depalatalization often occurs with type B verbs in the jussive/imperative template in Gunnän Gurage, while in Eastern Gurage the thematic vowel $\bar{e}$ changes to i (Silt’e and Wolane) or vice versa (Zay).

Gunnän Gurage varieties morphologically distinguish between unaccusative and unergative simplex verbs in the jussive/imperative template. The pattern $C_1C_2C_3$ occurs with unergative verbs, like Muher *waṅkəs* ‘to bite’ or *wäsbər* ‘to break’, but $C_1C_2\check{a}C_3$ with unaccusative verbs, like *wäbrär* ‘to run’ or *wälbäs* ‘to put on clothes’ (cf. Leslau 1951). Eastern Gurage does not make such a distinction, thus Zay *wäsbär* ‘to break’ and *wälbäs* ‘to put on clothes’.

5.2.3.2. Derivation

Gurage varieties productively use a number of prefixes and templates for derivation. The main derivational devices are summarized in Table 72.13 (cf. Gutt 1997a, 524; Hetzron 1977, 71ff.).

The prefixes $(ʔ)a-$, $(ʔ)at-$ and $tä-$ frequently co-occur with vowel a -insertion and reduplication to form subclasses of derived verbs.

A number of roots do not exist in a simplex stem but are always preceded by the prefixes $(ʔ)a-$, $(ʔ)at-$ or $tä-$, like Chaha **gäsa* > *a-gäsa* ‘belch’ or **dana* > *tä-dana* ‘take bad advice’ (Degif 1994, 1221f.).

5.2.3.3. Phrasal verbs

Besides verbs which are formed from a root by the use of templates, Gurage possesses phrasal verbs, which consist of an invariable meaning bearing element, often ideophones, and an auxiliary verb, which indicates aspect, mood, agreement, etc. Usually the verb ‘to say’ is found as an auxiliary verb when the subject is affected by the verbal

Table 72.13: Derivational formatives in Gurage varieties

FORMATIVE	FUNCTION	EXAMPLE (WOLANE)
(?) <i>a-</i>	direct causative (formed mainly from mono-valent verbs)	<i>dähärä</i> ‘be dirty’ > <i>ʔa-dähärä</i> ‘make dirty’
(?) <i>at-</i> + change of the root into type B	indirect causative (formed from mono- and bivalent verbs)	<i>k’ätälä</i> ‘kill’ > <i>ʔat-k’ētälä</i> ‘order to kill’
<i>tä-</i>	medio-passive	<i>näkäsä</i> ‘bite’ > <i>tä-näkäsä</i> ‘be bitten’
<i>tä-</i> + vowel <i>a</i> insertion after C ₁	reciprocal	<i>k’üt’ärä</i> ‘appoint’ > <i>tä-ʔät’äru</i> ‘appoint each other (3p)’
reduplication of a root consonant accompa- nied by vowel <i>a</i> inser- tion	intensive, frequentative, iterative	<i>k’ōḥfē</i> ‘cut’ > <i>k’uḥf’äḥfä</i> ‘chop well’

event, less frequent the verb ‘to make’ is found in contexts in which the subject is an agent.

(33) (a) Wolane (Meyer 2006a, 100ff.):

- ṣəgg balä* (silent:IDEO say:PV:3sm) ‘keep quite’
ṣəgg aṣṣē (silent:IDEO make:PV:3sm) ‘cause to keep quite’

(b) Muher

- t’ämb^{wā} beäm* (crack:IDEO say:PV:3sm:DCM)
‘explode, crack (with a sharp noise)’
t’ämb^{wā} amäṣṣäm (crack:IDEO make:PV:3sm:DCM)
‘cause to explode/crack (with a sharp noise)’

Note that in Zay the causative counterpart of *bāl* ‘say’ is *ʔabäṣ*, as in *bək’ ʔabäṣ* ‘make to appear suddenly’ vs. *bək’ bāl* ‘appear suddenly’ (Meyer 2005a, 164ff.).

5.2.3.4. Existential verb and copulas for non-verbal predications

An existential verb is found in all Gurage varieties. In Eastern Gurage varieties it is related to the common Ethiosemitic root **hlw* ‘exist’ in affirmative present tense clauses, like Wolane *ʔalä* ‘he exists’ (Meyer 2006a, 94ff.). The existential verb is *jinä-* in Kistane, Dobbi and in the *ädi-bet* variety of Muher but *nänä-* in the *anä-bet* variety of Muher, *närä-* in Central Western Gurage and *anä-* in Inor (cf. Hetzron 1977, 108). The existential verb occurs only for statements which are true at the moment of speech. The existential verb in Eastern Gurage varieties developed into a temporal auxiliary expressing present or future tense (cf. Gutt 1997a, 521 but also Meyer 2005a, 147ff.).

(34) Zay (Meyer 2005a, 148)

- ḵäfär’ ji-näk’l-ən-äl’* (canoe 3sm-take:IPV-FOC-AUX:NP)
‘Does/will he take the canoe?’

Except for Zay, all Gurage varieties have a present-tense copula in non-verbal predication, which is based on the morpheme *n-* (Hetzron 1977, 105ff.; Meyer 2007; for additional possible copulas see Goldenberg 1977, 479f.).

(35) Silt'e (Gutt 1997a, 532)

zēgā-n-nā (poor-COP-1p) 'We are poor.'

The past-tense copula is based on the perfective aspect of the root **nbr* 'live' in Eastern Gurage and Kistane but on *ba(n)nä-* or related forms in Gunnän Gurage (cf. Hetzron 1977, 106). The existential verb and the past-tense copula express verbal possession when object markers are suffixed to them.

(36) Ezha (Hetzron 1977, 109)

at tākā bannä-na (one child COP:P:3sm-o3sf) 'She had one child.'

If the object marker is preceded by the applicative suffix *-b* (or its allomorphs) obligation is expressed:

(37) Muher

wef jinä-β-i-tt (go:VN exist:3sm-APLL-1s-DCM) 'I have to go.'

Besides past tense, the past-tense copula may also denote a counterfactual event.

5.2.3.5. Converbs

Converbs in Gurage consist of a conjugated verb plus an additional marker (cf. Hetzron 1972, 98ff.). All Gunnän Gurage varieties and Zay mark converbs by the suffix *-m* (Hetzron 1977, 94ff., Meyer 2005a, 171f.).

(38) Mäsqaṇ (Hetzron 1977, 95)

jä-sβar-əm jä-wär (3sm-break:JUS-CNV 3sm-go:JUS) 'Let him break and go!'

In Muher and Western Gurage, except Mäsqaṇ, there is a second converb which in addition to *-m* has an element *-ta* or *tan(n)ä~taand(ə)ä* (cf. Hetzron 1977, 97f.). Central and Peripheral Western Gurage have a special converb which occurs with negative reference verbs or with reference verbs which are not in the perfective aspect. This special converb is formed by the jussive/imperative template, the floating feature [+high, -back] and by a suffix *-t(tä)* followed by subject markers, as in Inor *səβii-tä jaari* 'in order that he break and go' (Hetzron 1975, Hetzron 1977, 96f.; but see also Goldenberg 1977, 466ff.). Silt'e and Wolane, in contrast, use the suffixes *-ä* or *-āni* to mark converbs (Gutt 1997b, 928f., Meyer 2006a, 131ff.).

(39) Wolane (Meyer 2006a, 133)

k'älläb bl-u(w)-ä hid-u (meal eat:IMP-2p-CNV go:IMP-2p)
'Go (p) after you have eaten (the) meal!'

5.2.4. Affixes expressing grammatical relations

All Gurage varieties have prefixes to indicate grammatical relations when attached to nouns. The prefixes *t(ä)-* or *b(ä)-*, for instance, generally express an ablative or a

locative, respectively, as in Muher *tä-fäwā* ‘from Addis Ababa’ or *bä-fäwā* ‘in Addis Ababa’. These prefixes can also be attached to verbs to mark a subordinate clause.

(40) Muher

t-i-märr *jift-əhut* *jö-xmättät-u.*
 (when-3sm-be_angry:IPV face-POS:3sm 3sm-crumple-DCM)
 ‘When he is angry his forehead is crumpled.’

(41) Muher

maŋgo *bä-srä* *əäz-ənn* *nähä*
 (mango if-buy:PV:3sm hold:IMP:2sm-o3sm come:IMP:2sm
be-nn!
 say:IMP:2sm-o3sm)
 ‘If he bought mangos tell him he should come and bring them with him.’

Furthermore, all Gurage varieties have a suffix which either functions as a similative marker or as a marker of complement clauses. It is *-hum* in Zay (Meyer 2005a, 273), *-kō* in Wolane and Silt’e (Meyer 2006a, 190; Gutt/Hussein 1997, 982f.) but *-hä(ma)* in Gunnän Gurage (cf. Hetzron 1977, 55). Usually the noun or noun phrase marked by the similative suffix is also marked by the genitive prefix *jä-*, as in (42).

(42) Wolane (Meyer 2006a, 190)

däre-m *jä-gʷāra-kō* *t’uli* *jādärk’-ān.*
 (Dare-FOC GEN-Gwara-like wound 3sm:dry:IPV-AUX:NP)
 ‘The Dare (kind of ensete), too, dries wounds like the Gwara (kind of ensete).’

The affixes indicating a grammatical relation are summarized in Table 72.14 (cf. Gutt 1997a, 514 and Hetzron 1977, 54ff.). The reading of the affixes can be specified by relational nouns, like *dän(n)/wäsətt/käs* ‘inside’, *fʷär/fʷē/lalä* ‘top’, etc. (see Hetzron 1977, 55), as in Muher *bä-mākina fʷe* ‘on top of the car’ or *bä-mākina wäsətt* ‘in the car’, etc.

Table 72.14: Selected affixes indicating grammatical relations

AFFIX	TYPICAL SEMANTIC ROLE WITH NOUNS
<i>bä-</i>	instrumental, source, location, malefactive
<i>tä-</i>	ablative, comitative
<i>-kō</i> (Silt’e/Wolane)	similative
<i>-hum</i> (Zay)	
<i>-hä(ma)</i> (Gunnän Gurage)	
<i>yä-</i>	Eastern Gurage
(Gura and Peripheral Western Gurage <i>ä-</i>)	genitive
	Gunnän Gurage
	genitive, beneficiary, addressee, goal, direct object
<i>lä-</i>	Only Eastern Gurage and Kistane
	beneficiary, addressee, goal
<i>-jj(än), -n(n)jä, -i~-e</i>	only Gunnän Gurage
	allative

5.3. Remarks on syntax

The common order of constituents in all Gurage varieties is *subject – object – verb* whereby the clause-initial position usually contains the topic constituent. Subordinate clauses precede main clauses; adjectives and relative clauses precede their heads.

Kistane, Dobbi and Muher employ a number of suffixes (*-u*, *-(t)t*, *-i*, *-n*) to mark affirmative, declarative main clauses in the indicative mood (cf. Goldenberg 1977, 479; Hetzron 1977, 88ff.; Meyer 2002). Although in Kistane and Dobbi the declarative clause markers based on *-u*, *-(t)t*, *-i* occur with perfective and imperfective verbs, they are restricted to imperfective verbs in Muher.

(43) Muher

<i>tə-säβr-u</i>	(2sm-break:IPV-DCM)	‘you (m) break’ but
<i>tə-säβrə-tt</i>	(2sf-break:IPV-DCM)	‘you (f) break’

Due to morphologically and phonologically conditioned allomorphs of the declarative clause marker, they may also distinguish between different genders (see Rose 1996, 222). Goldenberg (1999, 218) considers the declarative markers to be copulas and the preceding verb phrase a relative clause. Perfective main clause verbs in Muher and in Western Gurage varieties except Mäsqaṇ are marked by an invariable suffix *-m*, which also functions as a marker for converbs in these varieties.

Zay, but neither Silt’e nor Wolane, marks affirmative and negative main clauses in the indicative mood as well as affirmative main clauses in the jussive mood (but not in the imperative) by the clause final morpheme *-u* or its allomorphs. In addition, a finite indicative main clause in Zay contains an assertive or contrastive focus marker. Temporal auxiliaries also occur with main clause verbs in Eastern Gurage (cf. Meyer 2005a, 181ff. and 306).

5.4. Remarks on the lexicon

The lexicographic work on Gurage languages can be traced back to the second half of the 19th century (cf. Cohen 1931, 57ff. for a summary of printed and unpublished vocabulary lists of various Gurage languages). However, Arabic philologists possibly started to record lexical items much earlier in their linguistic treatises, as, for example, in the treatise written by Abū Ḥayyān from the 13th century mentioned by Goldenberg (2005, 924). The most comprehensive lexicographic work hitherto is Leslau (1979a–c). Leslau (1979a) contains glossaries for Chaha, Endegeñ, Inor, Ezha, Dobbi, Gyeto, Mäsqaṇ, Muher, Silt’e, Kistane, Wolane and Zay and their English translations while Leslau (1979b) contains English lemmas and their expressions in the twelve Gurage languages. In Leslau (1979c), each Gurage lemma is followed by cognate entities in other Gurage languages and by information on etymologically related entities in Ethiosemitic, Semitic as well as Cushitic and Omotic languages. A more recent but less comprehensive dictionary was prepared by the Guraghe Zone Educational Desk (n.d.). This trilingual dictionary (Gurage-Amharic-English) contains a mixture of lemmas from several Gurage varieties which are written in a modified Ethiopic script. Only for Silt’e does a detailed trilingual dictionary (Silt’e-Amharic-English) exist in which

almost every lemma is accompanied by information on its usage and example sentences (Gutt/Hussein 1997).

Generally, it seems that the surrounding Highland East Cushitic languages (cf. Crass/Meyer 2005; Leslau 1952, 80f.; 1986) and/or Oromo (cf. Meyer 2005c; 2006b) highly affected the lexicon of Gurage varieties. This might have triggered the development of a common (culture-specific) vocabulary among several Gurage varieties (Hetzron 1977, 133ff.; Leslau 1965, 269ff.; 1969, 106ff.). Besides Cushitic, Gurage varieties contain also a number of loanwords from Arabic and Amharic (cf. Leslau 1956; 1960; 1990). Widespread bilingualism with Amharic as well as special types of avoidance languages yielded word taboos in Gurage varieties and consequently changes in the lexicon (Leslau 1959b). Note that, vice versa, a number of words from Gurage varieties occur in the avoidance language used by married Kambaata women to respect their in-laws (Treis 2005).

6. Concluding remarks

From a synchronic point of view, the hypothesis that Gurage represents a single language or dialect cluster, as for instance proposed by Ullendorff (1955, 26f.), seems not to be valid. The above fragmentary description of grammatical features in Gurage shows that beside a number of similarities there is also a good portion of differences between them. Eastern Gurage clearly differs from Gunnän Gurage in many aspects, but on the other hand Zay and Wolane seem to be more similar to Gunnän Gurage than to Silt'e in some aspects. Kistane and Dobbi, too, seem to share a number of features with East Gurage and with West Gurage.

As sufficient grammatical descriptions of most Gurage varieties are still a desideratum, their genetic classification can only be an approximation or as Leslau (1979a, xii) said with regard to Hetzron's (1972, 1977) classification some thirty years ago '... [the] detailed classification is premature and awaits further investigation.'

Abbreviations:

1, 2, 3	first, second, third person
ACC	accusative
APLB	applicative in *-b
APLL	applicative in *-n
AUX:NP	present/future-tense auxiliary
AUX:P	past-tense auxiliary
C	any consonant
CAUS	causative
CNV	converb
COP	copula
DCM	declarative clause marker
DEF	definite article
E.C.	Ethiopian calendar
f	feminine/female
FOC	focus
GEM	floating feature gemination
GEN	genitive

IDEO	ideophone
IMP	imperative
IP	impersonal
IPV	imperfective aspect
JUS	jussive
LAB	floating feature [+round]
LOC	locative
m	male/masculine
NEG	negative
o	object marker
p	plural
PAL	floating feature [+high, -back]
POS	possessor
PV	perfective aspect
REL	relative clause marker
s	singular
V	any vowel
VN	verbal noun

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73. Harari

1. Harar: its people and language
2. Ancient and modern Harari
3. The position of Harari within the Ethio-Semitic language family
4. References

Abstract

This section describes the present day ethnic and linguistic situation in Harar, tracing the historical development of the Modern Harari language. The position of Harari within the Ethio-Semitic language family is discussed with reference to a list of isoglosses.

1. Harar: its people and language

When Harar, in Southeastern Ethiopia, was still an independent emirate, its language Harari was spoken by the 30,000 inhabitants of the walled town. The territory *intra muros* measured a compact 1.6 by 0.8 km. Following the occupation of Harar by the future emperor Menelik II in 1887, an extended urban area developed outside the walls of the town, populated by Amharic-speaking soldiers, administrators, teachers, etc. The surrounding countryside was (and is to this day) inhabited by Oromo-speaking farmers. Consequently, Harari is spoken in a ‘speech island’, although a different situation may have obtained prior to the Oromo invasion in the 16th century. It is possible that before this time a continuous Semitic-speaking band of territory stretched between Harari and the Eastern Gurage languages.

After the 1974 revolution, the Rural Property Act of 1975 and the Urban Property Act of the same year, much of the town’s subsistence was destroyed. Great numbers of Harari speakers left the town, settling in the large towns of Ethiopia (most in Dire Dawa and Addis Ababa), and an even larger group sought political asylum abroad (predominantly in Saudi-Arabia and Canada). After the exodus of the Harari, other ethnic groups entered the old city, and it is now inhabited by an ethnically and linguistically mixed population of Harari, Amhara, Oromo and Somali, though the Harari still seem to dominate urban life. The census of 1994 estimated the total number of Harar’s inhabitants at more than 65,000, 27,000 to 30,000 of whom lived inside the city walls.

Of these, about 15,000 were Harari. The number of Harari speakers worldwide is estimated at 42,000 to 45,000. Accordingly, about two-thirds of Harari now live outside the town (cf. Gibb 2005, 1026).

The terms ‘Harar’ and ‘Harari’ are used by the Harari only in writing. In spoken language the Harari refer to *gēy* ‘town’ for Harar, *gēy usu* ‘people of the town’ for themselves and *gēy sinān* ‘language of the town’ for their language. The Amhara call the language *adārāñña*, which is the Oromo name *adare* with an Amharic suffix.

2. Ancient and Modern Harari

Apart from Amharic, Harari is the only Southern Ethio-Semitic language for which we can observe a historical development, as it is known not only as a spoken modern language, but also from older written texts. Because the Harari were Muslims, the Arabic script was used by the authors and copyists of documents in Ancient Harari (for text editions cf. Cerulli 1936, 304–405; Wagner 1983, 21–265). The old literature consists mostly of religious texts, and consequently abounds in Arabic elements (not only words, but also clauses and even sentences). In some cases, it is appropriate to speak of a macaronic style (Wagner 1988, 204–206). The oldest text in Ancient Harari that can be dated is the *Muṣṭafā*, a collection of prayers and praises of the Prophet, composed by Hāšim b. ‘Abdal‘azīz (died ca. 1756). Other texts however, may date to earlier than the 18th century.

Ancient and Modern Harari overlapped chronologically. Ancient Harari was still in use as a written language up to the end of the 19th century (Garad / Wagner 1991, 492), though modern forms were already witnessed in oral language by Richard Burton when he visited Harar in 1855 (Burton 1894, 163–165; Wagner 1999, 165). Ancient Harari texts were still copied by hand at the end of the 20th century. Only one text, the above mentioned *Muṣṭafā*, was printed in Ethiopia (Addis Ababa 1974). Modern Harari has remained an oral language, and it was only following the fall of the *dārg* regime in 1993 that the new government’s ethnic policy allowed the different population groups of Ethiopia to publish in their own languages. This forced the Harari to settle on a script. The Harari diaspora in Saudi Arabia favored the Arabic script and even supported their choice financially. The Harari that remained in Harar, however, opted (after a flirtation with the Latin script) for the Ethiopian script (*fidāl*), which had already been used to publish the journal *Šaḥan* in the diaspora since 1986. To date, several works of religion, history and poetry as well as school books have been printed in the Ethiopian script (Wagner 2004, 355f.).

The main differences between Ancient and Modern Harari may be summarised as follows:

- (1) The loss of the old genitive marker *zi-* in Modern Harari (cf. 3.4.3.).
- (2) The replacement of the imperfect *yisabri* by the compound imperfect formed with the auxiliary *ḥal* in Modern Harari (cf. 3.4.5.2.). This development corresponds to that in Amharic (*yəsäbär* + *allä* = *yəsäbrall*). While in Amharic however, the old simple imperfect can be observed in the Old Amharic texts as rudiments only, it is still fully in use in the Ancient Harari texts and can be studied in all its functions (cf. Wagner 1999).

- (3) The preservation of an initial *l*- (cf. Gə'əz *lä*-) in some forms of the 1 sg. in Ancient Harari: *l-ilmad* 'I may learn', while Modern Harari knows only *nasbar*, due to the sporadic shift *l* > *n* (Wagner 1968, 210–213).
- (4) The loss of the old infinitive in *-ōt*. In Modern Harari, the infinitive is formed with the prefix *ma-*: *masbar*. The infinitive in *-ōt* still exists in Silṭe. It is only due to the historical depth of Harari that this isogloss can be recognized.
- (5) The changes that took place in the construction of negative sentences (cf. 3.4.5.3.) and the relative clause (cf. 3.4.5.4.). The latter is now used much more extensively than in Ancient Harari.
- (6) The spread of the cleft sentence, which did not exist in Ancient Harari at all. This is a phenomenon which Modern Harari shares with modern Amharic.
- (7) The abundance of syntactic means to construct subordinate clauses in Modern Harari. Ancient Harari had only a few types of subordinate clauses.

Many Harari speakers of the last two or three generations have difficulties understanding Ancient Harari texts, even if they are able to read the Arabic script fluently. This may be due, however, not only to the grammatical changes but also to different vocabulary. The old texts abound in Arabic loans (cf. Leslau 1956, 14–35) while Modern Harari has taken over many Oromo words.

3. The position of Harari within the Ethio-Semitic language family

3.1. Harari according to Hetzron's classification

Harari belongs to the Southern branch of the Ethio-Semitic languages, together with Amharic, Argobba, Gafat and the Gurage languages. According to the classification of Hetzron, the Southern branch splits into Transversal South Ethiopic and Outer South Ethiopic. Transversal South Ethiopic includes Amharic and Argobba, forming the AA group on the one hand, and of Harari and the Eastern Gurage languages Silṭe, Enneqor, Wäläne and Zay, forming the EGH group on the other hand. All other Gurage languages and Gafat belong to Outer South Ethiopic (cf. Hetzron 1972, 119–122). Parts of this classification may be controversial, but it seems to be consensus that Harari has its nearest relatives in the Eastern Gurage languages, being especially proximate to Silṭe (cf. Wagner 2009).

Only the most important features of Harari can be listed here. First, mentioned are some of the isoglosses which Harari has in common with most Ethio-Semitic languages and then those isoglosses that are shared only by some. Finally, the peculiarities in which Harari differs from the related languages will be discussed.

3.2. Features shared with most Ethio-Semitic languages

Harari shares the main features of modern Ethio-Semitic: a) in phonetics, the ejective realization of the emphatic consonants, b) in morphology, the tripartite verbal system consisting of one pattern with suffixes (*sabara*), commonly known as perfect, and two

patterns with both prefixes and suffixes (*yisabri* and *yasbar*), commonly known as imperfect and jussive, c) in syntax, the SOV word order. This is found along with adjectives and genitives preceding the head noun and subordinate clauses preceding the main clause. In this respect, Harari is more consequent than the other Ethio-Semitic languages and transforms the main prepositions into postpositions (e.g. *gār-be* ‘in the house’, *usu’-le* ‘for the man’).

3.3. Features shared with only some of the Ethio-Semitic languages

With Amharic and the Eastern Gurage languages, Harari shares the loss of gender distinction in the plural pronouns and verbs. It differs from Amharic in the total loss of the morphological relevance of gemination in the verbal system, while in Eastern Gurage, there are at least some remnants of gemination in the verb. Harari is, in this respect, the most progressive of the Ethio-Semitic languages. In most Semitic languages outside Ethiopia, gemination of the second radical is the main feature of verbal type B. In Gə‘əz an *ē* between the first and second radical developed as a secondary feature, but only in the imperfect. In Harari, the *ē* spread to all verbal forms of the B type and replaced the gemination completely.

Another feature common to both Harari and the Eastern Gurage languages (except Wälāne) is phonemic vowel length. Vowel quantity is conditioned lexically and morphologically in Harari and is uninfluenced by the position of the word in the sentence.

3.4. Special features of Harari

3.4.1. Phonology

In the consonantal system, the merging of *h* and *ħ* with *h* is a special feature of Harari, not shared by any other Ethio-Semitic language.

Labialization, a feature of most Ethio-Semitic languages, was lost both in Harari and in Silṭe. Palatalization, on the other hand, is very common: *d* > *ǧ*, *t* > *č*, *ʔ* > *č*, *s* > *š*, *n* > *ñ*, *l* > *y*. The *i*-suffix of the 2f. sg. imperfect may affect all radicals of the root (*tikačbi* from *kataba* ‘to write’, *tišagǧi* from *sagada* ‘to prostrate’) and even the prefix (*čikībi* and *tikībi* from *kēba* ‘to testify’) (Rose 2004).

3.4.2. Syllabic structure

The syllabic structure of Harari does not permit initial or final consonantal clusters. Initial clusters are split by insertion of an anaptyctic vowel *-i-* between the two consonants (cf. the jussive *ya-sbar* with the imperative *sibar*). Final clusters are avoided by adding a propvowel *-i* (cf. imperfect *yisabri*; Arab. ‘*umr*’ > Har. *umri*), while most other Ethio-Semitic languages insert *-ə-* (Amh. *yäsäbər*).

3.4.3. The pronominal system

The Harari pronominal system is unique, being characterized by the spread of the relative element *z(i)*- first into the possessive suffixes of the 3rd person and the 1st person plural (1 c. sg. -*e*, -*e'e*, -*eye*, 2 m. sg. -*ha*, 2 f. sg. -*haš*, 3 m. sg. -*zo*, 3 f. sg. -*ze*, 1 c.pl. -*zina*, 2 c. pl. -*ho*, 3 c. pl. -*ziyu*) and then also into the independent personal pronouns (1 c. sg. *ān*, 2 m. sg. *aḥāḥ*, 2 f. sg. *aḥāš*, 3 m. sg. *azzo*, 3 f. sg. *azze*, 1 c. pl. *iñña*, *iññāč*, 2 c. pl. *aḥāḥāč*, 3 c. pl. *azziyāč*). Several explanations are possible for these forms (Wagner 1997a, 489–490), but it is evident that -*z*- is the same relative element which, in Ancient Harari, was also used to form the genitive (cf. 3.4.4.). A further special feature of Harari independent pronouns is plurals with the nominal plural suffix -*āč*. This is partly paralleled by the Amharic plural forms of the possessive suffixes -*ačč-ən*, -*ačč-əhu*, -*ačč-äw* where an old nominal plural suffix (modern -*očč*) is inserted before the pronominal element.

3.4.4. The noun

Harari nouns do not formally mark gender. The plural suffix is -*āč*, a palatalized form of the common Semitic feminine plural -*āt* (as in other Southern Ethio-Semitic languages). In Modern Harari, the genitive is marked only by its position before the head noun, while in Ancient Harari it was preceded by the relative pronoun *z(i)*- (e.g. Ancient *zi-dāna tāya* ‘the shadow of the cloud’; Modern *zar mīy* ‘the water of the river’). Harari has a special accusative suffix -(*u*)*w* which is different from the various markers used in other Ethio-Semitic languages, although it may have the same origin as the Amharic definite article -*u/-w* (Wagner 2002). Harari has a definite article formed by the suffix -*zo* (identical with the possessive suffix 3 m. sg., cf. 3.4.3.), but it is used sparingly.

3.4.5. The verb

3.4.5.1. Verbal types and classes

In the triradical Harari verb four types are distinguished by the vowel behind the first radical: A *sabara*, B *sēbara*, C *sābara*, D *sōbara*. In addition there is a frequentative with a reduplication of the second radical: *sibābara*. While there are no semantic differences between the types A to D, the frequentative expresses a repeated or intensive action. The types B and D use an ablaut to distinguish the moods: imperfect *yisibri* and *yisūbri*, jussive *yasēbri* and *yasōbri*. From most types a *ta*-reflexive, *a*-causative and *at*-causative can be derived. In two derivational classes, type C preserves a semantically distinctive value: *tasābara* expresses reciprocity and *assābara* (< **atsābara*) forms an adjunctive.

3.4.5.2. Compound verbs

As noted above, the most important change between Ancient and Modern Harari is made by the formation of a new compound imperfect through the combination of the old imperfect with the auxiliary *ḥal* (*yisabri* + *ḥal* = *yisabrāl*). The form *yisabrāl* is now the normal form in main clauses to express present and future actions, while *yisabri* is restricted to subordinate clauses.

3.4.5.3. Negated verbs

In Ancient Harari, sentences were negated by adding the prefix *al-* to the perfect (*al-sabara*) and *a-* to the imperfect (*a-ysabri*) and jussive (*a-ysibar*). The prefix *a-* developed from *al-* by assimilation and later reduction of the lengthened consonant, cf. the 1 c. sg. where the *l* is still preserved (e.g. *alqabṭi* ‘I do not miss’). In Modern Harari, negative main clauses always contain the element *m* which, in the perfect, is normally suffixed to the verb (e.g. *al-sabara-m*). In the compound imperfect, it is mostly inserted between the main verb and the auxiliary (e.g. *ysabr-um-ēl*: the *-u-* splits the cluster of three consonants; *-ēl* is contracted from the old Ethiopian negation *ī-* and *ḥal*). In subordinate clauses, *m* is missing and, in the present tense, the imperfect of Ancient Harari is replaced by the jussive (*aysibar* instead of *aysabri*). The latter change may be due to Oromo influence (cf. Wagner 1997b).

3.4.5.4. Relative verbs

In Ancient Harari, in the perfect the relative clause was marked by the relative prefix *zi-* (e.g. *zi-sabara* ‘who broke’; neg. *z-al-sabara* ‘who did not break’). In the imperfect, the relative relationship was expressed only by the position of the relative clause before its head noun (e.g. *yimāḡ gafi-zo* ‘his servant who is better’). In Modern Harari, the relative morpheme *z* is also used in the imperfect. It is inserted between the main verb and the auxiliary (e.g. *ysabri-z-āl*). In negative clauses, however, the development was quite different. Here, the morpheme *z* was already in use in Ancient Harari, being prefixed to the negated imperfect (e.g. *z-a-ysabri*). In Modern Harari, on the other hand, *z* is prefixed to the jussive (e.g. *z-a-ysibar*) as in the other subordinate clauses (cf. 3.4.5.3.).

3.4.5.5. Insertions between the main verb and auxiliary

A peculiarity of Modern Harari is the insertion of a number of different elements between the main verb and the auxiliary. As in Amharic, the complement pronoun, with or without prefixed preposition, may be infix here (e.g. *yikīb-ba-ḥ-āl* ‘he testified against you’). In Harari the negative *m* and the relative *z* must also be inserted here (cf. 3.4.5.3 and 3.4.5.4.). Combinations of several infixes are also possible (e.g. *tiqānni-l-ayu-z-āt* ‘who (fem.) will assist them’). Furthermore, an *-īn-* is inserted to mark questions (e.g. *ysabr-īn-āl* ‘does he break?’). *-īn-* seems to be a combination of the element *n*, which also occurs before the affirmative copula (cf. 3.4.5.8.), and the question marker *ī*. Another infix element is *-t-* ‘only’, ‘still’, ‘yet’ (e.g. *ysabri-t-āl* ‘he only breaks’, cf. Garad/Wagner 1998, 170–174). Up to the middle of the 20th century, the conjunction *is-* ‘while’ could also be inserted between the main verb and the auxiliary of the compound imperfect (e.g. *yil-s-āl* ‘while he says’, Goldenberg 1967/8, 254–256). In recent decades this construction has been superseded by *yil-z-āl*, which may be interpreted as a relative clause used as an adverbial accusative (cf. Leslau 1965b, 153f.; Wagner 1994).

3.4.5.6. The suffix *-ma*

The original converb or gerund, attested in other Ethio-Semitic languages, was lost in Harari and the Gurage languages. In Harari, it is replaced by the suffix *-ma* which can be suffixed to any verbal form. It is substituted for the old converb in almost all its functions (cf. Littmann 1921; Cerulli 1936, 197–203; Leslau 1970; Garad/Wagner 1998, 327–336).

3.4.5.7. Verbs with weak radicals

Verbs with the weak radicals', *w*, *y*, *h* – and in some verbs also *b* – differ formally from those of the normal triradical verb. In some cases, different classes fall together, for example the conjugation of the II ' verb *ṭēna* (Gə'əz ṣə'əna) is identical with that of the II *y* verbs and the type B of the III inf. verbs.

3.4.5.8. The copula and verb of existence

The Harari copula is *ta*. It is conjugated by adding the pronominal object suffixes: *tañ*, *taḥ*, *taš*, *ta*, *te*, *tana*, *taḥu*, *tayu*. The affirmative copular main clause contains the morpheme *-(i)n* which may be suffixed to every word of the clause, but is normally attached to the predicative noun or adjective which precedes the copular verb. The element *-(i)n* is not found in subordinate clauses. In negative clauses, *ta* is preceded by the negation *al-*, and the clause needs an *-(u)m*. Like *-(i)n*, *-(u)m* is not used in subordinate clauses.

The verb of existence is *ḥal*, negated *ēl*. Suffixed by object pronouns, it expresses possession ('to have').

3.4.6. Syntax

In the field of syntax, a few special features of Harari may be mentioned. Modern Harari possesses several conjunctions to express different kinds of subordination. The conjunctions either precede or follow the subordinate clause. In the latter case, the subordinate clauses often developed from relative clauses.

The Modern Harari relative clauses can be nominalized on a large scale, and can be made definite by the article *-zo* or transformed into an accusative by suffixing the accusative suffix *-(u)w*, it can also be pluralized by the plural suffix *-āč*. In the latter case, the plural may refer either to the subject or to the object of the clause (e.g. *yimaḥtōzālāč* 'those who beat him'; *yimaḥtayuzālāč* 'those whom he beats').

As in Amharic, cleft sentences have spread widely in recent decades. Unlike Amharic however, an object suffix in the 3 m. sg. is obligatory (in Amharic it occurs only sporadically). It is also obligatory after intransitive and passive verbs. Leslau (1965b, 154–155) termed this a 'pseudo-object suffix pronoun' and interpreted it as an inner object: *mačī-n ta liḡi zi-tmaḥaṭē-w?* 'when was it that the boy was beaten it (i.e. the being-beaten)?' (cf. also Garad / Wagner 1998, 253–263).

In Ancient Harari, the suffix *-nat* was used to form abstract nouns from substantives or adjectives (e.g. *nabi* ‘prophet’; *nabi-nat* ‘prophethood’). During the last fifty years the range of application of the suffix has expanded a great deal. As a result, in present day Harari an entire relative clause can be transformed into an abstract noun by adding *-nat*: *aḥmad kiz yīd-z-āl-nat-uw āmn-um-ēḥ* ‘I do not believe in Aḥmad’s one-who-tells-lies-ness’ = ‘I do not believe that Aḥmad tells lies’ (cf. Leslau 1965b, 157; Goldenberg 1987/88, 114–115; Garad/Wagner 1998, 382–390).

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74. Ethiosemitic-Cushitic Language Contact

1. Introduction
2. Phonological features
3. Morpho-syntactic features
4. Lexical features
5. Conclusions
6. References

Abstract

The article gives an overview of phonological, morpho-syntactic and lexical contact features between Ethiosemitic and Cushitic languages. In addition to older research hypotheses on phonological and lexical borrowings from Cushitic into Ethiosemitic, the current research on the Ethiopian linguistic area is also included. The latter approach deals mainly with rare grammaticalizations which have evolved due to mutual influence between Ethiosemitic and Cushitic languages.

1. Introduction

According to a widely accepted view, Semitic-speaking peoples left their homeland on the Arabian Peninsula at the end of the 1st millennium B.C. by crossing the Red Sea, and migrated into today's Ethiopia and Eritrea. They experienced extensive linguistic and extra-linguistic influence from Cushitic-speaking peoples (cf. Hetzron 1972, 122 ff., Ullendorff 1955, 4 ff.). A different view considers Ethiopia to be the homeland of Semitic-speaking peoples, as it is assumed that the linguistic diversity among Semitic languages in Ethiopia is much greater than elsewhere in Semitic (Hudson 1977, Murtonen 1967). According to Gordon (2005), more than eighty languages are spoken in Ethiopia. Most of these belong to three language families of the Afroasiatic phylum, namely Semitic, Cushitic and Omotic. A number of languages in the west and south-west belong to different families of the Nilo-Saharan phylum.

Traditionally it is assumed that the various Ethiosemitic languages emerged due to unilateral linguistic influence of Cushitic languages (Leslau 1945, 1952, 1959). The assumption is based on the concept that features which exist in Ethiosemitic and Cushitic but not in Semitic languages outside Ethiopia are a Cushitic substratum. Hetzron (1972, 123) explicitly states that most probably all modern Ethiosemitic languages are characterized by Agaw (Central Cushitic) influence. He considers Tigre to have evolved due to influence of the North Cushitic language Beja, Tigrinya due to Agaw influence and most Gurage languages due to influence of Sidaama (and probably other Highland East Cushitic languages).

In opposition to the view of unilateral Cushitic influence on Ethiosemitic, Ferguson (1976, 64) is of the opinion that 'the languages of Ethiopia [and Eritrea] constitute a linguistic area, [because] they tend to share a number of features which [often] result

from the processes of reciprocal diffusion among languages which have been in contact for many centuries'. This view is further modified, for example, by Crass (2002), Crass/Bisang (2004), Hayward (1991), Tosco (1994, 1996), Zaborski (1991), but denied by Tosco (2000). In the following sections the prominent contact features between Ethiosemitic and Cushitic are described.

2. Phonological features

The existence of labio-velars (k^w , g^w , k^w , x^w) in Ethiosemitic is commonly considered to be of Cushitic influence (Leslau 1945, 61 f., Ullendorff 1955, 83). While they are not attested in unvocalized Ge'ez inscriptions and Semitic languages spoken outside Ethiopia, vocalized Ge'ez inscriptions and all modern Ethiosemitic languages either possess labio-velars or have traces of them (Ullendorff 1951). The contact situation regarding the ejectives is not so clear. Although Leslau (1945, 63; 1957, 159) claims that the ejective articulation in Ethiosemitic evolved due to Cushitic influence, Ullendorff (1955, 151 ff.) remarks that it can be considered Afroasiatic in origin and may, thus, have been preserved by a 'combined action of Semitic and Cushitic'. Crass (2002) argues that the occurrence of ejectives is an areal feature. Reconstructions of different stages of proto-languages of Afroasiatic show that ejectives were lost over the course of time. Recently, however, ejectives were re-imported into most of the languages via contact (Crass 2002, 1683 ff.). In Proto-Highland East Cushitic, for example, only the velar ejective is attested but in most of the modern Highland East Cushitic languages four ejectives occur as phonemes, namely t' , $tʃ'$, k' and to a smaller extent p' (Hudson 1989, 11). In the Agaw languages, ejectives occur predominantly in loan words from Amharic and Tigrinya but their phonemic status is problematic (Appleyard 1984, 34 f.). The occurrence of an implosive d is attested in several Cushitic languages but not in Ethiosemitic, with the exception of Zay into which it entered due to language contact with Oromo (Meyer 2006). Ethiosemitic-Cushitic language contact may also yield the deletion of features. Although ʕ and ħ are reconstructed for Proto-Afroasiatic (cf. Crass 2002, 1687 for references), they do not occur in most South Ethiosemitic and Cushitic languages (Leslau 1959, 2). The non-occurrence of these phones is considered an areal phonological feature of Central Ethiopia (cf. Crass 2002, Tosco 2000).

3. Morpho-syntactic features

A frequently cited result of Ethiosemitic-Cushitic language contact is the change of the Semitic word order VSO/SVO to SOV in Ethiosemitic. Other areal features are, for example, the existence of converbs, compound verbs (consisting of an ideophone bearing the semantics and an auxiliary, commonly the verb 'to say') and the fact that the unmarked form of a noun gives no reference to number (cf. Ferguson 1976, but cf. Leslau (1945, 1952) for other features). Linguistic features of the Highland East Cushitic/Gurage sub-area have been investigated thoroughly for K'abeena, Libido (Highland East Cushitic), Gumär, Muher, Wolane and Zay (Ethiosemitic) by Crass/Meyer

(2007a). Beside these vernacular languages, the role of the *linguae francae* Amharic and Oromo (Lowland East Cushitic) is also considered. The features presented in the following sections occur in all the above listed languages if not mentioned otherwise.

3.1. Ablative > ‘since’-temporal > real conditional

The ablative case marker can be grammaticalized to a marker of ‘since’-temporal clauses (Heine/Kuteva 2002, 35). This grammaticalization is attested in all investigated languages except Oromo, which possesses conjunctions to mark ‘since’-temporal and real conditional clauses. Example (1) shows that an identical morpheme occurs in the functions of the ablative marker and the ‘since’-temporal clause marker.

(1) ZAY

<i>bä-järmän</i>	<i>bä-mät’aah^w</i>	<i>awji</i>	<i>wär</i>	<i>tä-saamit</i>	<i>haanämmaa.</i>
ABL-Germany	SINCE-	today	month	with-week	become.PRIV.
	come.PRIV.1s				3SM.FC.CNV.
					AUX.3SM

‘It is five weeks ago today since I came from Germany.’

In all languages except Muher and Gumär, the function of the ablative morpheme is further grammaticalized to mark real conditional clauses.

(2) ZAY

<i>c’aat</i>	<i>bä-k’aamuh</i>	<i>ay-aamuuk’te-ño.</i>
Khat	CND-chew.PRIV.1S	NEG-let.sleep.IPV.3S-1S.OBJ.DC
‘If I chew khat, I cannot sleep.’		

The grammaticalization from a ‘since’-temporal to a real conditional marker is not listed in Heine/Kuteva (2002) and seems not to be well attested in the languages of the world. Therefore, we assume that this grammaticalization evolved or was reinforced due to contact.

3.2. Simile > complementizer > purpose

A similitive marker, i.e. a morpheme indicating that an entity matches a standard entity, may grammaticalize into a complementizer (Heine/Kuteva 2002, 273 f.) and probably into a marker of purpose clauses. While the grammaticalization of a similitive marker into a complementizer is attested in many languages, this does not hold true for the grammaticalization into a marker of purpose clauses (Heine/Kuteva 2002, 91). Both grammaticalizations occur in all investigated Ethiosemitic and Cushitic languages.

(3) MUHER: Similative

yä-leba-häma t'ɨpʷä'e yännä.
 GEN-thief-SIM bad.thing not.exist.PRIV.3SM
 'There is nothing as bad as a thief.'

Complementizer

abbäbä nägä yibäsa-häma sämmahum banno.
 Abebe tomorrow 3sm.come.IPV-CMPL hear.PRIV.1S.CNV AUX.past.3SM.DC
 'I heard that Abebe will come tomorrow.'

Purpose

dähä tük'aw-häma bä'awawe k'ib gäffattim.
 2SM drink.IPV.2S.M-PURP in.coffee.DEF butter add.PRIV.3SF.DC
 'She added butter to the coffee for you to drink it.'

The grammaticalization of a complementizer to a marker of purpose clauses is more frequent than Heine/Kuteva consider it to be. The cross-linguistic rarity makes it reasonable to consider the occurrence in Ethiosemitic and Cushitic languages as due to language contact.

The grammaticalization of a similative marker to a marker of purpose clauses in the investigated Cushitic languages indicates that this feature is more common in Cushitic than Hetzron (1972, 129, footnote 11) supposes. He considers the morphological identity between a similative marker and the marker of a purpose clause to be early Agaw influence on Ethiosemitic. Hetzron does not discuss the connection between a similative marker and a complementizer, which we consider the link between the grammaticalization of a similative into a purpose clause marker.

3.3. Different copulas in main and subordinate clauses

Different copulas in main and subordinate clauses are found in all investigated languages except Zay. In affirmative main clauses the copula agrees in person, number and gender with the subject in Ethiosemitic languages. In Cushitic either the gender of the predicate nominal is referred to on the copula or an invariable copula is used.

(4) K'ABEENA

is^u rosisaanco-h^a
 3S.M.NOM teacher. ACC-COP.M
 'He is a teacher.'

In subordination, a fully inflected perfective verb with the meaning 'to live, to become' occurs as copula but it refers to present or future tense.

(5) K'ABEENA

maat'aaree ikkoo mann^u...
 wise be.PRIV.3S.M.REL person.NOM
 'A person who is wise / a good judge ...'

Copulas or/and existential verbs are further involved in the expression of possession and obligation, which follows in most Ethiosemitic and Highland East Cushitic languages the same pattern (see Crass/Meyer 2007a).

3.4. Experiential perfect

A construction with the verb 'to know' in the main clause and a converb clause as complement expresses the experiential perfect. It indicates that a given situation has been experienced at least once in a lifetime (Comrie 1976, 58 f.). The situation, which was experienced, is encoded in the converb clause.

(6) WOLANE

amarikan hedi-nä yiclīnan.
 America go.PRIV.1P.CNV know.IPV.1P.AUX.3S.M
 'We have been in America.'

3.5. Past > apodosis of an irreal conditional clause

Beside its function to express tense, the past marker indicates the apodosis of irreal conditional clauses.

(7) GUMÄR: Past

b-abba-nä bet k'e bahu-m ambwär-hu banä?
 LOC-father- house wait.IMP.2S say.PRIV.1S-CNV NEG.go.PRIV-1S AUX.PAST.
 POSS.1S 1S.OBJ 3S.M
 'Didn't I leave by saying to you: "Wait in the house of my father!"?'

Irrealis condition

tramäna zīrab tanzänäbä ihün nīdīrgnä banä.
 yesterday rain SUB.NEG.rain.PRIV. corn thresh.JUS.1P AUX.PAST.3S.M
 3S.M
 'If it had not rained yesterday we would have threshed corn.'

The use of past markers in the apodosis of irrealis conditional clauses is rare. Frequently, the past marker in conditional sentences occurs in the protasis of hypothetical or contrary to fact conditions. The relative rareness of the occurrence of past markers

in the apodosis in the languages of the world (cf. Fleischman 1989, 4 ff.) leads to the assumption that language contact is the reason for its occurrence in Ethiosemitic and Cushitic.

4. Lexical features

Lexical borrowing is a major topic in the description of Ethiosemitic-Cushitic language contacts. Although there is a tendency to enumerate Cushitic lexical items in Ethiosemitic languages, most scholars are aware of the fact that the contact is mutual between both languages families (Appleyard (1978), Gragg (1982), Hudson (1994), Leslau (1980, 1990), etc.).

Hayward (1991) postulates three categories of lexicalizations which are typical for Ethiopian languages (including Omotic). The first category comprises 'single-sense lexicalizations', such as lexical items for seasons of the year, categories of terrain, skin colors for people, the suppletive imperative of the verb 'to come' (also listed in Ferguson 1976), etc. The second category, namely lexicalizations with two or more distinct senses, is comprised of verbs and some nouns, like the respective verbs for 'hold, catch' which have the secondary meaning 'start, begin' or the respective verbs for 'play' which have the secondary meaning 'chat'. The third category includes (i) verbal derivations (e.g. the causative of the verb 'want' having the meaning 'need', the causative of the verb 'enter' having the meaning 'marry' and the causative of the verb 'pass the night' having the meaning 'administer'), (ii) possessive constructions including two NPs (e.g. 'son of man/people' having the meaning 'mankind, human being' and 'land of man/people' with the meaning 'foreign country'), and (iii) idiomatic expressions (e.g. 're-gain/recover control, take courage' being composed of the noun 'heart' and the verb 'return (intransitive)', and 'catch cold', in which the noun 'cold' is the subject and the experiencer the object of the verb 'catch').

5. Conclusions

Besides contact-induced changes in the phonology and the lexicon of Ethiosemitic languages, many morpho-syntactic features evolved through grammaticalization. Especially in the case of rare or unattested grammaticalizations, contact-induced language change is one possible way of explaining the similarities (cf. Bisang 1996, Heine 1994, Heine/Kuteva 2003). A number of areal features, like general number, converbs, and cleft construction, show a considerable variation in the grammatical systems of individual languages. Converbs, for instance, can be marked by a separate morphological form (e.g. Amharic, Libido) or by using an inflected verb plus a converb marker (Gurage languages, Oromo). Furthermore, while some languages do not make a morphological distinction between narrative and adverbial converbs (e.g. Amharic, Oromo), other languages distinguish between them (e.g. Gurage languages, Libido).

Abbreviations

1,2,3	first, second, third person
ABL	ablative
ACC	accusative
AUX	auxiliary
CMPL	complementizer
CND	conditional
CNV	converb
COM	comitative
COP	copula
DAT	dative
DC	declarative clause marker
DEF	definite marker
F	feminine
FC	focus marker
GEN	genitive
IMP	imperative
IPV	imperfective
LOC	locative
M	masculine
NEG	negative
NOM	nominative
OBJ	object
OBL	obligation
P	plural
POSS	possession
POST	posteriority
PRV	perfective
PURP	purpose
REL	relative marker
S	singular
SIM	similative
SUB	subordinator
VN	verbal noun

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