

Doubled clitics are pronouns

Amharic objects (and beyond)

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Abstract Controversy and uncertainty have plagued the question of whether “object markers” (OMs) are object pronouns cliticized to the verb or realizations of object agreement. Using data from Amharic, we address this question from a new perspective. Specifically, we claim that Amharic OMs should be analyzed as clitics because they are unable to double nominals that are quantified, anaphoric, or contain a variable bound by a quantifier. These restrictions can be derived from familiar principles of grammar—the Weak Crossover condition and the Binding theory—if and only if the OM is taken to be a pronoun (D) adjoined to *v* at LF. We then explain in terms of syntactic structure why these OMs can double even nonreferential DPs in experiencer subject constructions, whereas they cannot double theme arguments in unaccusatives or passives. Finally, we consider whether our analysis provides a diagnostic that distinguishes pronominal clitics from agreement morphemes across languages. OMs in Greek, Bulgarian, and Spanish seem to work broadly like Amharic, confirming that they are pronominal clitics. In contrast, OMs in Burushaski and Sambaa behave like agreement, even though certain other putative diagnostics suggest they might be clitics. We thus confirm that both object clitics and object agreement exist.

Keywords Amharic · Clitic doubling · Object agreement · Weak crossover · Clitics · Pronouns

1 Introduction: Agreement vs. clitic doubling

It is an awkward fact that generative linguistics has had a hard time distinguishing reliably between pure agreement and clitic doubling (CD). Conceptually, the two

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analyses are often very different, one focusing on the process of Agree, and the other on the distinct process of Move as the principal explanatory engine (although hybrid analyses also exist). It is troubling, then, that there has been little consensus as to what data will tell us which analysis is correct for a given construction in a given language.

As one case in point, consider the paradigm in (1) from Amharic, a Semitic language spoken in Ethiopia. (1)a shows an ordinary transitive clause, with the object as a separate phrase before the verb (Amharic is a rather uniform head final language, with the apparent exception of Ps; see Baker and Kramer 2014). In contrast, (1)b is the way to express a weak, unstressed pronoun as object in Amharic. Here the morpheme /w/ ‘it’/‘him’ comes after the verb ‘see,’ and forms a phonological unit with it. As a point of terminology, we call elements like /w/ in (1)b *object markers* (OMs, a term taken from Bantu linguistics), to use a neutral term that does not prejudge whether it is agreement or a clitic pronoun. Finally, (1)c has both an overt DP object before the verb and an OM attached to the verb which matches it in person-number-gender features.¹

- (1) a. Läm̃ma **wiffa-w-in** ayy-ä.
 Lemma.M dog-DEF.M-ACC see.PFV-3MSG.S
 ‘Lemma saw the dog.’
 b. Läm̃ma ayy-ä-w.
 Lemma.M see.PFV-3MSG.S-3MSG.O
 ‘Lemma saw it/him.’
 c. Läm̃ma **wiffa-w-in** ayy-ä-w.
 Lemma.M dog-DEF.M-ACC see.PFV-3MSG.S-3MSG.O
 ‘Lemma saw the dog.’²

The question thus arises whether the OM has the status of an agreement marker, and (1)b is related to (1)c as an instance of pro-drop, or whether the OM has the status of a cliticized pronoun, and (1)c is related to (1)b as an instance of clitic doubling—or indeed whether the two analyses converge, such that this is a distinction without a difference. Similar issues arise in many other more-studied languages, including the Romance languages, some Slavic languages, Greek, and various Bantu languages, to name just a few.

Often this question is decided by looking at a range of semi-traditional diagnostics, as in previous work by one of the authors on Amharic (Kramer 2014). In Kramer 2014, it is shown that OMs in Amharic consistently behave like clitics for many of the diagnostics that have been widely used in the literature (see also Mullen 1986 and Yabe 2001). However, many of these diagnostics are not so well-understood, in

¹ Gloss abbreviations follow the Leipzig Glossing Rules with the following additions: 1—Noun Class 1 in Bantu, 2—Noun Class 2 in Bantu, 7—Noun Class 7 in Bantu, CP—conjunctive participle, DJ—disjoint, FV—final vowel, GER—gerund, NPRS—nonpresent, NPST—nonpast, .O—object marker, PREV—preverb, .S—subject agreement, X—a gender in Burushaski, Y—a gender in Burushaski.

² All data without a citation is from the fieldnotes of one (or more) of the authors. Each Amharic observation was checked with at least two of the six speakers identified in the acknowledgements. To the best of our knowledge, all our consultants speak the standard dialect of Amharic as described in, e.g., Leslau (1995).

the sense that we do not know why they hold, so we do not know how reliable they are. This becomes crucial when we want to apply the tests typologically to other languages, where the diagnostics may not all point to the same result. Which diagnostics should we trust in such conflicts?

With this issue in mind, we want to consider a class of data that has not been explained in the previous literature on Amharic OMs. (2) shows that there is a range of DPs that can function as direct objects in Amharic which cannot be doubled by an OM. These are what we may informally think of as “less than fully referential” nominals—a class that includes nonspecific indefinite NPs (2)a, interrogative DPs (2)b, universally quantified DPs (2)c, and reflexive anaphors (2)d, among others.

- (2) a. Läṃma wiffa y-ay-all.
 Lemma.M dog.M 3MSG.S-see.IPFV-AUX.3MSG.S
 (*y-ay-äw-all)
 3MSG.S-see.IPFV-3MSG.O-AUX.3MSG.S
 ‘Lemma sees a dog.’
- b. Mann-in ayy-if ? (*ayy-if-iw)
 who.M-ACC see.PFV-2FSG.S see.PFV-2FSG.S-3MSG.O
 ‘Who did you (feminine) see?’
- c. Läṃma hullu-n-imm säw ayy-ä.
 Lemma.M every-ACC-FOC person see.PFV-3MSG.S
 (*ayy-ä-w)
 see.PFV-3MSG.S-3MSG.O
 ‘Lemma saw everyone.’
- d. Läṃma ras-u-n gäddäl-ä. (*gäddäl-ä-w)
 Lemma.M self-his-ACC kill.PFV-3MSG.S kill.PFV-3MSG.S-3MSG.O
 ‘Lemma killed himself.’

That some such restrictions exist in some languages is, of course, well-known, especially for the definiteness/specificity effect in (1)c vs. (2)a, but we believe that the broader contours of the phenomenon have not been accurately identified, and that the significance of (2)b–(2)d has not been properly interpreted. We claim that these examples are quite mysterious from a pure Agree perspective, whereas they can be explained in terms of familiar grammatical conditions if we adopt a clitic doubling analysis, in which the OM is taken to be intrinsically pronominal. Our central claim is that the OM is a D(P) merged into the structure at the ν P level, and as a D(P) it itself is interpreted as a pronoun at LF, distinct from the doubled DP. Once we make this assumption, the badness of (2)b and (2)c follows as weak crossover violations, and the badness of (2)d follows as a kind of violation of Condition B of the Binding theory. We conclude from this that there is real explanatory force to saying that Amharic OM are *pronominal* clitics, not mere agreement markers (or indeed clitics that have phi-features but do not count as pronouns).³

³We acknowledge, however, that there might be other senses of clitic doubling in which the doubling clitic is not a *pronominal* clitic. For example, there might be two morphemes that realize phi-features on the verb and are compatible with every kind of DP, but one is more tightly bonded to the verb for phonological purposes, or one is more mobile than the other in word/morpheme order (see Coon 2017 for a case in

Our discussion develops in the following stages. In Sect. 2, we briefly discuss why existing theory can account for the badness of examples like (2)a but not examples like (2)b–d, so that there is something new to learn here. Then in Sect. 3, we lay out and motivate our basic assumptions about the structure of the clauses in (1) and (2). In Sect. 4, we investigate how the Crossover condition applies to such structures to derive the badness of examples like (2)b and (2)c. As an extension, we also consider the fact that OMs can double quantified DPs in a certain kind of experiencer construction in Amharic, a difference that we can explain in terms of structure, without stipulating that some OMs are pronominal and others are not. Then, in Sect. 5, we investigate how Binding theory applies to the structures in question to explain why examples like (2)d are bad as violations of Condition B. This also includes an explanation of why OMs can double putative subjects in experiencer subject constructions, but not in unaccusative and passive constructions, thereby completing our analysis of Amharic OMs.

Finally, Sect. 6 reflects on the possible typological implications of our analysis. Although our primary object of study here is Amharic, inasmuch as we appeal to universal principles of grammar—Agree, Crossover, and Binding theory—we naturally expect similar effects to hold in other languages that have similar structures, all things being equal. If so, we might have a principled new way to distinguish pronominal clitics from “mere” agreement. We give preliminary data that suggests that, despite well-known variation with regard to specificity, animacy, and obligatoriness, clitic doubling languages may be quite similar when it comes to the data that is crucial here. In particular, well-studied CD languages like Greek, Spanish, and Bulgarian are like Amharic in the relevant respects. In contrast, (2)-like restrictions apparently do not hold in certain Bantu languages, like Sambia, or in Burushaski; these then are languages with true object agreement, even though other, more surface criteria suggests that their OMs might be clitics. If sharp contrasts like these hold up under further investigation, then we have a better-understood diagnostic that gets directly at the essential conceptual difference between clitic-doubling and agreement—that doubling clitics are pronouns, whereas agreement markers are not.

2 Why there is something to be gained

The *prima facie* importance of examples like (2) is that there is no obvious reason why they should be bad if OMs in Amharic are just manifestations of simple object agreement. More specifically, it should be possible for *v* (or the equivalent) to agree with the object in such examples. One cannot, for example, say that these objects fail to participate in Agree because they lack the relevant features, since the DPs in question clearly do have ϕ -features. Indeed, such nominals participate perfectly well in Agree relationships when they appear in subject position, where they trigger

point in Mayan languages). Then it might make sense to say the more tightly bonded one is an affix and the less tightly bonded one a clitic, but not a pronominal clitic. One might tentatively think of any such nonpronominal clitics as functional heads that undergo Agree but then attach to the verb by cliticization at PF rather than by any syntactic process.

subject agreement on the verb. This can be seen for the universal quantifier and for a non-d-linked wh-phrase in (3).⁴

- (3) a. Hullu-mm set mät't'-at[tf].
 every-FOC woman.F come.PFV-3FSG.S
 ‘Every woman came.’⁵
 b. Man mät't'-a?
 who.M come.PFV-3MSG.S
 ‘Who came?’ (Leslau 1995:68)

Why then should object agreement be any different from subject agreement in this respect?

It has, of course, been thought for a long time that some instances of agreement—especially object agreement, it seems—come along with semantic consequences or restrictions. This has not been taken to be fatal to an agreement-based account. Thus, it is often said that the verb agrees with the object only if it is “specific,” where some authors are more explicit than others what they mean by this. For example, it has been suggested that [+specific] may be another feature that can be present on nominals and involved in agreement (see Suñer 1988 and Sportiche 1996:264 on Romance; Franks and King 2000 on Slavic, among others). As a placeholder for a future account, we have no problem with this, but as an official theory we consider it unpromising. First, specificity is primarily a semantic or pragmatic notion, not a morphosyntactic feature; indeed it does not seem to be common for languages to mark this feature systematically on nominals themselves (e.g., *a book* is ambiguous between specific and nonspecific readings in English), whereas the core phi-features involved in agreement, like person, number, and gender, are often (although not universally) marked on the DP itself. Second, although a specificity condition might rule out (2)a, b it is not clear that it would extend to (2)c, d without rendering the term “specificity” vacuous. Third, along these lines it is far from obvious why specificity should matter for object agreement in Amharic (and many other languages), but not for subject agreement.

A more promising agreement theory that is responsive to some of these concerns is one that makes a connection with object shift. This involves linking up two ideas: the idea that the direct object is interpreted as specific if it moves out of VP to land in a position in the vicinity of Spec vP, and the idea that only if the object moves to such a position can *v* enter into Agree with it. For example, Baker (2008:198–200) argues for such a view for certain Bantu languages, and Baker (2012a) applies it to Amharic. This seems promising because the first idea is independently motivated by studies of object shift in Germanic languages in the tradition of Diesing (1992). Thus, the visible correlation between a DP’s position and its interpretation in (4)a and (4)b in Dutch seems attractively similar to the correlation between OM-doubling and interpretation between (1)a and (2)a in Amharic (see Sportiche 1996:Sect. 7 for an early connection between clitic doubling and object shift/scrambling).

⁴We cannot, however, show this for a reflexive anaphor like *ras-u*: it cannot be used as a subject because it would have no possible antecedent in the local clause when it is in that position (Condition A).

⁵Some speakers prefer the form *hullu-wa-mm* ‘every-DEF.F-FOC’ for feminine nouns.

in detail.⁷ We proceed to undertake this, deriving the badness from the syntactic configuration plus the assumption that the clitics are pronouns, and count as such for UG principles that govern the interpretation of pronouns, namely the Crossover condition and Binding theory.

3 Basics of the clitic doubling construction

3.1 Structural characteristics

To begin with, then, we need a decent handle on the structure of the relevant sentences. On this matter, we try to be uncontroversial in the sense of only assuming as much as we need about the structure to make our account work, leaving the finer-grained details somewhat open.

In short, we assume that the structures in questions have the following crucial characteristics:

- (7) In a clitic doubling configuration:
 - a. The clitic is a weak pronoun: tentatively a D head with phi features but no NP complement.
 - b. The clitic is adjoined to *v* or a nearby verbal head in the middle region of the clause (above VP but below the subject).
 - c. The object that D doubles is low in the structure, in or near VP, inside the domain of *v*.

In particular, it is not crucial exactly where the doubled DP is inside the greater VP-domain, nor exactly where the clitic is in the middle field of the clause.⁸ We also leave open for current purposes exactly how the structure is formed, including how the clitic may have arrived in the vicinity of *v*. One possibility is that it is simply base generated there, a possibility arising from the free Merge of linguistic elements, not ruled out by any parametric properties of Amharic. (Sportiche's 1996 Clitic phrase hypothesis would be a version of this possibility.)

Another possibility is that the clitic gets to *v* by some kind of movement. Here there are several sub-possibilities. One familiar one is that the clitic is generated inside the object DP and moves out of that DP to adjoin to *v* (sometimes called the "big DP hypothesis"; see Uriagereka 1995, who attributes the idea to Esther Torrego),

⁷One clear precedent (and inspiration) for our analysis is Rizzi's (1986) proposal about why quantified nominals cannot undergo CLLD in Italian and French. However, the restrictions on CLLD and on true clitic doubling are similar in some respects, but not identical (see fn. 8 for some discussion).

⁸In the larger picture, there are also structures to consider in which the doubled DP is higher than the clitic attached to *v*: these are, broadly speaking, Clitic Dislocation (CLLD) structures as opposed to clitic doubling (CD) structures. Some languages only have the former, not the latter, including standard Italian and French. CLLD structures obey some of the same constraints as CD structures, possibly including some of those discussed here, given that the clitic is intrinsically pronominal in CLLD too. But there are also subtle but important differences between CL and CLLD known for languages like Greek (Anagnostopoulou 1994). We have not looked for these differences in Amharic (e.g., systematically comparing $O_iS V + cl_i$ to $S O_iV + cl_i$), leaving CLLD for possible future work.

a semi-conventional type of head movement. Another variant would be that the DP in object position moves to Spec *v*P as a whole, but then a special process of m-merger applies, reducing this higher copy of DP to its D head and adjoining it to *v*, as in Matushansky's (2006) reconstruction of head movement (see also Harizanov 2014 and Kramer 2014 for the use of m-merger to give CD). Along these lines, though, we would have to make the nonstandard assumption that m-merger happens in the narrow syntax—or that PF feeds LF—so that the structure it derives is interpreted at LF. However, the details of how the configuration described in (7) comes about are not crucial for our central point here. What is crucial is that the clitic is interpreted as a pronoun at LF and/or the interface with the semantic system (where Crossover and the Binding theory presumably apply), and for that where the clitic is relative to other elements is more important than how it got there.

That the configuration described in (7) exists is perhaps a little more obvious in certain Bantu languages like Haya than in Amharic, because Haya has Specifier-Head-Complement word order. This language has triples like (8), superficially analogous to (1) in Amharic apart from matters of morpheme/word order.

- (8) a. Y-a-bona Kato kileki. (Riedel 2009:71)
 1.S-PST.1.CJ-see 1Kato today
 'He saw Kato today.'
- b. Y-áá-mu-kôm-a. (Riedel 2009:67)
 1.S-PST.1.DJ-1.O-tie-FV
 'He tied him.'
- c. Y-aa-mu-bona Kato kileki. (Riedel 2009:71)
 1.S-PST.1.DJ-1.O-see 1Kato today
 'He saw Kato today.'

The fact that the OM *mu* here comes before the main verb *bona* but after the tense morpheme *aa* fits well with the fact that it is attached to *v*, hence before V (or V in *v*) but after the realization of T. The fact that the visible object *Kato* in (8)c comes after the verb but before the time adverb fits well with the idea that it is still in situ inside VP (or perhaps adjoined to VP or some low projection), not dislocated to the left or right periphery; see Riedel (2009:70–73) for further evidence of this from details of word order.⁹ Similar structures have been proposed many times for clitic doubling in Romance, Slavic, and Greek languages, except that D in these languages seems to attach to a higher head, roughly T as opposed to *v*. So (7) describes a possible UG structure, one that we would not be surprised for Amharic to have too.

And the available evidence suggests that Amharic does have this structure, apart from differences in order. Indeed, in Amharic it is more obvious that the OM is adjoined to *v*, rather than simply being in Spec *v*P, which is expected to be to the left of VP, since in Amharic the OM shows up at/near the end of the clause, encliticized to the verb. We expect phonologically weak functional elements like bare D heads to be attracted to some stronger element that can host them phonologically, such as

⁹In contrast, disjoint/conjoint marking in Haya and phrasal phonology have been taken as providing evidence that the doubled object is not in VP in Haya. See Riedel (2009:67–73) for reasons to trust the word order evidence rather than the phonological evidence in this case.

the verb (or the second position, in other languages). The evidence that the clitic is adjoined to *v*, as opposed to a much higher functional head, comes from complex tenses consisting of a main verb and an auxiliary verb. In such constructions, the OM encliticizes to the main verb, coming between the main verb and the auxiliary, just like (in mirror order to) Haya and other Bantu languages. It does not come after the auxiliary, as one might expect if it just appeared at the end of the clause in a structure-insensitive way.

- (9) Läm̩ma **wiffa-w-in** y-ay-äw-all.
 Lemma.M dog-DEF.M-ACC 3MSG.S-see.IPFV-3MSG.O-AUX.3MSG.S
 ‘Lemma sees the dog.’

The other important aspect of the characterization in (7) is that the object DP (‘the dog’ in (9)) is low in the structure, within the domain of the head that the D clitic adjoins to. *Prima facie*, the fact that the object appears after the subject and before the verb in the most neutral order, even when doubled by an OM, suggests that it is neither Left- nor Right- dislocated. However, this is not beyond doubt: Eilam (2009) claims that all doubled objects in Amharic are clitic left dislocated, similar to French and Italian. We disagree with this for several reasons. First, an SOV sentence with an OM like (1)c can be pronounced with what is impressionistically the same smooth intonation contour as an SOV sentence without an OM like (1)a; there is no prosodic break, as exists between a left-dislocated DP and the rest of the clause in Indo-European languages. Second, full DPs doubled by an OM can also follow adverbs, even adverbs that are considered very low in Cinque’s (1999) hierarchy, as seen in (10).

- (10) a. Läm̩ma ahunimm **wiffa-w-in**
 Lemma.M still dog-DEF.M-ACC
 y-ay-äw-all.
 3MSG.S-see.IPFV-3MSG.O-AUX.3MSG.S
 ‘Lemma still sees the dog.’
 b. Gäna **wiffa-w-in** al-ayy-ä-w-imm.
 yet dog-DEF.M-ACC NEG-see.PFV-3MSG.S-3MSG.O-FOC
 ‘He has not seen the dog yet.’

Third, objects doubled by OMs necessarily have the case that they should have if they are in the same in-situ position as undoubled OMs. This should not be taken for granted, since obviously dislocated DPs in Amharic do *not* necessarily display case connectivity. It is possible to have orders like [Object, Subject, Verb-OM] where the object dislocated/adjoined to clause initial position has default (unmarked) nominative case, rather than accusative case. An example is given in (11).

- (11) Almaz ibab näkkäs-at. (Also OK: Almaz-in...)
 Almaz snake bite.PFV(3MSG.S)-3FSG.O¹⁰ Almaz-ACC
 ‘A snake bit Almaz; As for Almaz, a snake bit her.’

¹⁰Third person masculine singular agreement (*ä*) is deleted by a regular process of hiatus when it is followed by any vowel-initial suffix (Leslau 1995). In such cases, we still gloss it and place it in parentheses.

This suggests that accusative case is strictly assigned to the position inside VP, and an adjoined DP that binds that position may or may not inherit its case. But this sort of case mismatch does not occur with simple CD: a clitic-doubled direct object in SOV order must have accusative case, as seen in (12).

- (12) ibab Almaz-in/*Almaz näkkäs-at.¹¹
 snake Almaz-ACC/Almaz bite.PFV(3MSG.S)-3FSG.O
 ‘A snake bit Almaz; As for Almaz, a snake bit her.’

This follows if *Almaz* is not dislocated from the position that is directly associated with accusative case in (12) the way it is in (11) (see Harizanov 2014:1045–1047 for a similar argument from Bulgarian).

Fourth, for what it is worth, it is possible to relativize a possessor from within a clitic-doubled DP, just as it is from an undoubled object, as shown in (13).

- (13) [CP Almaz [Obj – gänzäb-u-n] yä-särräk’-ätftf-(iw)]
 Almaz.F money-his-ACC COMP-steal.PFV-3FSG.S-3MSG.O
 astāmari bāt’am habtam näw.
 teacher.M very rich be.3MSG.S
 ‘The teacher whose money Almaz stole is very rich.’

This appears to replicate an argument of Harizanov’s (2014:1044–1045) in favor of true clitic doubling as opposed to clitic dislocation in Bulgarian. Inasmuch as adjoined phrases are islands for extraction and complements are not, (13) suggests that the doubled object ‘his money’ is in complement position in Amharic. We admit, however, that we have not attempted to explore the syntax of relative clauses in Amharic in any detail, making this argument somewhat tentative.¹²

Overall, then, the evidence that is available supports the view that the doubled DP may be in-situ in the normal VP-internal position in Amharic. As such, Amharic is similar to VO languages for which good evidence has been given that the full doubled DP is in the clause-internal object position, including Greek (Anagnostopoulou 1994, 1999:764–768), Spanish (Jaeggli 1986; Suñer 1988), and Bulgarian (Harizanov 2014; but see Krapova and Cinque 2008 for a different view). Even if this is not quite right, such that the dislocated object is not literally in situ, it must be close to that position. The doubled object in SOV order clearly has a quite different status than the obviously dislocated object in OSV orders, given the difference in case marking in (11) vs. (12). If it is in an adjoined position, then, it must be adjoined low in the clause, to VP rather than to TP. If so, it is still within the c-command domain of the head that hosts the

¹¹ Note that Amharic is a DOM language, and indefinite objects in situ have no morphologically overt case marking (e.g., (2)a), similar to subjects. But this is not an option for a definite object like the name *Almaz* in (12).

¹² In particular, we are not sure whether relative clauses in Amharic involve true operator movement or a (null) resumptive pronoun strategy, and what their exact island behavior is. Julie Anne Legate points out that extraction is ruled out from clitic-doubled DPs (and other specific DPs) in many languages, but question formation is probably more sensitive to this factor than *wh*-movement in relative clauses is. (Indeed, there is some gradation in the Bulgarian judgments too: Harizanov (2014:1044 n.10) reports that interrogative movement out of clitic-doubled objects in Bulgarian is not always acceptable, whereas movement of referential DPs out of such objects is.)

D, as in (7), and this is all that our analysis really requires. We represent the doubled object as being the complement of V in our structures, because this is our best guess, but skeptical readers should bear in mind that it doesn't need to be exactly that.¹³

3.2 Associating the OM with the object

So far, then, we have claimed that a clitic doubling structure in Amharic has a D(P) adjoined to *v* and a fully articulated DP in the c-command domain of *v*, in (or near) the theta-position of the object. But there is another obvious fact to be captured here: the fact that the D head matches the object in phi-features, such that it counts as a kind of double of the object. Why must this be? Why can't the OM double an agentive subject instead? Or why can't it just be a distinct item, unassociated with any DP in the clause, as in (14), where the OM is masculine, but both the subject and object are feminine? (Note that Romance languages do sometimes allow clitics not associated with any argument in the clause, as in so-called ethical dative constructions.¹⁴) In short, why are these "object markers," not just "markers"?

- (14) *Almaz Aster-in ayy-ätftf-**iw**.
 Almaz.F Aster.F-ACC see.PFV-3FSG.S-3MSG.O
 'Almaz saw (him) Aster.'

We address this point as follows. We claim that the D head is intrinsically a nominal item—specifically a pronoun—since it has both a full set of phi-features (person, number, gender, and perhaps case) and the category feature D. However, it is in a non-argument position. Therefore, it can only satisfy the Theta-Criterion/Full interpretation if it can establish a link with a properly licensed DP associated with a thematic position. Adopting a base-generation analysis for ease of exposition (see below on movement-based alternatives), we suggest this link is at minimum mediated by the familiar Agree properties of the *v* that D is adjoined to. It is standard to say that *v* can enter into Agree with an object DP inside its c-command domain (Chomsky 2000, 2001, and many others). It is plausible that *v* also Agrees with the D adjoined to it, and this forces D and DP to have the same phi-features, thereby licensing D. (Compare Landau's 2001, 2004 theory of control, where a functional head, T or *v*, agreeing with both its specifier and a PRO inside its domain induces feature sharing, and indeed a referential dependency between the two. Similarly, for Reuland 2011 the binding of anaphor by a DP is mediated by Agree.) Then (14) is bad because the OM does not in fact agree with any of the DPs in the clause, overt or covert. Moreover, since *v* probes downward for something to agree with and is lower than the subject, *v* must agree with the object, not the subject, so the OM does as well. Therefore, (15)a is good, but (15)b is not.

¹³Indeed, even if the doubled DP is higher than the clitic, our principles could be restated slightly so as to give the crucial effects, as long as the clitic is intrinsically pronominal.

¹⁴It is an open question whether Amharic has any "ethical dative" clitics that do not double any argument. Leslau (1995:420–421) notes that intransitive verbs can have third masculine singular OMs with some kind of emotional effect, but it remains unclear whether transitive verbs (like the one in (14)) can ever have this kind of OM. If any such cases exist, they must be very heavily restricted, so we do not consider ethical dative clitics here.

- (15) a. Almaz **mäs'haf-u-n** ayy-ät[tf]-**iw**.
 Almaz.F book-DEF.M-ACC see.PFV-3FSG.S-3MSG.O
 'Almaz saw the book.'
- b. *Almaz mäs'haf-u-n ayy-ät[tf]-**at**.
 Almaz.F book-DEF.M-ACC see.PFV-3FSG.S-3FSG.O
 'Almaz saw the book.'

Perhaps the clearest evidence that Agree has a role to play in these structures comes from ditransitive constructions with verbs like 'give' in Amharic (and also derived ditransitives, created by morphological causativization; see Amberber 2002:Chap. 3). These sentences look mostly as one would expect in an SOV language with a moderate amount of case marking: the word order is generally subject-source/goal-theme-verb, with nominative subject and accusative theme object. With verbs that take a goal argument, the IO can be dative or accusative; with verbs that take a source argument (and also in causatives), the IO is accusative like the DO. A typical example with a goal argument is in (16).

- (16) Girma lä-Almaz mäs'haf-u-n sät't'-ä.
 Girma.M DAT-Almaz.F book-DEF.M-ACC give.PFV-3MSG.S
 'Girma gave the book to Almaz.'

How then do OMs work in structures like these, where there are two objects which could conceivably be doubled? In fact, the possibilities are restricted. When both a goal argument and a theme are present, the OM must be associated with the goal, not the theme, as in (17)a. Similarly, in (17)b, the OM can be associated with the source argument of 'rob,' but not with the theme argument.¹⁵

- (17) a. Girma lä-Almaz mäs'haf-u-n sät't'-**at**
 Girma.M DAT-Almaz.F book-DEF.M-ACC give.PFV(3MSG.S)-3FSG.O
 (*sät't'-ä-w)
 give.PFV-3MSG.S-3MSG.O
 'Girma gave the book to Almaz.' (Kramer 2014:600)
- b. Lämma Aster-in gänzäb-u-n särräk'-**at**.
 Lemma.M Aster.F-ACC money-DEF.M-ACC rob.PFV(3MSG.S)-3FSG.O
 (*särräk'-ä-w)
 rob.PFV-3MSG.S-3MSG.O
 'Lemma robbed Aster of the money.' (Baker 2012b:49–50)

Following previous literature on Amharic (Demeke 2003; Baker 2012a; Kramer 2014), we take this restriction to be an effect of the locality restrictions on Agree. The source/goal indirect object asymmetrically c-commands the theme object in Amharic as in many other languages (see Baker 2012b for some discussion and evidence).

¹⁵ This locality effect seems to be quite sharp when both internal arguments are accusative. It is a bit noisier when the goal is dative: then an OM doubling the accusative theme argument is sporadically accepted (although usually not). We attribute this to the possibility of parsing a nominal in dative case as a PP rather than an NP. On that parse, the goal is not a target for Agree, and does not intervene for *v* + D agreeing with the theme.

Therefore, when *v* probes down looking for a DP to agree with, it finds the IO before the DO, and must agree with that; therefore the OM must agree with the IO as well. The examples in (17) with the masculine OM are thus violations of the intervention condition on Agree.¹⁶

It is also worth noting that in Amharic OMs on a matrix verb never (as far as we can tell) double a DP inside a CP complement of that verb. This is what we expect given that CPs are phases (except in ECM constructions, which Amharic doesn't have) and the Agree relation cannot look into a phase.

As an aside in anticipation of the cross-linguistic comparison in Sect. 6, clitics in Amharic seem different from clitics in IE languages when it comes to ditransitive constructions. Many IE languages do allow the theme to be doubled by a clitic even when there is a goal present. (18) shows this in Greek.

- (18) (To) edosa tu Petru to vivlio.
 3NSG.ACC gave.1SG.S the.GEN Peter.GEN the.ACC book.ACC
 'I gave (it) Peter the book.' (Anagnostopoulou 2001:15)

This contrast might make one think that Amharic OM constructions show a kind locality that is characteristic of Agree, whereas Greek OMs show a different kind of locality because they are a different sort of construction, possibly involving D(P) movement instead of Agree.

However, work by Anagnostopoulou (2001) suggests that this would be a hasty conclusion. Anagnostopoulou observes that a small number of verbs like 'teach' in Standard Greek (and more verbs in northern dialects) take two accusative objects rather than one genitive (= dative) object and one accusative object. With these verbs, only the goal argument can be doubled by an OM on the verb—just as in (17) in Amharic.

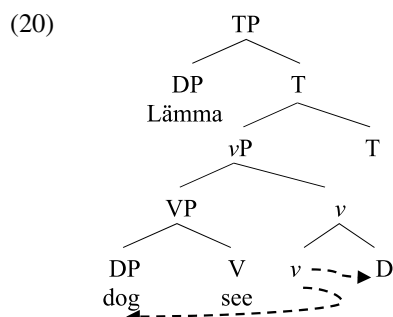
- (19) (*Tin) didaksa ta pedhia
 3FSG.ACC taught.1SG.S the.ACC children.ACC
 tin grammatiki ton arxion ellinikon.
 the.ACC grammar the.GEN ancient Greek
 'I taught (it) the children the grammar of ancient Greek.'
 (Anagnostopoulou 2001:11, 16)

To capture the clear parallel between (17)b and (19), we probably want to say that Agree is involved in both languages. The goodness of (18) then suggests that the genitive goal is different enough in its features from the accusative theme in Greek that the *v* head can see the theme past this sort of goal. For concreteness, we can say that 'Peter' in (18) bears the feature [GEN], and *v* can probe for [ACC] separately from [GEN]. Then there is no intervention between *v* and the theme in (18), although there is in (19) and (17)b where the two internal arguments have exactly the same case features.

¹⁶Even though the higher argument is animate and the lower argument is not in these examples, there is probably not an animacy effect generally. The OM associates only with the higher argument even when both arguments are human for *särräk'ä* 'rob' and *asayyä* 'show' (*sät't'ä* 'give' is more variable, perhaps because *lä*-DP in this context can be parsed either as a PP or a dative-marked DP; see fn. 15).

We can then complete the account by stipulating that “dative” case in Amharic in examples like (17)a does not count as a feature distinct from [ACC]. In essence, this means that dative in Amharic is “weaker” (less distinct from accusative) than dative/genitive in I-E languages like Greek. This seems to be true, in that the goal in (17)a is only optionally dative; it can also be accusative *Almaz-in* ‘Almaz’ in more or less free variation, whereas dative/genitive does not alternate freely with accusative in the relevant I-E languages. Therefore the superficial difference between (17)a and (18) need not stand in the way of a unified analysis of CD in these languages. On the contrary, the fact that the precise features of the probes and goals matter for whether or not there is an intervention effect in DOCs tends to support the idea that Agree is at work. (We thank Elena Anagnostopoulou (p.c.) for generous discussion of these matters.)

The essentials of the Amharic clitic doubling construction, then, are summarized in the structure in (20), where dashed arrows indicate Agree relations.¹⁷



At this point, we reiterate that we think that several more detailed theories as to how a CD construction is derived are compatible with the boundary conditions implicated in this sketch. It could be that the D head is base-generated adjoined to *v*, in which case the link between D and DP is created entirely by Agree, mediated through *v*, as we have assumed for purposes of exposition. Alternatively, some kind of movement of D or DP could be involved as well: either D moves out of the DP object to adjoin to *v*, stranding the rest of DP (the “big DP” derivation), or DP as a whole remerges in Spec vP but then it is reduced to its D-head and adjoined to the verb by a version of m-merger. In these variations, the Agree relation motivated by (14)–(17) might rather be thought of as holding between *v* and a nearby DP as a precondition to DP or its D head moving to *v* (see Chomsky 2000, 2001 for the hypothesis that Agree is always a precondition to movement, and Béjar and Rezac 2003; Rezac 2004, 2008; Roberts 2010; Nevins 2011; Preminger 2011 for applications of this to clitic constructions in particular). But whichever of these options is taken, the network of relationships in (20) can be taken to exist at the LF interface.

On this view, then, D is in fact a kind of object agreement element closely related to *v*. Crucially, however, it is not *just* an object agreement element, on our view. Rather, since it bears the category feature D as well as phi-features it is an intrinsically

¹⁷ It is not entirely clear whether there is V-to-T raising in Amharic, so we omit it from the tree. If V does raise to T, it has no impact on our analysis.

pronominal element, and counts as such for principles of interpretation at the LF interface (cf. Reuland 2011:22 on the definition of a pronoun). The idea that the OM counts as a pronominal is plausible in the light of facts like those in (21), where it does not double any overt DP object.

- (21) a. Girma ayy-ä-w.
Girma see.PFV-3MSG.S-3MSG.O
'Girma saw him.' ('him' ≠ 'Girma')
- b. Yä-Girma innat ayy-ät[ɬ]-iw.
of-Girma mother see.PFV-3FSG.S-3MSG.O
'Girma's mother saw him.' ('him' = 'Girma')
- c. Girma Almaz ind-ayy-ät[ɬ]-iw sämm-a.
Girma Almaz COMP-see.PFV-3FSG.S-3MSG.O hear.PFV-3MSG.S
'Girma heard that Almaz saw him.' ('him' = 'Girma').

Here (21)a shows that the OM cannot be coreferential with the subject of the verb it attaches to, but it can be coreferential with the possessor of the subject (21)b, or with the subject of a higher clause (21)c. It can also refer to some entity available in the discourse context that is not represented in the sentence. This is typical behavior for a pronoun, subject to Principle B of the Binding theory, or the equivalent.¹⁸

Like other pronouns, then, we assume that OMs in Amharic can enter into semantically significant relationships of referential dependence (for foundational discussion of this notion of Binding theory, see Safir 2004a, 2004b). In fact, when there is an overt object DP present, it is referentially dependent first of all on the object DP that it doubles: in addition to agreeing in phi-features, the two must refer to the same discourse referent. If it were not, the OM's argumental nature as a pronoun would not be licensed for Full Interpretation; there would still be a Theta-Criterion violation despite the superficial matching of phi-features. We make this assumption explicit in (22).

- (22) A D adjoined to head H is referentially dependent on the DP it agrees with via H.

This referential dependency is the extra factor that comes from saying that OMs are *pronominal* clitics (D(P)s), not just agreeing heads with phi-features only.¹⁹ That (22) holds is clearly consistent with all the grammatical examples we have seen so far.

¹⁸The alternative is to capture this behavior by saying that it is not the OM itself that is pronominal, but it agrees with a null DP that is intrinsically pronominal (i.e., *pro*) in these examples. That is a possibility that we do not rule out, although we tentatively assume that the D—empty category relation here counts as a movement relation, given that the higher element has all the features of that the lower element one has, following Roberts (2010). Our point here is only that it is plausible to say that the OM is a pronoun, not that it is inevitable.

¹⁹It is quite possible that (22) can be deduced from the general principles involved in exactly how the CD construction is derived. For example, if D is actually a copy of the object DP created by movement followed by partial deletion of the higher copy, then (22) is simply the traditional idea that reduced copies are referentially dependent on full copies within a movement chain (see Higginbotham 1983:402, 409 for an explicit statement). In a version that uses Agree without movement, one might be led to adopt an existing proposal in which Agree relations can create (or count as) referential dependency relationships quite generally (e.g. Reuland 2011:Chap. 5, cf. also Landau 2001). However, (22) would be derived in

The crucial question for what follows is whether the referential dependency asserted in (22) for CD structures in Amharic is compatible with other restrictions that are put on the interpretation of pronominal elements by the principles of Crossover and Binding theory. In Sects. 4 and 5, we argue that they are not compatible in a well-defined range of cases, which provides the explanation for the otherwise unexplained restrictions on clitic doubling shown in (2)b–d.

Of course, not all languages have the object clitic doubling construction that Amharic has. Therefore there should ultimately be something to say about what sort of parameterization allows a representation like (20) in one language but not in another. Since we are not being fully detailed about how this structure is formed in Amharic, we are not in a position to be fully detailed about the nature of this parameterization either. However, we can say in a preliminary way that we foresee two distinct kinds of parameters at work here. The first might be thought of as a kind of EPP feature associated with *v*, saying that it tolerates merging with an overt minimal-maximal projection like D, but not with some larger phrase. On the one hand, this distinguishes Amharic from languages like English, which appear to only allow traces of movement in Spec *v*P; on the other hand, it distinguishes Amharic from languages like Dutch or Icelandic, which allow a full maximal projection in Spec *v*P as a result of object shift. In this respect, Amharic would be approximately like the mainland Scandinavian languages, which allow only weak pronouns in Spec *v*P (see (27)). The second parameter would concern whether a weak pronoun (D head) associated with *v* can double a DP inside VP. This is possible in Amharic and some Bantu languages like Haya, but not in Mainland Scandinavian or other Bantu languages, like Lubukusu. There are different semi-familiar ways to formulate this. In our current expository terms, one might be to say that (22) applies to license X in a non-argument position by linking it to Y in an argument position in some languages but not others. In Amharic, it does, but in languages that have object clitics but not object clitic doubling, it does not, and D associated with *v* is only licensed if it binds a trace in a thematic position, as part of an ordinary movement chain.²⁰ There is more to consider about these parametric issues, surely, but this should be enough for us to pursue our main theme.

3.3 The OM does not bind the object

One additional feature to note about the structure in (20) that we are arguing for is that the D itself does not c-command the DP it doubles, because it is merged with a verbal head, and the constituent that immediately dominates *v* and D does not contain the object DP. This view contrasts with a possible alternative in which the D(P) clitic is in a canonical X-bar theoretic position like Spec *v*P. Having the D merge with a verbal head is consistent with the observed facts, where the OM seems to be attached

somewhat different ways in different versions, and since we are leaving the exact derivational history of the construction open, we do not pursue the possible reduction here.

²⁰ In a movement based derivation involving big DPs, one would say that D can move out of a larger DP stranding the rest in some languages but not others. In a movement based derivation involving m-merger, one would say that m-merger applies to transform a full DP into its D head so as to satisfy *v*'s EPP feature in some languages but not others (see Diercks and Sikuku 2013).

to the main verb, and is not where one would expect a canonical specifier to be in Amharic (see (9)). But it is particularly significant for our project here that D does not c-command the doubled object, at least at LF, given our hypothesis that the OM counts as a referentially active element in its own right, entering into relationships of referential dependence. This will allow us to derive restrictions on clitic doubling from the Weak crossover condition and Condition B of the Binding theory. However, it immediately raises the question of why a simple case of CD like (1)c or (23) does not violate Condition C of the Binding theory the way that (24) does in English, given that the OM near *v* may seem to be higher in the clause than the in situ object inside VP that it is referentially dependent on. (We indicate covaluation/referential dependence informally with underlining here and at many points below.)

- (23) Almaz Lämma-n gäddäl-ätftf-iw.
 Almaz.F Lämma-ACC kill.PFV-3FSG.S-3MSG.O
 ‘Almaz killed Lemma.’

- (24) *She saw Aster in the mirror.

After all, if the OM is going to count as a pronoun for purposes of crossover and Condition B of the Binding theory, it should count it as a pronoun for Condition C of the Binding theory as well. So we need to make sure that (23) comes out as it should.

But in fact there is no problem here, given that D merges with *v*, not with *v*’ (i.e., the syntactic object consisting of *v* and its complement). Therefore D does not c-command the direct object, and no disjoint reference effect is expected, on any standard version of the Condition C phenomenon.²¹ In effect, the structure in (23) is in the relevant respects more like the English example in (25), where coreference between the pronoun and the name is possible, than like (24), where it is not. The pronoun is not, strictly speaking, higher than the direct object; it is only a prominent subpart of a constituent that is higher than the direct object.

- (25) Her brother saw Aster in the mirror.

In fact, there may be an indirect typological reason to think that Condition C is relevant to doubling constructions in the way that one might expect given our hypothesis in (22). Descriptively, I-E languages have two sorts of weak or deficient pronouns, as argued by Cardinaletti and Starke (1999): true clitics that adjoin to a verbal head, which are ubiquitous in the Romance languages, and weak pronouns that have little internal syntactic structure but still occupy phrasal positions, which are more characteristic of Germanic languages. One way the difference can be seen is by interactions with verb movement. Verb movement can (sometimes) carry an object clitic with it when it moves to C in Romance languages, as in (26) from Italian.

²¹Note that technically we must assume that adjuncts do not c-command out of the category they are adjoined to (i.e., we don’t distinguish segments from categories in the definition of c-command, the way that Kayne (1994:15–19) influentially does). Julie Anne Legate asks in this connection whether V moved to *v* is required to c-command its trace, and if so, how that requirement is fulfilled. We do not take any explicit stand on the nature of head movement here (cf. fn. 17). One familiar possibility is that V-to-*v* movement counts as a substitution-type movement rather than as an adjunction-type movement (Larson 1988); another is that this sort of head movement happens at PF (Chomsky 2001:38), and so is not restricted by syntactic c-command.

- (26) **Gli-avesse** Gianni parlatto in anticipo, niente sarebbe successo.
 him-had John spoken in advance nothing would.have happened
 ‘Had John spoken to him in advance, nothing would have happened.’
 (Cardinaletti and Starke 1999:168)

In contrast, verb movement does not do this in most Germanic languages. For example, in Mainland Scandinavian languages like Danish, weak pronouns can occupy a higher position near Spec *v*P (Engels and Vikner 2006), a position which is not available to full DPs (27)b. Nevertheless, these weak pronouns are not carried along with the verb when it moves to C in verb second constructions, as shown by (27)a.

- (27) a. Hvorfor læste Peter den aldrig?
 why read Peter it never
 ‘Why did Peter never read it?’
 b. Hvorfor læste Peter (*bogen) aldrig (bogen)?
 why read Peter book-the never book-the
 ‘Why did Peter never read the book?’ (Engels and Vikner 2006:196)

The question arises, then, whether one could have “weak pronoun doubling” in a Germanic type language, analogous to clitic doubling in Amharic or a Romance language. If so, we might see examples like (28) in some variety:

- (28) Unattested: Hvorfor læste Peter den aldrig bogen?
 why read Peter it never book-the
 ‘Why did Peter never read the book?’

But no clear examples of this sort are attested, despite intense work on these issues in a wide range of I-E languages. Thus, Cardinaletti and Starke (1999:169) state that “Doubling is always *clitic*-doubling, in the sense that doubling must always involve at least one clitic,” no other combinations of weak pronouns, strong pronouns, and full DPs are allowed. Similarly, Franks and King (2000:Chap. 7, esp. p. 251) observe that the two Slavic languages that allow clitic doubling—Bulgarian and Macedonian—are the same two that have verb-attached clitics rather than second position clitics. Bošković (2015) generalizes from this that clitic doubling never happens with second position clitics (a.k.a. weak pronouns). Assuming that this holds up over a wider range of languages, Condition C and our leading claim that clitics and other weak pronouns are genuine pronouns might explain why: weak pronouns will only be able to double DPs lower in the clause if they are clitics attached to a verbal head, so that c-command doesn’t hold, and Condition C is therefore not violated.

This reasoning about Condition C also generalizes to the other binding conditions. For example, it is possible for an OM to double a strong pronoun in object position in Amharic, as shown in (29).

- (29) Lamma issu-n gäddäl-ä-w.
 Lemma.M he-ACC kill.PFV-3MSG.S-3MSG.O
 ‘Lemma killed him.’

One might wonder whether there is a Condition B violation here, since there are two pronouns in the same clause, one referentially dependent on the other. But the

answer is that there is no violation, since the OM does not c-command the object pronoun (nor does the object pronoun c-command the OM). (29) is thus more like *Her sister saw her* than like *She saw her* in this respect. Conversely, (30) shows that it is impossible in Amharic for a reflexive anaphor in object position to take an OM that doubles it as the clause-internal antecedent that it requires (compare the grammatical use of the anaphor in (61)b below).

- (30) *Almaz ras-u-n gäddäl-ätftj-iw.
 Almaz.F self.M-his-ACC kill.PFV-3FSG.S-3MSG.O
 ‘Almaz killed him.’ (Literally: Almaz him-killed himself.)

Example (30) violates Condition A of the Binding theory for essentially the same reason that **Her brother saw herself* does: the anaphor does not have a c-commanding antecedent inside the clause.²² So this set of data hangs together the way it should under the hypothesis that the OM does not c-command the doubled object at LF/the conceptual-intentional interface, where anaphoric relations are evaluated.

We conclude that ordinary clitic doubling is not expected to give a Condition C effect. Therefore, this does not count as evidence against our primary hypothesis that OMs are interpreted as pronouns at the LF interface in Amharic. We now turn to the positive effects that this hypothesis can have for explaining restrictions on clitic doubling, like those shown in (2)b–d.

4 OMs, quantified DPs, and crossover

4.1 The basic analysis

One class of examples in which the OM is bad doubling an object DP is examples in which the DP is a nonreferential quantifier. (31) provides fresh examples for the badness of an OM where the object is a non-D-linked *wh*-phrase (31)a or a singular universal quantifier (31)b; see also (2)b, c. (31)c adds a similar example in which the object is (the equivalent of) a negative quantifier.²³ These DPs are fine in object position, but bad if an otherwise optional matching OM is included.

- (31) a. Almaz mann-in sam-ätftj? (*sam-ätftj-iw)
 Almaz.F who.M-ACC kiss.PFV-3FSG.S kiss.PFV-3FSG.S-3MSG.O
 ‘Who (in the world) did Almaz kiss?’

²²The badness of (30) is theoretically important for efforts in the tradition of Reinhart (1983) to deduce Condition C from a pragmatic blocking principle, as most current theorists do (e.g. Safir 2004a; Reuland 2011; Büring 2005, etc.). Generally speaking, these approaches say that using a full referential DP to refer to something is bad wherever using a bound variable in that position is possible and gives the same meaning. (30) shows that it is not possible to have a bound variable in object position (here in reflexive form, as expected) bound by the OM, so using a full referential DP in this position is expected to be possible, as it is in (23). Hence our proposal should be compatible with this type of theory, although we do not implement it here.

²³Like universally quantified DPs, negatively quantified DPs can undergo object shift in Dutch and Icelandic (Broekhuis 2008, p.c.; G. Harðarson, p.c.). Hence, an example like (31)c must also be ruled out by a condition that invokes the pronominal nature of the OM in Amharic—not just by a restriction on object shift.

- b. Tigist hullu-n-imm mäs'haf gäzz-atftf.
 Tigist.F every-ACC-FOC book.M buy.PFV-3FSG.S
 (*gäzz-atftf-iw)
 buy.PFV-3FSG.S-3MSG.O
 'Tigist bought every book.'
- c. Lämman mann-in-imm al-ayy-ä-mm.
 Lemma.M one-ACC-FOC NEG-see.PFV-3MSG.S-FOC
 (*al-ayy-ä-w-imm)
 NEG-see.PFV-3MSG.S-3MSG.O-FOC
 'Lemma saw nobody; Lemma didn't see anybody.'

What do objects like these have in common? They strongly recall the range of DPs that cause weak crossover violations in English and many other languages. Thus, a referential DP in object position can be co-construed with a pronoun inside the subject, as long as it is in the right context, so that it has the right information structure (with no focus on the object) (see (32)a). However, universally quantified or negatively quantified DPs cannot be co-construed with a pronoun inside the subject DP, as shown in (32)b, c. Similarly, the non-D-linked *wh*-phrase moved from the object position cannot be co-construed with a pronoun inside the subject position, as in (32)d. This is a classic weak crossover paradigm, familiar from Postal (1971), Chomsky (1976), and Wasow (1979), among others (see Safir 2015 for a recent review).

- (32) a. His mother loves John.
 b. ?*His mother loves everyone.
 c. ?*His mother loves nobody.
 d. ?*Who does his mother love?

Facts like these show that the situations in which a pronoun can be interpreted as a variable bound by a quantifier in English are rather restricted—significantly more restricted than when it can be interpreted as being coreferential with a definite DP. Our proposal, then, is that the contrast between (31) and (1)c in Amharic can be explained in terms of the same principles as the contrast between (32)b–d and (32)a in English—a result that can be achieved if and only if the OM in Amharic counts as a pronoun.

The first step along this path is showing that the weak crossover phenomenon is present in Amharic, in situations analogous to (32) in English. Indeed, a pronoun inside the subject can be understood as coreferential with a referential DP in Amharic under favorable conditions, as in (33).²⁴

- (33) Context: Lemma attends an academically challenging high school in Addis Ababa. Parents are encouraged to help their children with their homework. But not all parents participate to the same degree. For example:

²⁴ Kramer (2014) reports that a similar example is seriously degraded (?*), but it was elicited without an articulated context. The examples here are carefully engineered to ensure that the object DP is neither the main focus of the clause (this interferes in Amharic as in English), nor the topic of the clause (in which case the DP is best doubled by an OM, which would inhibit our ability to construct similar sentences with quantified objects).

innat-u Lämma-n ti-rädd-all-ät[tf],
 mother-his Lemma-ACC 3FSG.S-help.IPFV-AUX-3FSG.S
 abbat-u gin a-y-rädda-mm.
 father-his but NEG-3MSG.S-help.IPFV-FOC
 ‘His mother helps Lemma, but his father doesn’t help.’

However, quantified DPs cannot bind a pronoun as variable inside the syntactic subject, even when the sentences are put in contexts similar to the one that facilitates coreference in (33). For example, (34)a does not have a reading that is naturally given to the passive version in (34)b, where the theme moved to the subject position does c-command the pronoun embedded inside the *by*-phrase.

- (34) Context: There is an academically challenging boys’ school in Addis Ababa. Parents are encouraged to help their children with their homework. After surveying the students and interviewing the families, we discovered a clear pattern of assistance:
- a. #innat-u tämar-i-w-in hullu ti-räd-all-ät[tf],
 mother-his student-DEF-ACC every 3FSG.S-help.IPFV-AUX-3FSG.S,
 abbat-u gin a-y-räda-mm.
 father-DEF/his but NEG-3MSG.S-help.IPFV-FOC
 ‘#His mother helps every student, but the/his father does not help.’
 (Not: for all *x*, *x*’s mother helps *x* . . .)
- b. Tämar-i-w hullu bä-innat-u yi-r-räd-all.
 student-DEF every by-mother-his 3MSG.S-PASS-help.IPFV-AUX.3MSG.S
 ‘Every student is helped by his (own) mother.’
 (Bound variable anaphora is possible.)

The same is true for non-D-linked *wh*-words, and for negative quantifiers, as shown in (35) and (36). Note that the judgments here are somewhat variable and intermediate, as expected for weak crossover.

- (35) Context: There is an academically challenging boys’ school in Addis Ababa. Parents are encouraged to help their children with their homework, but it seems like there are gender differences. I know a bit about this, but you know more. I ask:
- ?? innat-ot[tf]-u hulgize yi-räd-all-u,
 mother-PL-DEF always 3MSG.S-help.IPFV-AUX-3PL.S,
 abbat-u gin mann-in andand gize yi-räd-all?
 father-his but who-ACC some time 3MSG.S-help.IPFV-AUX.3MSG.S
 ‘??The mothers always help, but who does his father sometimes help?’
- (36) Context: There is an academically challenging boys’ school in Addis Ababa. Parents are encouraged to help their children with their homework. We’ve investigated how this is working out, and we’ve discovered there are gender differences. So far we have learned this:

?? Abbat-u mann-imm fäs's'imo a-y-räda-mm,
 father-his one-FOC never NEG-3MSG.S-help.IPFV-FOC,
 innat-otftj-u gin bizu gize yi-räd-all-u.
 mother-PL-DEF but many time 3PL.S-help.IPFV-AUX-3PL.S
 '??His father never helps anyone, although the mothers often do help.'

So the principle that produces basic weak crossover effects holds in Amharic too—as we would expect given that this is plausibly a UG principle, which has been replicated in many languages (although not all). Therefore, it is available in Amharic as a possible explainer for our CD paradigm.

What then are the principles that produce the weak crossover effect, and how can they be applied to a CD structure? Many versions have been proposed over the years, and we think our intuition that the CD restrictions and the WCO restrictions are intrinsically related could be expressed in most of them. One classic version that makes explicit the relevance of whether something is a pronoun or not is (37).

- (37) Parallelism Condition on Operator Binding (PCOB) (Safir 1984)
 If a single quantifier binds more than one variable, then either (a) or (b).
 a. They are both pronouns
 b. They are both traces.

In these terms, (32)d in English is bad because the quantifier *who* binds a trace in object position and the pronoun *his* inside the subject—one of which is a pronoun and the other not. (32)b and (32)c are ungrammatical for the same reason, once the quantifier *everyone* or *nobody* under goes QR at LF. The Amharic examples in (34)a and (35) are the same, apart from the expected differences in word order. Our idea, then, is that the CD examples in (31) are ruled out by the same condition, the quantifier binding both a normal trace in the object position and the pronominal D that is merged with *v*.

For concreteness, we base our official analysis on that of Safir (2004b), an updated successor to the PCOB that is broad in coverage and syntax-oriented.²⁵ In these terms, the crucial principle can be stated as the Crossover Condition in (39), which folds Safir's (Extended) Independence Principle into his Quantifier Dependency Condition

²⁵ There have been attempts to eliminate crossover as a syntactic condition, and build it entirely into semantic interpretation. For example, see Büring (2005) for a way of building this condition into the semantic interpretation scheme, where *wh*-words (and presumably moved quantifiers) and other nominals can both introduce lambda-abstraction to bind variables, but the two kinds of operators are kept distinct, so that a quantifier cannot directly bind a pronoun. However, a drawback of this approach is that it crucially follows Reinhart (1983) in assuming that one DP must c-command another to license a bound variable interpretation; Safir (2004b:37–38) and Barker (2012c) show that this is empirically false (and in a way that becomes important for us in Sect. 5.2 below).

Shan and Barker's (2006) theory does not depend on c-command in the same way, but it does depend on reconstructed linear order, at which stage the pronoun must not precede the quantifier's variable. The use of linear order is problematic in Amharic, where the OM encliticized to the clause-final verb always follows the quantified DP—and it is not clear why it should be reconstructed anywhere else. So among the current contenders, Safir's version is particularly congenial to our facts, although we are not trying seriously to choose among theories here.

to give a single condition.²⁶ This condition uses the notion of a q-variable, which is defined in (38).

- (38) X is a q-variable if X is in an A-position and X replaces the deleted copy of an operator.
- (39) The Crossover Condition:
 X can be interpreted as dependent on a quantified antecedent Y only if
- (i) X is a q-variable of Y, or
 - (ii) there is no q-variable of Y, or
 - (iii) X is dependent on a variable of Y *that no constituent containing X c-commands*.

Consider then how the Crossover Condition applies to (40), a representation for an example like (2)c, equal to (20) but with QR applied to the object, adjoining a copy of the object to TP to represent its scope (this structure is presented in English word order, for familiarity).

- (40) [TP everyone [TP Lemma T [_{VP} [him – v] [_{VP} loves <everyone*>]]]]

Here the D merged with *v* counts as a pronoun; hence it is the sort of item that can be referentially dependent on another item in the sense regulated by (39). The intended interpretation (indeed, the only conceivable one given (22)) is one in which D counts as a sort of variable bound by the quantifier ‘everyone’ adjoined to TP. So we check to see if this is allowed by (39). The answer is that it is not. First, D is not itself a q-variable of the quantifier, since it is not (and never was) a trace/copy of the quantifier, so clause (i) does not hold. Second, the quantifier does have a q-variable, namely <everyone*>, the copy of ‘everyone’ inside VP, so clause (ii) does not hold. Therefore, it comes down to clause (iii). Indeed, D is referentially dependent on a (q-)variable of ‘everyone,’ namely <everyone*>, by (22). However, it is the case that a constituent containing D, namely [D – v], c-commands <everyone*>. Therefore, the representation in (40) is ruled out, explaining the badness of (2)c. This is parallel to (32)b being ruled out in English because a constituent including the pronoun ‘his,’ namely ‘his mother,’ c-commands the variable in object position left by QRing ‘everyone.’ The same account generalizes to (31)a–c, given the assumption that ‘who’ and ‘nobody’ also undergo QR, count as quantified antecedents, and bind q-variables. Therefore, a doubling clitic cannot double a quantified DP given its status as a pronoun.

²⁶In particular, (39) is Safir’s Quantifier Dependency Principle (QDP) with his Extended Independence Principle built in as the italicized condition on clause (iii). By subordinating the c-command condition to the QDP in this way, we risk losing certain parallels between weak crossover and the distribution of sloppy identity readings that Safir aspires to capture (following Reinhart 1983). However, we cannot permit an Independence principle to rule out D being referentially dependent on a referential DP object in a structure like (20) on the grounds that [D – v] c-commands the object. We do not consider issues of sloppy identity under ellipsis here.

Safir (2004b:52, 69) says only that no *nominal* constituent that contains X can c-command the q-variable of Y, but in later work he extends this to phrases of any category. We need the more permissive version, because it is the constituent consisting of [D – v], presumably with label *v*, that creates the WCO effect in our Amharic examples. On (iii) referring to a variable of Y, rather than a q-variable of Y, see Sect. 4.4, especially fn. 34.

In Sect. 3.2 above, we mentioned that the same OM_s that can double accusative objects in monotransitive sentences in Amharic can also double dative objects in ditransitive sentences, as shown in (17)a. (41) is a second example of this type, using the verb ‘show’ (morphologically a causative of ‘see’).

- (41) Läm_{ma} lä-Aster mäs’haf-u-n asayy-at.
 Lemma.M DAT-Aster.F book-DEF.M-ACC show.PFV(3MSG.S)-3FSG.O
 (*asayy-ä-w)
 show.PFV-3MSG.S-3MSG.O
 ‘Lemma showed the book to Aster.’

Given that the OM is a pronoun that enters into relationships of referential dependence, we expect to get crossover violations when it doubles a quantified goal/indirect object, just as when it doubles a quantified direct object. This is correct, as shown by the examples in (42).²⁷

- (42) a. Läm_{ma} lä-hullu säw lid3-u-n
 Lemma.M DAT-every person.M child-DEF.M/his-ACC
 asayy-ä-(??w).
 show.PFV-3MSG.S-(??3MSG.O)
 ‘Lemma showed the (or his) child to everyone.’
 b. Almaz lä-man gänzäb sät’t’-ät[tʃ-(?*iw)?
 Almaz.F DAT-who.M money give.PFV-3FSG.S-(?*3MSG.O)
 ‘Who (in the world) did Almaz give money to?’ (I wouldn’t have expected her to give any.)

Although this result is a very natural extension of our analysis, it is not trivial from a cross-linguistic perspective. Many I-E languages with clitic doubling differ from Amharic in this respect: for example, in Spanish, dative clitics can double any kind of IO without restrictions, as emphasized by Suñer (1988) and Gutiérrez-Rexach (1999), among others. But Spanish is significantly different from Amharic also in that it distinguishes a set of dative clitics from a set of accusative clitics (with some overlap, and different details in different dialects). It is thus not unnatural to say for Spanish that accusative clitics are true pronominal elements while dative clitics are pure agreement markers. However, Amharic has only a single set of OM_s, used to double both IOs and DOs. Indeed, not only are the OM_s for dative arguments formally identical to the OM_s for accusative arguments, they also have the same determiner-like properties discussed by Kramer (2014:609–612): they trigger haplology when followed by a determiner, they are insensitive to tense/aspect, and so on. Therefore, we expect the OM_s in these examples to be inherently pronominal just as other OM_s are. Given this, the OM_s for dative objects should also be incompatible with a quantified doubled argument by the Crossover Condition—as in fact they are. It is therefore ex-

²⁷ We have, however, encountered somewhat more variability and gradation in these judgments than in others. Our hunch about this is that the pragmatics of ditransitive sentences tends to facilitate specific/partitive type readings, and special care is sometimes needed to bring out a truly quantificational reading (as in (42)b’s parentheticals).

pected that goal-doubling shows essentially the same restrictions as theme doubling in Amharic.

4.2 Variation in the behavior of putative quantifiers

It should be kept in mind that, in keeping with Sect. 3.3, it is not the D itself that c-commands the q-variable in clitic doubling structures, but rather a larger constituent that contains D, namely [D - v]. Hence, (40) counts as an instance of weak crossover, rather than strong crossover, according to the usual distinction. This fits the feel of the construction: speakers seem to avoid doubling quantified expressions spontaneously, but they sometimes classify constructed examples as awkward rather than as terrible or inconceivable. Moreover, there can be subtle and partly context-influenced distinctions as to exactly which quantified DPs trigger a violation, as is known to be true for weak crossover (but not for strong crossover). What exactly counts as a quantified DP for purposes of weak crossover can be a subtle matter, with some elements falling under the condition and other superficially similar elements not. Although the ultimate account of what makes something a quantifier in the relevant sense may be somewhat elusive, the logic of our analysis yields a fairly straightforward prediction: the kinds of factors that affect whether a certain type of DP falls under weak crossover in a language like English or Amharic should also affect whether that type of DP can undergo clitic doubling in Amharic. There is evidence that this is true.

For example, a distinction needs to be drawn between distributive universal quantification expressed by a singular DP like ‘every N’ or ‘each N’ and universal quantification, often domain-restricted, expressed by a plural DP like ‘all (the) Ns.’ Although the two can express similar propositions, the singular quantifiers yield canonical crossover violations (see (32)b), whereas the violation can be very weak or absent with plural domain-restricted DPs, as shown by (43).

- (43) Their incautious statements ended up ruining all my friends.
(Cinque 1990:11; Safir 2015)

The same is true in Amharic, with the interesting qualification that there is no lexical distinction between ‘every’ and ‘all’ in Amharic; both are translated as *hullu*. Plural Ns that are universally quantified do not trigger WCO violations (compare with (34)a).

- (44) Context: The new school in Addis Ababa is very demanding. There are five girls and four boys in the class. All the parents are encouraged to help their children with homework. But there are clear gender differences in the response.

innat-otftf-atftfäw set lidʒ-otftf-u-n hullu bizu gize
mother-PL-their girl child-PL-DEF-ACC all many time
yi-räd-all-u,
3PL.S-help.IPFV-AUX-3PL.S
abbat-otftf-atftfäw gin fäs’s’imo a-y-räd-u-mm.
father-PL-their but never NEG-3PL.S-help.IPFV-3PL.S-FOC
‘Their mothers often help all the girls, but their fathers never help.’

We correctly predict, then, that plural DPs with a quantifier like ‘all’ can be doubled by a plural OM in Amharic, even though DPs with a quantifier like ‘every’ or ‘each’ cannot be doubled by a singular OM. This is shown in (45).²⁸

- (45) a. Almaz hullu-n-imm tāmari agāññ-ätʃtʃ(*-iw).
 Almaz.F every-ACC-FOC student.M meet.PFV-3FSG.S(-3MSG.O)
 ‘Almaz met every student.’
 b. Almaz.F hullu-n tāmari-wotʃtʃ agāññ-ätʃtʃ-atʃtʃäw.
 Almaz all-ACC student-PL meet.PFV-3FSG.S-3PL.O
 ‘Almaz met all the students.’

Presumably either ‘all N-PL’ does not undergo QR at all, or it does undergo QR, but its trace does not count as a q-variable for purposes of the Crossover Condition in (39) (cf. Safir 2004b:87).

Similarly, it is known that crossover effects can be weaker with D-linked *wh*-phrases like *which N* than with non-D-linked uses of *who* in English. For example, Wasow (1979:163) gives (46) as significantly better than examples like (32)d (but see Safir (2015) on variability in this data).

- (46) ?Which picture did the man who painted it refuse to sell?

The same contrast holds in Amharic, with (47) notably better than an example like (35).

- (47) Context: Lemma, Girma, and Mengistu are the only boys at the new school in Addis Ababa. Parents are encouraged to help the students, but this does not work out equally because of gender roles and affinities. I know you have collected some data on this:

bäirgit’ innat-otʃtʃ-atʃtʃäw set lidʒ-otʃtʃ-u-n hulgize
 surely mother-PL-their girl child-PL-DEF-ACC always
 yi-räd-all-u, abbat-u gin yätinñaw-in lidʒ andand
 3PL.S-help.IPFV-AUX-3PL.S father-his but which.M-ACC child some
 gize yi-räd-all?
 time 3MSG.S-help.IPFV-AUX.3MSG.S
 ‘Obviously, their mothers always help the girls, but which boy does his father sometimes help?’

In turn, Kramer (2014) observes that OMs in Amharic cannot normally double a simple question word like ‘who’ or ‘what’ but can double a D-linked *wh*-phrase like ‘which N,’ as shown in (48).

²⁸Note that clitic doubling is bad in (45)a, even though there is an NP restrictor for the quantifier. In contrast, Rizzi (1986) and Cinque (1990) report that quantifiers can be clitic left dislocated in Italian as long as they have an NP restrictor. This may point to a difference between true CD and dislocated structures; see fn. 8.

- (48) a. Girma tinant mann-in ayy-ä(*-w)?
 Girma.M yesterday who.M-ACC see.PFV-3MSG.S(*-3MSG.O)
 ‘Who did Girma see yesterday?’ (Kramer 2014:601)
- b. Almaz tinant yätiñinaw-in tāmari ayy-ätftf-iw?
 Almaz.F yesterday which.M-ACC student see.PFV-3FSG.S-3MSG.O
 ‘Which student did Almaz see yesterday?’ (Kramer 2014:601)

We explain this contrast also by saying that simple question words count as binding *q*-variables for purposes of (39), but D-linked ones do not (or do not always).²⁹

Our explanation here is perhaps not as deep as one might want, in that we have offered no predictive principle about which DPs give weak crossover effects and which do not and why. We will not be the first to truly crack this open (but see fn. 44 for a conjecture). However, we have shown that the same kinds of DPs that resist doubling by an OM also give weak crossover effects in more standard structures in Amharic (as well as English). We take this to be evidence that the two phenomena are related, and hence that OMs in Amharic are intrinsically pronominal, not mere agreement markers.³⁰

4.3 Doubling of experiencer arguments

So far we have seen that in Amharic OMs cannot double nonreferential quantifiers that function as the direct or indirect object of the clause, attributing this to crossover. However, there is one syntactic environment in which this kind of doubling is possible: a special category of experiencer predicates. Amharic does not have dative subject constructions per se, as some I-E languages do, but it does have a not-so-small set of predicates in which the experiencer “subject” cannot trigger subject agreement, but instead is doubled by an OM on the verb. Such predicates may also take a theme argument, and even if they do not, they generally allow a cognate argument related to the verb root (see Leslau 1995:435–439; Amberber 2005:303–314). (49) gives two typical examples.

²⁹ Indeed, ‘who’ can sometimes be given a D-linked reading in a particular context, and this affects CD judgments, as one would expect. Thus, a consultant spontaneously observed that (31)a is better if there are several known potential male kissees in the context—i.e., when ‘who’ is essentially synonymous with ‘which of the boys.’

The CD behavior of other D-like elements seems to have more to do with specificity than with weak crossover. Hence *and* N ‘a (certain) N,’ *hulätt* N-PL ‘two Ns,’ and *bizu* N ‘many Ns’ can either be doubled by an OM or not, depending on the sort of reading the NP/DP is assigned—specific, nonspecific, or partitive (Haile 1970; Yabe 2001). Finally, generic objects cannot be doubled by an OM in Amharic (even though generic DPs must undergo Object Shift in Dutch, Broekhuis 2008:221). We do not pursue the specificity effect in detail here.

³⁰ An alternative analysis for Amharic is Eilam’s (2009), who proposes that the semantic restrictions on doubled objects can be explained if doubled objects are all topics, and topics cannot be non-referential, quantificational, etc. However, this alternative does not explain all the restrictions: it leaves open why ‘which NP’ can be doubled but not ‘what,’ for example (see Eilam 2009:224). It also does not fit well with research on topics in Amharic (Demeke and Meyer 2007), which claims that all topics in Amharic are at the left periphery, whereas doubled objects are not. In addition, native speaker linguists report that adding an OM can result in a contrastive focus interpretation for the doubled object rather than a topic interpretation (Haile 1970; Demeke 2003:Ch. 4). It is even grammatical for an OM to double a definite DP that is the answer to a *wh*-question—a clear case of doubling a focused DP. Therefore, the full range of effects we have studied here cannot all be derived from the idea that all doubled DPs are topics.

- (49) a. Almaz(-in) (rab) rab-at.
Almaz.F(-ACC) (hunger.M) hunger(3MSG.S)-3FSG.O
'Almaz is hungry.'
- b. Aster gänzäb t'äff-at.
Aster.F money.M lose(3MSG.S)-3FSG.O
'Aster lost some money.'

Interestingly, in this type of structure, it is possible for nonreferential quantifiers to be doubled by an OM, as shown in (50). This contrasts with the badness of OMs doubling such DPs used as theme-objects.

- (50) a. Mann(-in) ammäm-ä-w ? (Interrogative)
who(-ACC) hurt-3MSG.S-3MSG.O
'Who is sick?'
- b. Hullu säw gänzäb t'äffa-w. (Quantified NP)
every person money lose(3MSG.S)-3MSG.O
'Everyone lost some money.'
- c. Mann-imm säw gänzäb al-t'äffa-w-imm.
who-FOC person money NEG-lose(3MSG.S)-3MSG.O-FOC
'No one lost money.' (Negative quantifier/polarity item)

In these examples, the OM seems to behave like an agreement marker, rather than like a pronominal clitic. Because of facts analogous to this, researchers on Romance languages have often proposed that dative clitics are really agreement morphemes, whereas accusative clitics are true pronominal clitics (Sportiche 1996; Bleam 1999; Ormazabal and Romero 2013, etc.; see also Krapova and Cinque 2008 on Bulgarian, and for references to other languages). But for Amharic it is not very satisfying simply to stipulate this difference, given that there is no formal distinction between dative OMs and accusative OMs, as discussed above. We seem to have the very same OMs in (50) that we have in (2), so the question arises why these elements trigger restrictions in one syntactic context but not the other.

In fact, it is not hard to give a unified account of these facts within our theory in which having an OM double a quantified object is ruled out as a weak crossover violation. It is well-known that moving a quantified DP to an A-position higher than the pronoun can avoid the WCO violation. This is seen in familiar pairs like (51) in English, as well as in the literature on clause-internal scrambling; see also (34) for passive affecting weak crossover judgments in Amharic.

- (51) a. *It seems to her father that every girl is beautiful. (Out by crossover)
b. Every girl seems to her father—to be beautiful. (Possible)

We can, then, reconcile the idea that OMs are always pronominal clitics in Amharic with the goodness of (50) if we assume that experiencers move to an A-position higher than the D in experiencer constructions, whereas theme objects of transitive clauses do not (A-) move higher than the D in [D - v].

Indeed, this seems eminently reasonable to assume, given that experiencers are the notional subjects of the clauses in (49) and (50). There are several reasons for saying this. First, they are the highest arguments thematically, and the natural topics

of the clause (Amberber 2005:313). Second, they can and most often do appear in nominative case, the case for subjects not c-commanded by any other DP in Amharic (although accusative case is also possible; see Baker (2012b, 2015) on this alternation). Possible evidence that these experiencers sit in an A-position like Spec TP rather than an A-bar position like Spec of Topic Phrase is that they can act as controllers, which is a canonical property of subjects, not topics. In (52), ‘Almaz’ is an experiencer in that it does not trigger feminine singular subject agreement on the verb ‘need,’ but rather is doubled by an OM. Nevertheless, it controls the null subject of the infinitival complement of ‘need,’ just as the subject does in English.

- (52) Almaz [PRO migib mä-blat] y-asfällig-at-all.
 Almaz food INF-eat 3MSG.S-need.IPFV-3FSG.O-AUX.3MSG.S
 ‘Almaz needs to eat some food.’

Also relevant is the fact that, if the experiencer is a quantified DP, it can bind a variable inside the theme argument, as shown in (53); no weak crossover effect arises here.

- (53) Hullu säw lidɜ-u t’äffa-w.
 every person child-his lost(3MSG.S)-3MSG.O
 ‘Everyone lost his own child.’ (Bound variable anaphora is OK)

We conclude that the experiencer is associated with an A-position that c-commands the theme argument. It is plausible, then, to say that it also c-commands the D merged with *v* in this construction.

Overall, then, the structure of an example like (50)b is approximately (54).

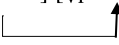
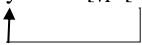

- (54)
-
- ```

graph TD
 TP --> DP1[DP
everyone]
 TP --> T1[T]
 T1 --> vP[vP]
 T1 --> T2[T]
 vP --> VP[VP]
 vP --> v1[v]
 VP --> DP2["<DP>
<everyone>"]
 VP --> V1[V]
 V1 --> DP3[DP
money]
 V1 --> V2[V
lose]
 v1 --> v2[v]
 v1 --> D[D]

```

Here the experiencer argument is generated inside VP; if there is also a theme argument (or a cognate object), the experiencer is the higher of the two arguments inside VP (analogous to goals being higher than themes in DOCs). D is merged with *v* and *v* undergoes Agree with the highest DP inside its domain, namely the experiencer. This creates a referential dependency of D on the experiencer DP (see (22)). So far this is just like clitic doubling in ditransitive constructions with a goal. But what is special about these experiencer constructions is that there is no higher agent argument; therefore, the experiencer argument can A-move to Spec TP, as dative-experiencer subjects do in Icelandic and other languages, putting it above the D adjoined to *v*. We

assume that when this happens, D is most immediately referentially dependent on the head of the chain formed by this movement. This assumption is made explicit in (55), where we represent referential dependence with arrows. Therefore, the representation derived from (55)b by movement is (55)c, which becomes (55)d by QR.<sup>31</sup>

- (55) a. If X is initially referentially dependent on Y, and Y forms an A-chain with Z, Z c-commanding Y, then X is referentially dependent on Z.
- b.  $_{VP} [D \ v] \ [_{VP} \text{everyone lose money}]$  by Agree, (22)
- 
- c.  $[_{TP} \text{everyone T } [_{VP} [D \ v] \ [_{VP} <\text{everyone}> \text{lose money}]]]$
- 
- by EPP-driven A-movement
- d.  $[_{TP} \text{everyone } [_{TP} <\text{everyone}> \text{T } [_{VP} [D \ v] \ [_{VP} <\text{everyone}> \text{lose money}]]]]]$
- 
- by QR

The D merged with *v* now counts as a pronoun that is referentially dependent on a copy of DP that c-commands it from an A position. This makes all the difference with respect to crossover. When the experiencer undergoes QR from Spec TP, adjoining to the clause to represent its scope at LF, the q-variable bound by the quantifier is in Spec TP, a position not c-commanded by D, [D - *v*], or any other constituent containing D. As a result, D's referential dependence on this q-variable is allowed by the Crossover Condition in (39), or the equivalent. We can thus account for the goodness of (50) without having to stipulate that in Amharic some OM are pronominal clitics and others are not, as is desirable.<sup>32</sup>

Having an OM double a non-agentive derived subject is possible with experiencer predicates in Amharic, but not with unaccusative verbs like 'die' or 'fall,' nor with passive clauses. The analysis of examples like (49) and (50) will not be complete until this contrast has been addressed, which requires some revision of the representation. We discuss this issue in Sect. 5.2.

#### 4.4 An extension: OM and nominals that contain a bound variable

Before moving on to Binding theory issues, however, there is one relatively novel effect that our account of crossover effects can be extended to cover. Among the class of definite DPs that can be doubled by an OM are common nouns with a pronominal possessor, as in (56).

<sup>31</sup>Higginbotham (1983) and Safir (2004b) apparently do not need a principle like (55)a, since they assume that referential dependencies are freely formed at the conceptual interface. Although (55)a might be eliminable (for example, by reducing it to "Have Local Binding" (Rule H), presented in (65) below), we find it convenient to state it explicitly, because for us the initial referential dependency of D on the highest object in VP is grammatically enforced, as part of the licensing of the CD structure; referential dependencies thus are not all freely formed.

<sup>32</sup>At this point, one might wonder why these experiencer arguments do not trigger subject agreement on the verb. See fns. 37 and 40 for discussion of possible ways to prevent this.

- (56) Läm̩ma lid̩ʒ-ih-in ayy-ä-w.  
 Lem̩ma.M child.M-your.M-ACC see.PFV-3MSG.S-3MSG.O  
 ‘Lemma saw your child.’

However, something interesting happens when the subject of a sentence like this is a quantified DP. Then the OM is possible, but only if the possessor of the object is understood as some specific individual, known from discourse. Thus (57)a with an OM on the verb cannot have the otherwise easily available interpretation that every person *x* loves *x*’s own child.<sup>33</sup> Similarly, (57)b with the OM on the verb cannot mean for all *x*, *x* gave *x*’s wife some money, with a bound variable in the doubled dative argument.

- (57) a. Hullu säw lid̩ʒ-u-n  
 every person child.M-his-ACC  
 yi-wädd-ä-(#w)-all.  
 3MSG.S-love.IPFV-3MSG.S-(3MSG.O)-AUX.3MSG.S  
 ‘Everyone loves his child.’ (Bad with OM as ‘every person *x* loves *x*’s own child’)
- b. Hullu-mm säw lä-mist-u gänzäb sät’t’-ä  
 every-FOC person DAT-wife-his money give.PFV-3MSG.S  
 (#sät’t’-at).  
 give.PFV(3MSG.S)-3FSG.O  
 ‘Everyone gave his wife some money.’ (bound reading only OK iff OM is omitted)

We want to say that the badness of (57) is also a sort of crossover violation, in an extended sense.

In fact, the desired result follows readily from the Crossover Condition in (39), repeated here as (58), given a certain understanding of referential dependency.

- (58) The Crossover Condition:  
 X can be interpreted as dependent on a quantified antecedent Y only if
- (i) X is a q-variable of Y, or
  - (ii) there is no q-variable of Y, or
  - (iii) X is dependent on a variable of Y that no constituent containing X c-commands.

Safir (2004b:69–70) motivates an extension of the notion of referential dependency, such that if X is dependent on an antecedent Y, then larger DPs that contain X are also referentially dependent on Y. This is intuitive, in the sense that the referential value of the larger DP cannot be calculated without consulting Y. Moreover, the notion of referential dependence is understood as being transitive: if X is dependent on Y and Y is dependent on Z, then X is dependent on Z. We can break this down one step further, and say that a larger DP is referentially dependent on a smaller DP inside it,

<sup>33</sup>Two of three consultants clearly get this effect, although one seems not to. Note also that Leslau (1995:Sect. 36) has quite a few examples of this general type, but none of them has a doubling OM.

and therefore is referentially dependent on something that the smaller DP depends on.

With these clarifications of the notion of referential dependence in hand, we can put the pieces together and apply them to an example like (57)a. The possessive pronoun ‘his’ inside the object ‘his child’ is straightforwardly referentially dependent on the quantifier ‘everyone’ in the interpretation of interest; this is allowed by the Crossover Condition, since no phrase containing ‘his’ c-commands the q-variable of ‘everyone’ in the subject position after QR (for example, ‘his child’ does not). Then the larger DP ‘his child’ is referentially dependent on ‘his,’ and therefore also on ‘everyone.’ Finally, the OM merged with *v* is referentially dependent on the object ‘his child’ by (22), as usual for a CD structure. Therefore, by the transitivity of referential dependence, ‘D’ is also dependent on ‘his’ and on ‘everyone.’ Since D is dependent on ‘everyone,’ the Crossover Condition applies, checking if this dependency is well-formed or not. The answer is that it is not, since D is also dependent on a variable bound by ‘everyone,’ namely the pronoun ‘his,’ which [D - *v*] containing D c-commands.<sup>34</sup> Therefore condition (iii) of (58) is not satisfied, and examples like (57)a are weak crossover violations in an extended sense.

That referential dependency should be understood in this extended way for purposes of evaluating a structure for crossover violations can be observed in English also, quite apart from CD constructions. So consider (59)a in English, which is deviant as compared to the control sentences in (59)b and (59)c.

- (59) a. ??*Every well-adjusted boy* accepts that her new husband loves his mother.  
 b. (?)John accepts that her new husband loves his mother.  
 c. *Every well-adjusted boy* accepts that his mother is loved by her new husband.

In (59)a the quantified subject of the matrix clause binds a pronoun inside the direct object of the embedded clause. Meanwhile, the subject of the embedded clause properly contains a pronoun *her* that is intended to be referentially dependent on the object *his mother*. But this interpretation is bad; it has the flavor of a weak crossover violation. (58) explains why. The pronoun *her* is trying to be referentially dependent on the DP *his mother*, but *his mother* is in turn referentially dependent on *his* and thus on *every well-adjusted boy* which binds *his*. Therefore, *her* is (indirectly) referentially dependent on *every well-adjusted boy*, and (58) applies. But (58) is not satisfied, because *her* depends on a variable of *every well-adjusted boy*, namely *his*, via the larger DP *his mother*, and a DP containing *her* (*her new husband*) c-commands this variable. Therefore, (59)a violates the Crossover Condition. (59)b is a control sentence in which the depended-on DP *his mother* does not contain a bound variable, and it is better. (59)c is a second control sentence in which the depended-on DP *his mother* is not c-commanded by the DP containing the dependent pronoun *her* as a result of passivization; it is even better. Therefore, the interpretation of the Crossover Condi-

<sup>34</sup>Note that ‘his’ here is a variable bound by ‘everyone’ but not a q-variable of ‘everyone.’ This motivates our interpretative decision to use “variable” rather than “q-variable” in (39)(iii)/(58)(iii). As far as we can see, this decision does not lead to any problems in the standard cases.



tion that explains why the CD examples in (57) are bad in Amharic is independently motivated in English.

We take the discovery in (57) to be rather significant, because it shows the fecundity of our clitic doubling analysis in extending to new data. In contrast, an account in terms of agreement would not predict this effect, and does not explain it. For example, there is no reason at all to think that ‘his child’ in (57) has different phi-features from ‘your child’ in (56), such that it cannot trigger third masculine singular agreement on the verb. Nor would an account based on restrictions on object shift apply to (57), since it is perfectly possible for a DP that contains a variable bound by a quantifier to undergo object shift in Icelandic (G. Harðarson, p.c.) and Dutch. (60) is an example from Dutch (Broekhuis, p.c.).

- (60) ...dat iedereen zijn salaris waarschijnlijk – wat later krijgt.  
           that everyone his salary probably somewhat later gets  
           ‘...that everyone will probably get his salary a bit later.’

Therefore, assuming that the OM is literally a pronoun and interpreted as such at LF is crucial to explaining this phenomenon, at least among the range of analyses currently in view. This increases the diversity of the examples that can be explained by our clitic doubling analysis but not by alternatives.

## 5 OMs and Binding theory

### 5.1 OMs doubling anaphors

Next we extend the idea that doubling clitics count as pronouns into the domain of Binding theory, so as to explain the last key fact in (2): the fact that an OM cannot double a reflexive anaphor in Amharic, as shown again in (61)a. In contrast, the anaphor is fine if it is not doubled (61)b. (61)c shows that an OM cannot double an anaphor in the dative/indirect object position of a DOC either.

- (61) a. \*Lämma ras-u-n gäddäl-ä-w.  
           Lemma.M self.M-his-ACC kill.PFV-3MSG.S-3MSG.O  
           ‘Lemma killed himself.’  
       b. Lämma ras-u-n gäddäl-ä.  
           Lemma.M self.M-his-ACC kill.PFV-3MSG.S  
           ‘Lemma killed himself.’  
       c. Almaz gänzäb-u-n lä-ras-wa  
           Almaz.F money-DEF.M-ACC DAT-self-her  
           sä’t’-ätftj-(\*at).  
           give.PFV-3FSG.S-(\*3FSG.O)  
           ‘Almaz gave the money to herself.’

Our leading idea about this restriction is again rooted in the assumption that the OM is intrinsically a pronoun for purposes of interpretation at LF. As such, it is required to be disjoint in reference from the subject of the clause that contains it. As mentioned in Sect. 3.2, the idea that the OM is indeed pronominal in this sense is supported by

the fact that in examples like (21)a, repeated here as (62), where there is an OM but no overt doubled DP, the OM cannot refer to the subject of the same clause.

- (62) Lämma gäddäl-ä-w.  
 Lemma.M kill.PFV-3MSG.S-3MSG.O  
 ‘Lemma killed him.’ (him ≠ Lemma)

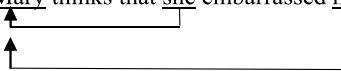
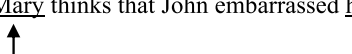
The idea, then, is that (61)a violates the Binding theory for essentially the same reason that (62) does. If so, this is important because it provides converging evidence that OMs in Amharic are intrinsically pronominal, counting as such for Binding theory as well as for the Crossover condition.

In fact, this result is essentially immediate within the classic Chomsky 1981-style binding theory and closely related work. Chomsky’s Condition B can be stated as follows:

- (63) A pronoun cannot be referentially dependent on a DP that c-commands it within the same binding domain (roughly the same clause).

The D(P) merged with *v* counts as a pronoun in both (62) and (61)a, c because it has a full set of phi-features (third, masculine, singular) and a category feature (D) but no descriptive/encyclopedic content (cf. Reuland 2011: 22). Moreover, it is c-commanded by the subject ‘Lemma’ in Spec TP, and they are in the same binding domain (clause). Therefore, Condition B is indeed violated in both.

The one additional issue that might need to be clarified with respect to (61)a, c is whether these examples could sneak through because the OM can be referentially dependent on the anaphor in object position in the first instance (see (22)), a referential dependency that is grammatically permitted. Then the anaphor in object position can in turn be referentially dependent on the subject, which is clearly possible (seen in (61)b). The consequence might be that (61)a, c could be possible with the OM *indirectly* referentially dependent on the subject—contrary to fact. Fortunately, it is well-known in the Binding theory literature that obviation conditions like Condition B and Condition C cannot normally be circumvented in this way. For example, one might think that (64)a should be possible with both pronouns referring to *Mary* because the object of the lower clause *her* takes *Mary* as its direct antecedent, rather than *she*—a dependency that is clearly possible in (64)b. But (64)a is definitely not possible (see Higginbotham 1983:407; Safir 2004a, 2004b; and Buring 2005:120–121 for discussion, among others).

- (64) a. Mary thinks that she embarrassed her.  
  
 b. Mary thinks that John embarrassed her.  


A standard way of closing this loophole this is what Buring (2005:121) calls “Have Local Binding!”, a slight reformulation of Fox’s (2000:Chap. 4) “Rule H,” itself based on observations by Irene Heim.

## (65) Have Local Binding:

For any two NPs/DPs A and B, if A c-commands B and B is not bound within A's c-command domain, A must bind B unless that changes the interpretation.

The condition in (65) forces *her* in (64)a to be directly bound by (referentially dependent on) *she*, not *Mary*, and this representation does violate Condition B in the usual way (cf. \**She embarrassed her*). In a similar way, (65) forces the OM to be bound by (referentially dependent on) 'Lemma' rather than on 'himself' in (61)a—changing the initial referential dependency created in accordance with (22)—since *Lemma* c-commands the OM, the two corefer in the intended interpretation, and there is no closer binder for the OM. Therefore (61)a also violates Condition B in (63).

Overall, then, Binding theory explains why it is impossible to have an OM double a reflexive anaphor given that the OM is a pronominal clitic, not merely an agreement marker, to which Condition B would not apply. We have formulated this analysis in terms of classical Binding theory, but we believe that the same result would follow in many of the more recent updates of Binding theory, if not all.<sup>35</sup>

## 5.2 Application: OMs with derived theme subjects

With this result in hand, we are now in a position to return to a question raised in Sect. 4.3 above but not resolved: why can't an OM double the derived subject of an unaccusative or passive verb? That it cannot is shown by the sharp badness of examples like (66) with an OM included.

- (66) a. Almaz wäddäk'-ätftj-(\*at).  
Almaz fall.PFV-3FSG.S-(\*3FSG.O)  
'Almaz fell.'
- b. Almaz bä-Girma tä-sam-ätftj-(\*at).  
Almaz by-Girma PASS-kiss.PFV-3FSG.S-(\*3FSG.O)  
'Almaz was kissed by Girma.'

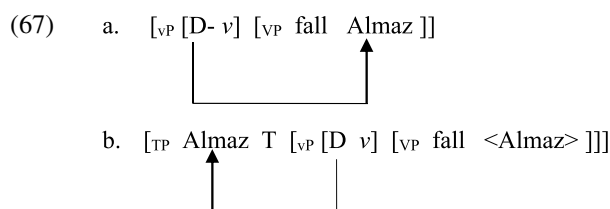
In one sense, we do not expect such examples to be good, since OMs are object markers, and these DPs are not objects on the surface, but rather subjects. But as one pauses to think about the derivation, it is not so obvious why it should be bad. 'Almaz' in these sentences presumably starts in the theme position inside VP, just

<sup>35</sup>For example, in Reinhart and Reuland's (1993) reflexivity framework (updated by Reuland 2011), (61)a like (62) violates the Chain condition. In both examples, (Lemma, OM) counts as a chain because the D(P)s are coindexed, 'Lemma' c-commands the OM, and there is no barrier between them (they are in the same clause). However, (Lemma, OM) violates the Chain condition, because the tail of this chain (OM) is +R: it is referential, having a full set of phi-features.

One more recent Binding theory that might need some adaptation for our facts is the competition-based binding theory of Safir (2004a). On Safir's view, a pronoun is blocked in a certain position with a certain interpretation if and only if an anaphor (more generally, a more dependent item) is possible in that position with that interpretation. The problem is that Amharic—unlike many Bantu languages and I-E languages—does not happen to have an (overt) reflexive clitic that would compete with the pronominal OM in (61)a. We do not consider the problem a deep one for Safir's binding theory, however; for example, it might be patched by positing a null anaphoric clitic in Amharic, which would be present covertly along with the 'self' anaphor in an example like (61)b.

as direct objects do (the Unaccusative Hypothesis). Then when *v* is merged, it can enter into Agree with the DP inside VP, as usual, inducing agreement and thus referential dependency between a D adjoined to *v* and the DP theme. Next the DP theme moves to Spec TP, but it is not immediately obvious why that should break the relationship between D and DP, or cause some other problem. Indeed in Sect. 4.3 we assumed that essentially this derivation was possible with experiencer constructions, in order to explain why OMs can double quantified DPs (only) in such sentences. In I-E languages with CD, one might be able to rule out examples like (66) by a case matching requirement: the object clitics have accusative (or dative) case, whereas the doubled DPs in (66) are nominative. But this is unlikely to work for Amharic, since its OMs seem not to be marked for any particular case. Thus the same OMs that double accusative objects in monotransitive constructions can double dative objects in ditransitive constructions (17)a. Indeed, they can even double nominative DPs in the aforementioned experiencer constructions (see (49)). So far, then, we do not have an obvious explanation for the badness of (66).

But now in the light of this section, we have a plausible solution: these examples are also Condition B-type violations of the Binding theory, on par with (62) and (61)a. This is because the OMs in (66) are illicitly bound by the local (derived) subject, just as the OM is bound by the (underived) subject in (62). The derivation looks like (67), with referential dependency relations indicated.



As usual, D initially links to the DP inside VP that it agrees with via *v*, as shown in (67)a. Then the DP inside VP moves to Spec TP to satisfy the EPP property of T, as in (67)b. In the derived structure, D becomes referentially dependent on the Spec TP position (see (55)a, possibly a result of Have Local Binding in (65)). The resulting representation is then essentially the same as that of (61)a, except that object position contains a trace bound by the subject rather than an anaphor bound by the subject. (67)b thus runs afoul of Binding theory for the same reason: D is a pronoun referentially dependent on a DP that c-commands it within the same clause, a condition B violation. Binding theory therefore correctly rules out (66)a, b using assumptions already in place.

The outcome should be different if the OM did not count as a pronoun—for example, if it were a mere agreement marker (see (82) below), or if it were an anaphor. Then there would be no Condition B violation, since the anaphor would be subject to Condition A instead. This logical possibility is not attested in Amharic since Amharic does not have any anaphoric OMs. The possibility is attested in Romance languages, however, where the anaphoric clitic *se* is often found in unaccusative structures:

- (68) La fenêtre s'est cassée. **French**  
 the window itself-is broken  
 'The window broke.'  
(Burzio 1986:142)

This drives home the fact that the intrinsic pronominal nature of OM in Amharic—related to them having a full complement of phi-features—is essential to explaining the badness of (66).<sup>36</sup>

So far, so good, but now we need to harmonize this account of the badness of an OM with unaccusative and passive subjects with the goodness of an OM with experiencer subjects, in the data discussed in Sect. 4.3. Two relevant examples with experiencer subjects are repeated here as (69).

- (69) a. Almaz(-in) (rab) rab-at.  
 Almaz.F(-ACC) (hunger.M) hunger(3MSG.S)-3FSG.O  
 'Almaz is hungry.'  
 b. Aster gänzäb t'äff-at.  
 Aster.F money.M lose(3MSG.S)-3FSG.O  
 'Aster lost some money.'

These must have derived subjects too: the experiencer must start lower than *v*, or *v* and the D adjoined to it could not agree with it, and it must move to an A-position higher than D or there would be crossover violations when the experiencer is a quantified DP. So what is the difference between them?

In fact, Baker (2012b, 2015) addresses a closely related question and makes a proposal that we can invoke here. He starts with the observation that Amharic has two kinds of ditransitive constructions: goal verbs like 'give' and 'tell,' and source verbs like 'rob.' In active sentences, the two look extremely similar, and indeed we already saw that they have parallel clitic doubling behavior, such that an OM can double the higher source/goal argument but not the lower theme argument, as shown again in (70). ((70)a is the version with an accusative goal rather than a dative goal, to maximize the similarity.)

- (70) a. Lämma Almaz-in tarik-u-n näggär-at.  
 Lemma.M Almaz.F-ACC story.M-DEF-ACC tell.PFV(3MSG.S)-3FSG.O  
 (\*näggär-ä-w).  
 \*tell.PFV-3MSG.S-3MSG.O  
 'Lemma told Almaz the story.'  
 b. Lämma Aster-in gänzäb-u-n särräk'-(at).  
 Lemma.M Aster.F-ACC money-DEF-ACC rob.PFV(3MSG.S)-3FSG.O  
 (\*särräk'-ä-w).  
 rob.PFV-3MSG.S-3MSG.O  
 'Lemma robbed Aster of the money.'  
(Baker 2012b:49–50)

<sup>36</sup> Again, there is a challenge to Safir's (2004a) competition-based binding theory here, since that might predict that a pronoun is possible in a structure like (67)b in a language like Amharic when there is (seemingly) no anaphoric element in competition with it. See fn. 35 for some discussion.

However, a striking difference appears when the two sorts of predicates are passivized, as shown in (71). The source sentence in (71)b behaves more as one would expect. The higher source object becomes the subject of the passive sentence in every relevant respect: it is in nominative case, triggers subject agreement on the verb, and triggers accusative case on its coargument ‘her suitcase.’ It also cannot be doubled by an OM—just like the subject of the passive of a monotransitive verb in (66)b cannot be. The goal sentence in (71)a is different. Although the goal ‘Almaz’ can be in nominative case, it is defective as a subject in other respects: it does not trigger subject agreement on the verb, and it does not trigger accusative case on its coargument ‘story.’ It also can be doubled by an OM—just like the subjects of experiencer predicates like (69) can be.

- (71) a. Almaz tarik-u-(\*n)      tä-nägr-ow-at      näbbär.  
 Almaz.F story-DEF-(\*ACC) PASS-tell.GER-3MSG.S-3FSG.O AUX  
 ‘Almaz was told the story.’  
 b. Aster fant’a-wa-n      tä-särräk’-ätf-(\*at).  
 Aster.F suitcase.M-her-ACC PASS-rob.PFV-3FSG.S-(\*3FSG.O)  
 ‘Aster was robbed of her suitcase.’

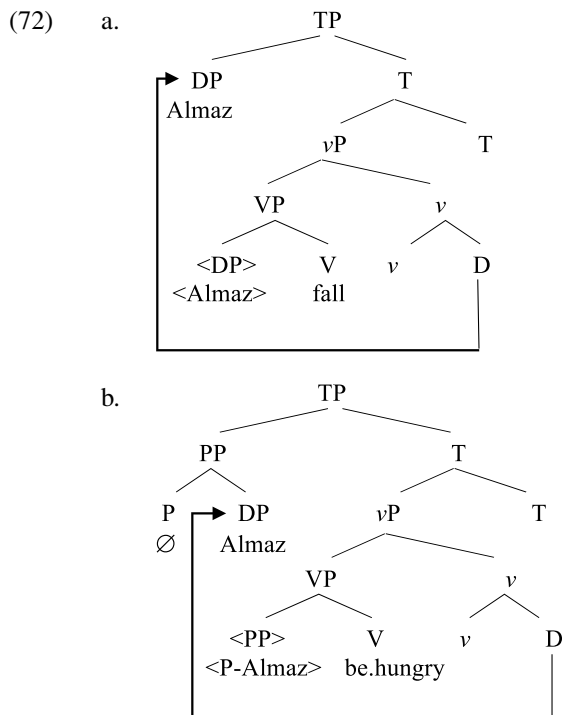
So passives of goal predicates are like experiencer predicates, whereas passives of source predicates are like ordinary unaccusatives and passives with respect to OM-doubling, as well as in other respects.

Baker (2012b) then asks why the goal argument of a ditransitive verb in Amharic cannot become the subject of a passive for purposes of case and agreement, whereas an otherwise similar source argument can. His answer was that goal arguments in Amharic are generated inside a PP headed by a null P, whereas theme arguments and source arguments are not. The most straightforward consequence of this PP shell is that it prevents the goal DP from c-commanding the theme DP and triggering accusative case on it, assuming a dependent case theory of accusative along the lines of Marantz (1991), supported for Amharic in Baker (2012a, 2015).<sup>37</sup> Baker then extends this proposal to one argument verbs: normal unaccusatives take an ordinary DP argument, whereas experiencer verbs take a null-headed PP argument. (Compare I-E languages like Icelandic, where goals and experiencers both bear quirky dative case; the null headed PP shell in Amharic is basically its version of the same cross-linguistic tendency to use the same distinctive morphosyntax for both goals and experiencers).

Now this covert structural difference which accounts for differences in accusative case assignment (and perhaps subject agreement) is also sufficient to address the dif-

<sup>37</sup> Baker (2012b) also used the PP shell around goal and experiencer arguments to explain why *v* can agree with a goal/experiencer argument in Amharic, but T cannot. Simplifying slightly, the idea was that the PP structure prevents the goal/experiencer from satisfying T’s EPP property, and T must agree with the XP that satisfies its EPP property in Amharic. Therefore, the theme argument must move to Spec TP and agree with T rather than the goal. This led to saying that in examples with goal/experiencer-theme-verb word order, the goal/experiencer moves to a distinct position above TP that is not associated with agreement or restricted to DPs, such as Spec TopP. We could adopt this view here too, except that for us the high position of sentence-initial goals/experiencers would have to be an A-position so that movement to it bleeds weak crossover (see Sect. 4.3). Perhaps it is really Spec SubjectP in the sense of Cardinaletti (2004) and Rizzi (2006). However, we suppress this possible distinction between Spec TP and Spec SubjP for simplicity. See fn. 40 for an alternative way of ruling out subject agreement with experiencers.

ference in clitic doubling that concerns us here. The final representation for the unaccusative and normal passive structure is the same as before, repeated in (72)a, with arrows again indicating the important referential dependency. The final representation for the experiencer predicates and passives of goal structures is very similar, but there is an additional PP shell around the derived subject, as shown in (72)b.



(72)a is a Condition B violation, as before. But (72)b is not, because ‘Almaz’ embedded inside the PP shell does not c-command D. Thus, Condition B is not violated in (72)b. The same piece of covert structure that explains why the theme argument is accusative in (71)b but not in (71)a or (69)b also explains why an OM can double the nominative DP in (71)a and (69) but not in (71)b and (66).<sup>38</sup>

<sup>38</sup> Notice that we are now rather close to having a general explanation for why pronominal subject clitics seem to be rarer across languages than pronominal object clitics: there will often be a Condition B problem between the subject clitic and the doubled subject, parallel to the one that rules out (72)a. Descriptively, among the I-E languages subject clitics are found only in Colloquial French and some Northern Italian dialects—a small subset of the languages that have object clitics (and even in some of those varieties the elements in question behave like agreement rather than pronominal clitics; see Poletto 2000 and Gorla 2004 on Piedmontese). We expect that pronominal subject clitics analyzed as Ds adjoined to T could sneak through if (a) T had no necessary EPP feature, so that [  $SM_i = T(+V) \dots Subject_i \dots$  ] order is allowed, or if (b) subjects front, but to a preverbal A-bar position like TopicP, giving [  $Subject_i SM_i + T-V \dots$  ] order, but where the subject crucially does not A-bind the SM to create a binding theory violation. Colloquial French (Culbertson 2010) and Venuto (Poletto 2000:141; Roberts 2010:111) are two possible cases of the (b) type. Poletto (2000:140) implies that the (a) pattern of having subject clitics with postverbal subjects that are referential but not with ones that are quantified is attested in Italian dialects, but she does not say

Finally, recall that a structure like (72)b is possible with a quantified DP in the position of ‘Almaz’: there is no weak crossover violation when an OM doubles the experiencer DP. This may seem like a contradiction to those reared on Reinhart’s (1983) influential claim that a DP must c-command a pronoun in order for the pronoun to be interpreted as a variable bound by DP. If so, WCO evidence seems to imply that the experiencer does c-command the OM, whereas Binding theory evidence seems to imply that it does not. But in fact there is no contradiction, because Reinhart’s generalization has turned out to be false, as discussed by Safir (2004a, 2004b) and especially Barker (2012c). This is shown already by the grammaticality of familiar examples like *Everyone’s mother loves him*, whereas Binding theory is more strictly sensitive to c-command, such that *John’s mother loves him* is not a Condition B violation.<sup>39</sup> Thus all that the Safir-based Crossover Condition in (39) requires is that D(P) and constituents containing it not c-command the variable position associated with the quantified DP, and that holds in (72)a as a result of A-moving the null-headed PP to Spec TP (or Spec SubjP; see fn. 37).<sup>40</sup>

### 5.3 Summary

We now have a full analysis of when an OM can or cannot double a DP in Amharic. We set out to explain why OMs cannot double a certain set of quantified DPs and anaphoric DPs. These restrictions do not follow from pure agreement theory, given that at least some of these DPs demonstrably have phi-features. It is not even enough to make Agree contingent on object shift, since some of these DPs count as specific, and can undergo object shift in languages like Dutch and Icelandic. Therefore, we supplement an Agree theory with the assumption that OMs are Ds merged with *v*, and hence count as pronouns. This assumption is a priori plausible, given that OMs without an overt doubled DP are the normal expression of weak object pronouns in Amharic. With that assumption, we can explain the incompatibility of OMs doubling

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which ones have this particular pattern. We leave more detailed consideration of subject clitics to future research.

<sup>39</sup> Note that Binding theory apparently sees the null P in Amharic as a real P like *under* rather than a weak/case-like P like *to*, which does not count even for Binding theory (OK is: *I talked to Mary about herself*).

<sup>40</sup> An additional fact, which we do not fully analyze here, is that having an OM that doubles the experiencer argument is not only possible, but obligatory: the examples in (69) are ungrammatical if the OM is omitted. We conjecture that the OM is somehow required to cope with the fact that canonical NP movement to Spec TP is not possible in these structures, but something a bit more marked must happen: a PP moves to Spec TP (as in (72)b), or the lower theme argument moves to Spec TP past the higher experiencer argument, or Spec TP is exceptionally left empty. Empirical support for this diagnosis is the fact that the OM is also required in the passive-of-‘tell’ example in (71)a, but not in the active version in (70)a. This suggests that it is not the intrinsic nature of the doubled argument that makes CD obligatory, but rather whether an internal argument is called on to move to Spec TP. This Amharic effect is analogous to Anagnostopoulou’s (2003:21–27) well-known observation that in Greek goals and experiencers must be clitic-doubled in passive and unaccusative structures. (Her analysis is that this prevents the goal/experiencer from counting as an intervener that blocks the theme from moving to subject position.)

The fact that D+*v* must agree with the experiencer argument might also be used explain why subject agreement with experiencers is impossible: a single morphological word can only agree with a particular DP once in many languages (see “Kinyalolo’s Generalization” from Carstens 2005), and Amharic seems to be such a language (see e.g., Kramer 2014: 618).



certain quantifiers using the Crossover Condition, and we can explain the incompatibility of OMs doubling anaphors using the Binding theory. We have also extended our account to explain why OMs cannot double definite DPs that contain a bound variable, why OMs that double experiencer arguments can double quantified DPs, and why OMs cannot double the arguments of unaccusative and passive predicates at all. We thus claim that this is a successful and fecund analysis.

## 6 On diagnostics for clitic doubling: A possible cross-linguistic application of the analysis

Although our discussion in the bulk of this article has been focused squarely on Amharic, the analysis has potential implications beyond it. This is because it makes use of one syntactic categorization (that of being a pronoun) and two principles (the Crossover Condition and Principle B of the Binding theory) that are very robust cross-linguistically, and are arguably part of Universal Grammar. Therefore, it is natural to expect that the same consequences will follow in other languages, wherever essentially the same syntactic structure exists—for any language that allows a D to be merged with *v*. If that is so, then we could have an effective diagnostic for pronominal clitics as opposed to simple agreement. If an OM is pronominal, then it counts as a pronoun for Binding theory and crossover, and the consequence should be that it cannot double a nonreferential quantified DP or anaphor in the domain of the head it adjoins to. Conversely, if an OM can double nonreferential quantified DPs and anaphors in that domain, then crossover and Binding theory are not invoked. Why not? Plausibly because the OM is not a pronoun, but rather agreement. This logic could then be applied cross-linguistically to test whether a given morpheme is a pronominal clitic or a simple agreement. And that would be productive, since there has been much confusion and controversy in the literature about how to distinguish pronominal clitics from agreement, and different diagnostics can give conflicting results. With this in mind, we consider somewhat tentatively in this last section what might be involved in applying our results as a diagnostic cross-linguistically.

### 6.1 Object clitics in some I-E languages

The received wisdom in the field is that many Romance languages, Greek, and Bulgarian/Macedonian have clitic doubling, and these constructions have been much studied—although analyses also exist that reduce clitics to agreement, or that blur the distinction between agreement and clitic doubling. Moreover, there are some significant differences among these languages when it comes to specificity conditions on clitic doubling, animacy conditions, and whether clitic doubling is optional or obligatory in particular situations. With this in mind, anonymous reviewers have suggested that some I-E languages may have a different kind of clitic doubling than Amharic does. If so, then, the diagnostic value of our analysis as a way to distinguish pronominal clitics from agreement could be rather limited.

But we are not so sure that I-E languages are significantly different from Amharic in the specific respects that our analysis picks out as being crucial. First of all, in all

the languages there are significant restrictions on what quantified DPs can be doubled by a clitic, according to native speaker linguists that we have consulted. For example, (73) gives examples in which clitic doubling of a quantified DP is degraded or totally out in Greek; (74) gives similar examples for Bulgarian.

- (73) a. \*S' aftin tin xora, i kavernisi ton voihai ton kathenan se  
in this the country the government 3MS.ACC helps the everyone in  
anagi. **Greek**  
need  
'In this country the government helps everyone in need.'  
(E. Anagnostopoulou, p.c.)
- b. \*Den ton idha kanenan stan avli.  
not 3MSG.ACC saw-1SG.S anybody in yard  
'I didn't see anyone in the yard.' (a homeowner investigating a suspicious sound)  
(E. Anagnostopoulou, p.c.)
- c. \*Ti to magirepses?  
what 3NSG.ACC cook.2SG.S  
'What did you cook?' (Anagnostopoulou 1994:174)
- (74) a. \*Maria go vidja vsekingo/vseki student v centyr-a na  
Maria 3M/NSG.ACC saw everyone/every student in center-DEF of  
grad-a. **Bulgarian**  
town-DEF  
'Maria saw everyone/every student in the town center.'
- b. Ivan ne (\*go) vidja nikogo v koridor-a.  
Ivan not 3M/NSG.ACC see anyone in hallway-DEF  
'Ivan did not see anyone in the hallway.'
- c. Kakvo (\*go) kupi ot magazin-a?  
what 3M/NSG.ACC bought from store-DEF  
'What did you buy from the store?' (all from Todor Koev, p.c.)

These are clearly reminiscent of our Amharic data, with similar sorts of universal, negative, and non-D-linked *wh*-quantifiers. Porteño Spanish is also very similar, according to Suñer's (1988) classic study: clitic doubling is bad with a singular distributive universal quantifier (p. 411), with a negative phrase (p. 396), and with a non-D-linked *wh*-phrase (p. 391), among others.<sup>41</sup>

There seems, then, to be a real point of similarity among Amharic, Spanish, Greek, and Bulgarian here—hence value to saying that the Crossover Condition applies to these structures, hence reason to say that the OMs are pronouns, not mere agreement.

<sup>41</sup>Suñer (1988) also shows that a full range of quantifiers can be clitic doubled when they appear in a partitive construction like 'none of them,' 'which of them,' etc. Gutiérrez-Rexach's (1999) thorough semantic discussion of what quantified expressions can and cannot be doubled in Spanish reaches essentially the same conclusion, in our view. In the end, his most robust generalization is that all simple quantifiers can be doubled when they invoke a particular set known from context—either explicitly, as in partitives, or implicitly—but not otherwise. We assume that these facts are compatible with our theory, the partitive phrase making the DP as a whole "more referential" (cf. fn. 44), but we do not go into the special syntactic and semantic issues raised by partitives here.

Similarly, an anaphoric object cannot naturally be clitic doubled in Greek in many cases, as shown in (76).<sup>42</sup>

- (75) O Janis (??ton) peripiithike ton eafto tu prin vgi ekso.  
 The Janis 3MS.ACC took.good.care.of the self his before he went.out  
 ‘John took good care of himself before he went out.’  
 (E. Anagnostopoulou, p.c.)

(In contrast, Bulgarian and Spanish have special reflexive object clitics, so they are not relevant to this point.) Finally, our inquiries show that objects that contain a pronoun bound by a quantifier cannot be doubled by a clitic in Greek, Bulgarian, and Spanish, as in Amharic.<sup>43</sup>

- (76) a. ??Kanena pedhi den tin akoluthise tin mitera tu. **Greek**  
 No child not 3FS.ACC follow the mother his  
 ‘No child follows his mother.’ (E. Anagnostopoulou, p.c.)  
 b. Vseki (??ja) obica sobstvena-ta si majka. **Bulgarian**  
 Everyone 3FS.ACC loves self-DEF POSS mother  
 ‘Everyone loves his own mother.’ (clitic is ?? if ‘self’ is bound by ‘everyone’)  
 (T. Koev, p.c.)  
 c. Cada hombre (\*la) ama a su madre. **Spanish**  
 Each man 3FS.ACC loves to his mother.  
 ‘Every/each man loves his mother.’ (bad with clitic on the bound variable reading)  
 (L. Sanchez and J. Camacho, p.c.)

There is good preliminary evidence, then, that CD in Amharic is *not* something fundamentally different from CD in the I-E languages, clitics in both families counting as pronouns for the relevant principles.

There are some complications, however. The literature on these languages tends to assume that at least some quantified DPs can be doubled by clitics. For example, (74)a in Bulgarian becomes good if ‘every student’ is replaced with *vsicki-te xora* ‘all-DEF people’ and the plural clitic *gi* is used in place of *go*. Similarly, although neither Greek nor Bulgarian allows clitic doubling with non-D-linked *wh*-phrases, both allow it with D-linked *wh*-phrases (Anagnostopoulou 1994:174–176, Franks and King

<sup>42</sup> Iatridou (1988) gives examples of this form (e.g., with the verb ‘hate’) which are grammatical, but Elena Anagnostopoulou (p.c.) conjectures that in these examples *ton eafto tu* has a literal nonreflexive meaning, meaning something like ‘his true self’ or ‘his personality.’ Similar issues arise in Amharic and need to be controlled for: *ras-u* ‘self-3m.sg’ is literally ‘his head,’ and it can be doubled by an OM when it has its literal meaning.

<sup>43</sup> For Greek, a precedent for our observation is Anagnostopoulou’s (1994:Chap. 2) generalization that “novel definites” cannot be clitic-doubled, DPs containing a bound variable being one subtype of novel definite. For Bulgarian, we believe that Harizanov’s (2014:1056) bad examples in his (41)b and (42)b are of the same type as our (76)b, although Harizanov gives a different explanation for them—one that would not generalize to the badness of (76)b. For Spanish, José Camacho and Liliana Sanchez (p.c.) observe that analogs of (76)c in which the object is left- or right-dislocated do allow a bound variable interpretation. This then is an interesting difference between true CD and clitic dislocation constructions worthy of future consideration. (We note that an anonymous reviewer reports that a sentence like (76)c is good in Spanish. We do not know what is behind the difference in judgments, but the reviewer seems to speak a *leísta* version of Spanish, in which the clitic has the form of a dative, and this might be relevant, dative clitics behaving more like true agreement markers in Spanish.)

2000:254). See Gutiérrez-Rexach (1999) for a detailed semantic study of when clitic doubling of quantified DPs is and is not allowed Spanish. Furthermore, the literature suggests that clitic doubling actually ameliorates conventional weak crossover violations, in much-discussed sentences like (77) from Greek and Bulgarian.

- (77) a. O Petros (to) epestrepse [tu idioktiti tui]  
 the Peter.NOM 3NSG.ACC returned the owner.GEN his  
 [to kathe aftokinito] xtes to vradi.  
 [the every car] yesterday the night.  
 ‘Peter returned to its owner every car last night’  
 (Alexiadou and Anagnostopoulou 1997)
- b. Ivan (i) izprati [nejnija Cek] [na vsjaka Zena] vCera.  
 Ivan 3FS.DAT sent her check to every woman yesterday  
 ‘Ivan sent her check to every woman yesterday.’  
 (Harizanov 2014:1054–1055)

(However, the clitic doubling in (77)b is not accepted by all Bulgarian speakers: Todor Koev, an anonymous reviewer of Harizanov’s article, and one of Harizanov’s five speakers consider this bad (see Harizanov 2014:1055 n.24).) Here the quantified DP that follows another object can bind a pronoun inside the first object if and only if it is doubled by the clitic (see also Suñer 1988:421–423 for Portefño Spanish). Harizanov uses this fact to argue that the clitic is essentially an occurrence of the quantified DP itself in a higher (A-) position, from which it c-commands the first object—not an intrinsically pronominal element, as in our proposal; see also Van Urk (2015, 2016) for the same idea. With this in mind, two anonymous reviewers ask whether Greek and Bulgarian have quite a different kind of clitic doubling from Amharic.

We would not rush to that conclusion, given the data in (73)–(76), but would explore a different line first. It is not a surprise that some quantified DPs can be clitic doubled in these I-E languages: on the contrary, we saw in Sect. 4.2 that this is true also in Amharic, and we have related this to the fact that some quantified DPs do not give weak crossover effects in English and Amharic. We have not said exactly why this is, but have adopted it as a descriptive observation from the literature on this topic. So it is not surprising that, say, plural universal quantifiers analogous to ‘all the Ns’ and D-linked *wh*-phrases like ‘which N’ should allow clitic doubling in I-E languages too. It is perhaps less clear why a phrase like *to kathe aftokinito* ‘the every car’ should allow clitic doubling in (77)a whereas *ton katheran* ‘the everyone’ does not in (73)a, but we note that there is something akin to D-linking or partitivity at work here: ‘the every car’ in (77)a clearly ranges over a particular set of cars known from (or accommodated from) the context, whereas ‘the everyone’ in (73)a is more like a true universal quantifier. Moreover, if ‘the every car’ counts as the sort of quantifier that is not subject to weak crossover, then this explains in a unified way both why it can be doubled by the OM in (76)a and why it can bind the pronoun ‘his’ inside the indirect object. We do not have a general theory to offer here,<sup>44</sup> but it

<sup>44</sup> Here is a non-expert intuition about what might be behind this. The better clitic doubling examples seem to involve reference to a known set of objects (e.g. the cars parked at a restaurant on a particular night) as well as quantification over the individual members of that set. It is possible, then, that the initial link

is clear how to investigate the matter further: one would compare systematically the range of quantificational DPs that cannot easily be clitic doubled with the range of quantificational DPs that give weak crossover effects to see if they are the same or not, as we have begun to do in Amharic. Indeed, very preliminary investigation along these lines in Greek is encouraging. First, whereas *ton kathena* ‘everyone’ triggers a strong WCO effect, the plural universal *ola* ‘all’ does not, as shown in (78).

- (78) a. \*I mitera tu panta voithai ton kathena.  
           the mother his always helps the everyone  
           ‘His mother always helps everyone.’  
       b. (?)I miteres tus voithisan OLA ta koritsia.  
           the mothers theirs helped all the girls  
           ‘Their mothers helped all the girls.’ (E. Anagnostopoulou, p.c.)

Our expectation, then, is that clitic doubling an *ola* N phrase should be possible, in contrast to clitic doubling with unrestricted *ton kathena*, which is not (see (73)a). This is correct, as shown in (79).

- (79) O daskalos ta voithise ola ta koritsia.  
       the teacher them helped all the girls  
       ‘The teacher helped all the girls.’ (E. Anagnostopoulou, p.c.)

We also mention that, in fact, data like (77) are often presented in relative isolation, not in a full weak crossover paradigm that compares a range of quantifiers to referential DPs. This should be done to help clarify these issues. In this connection, Suárez (1988:422) makes an important further observation about the Spanish data. She shows that doubling a quantified object in an embedded clause voids weak crossover even if the bound pronoun is inside the subject of the matrix clause, as in an example like (80).

- (80) A quiénes dijo su madre que no \*(les) dejaría ningún dinero?  
       to who said their mother that not them would.leave any money  
       To whom<sub>i</sub> did their<sub>i</sub> mother say that she would not leave any money (to them<sub>i</sub>)?

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between the pronoun and the quantified DP is established by coreference between the sets, not by bound variable anaphora. Then, at a later point in interpretation, a distributive operator is applied to the sentence, saying that “Peter returned to A’s owners A” for A = {a set of cars} is true because for each X in A Peter returned to X’s owner X. Coreference between plural sets followed by applying a distributive operator might give a semantic interpretation that is very similar to an intrinsically singular distributive quantifier binding a pronoun as a variable. However, there could be a crucial syntactic difference, if the Crossover Condition applies to quantifier-pronoun binding before the distributive operator applies. Then WCO treats the relevant structures like instances of coreference rather than like instances of bound variable anaphora, even though the semantic distinction almost disappears further downstream. We do not have the space or the expertise to work out this intuition in detail, but we offer it as a reason for hope that something more principled can be said about which DPs give crossover effects and which do not and why. (It is clearer how this account might apply to quantifiers that go with plural clitics and pronouns than with singulars, but the interpretation of number morphology becomes a complex matter in quantified sentences, so we are not too pessimistic that such a story could be extended to singulars like *to kathe aftokinito* ‘the every car’ in (77).)

This is not predicted by the Harizanov/Van Urk interpretation of the phenomenon in (77), since the matrix subject is clearly higher in the structure than any A-position marked by the clitic in the embedded clause, nor should an embedded object be able to object shift into the matrix clause of a non-restructuring predicate like ‘say.’ Suñer’s own interpretation of this fact is that the clitic in the lower clause makes the clitic-*wh*-trace chain pronominal, so that the *wh*-phrase in Spec CP binds two pronominal variables (the possessive pronoun *su*, and the clitic *les*, the latter in conjunction with the indirect object position itself), thereby satisfying Safir’s PCOB in (37). Our interpretation is similar to Suñer’s: the presence of clitic doubling in the embedded clause forces the quantified DP to have the sort interpretation ranging over elements of a given set that is not subject to weak crossover. And if the DP *a quiénes* is not subject to WCO, then there is no intrinsic barrier to the pronoun *su* in the matrix clause being referentially dependent on it as well, given that there is no Condition C violation here. So our interpretation of these data is less problematic than the one that is common in the recent literature.

We tentatively conclude, then, that the data available at this point suggest that Greek, Bulgarian, and Spanish are essentially like Amharic in the respects that are central to our analysis, although we ultimately defer to experts in these languages to confirm this over a full range of data that compares clitic doubling to weak crossover patterns. If so, then the behavior of true clitic doubling is encouragingly uniform in this respect over a range of languages, even though the languages may differ significantly in other respects that are not directly related to the basic pronoun/nonpronoun distinction—for example, when it comes to issues of optionality, animacy and specificity conditions.<sup>45</sup> Similarly Baker (in press) discusses evidence drawn from Riedel (2009) to the effect that OM is doubling pronominal clitics in some Bantu languages, including Mainland Tanzanian Swahili and Haya.

## 6.2 Object agreement rather than clitics: Burushaski and Sumbaa

Now applying the logic of our analysis from the other side, we can ask whether OM ever turn out to be true agreement markers by our potential diagnostic. Indeed, it is not totally uncontroversial that object agreement even exists. For example, Nevins (2011:960–961) asserts that, once one distinguishes clitics from agreement, OM always turn out to be clitics, and there can only be one true agreement per clause, with the nominative/absolute argument (cf. also Preminger 2009). In contrast we would conclude that an OM is true agreement if it is attached to the verb, varies with the phi-features of the object, and is systematically compatible with quantified DPs, anaphoric DPs, and DPs containing a bound variable.

<sup>45</sup> For example, animacy conditions on CD are prominent in the literature on Spanish (and Romanian), but animacy is not a major factor in Amharic (Kramer 2014:601), Greek, or Bulgarian (Harizanov 2014:1055). Even in Spanish, the importance of animacy may have been overemphasized: see Suñer (1988:399–400) for examples of inanimate direct objects doubled by clitics. Animacy effects are also variable across the Bantu languages (Marten and Kula 2012). Thus, when an anonymous reviewer asks whether animacy restrictions on CD can be captured by our analysis, we want to emphasize that these seem to be a relatively minor factor in CD, viewed crosslinguistically; their importance in the literature is partly an artifact of the particular languages with which the literature began.

In fact, it seems that some languages do have true object agreement according to this standard. One such language is the isolate Burushaski, spoken in Northern Pakistan. In addition to having object agreement with definite referential nominals (see (81)a), Burushaski also allows object agreement with reflexive anaphors (81)b, question words (81)c, and negative or nonspecific indefinite NPs (81)d. We also include (81)e with a universal quantifier, but since the universally quantified DP contains a plural definite DP, this may be less relevant to the question at hand (see Sect. 4.2).

- (81) a. Hilés-e dasín mu-yeéts-imi.  
boy-ERG girl.ABS 3FSG.O-see-3MSG.S.PST  
'The boy saw the girl.' (Willson 1996:3)
- b. Khín dasin-e mu-khár e-sqan-umo.  
DEM.F.PROX girl-ERG 3FSG-self.Y.ABS 3Y.O-kill-3FSG.S.PST  
'This girl killed herself.' (Willson 1996:18)
- c. Mu-ar men-Ø d-u-sú-č-a-m?  
her-DAT who-ABS PREV-3PL.O-bring-IMPV-1SG.S-NPRS  
'Whom (all) will I bring to her?' (Yoshioka 2012:186)
- d. Kholéi jé-e má-ma-r bés-an qhídmátan  
here I-ERG you-OBL-DAT what-INDF.SG service.INDF.SG.ABS  
i-t-as a-ulán-č-a bá-a.  
3Y.O-do-INF NEG-be.able.to-IPFV-1SG.S COP-1SG.S.PRES  
'I cannot do anything (any service) for you here.'  
(Yoshioka 2012:146)
- e. Icé číiz-Ø hár hán uyoon-Ø muú rádi n-i-t.  
those.X thing-ABS every one.Y all-ABS now ready CP-3YPL.O-do  
'All those things he made ready.' (Yoshioka 2012:46)

In short, there seem to be no restrictions on what sort of DP an OM can double in Burushaski, as expected if the OM is true object agreement. We also note that Burushaski is strikingly different from Amharic in that it does allow an OM on the verb that doubles the derived subject of an unaccusative verb (although not with the subject of an unergative verb; see Willson 1996; Baker 2017, and references cited there).<sup>46</sup>

- (82) Acaanák hilés i-ír-imi.  
suddenly boy 3M.O-die-PST.3M.S  
'Suddenly the boy died.' (Willson 1996:19)

In Sect. 5.2, we explained the badness of an Amharic analog of (82) as a violation of Condition B of the Binding theory: the OM is bound by the subject inside the same clause. But (82) in Burushaski does not violate Condition B, given that the OM is a

<sup>46</sup> It is rare for an OM to go with the subject of unaccusatives even in languages that have true object agreement (like Samba). This might be attributed to Kinyalolo's Constraint (Kinyalolo 1991; Carstens 2005), a general but not universal morphological filter that blocks a single verb form from manifesting more than one agreement with the same NP. Burushaski would not be subject to this filter, but many other languages are.

true agreement, not a pronominal clitic. So there is converging evidence that OMs in Burushaski are not pronominal clitics.

Another language of this sort is the Bantu language Smbaa spoken in Tanzania, as described by Riedel (2009). (83)a shows that an object marker is possible in Smbaa with a nominal that is interpreted as definite, but that nominal can also be interpreted as an indefinite (specific or nonspecific). (83)b shows that an OM is possible with a negative polarity item or narrow scope indefinite, (83)c that it is possible with an in-situ *wh*-word, and (83)d that it is possible with a singular universal quantifier.<sup>47</sup>

- (83) a. N-za-(mw)-ona ng'wana.  
1 SG.S-PFV.DJ-(1.O)-see 1 child  
'I saw the/a child.' (Riedel 2009:46)
- b. Si-chi-on-iye kintu chochoshe.  
NEG.1 SG.S-7.O-see-PFV 7 thing 7 any  
'I didn't see anything.' (Riedel 2009:50)
- c. U-wa-ene (wa)-ndayi?  
2 SG.S-2.O-see.PFV 2 (PL-)who  
'Who (all) did you see?' (Riedel 2009:158)
- d. N-za-m-somea [kia mwandisi] kitabu chakwe.  
1 SG.S-PFV-1.O-read.APPL every 1 writer 7 book 7 his  
'I read each author his own book.' (Riedel 2009:106)

Again, there seem to be no restrictions on what kind of nominal can be doubled by an OM in terms of the nominal's referentiality or quantificational force. (The missing datum here is an OM that doubles a reflexive anaphor, but this cannot be tested in Smbaa, because Smbaa, like other Bantu languages, expresses reflexivity by a special reflexive prefix on the verb, not by an independent DP.) So Smbaa too has object agreement, not CD. There is, however, by all accounts significant variation within the Bantu family in this regard, with OMs in many other languages counting as doubling clitics, or even as clitics that cannot be doubled by an in situ object but only by a dislocated DP, as in Lubukusu. (See Baker (in press) for preliminary discussion of this variation within the Bantu languages from our perspective.)

### 6.3 Comparing diagnostics

Finally, we can ask how our proposed diagnostic for agreement versus clitic doubling compares to other diagnostics from the literature. One influential diagnostic is from Nevins (2011). He suggests that if the morphemes that expone phi-features on the verb vary with the tense value of the verb (or similar inflectional category), then they are manifestations of agreement on T (or similar head). In contrast, if such morphemes are tense-invariant, then they are at best ambiguous as to whether they are clitics or agreement. Indeed, Kramer (2014) shows that Amharic OMs do not clearly

<sup>47</sup> Riedel also shows with some care that nominals doubled by an OM are not right dislocated in Smbaa. For example, in a structure of the form [Subject OM-verb Object] the verb can still be in conjoint form, high tone spread can happen between the verb and the object, and there is no sign of a prosodic break between the verb and the object. All of these are indications that the object can still be inside the VP even when the OM is present.



behave like agreement by this test: whereas subject agreement is entirely different depending on whether the verb is perfective or imperfective, the object markers are unaffected by this or any other inflectional change in the verb. OM<sub>s</sub> are always suffixes at the end of the main verb (but before an auxiliary), and there is only a single paradigm for them, invariant up to phonological changes.

However, Nevins's diagnostic and ours do not give the same results in other languages. For example, the OM<sub>s</sub> in both Burushaski and Sambia would at best be ambiguous as to clitic/agreement status by Nevins's diagnostic, whereas they are true agreement according to ours. In Burushaski, subject agreement is a suffix which varies with tense, but object markers are prefixes on the verb, and there is only a single paradigm for them. Similarly, object markers in Sambia apparently do not vary with the tense (except perhaps phonologically), in that Riedel (2009:21) gives only one form for OM<sub>s</sub> in her Table 2.3. So Nevins' diagnostic is silent on these cases, whereas ours gives a clear result.<sup>48</sup>

Another prominent diagnostic for clitic doubling in the recent literature comes from Preminger (2009). He draws attention to situations in Basque in which putative agreement cannot take place, for example because some other noun phrase intervenes between the agreeing head and the DP with which agreement might be expected. He reasons that if some kind of default morpheme appears in such situations, like the third singular morphology found on impersonal verbs or verbs with quirky case subjects in many I-E languages, then it is a case of true agreement. In contrast, if no overt morpheme is found in such circumstances, then it is a case of clitic doubling. He shows that absolutive marking in Basque is agreement by this criterion, whereas dative "agreement" counts as clitic doubling. This test also works well in Amharic, again as shown by Kramer (2014): third singular masculine subject agreement is used on impersonal verbs of various sorts, but there is no third singular masculine OM when there is no object; rather, the verb lacks a visible OM altogether.

But this diagnostic also does not converge with ours when it comes to languages like Burushaski and Sambia. While we do not have data to show that object agreement has failed because some other nominal intervenes, we do have data on unergative verbs. In Basque, unergative verbs have third singular default absolutive marking on verbs, even though there is no absolutive DP present in the clause (at least overtly). Preminger (2009:650–651) interprets this as evidence that absolutive marking is agreement in Basque. However, neither Burushaski nor Sambia has any kind of default object agreement marker in this situation, as shown in (84). So Preminger's test suggests that these languages have object clitics, whereas ours says that they have object agreement.

<sup>48</sup> Nevins further argues that, if a tense-invariant marker shows person complementarity effects (like the person-case constraint) or omnivorous number, then it is a clitic. Amharic cannot attach multiple object markers to a verb (Kramer 2014:625), so these effects cannot be tested. The same seems to be true for Burushaski. Sambia object markers, though, show person complementarity effects (Riedel 2009), which means that they are object clitics according to the Nevins' diagnostic tree. This conflicts with our conclusion that Sambia has object agreement. However, it is difficult to push further on this apparent conflict, since it is not so clear from Nevins (2011) why person complementarity effects indicate clitic status when they hold between direct objects and indirect objects.

- (84) a. Síruf hir-i girát-c-aan akhóle. **Burushaski**  
 only man-PL.ABS dance-NPST-3PL.S here  
 ‘Only men dance here.’ (Willson 1996:19)
- b. Né-n-shezigh-e. **Sambaa**  
 FUT-1SG.S-play-SUBJ  
 ‘I will play.’ (Riedel 2009:34)

What should we conclude from this mixed evidence? Our conclusion is that, although stories can be told that make their diagnostics not implausible, the logic of Nevins’s and Preminger’s tests is not completely compelling. For example, it makes sense that, if subject agreement is associated syntactically with T, different tense values *can* condition different allomorphs of subject agreement. But it also makes sense that, since object agreement is associated syntactically with a different head (*v*), it might be spelled out the same way regardless of the features on T. Similarly, there is a clear logic to Preminger’s diagnostic, but it becomes muddled if one realizes that a paradigm could also have a special null form which is used as the default, distinct from any overt third person form. This might be especially common for object agreement, since most languages have only a few predicates (if any) that do not have a subject, but almost all have many predicates that do not have an object. There is thus a clear functional reason why it is worth a language’s while to have a special null default for when object agreement fails but not for it to have one for when subject agreement fails. Thus both Nevins’s and Preminger’s diagnostics may be tendencies rather than solid implications, and they may be picking up on differences between subject agreement and object agreement rather than on the difference between agreement and clitics.

In contrast, we claim that our diagnostic is firmer in that it gets to the heart of what it means for an element to be an agreement morpheme as opposed to a pronoun, and it is grounded in well-established grammatical principles, namely the Crossover Condition and the Binding theory. What does it mean to be a pronominal clitic? It means to be a kind of pronoun, which falls under the same principles of interpretation as other pronouns. And that leads to restrictions on what the clitic can double, as we have shown. If there are no such restrictions, then there is evidence that the OM is not interpreted as a pronoun (unless there is a relevant difference in structure, as in Sect. 4.3), so there is no reason to call it a pronoun. Then it is better to call it agreement, since it has phi-features but makes no contribution to the interpretation. That is why we think our diagnostic is better. When all the diagnostics converge, as in Amharic, there is no problem. But when they diverge, as in Burushaski and Sambaa, one needs to make choices. Then it is better to have a small set of theoretically well-grounded diagnostics that go to the heart of the matter than to have a larger set of merely plausible diagnostics that can give conflicting results.

## 7 Conclusion

In this article, we have investigated previously unexplained restrictions on object markers in Amharic: they cannot double quantified DPs, anaphoric DPs, or DPs containing a bound variable. Although these restrictions do not naturally follow from

conditions on agreement, specificity, or object shift, we showed that they can be derived from well-known principles concerning the interpretation of pronouns—the Weak Crossover condition and the Binding theory—as long as these conditions apply to OM as elements that are interpreted as pronouns referentially dependent on the DP they double at LF. Our analysis also extends to OM that double goal objects and experiencer subjects, and it explains why OM are impossible doubling the theme arguments of passive and unaccusative predicates.

We concluded by suggesting that our analysis might provide a powerful diagnostic for distinguishing between pronominal clitic doubling and object agreement, thus addressing an issue that has puzzled linguists for a long time. If an OM can appear with quantified DPs, anaphoric DPs, and DPs containing a bound variable (and the DP is structurally lower than the position of the OM), then it is agreement; if it is systematically ruled out with such DPs, then it is a pronominal clitic, since there is evidence that grammatical principles see it as a pronoun. With this in mind, we put our Amharic results in a broader cross-linguistic context, briefly comparing clitic doubling in Amharic with Spanish, Greek, and Bulgarian, and contrasting it with object agreement in Samba and Burushaski. Next steps for future research would be to develop and test the cross-linguistic predictions of our approach, and to use the diagnostic to refine typological generalizations about what agreement can and cannot do.

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