Abstract: Controversy has plagued the question of whether “object markers” (OMs) attached to the verb that vary for person, number, and gender are pronouns cliticized to the verb or realizations of agreement. Beginning with data from Amharic, we develop a reliable and consistent diagnostic for resolving this question. Specifically, we claim that OMs should be analyzed as clitic pronouns if and only if 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—once the OM is taken to be a pronoun at LF. These OMs are formed in the syntactic derivation by first moving an object DP to Spec vP (object shift) and then applying a novel syntactic operation Reduce, which replaces DP with its D head. We give independent motivation for Reduce, showing that it also accounts for an unusual Amharic construction in which PPs are doubled by morphologically complex clitics. Finally, we show that previous diagnostics give conflicting results, and we consider some typological implications of our proposal, confirming that both object clitics and object agreement do exist in languages of the world, and discussing why clitic doubling seems to be more common with objects than with subjects.

Keywords: Amharic, clitic doubling, agreement, Weak crossover, Reduce, clitics

1. Introduction

It is something of an embarrassment that generative linguistics has had such a hard time distinguishing pure agreement from clitic doubling. Conceptually the two analyses in their simplest forms are usually very different, one focusing on (e.g.) the process of Agree, and the other on the distinct process of Move as the principal explanatory engine (although hybrid analyses that combine the two also exist). It is troubling, then, that there has been so little consensus as to what data will tell us which analysis is correct for a given construction in a given language. In pessimistic moods, this could undermine our confidence that linguistics is an empirical pursuit, in which theoretical questions can be resolved by empirical observations. It also stands to reason that we will not be able to settle questions about which properties of Agree (or Move) are universal and which are open to parametric variation until we can reliably distinguish true agreement from clitic doubling in a wide range of languages. For example, we will not be able to tell whether languages allow more than one true agreement per clause, which heads are allowed to undergo Agree (v as well as T?), whether a language having object agreement necessarily implies that it also has subject agreement (can v agree without T doing so?), whether exceptions to the Person-Case Constraint are possible in the domain of agreement or not, and so on.

The challenge exists in many languages, and can be illustrated in Amharic (a Semitic language spoken in Ethiopia) as well as any. (1a) shows an ordinary transitive clause, with the object as a separate phrase before the verb, as expected given that Amharic is a rather uniform head final languages (with the apparent exception of Ps; see Baker and Kramer 2014a). In contrast, (1b) is the way to express a weak, unstressed pronoun as object in Amharic. There are two crucial differences with (1b): the morpheme /äw/ expressing ‘it’/‘he’ comes after the verb ‘see,’ not before it, and it forms a phonological unit with ‘see’.

\[1a\] ordinary transitive clause

\[1b\] weak, unstressed pronoun as object in Amharic
(1) a. Lämma  \textit{wiffa-w-in} ayy-ä.
   Lemma.M dog-DEF.M-ACC see.PF-3MS.S
   Lemma saw the dog.\textsuperscript{1}

   b. Lämma ayy-äw.
   Lemma.M see.PF(3MS.S)-3MS.O
   Lemma saw it/him.\textsuperscript{2}

   c. Lämma  \textit{wiffa-w-in} ayy-äw.
   Lemma.M dog-DEF.M-ACC see.PF(3MS.S)-3MS.O
   Lemma saw the dog.

As a point of terminology, we call elements like /äw/ in (1b) object markers (OMs, a term taken from Bantu linguistics), so as not to prejudge whether it is a realization of agreement or a pronoun (clitic).

Amharic is analogous in this respect to the much-discussed case of pronouns in French and many other Indo-European (I-E) languages, as seen in (2a) versus (2b), with the predictable difference that normal objects are after the verb in French (it being head-initial), while weak pronouns are before it.

(2) a. Marie conna\^{i}t mon frère. (French, Kayne 1975:66)
   Marie knows my brother

   b. Marie les-conna\^{i}t.
   Marie them-knows

   c. Maria los-conoce a los hombres. (Colloquial Chilean Spanish; H. Campos, p.c.)
   Maria them-knows (to) the men
   ‘Maria knows the men.’

Focusing on minimal pairs, then, it is plausible to think of (1b) and (2b) as being derived from a source like (1a) and (2a) by way of some kind of “pronoun movement”, as in Kayne’s (1975) classic analysis and many others since. In the current theoretical context, this could be conceived of as either DP movement (a type of phrasal movement), or D-movement (a type of head movement), or some kind of combination. Let us call any analysis along these broad lines a \textit{cliticization} analysis.

But of course (1ab) and (2ab) are not the whole paradigm. (2c) shows that the OM on the verb and a full DP in (what is apparently) the object position can co-occur—not in all languages (not in French or Italian), but in some, including some dialects of Spanish (also Romanian, Greek, Bulgarian, etc.). (1c) shows that this is also clearly possible in Amharic. One important question is whether the full DP is really in the normal direct object position, or whether it has been dislocated, because there are languages that allow Left- and/or Right-dislocation that do not allow true clitic doubling (e.g., Italian). But good evidence has been given that the full DP is in the clause internal object position in VO languages like Greek (Anagnostopoulou 1994, 1999:764-768) and Bulgarian (Harizanov 2014; but see Krapova and


\textsuperscript{2} Third person masculine singular agreement (ã) is deleted by a regular process of hiatus when it is followed by any vowel-initial suffix. In such cases, we still gloss it and place it in parentheses, following Baker 2012a.
Cinque 2008 for a different view). It is not easy to replicate the best of these arguments in Amharic because it is SOV, but the object in examples like (1a) gives every appearance of being able to be in a normal object position in this language too. For example, the object in (1c) follows the subject just as it does in (1a), and the two sentences can be pronounced with what is impressionistically the same smooth intonation contour—i.e., no prosodic break, as exists between a dislocated DP and the rest of the clause in many languages. Full DPs doubled by an OM can also follow adverbs, even ones that are very low in the Cinque hierarchy (Cinque 1999):

(3) Lämma ahunimm wiffa-w-in y-ay-äw-al.
Lemma.M still dog-DEF.M-ACC 3MS.S-see-3MS.O-AUX(3MS.S)
‘Lemma still sees the dog.’

We thus assume that the full DP in examples like this are in situ in the object position, pending a more fine-grained analysis of word order in Amharic.

Examples like (1c) and (3) thus seem problematic for the simplest cliticization accounts. Rather, they suggest an agreement account, in which these examples have a functional head (presumably $v$) that agrees with the direct object—a possibility that is anyway believed to hold covertly even in languages that lack overt object agreement, like English, in Chomsky (1986, 2000) and related work. From this perspective, (1b) falls into place, not as an instance of pronoun movement, but as pro-drop: a phonologically null pronoun in the object position is licensed (somehow) by the presence of rich agreement on the verb. For an agreement account, the most problematic example in (1) is (1a), because it suggests that agreement with objects is somehow optional in Amharic, and agreement is normally taken to be obligatory wherever possible, as agreement with subjects is in many languages, including Amharic. But there are various ways in which this anomaly might be addressed (see Section 2.1 below).

But just as an agreement-based account can be patched to include (1a), so a cliticization-based account can be patched to include clitic doubling in (1c). Various proposals exist in the literature about exactly how to do this. The one that we favor is sketched in preliminary fashion in (4); this is based on Harizanov (2014) and Kramer (2014), who develop ideas pioneered by Matushansky (2006). The idea is that first the direct object moves to a clause-medial specifier position, for concreteness Spec $vP$ ((4b)). This is essentially the same sort of movement that one sees more transparently in some Germanic languages, called Object Shift. Then the higher copy of the DP object is reduced to its $D$ head ((4c)). We take this Reduce operation to be distinct from, but akin to, the normal deletion of material in copies: most of the DP deletes, but its head does not. This reduction of the higher copy in the chain bleeds the reduction/deletion of the lower copy. Then the reduced head cliticizes to the verb by an operation we call Spec-Head Merge, as in (4d). At PF it is spelled out as –äw in Amharic, los in Spanish, and so on.

(4) a. [TP Lämma [sp [VP [DP D [NP dog]] see ] v] T] \rightarrow Move=copy
b. [TP Lämma [sp [DP D [NP dog]] [VP [DP D [NP dog]] see ] v] T] \rightarrow Reduce
c. [TP Lämma [sp [D] [VP [DP D [NP dog]] see ] v] T] \rightarrow Spec-Head Merge
d. [TP Lämma [sp [D] [VP [DP D [NP dog]] see ] v+D] T]

One can debate whether Move, Reduce, and Spec-Head Merge are separate processes or one complex process; previous work for example conflates the last two. However, they are at least logically distinct, and indeed the representation like (4c), where Reduce has applied but Spec-Head Merge has not will be important to our account. We return to flesh out and justify the details in Section 3 below.

The upshot of this brief overview, then, is that there has been a long-standing stalemate in the debate between agreement analyses and cliticization analyses of paradigms like (1) and (2). Each handles

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3 It is possible to have orders like Object-Subject-Verb+OM in Amharic. These are plausibly due to clitic left dislocation (or scrambling), so that probably does exist in Amharic, but it is not the focus here. Eilam (2009) proposes that all Amharic doubled objects have been clitic left dislocated, but data like (3) are evidence against this.
part of the paradigm very easily and intuitively, and both can be refined so as to handle the more problematic data that gives prima facie motivation to the alternative account. And it is a shame that there is such a stalemate, undermining our sense that theoretical controversies can be resolved empirically, and inhibiting our ability to delimit theoretically the exact range of agreement and movement phenomena.

In fact, there is not much doubt that Amharic should be treated as a case of clitic doubling, not simply agreement. This is settled by Kramer (2014), who shows that OMs in Amharic consistently behave like clitics for many diagnostics that have been proposed and widely used. However, many of those diagnostics are not so well-understood, in the sense that we do not know why they hold, and hence how reliable they are. This becomes crucial when we want to apply the results typologically to other languages, where the diagnostics clearly do not all point to the same result (e.g., Burushaski and Sambaa, discussed in Section 6). Which then should we trust in such conflicts?

One class of data that (we argue) is crucial for resolving this question is in (5). This shows that there are a range of DPs that can function as direct objects in Amharic which cannot be doubled by an OM. These are what we can informally call “less than fully referential” nominals—a class that includes nonspecific indefinite NPs ((5a)), interrogative NPs ((5b)), universally quantified NPs ((5c)), and reflexive anaphors ((5d)), among others.

(5) a. Lämma wiʃʃā y-ay-all (*y-ay-aw-all)
   
   Lemma.M  dog.M  3MS.S-see-AUX.3MS.S  3MS.S-see-3MS.O-AUX.3MS.S
   ‘Lemma sees a dog.’

   b. Mann-in  ayy-ij?  (?*ayy-ij-iv)
   who.M-ACC see.PF-2FS.S see.PF-2FS.S-3MS.O
   ‘Who did you (feminine) see?’

   c. Lämma hullu-n-imm sāw ayy-ā. (*ayy-ā)
   Lemma.M  every-ACC-FOC person see.PF-3MS.S see.PF(3MS.S)-3MS.O
   ‘Lemma saw everyone.’

   d. Lämma ras-u-n gāddāl-ā. (*gāddāl-ā)
   Lemma.M  self-his-ACC kill-3MS.S kill(3MS.S)-3MS.O
   ‘Lemma killed himself.’

That some such restrictions exist in some languages is, of course, well-known (especially for (5a)), but we believe that the contours of the phenomenon have not been accurately identified, and that the phenomenon has not been properly interpreted. We claim that (at least some of) the data in (5) is quite mysterious from a pure Agree perspective, whereas it can be explained in terms of familiar grammatical conditions if we adopt a clitic-doubling analysis along the lines of (4). The crucial novel assumption is that the clitic D in Spec vP in (4c) is interpreted as a pronoun at LF, distinct from the doubled DP. Once we make this assumption, the badness of (5b,c) follows from the Weak Crossover Condition, and the badness of (5d) follows from Condition B of the Binding theory. We conclude from this that any language which has restrictions like those in (5) has clitic doubling, not agreement, because there is real explanatory force to saying that there is a clitic (weak pronoun) in the structure. Conversely, any languages in which restrictions like (5) do not hold do not have a pronoun in the grammatical representation in addition to the DP, by parity of reasoning; those are true agreement languages. In this, we aspire to replace a set of vaguely understood diagnostics that can give conflicting results with a sharp and better-understood diagnostic that gets directly at the essential conceptual difference between clitic-doubling and agreement—namely, the fact that only the first one has a pronominal clitic in it.

If correct, the derivation in (4) and how it is interpreted at LF has potentially important theoretical consequences. (4c) is the perfect representation to apply the necessary conditions to, because it contains a
pronoun (the D head, unlike (4b)) in an A-type position with a well-defined c-command domain (Spec vP, unlike (4d)). This points to two important conclusions. First, the different links of a chain can be interpreted separately; they are not necessarily just a single unit from the point of view of interpretation. This neatly lines up with the result from the copy theory of movement literature that different links of a chain can be pronounced differently at PF (see e.g., Nunes 2004, Kandybowicz 2007, Bošković and Nunes 2007). Second, Reduce must be a true syntactic operation, not simply a PF one, as its predecessors (like m-merger) have been taken to be.

To explore the bounds of this novel notion of Reduce, we consider the fact that Amharic also has “doubling” paradigms like (6). This is parallel to (1) in many respects, except that what is doubled seems to be a PP rather than a DP, and what doubles it on the verb seems to be bimorphemic, consisting of a P-like thing as well as a D-like thing.

(6) a. dañña-w lä-Aster färräd-ä.
   judge-DEF.M for-Aster.F judge.PF-3MS.S
   ‘The judge judged in Aster’s favor.’ (Amberber 1997:4, (10a))

   b. dañña-w färräd-ä-ll-at.
   judge-DEF.M judge.PF-3MS.S-LL-3FS.O
   ‘The judge judged in her favor.’

   c. dañña-w lä-Aster färräd-ä-ll-at.
   judge-DEF.M for-Aster.F judge.PF-3MS.S-LL-3FS.O
   ‘The judge judged in Aster’s favor.’ (Amberber 1997:4, (10a))

This would be a rather odd kind of “object agreement”, with the verb agreeing with both the P and its object. But we claim that it is not such a strange kind of Move-and-Reduce. Indeed, we claim that it provides evidence about exactly how our novel syntactic operation of Reduce should be stated.

Our discussion develops in the following stages. In Section 2, we explain how the incompatibility of OMs and nonreferential objects follows from the OM being interpreted as a pronoun at LF. Section 3 contains the nuts and bolts of our clitic doubling analysis, and Section 4 supports the analysis using the more complex and unusual type of object marking shown in (6). Section 5 shows how our analysis can account for the fact that experiencer arguments are not subject to referentiality restrictions, even when they are doubled by an OM. Section 6 takes a cross-linguistic perspective, showing how the (in)compatibility of OMs and nonreferential objects is an especially effective diagnostic for clitic doubling, using data from Burushaski (a Pakistani isolate) and Sambaa (Bantu). Section 7 concludes.

2. Explaining the incompatibility of OMs with nonreferential objects

2.1 The limits of an agreement account

The prima facie importance of examples like (5) is that there is no obvious reason why it should not be possible for v (or the equivalent) to agree with the object in such examples. One cannot, for example, say that they fail to participate in Agree because they lack the relevant features, because these nominals clearly do have phi-features. Indeed, such nominals are perfectly good participants in Agree relationships when they appear in subject position, where they trigger subject agreement on the verb, as seen in (7).

4 We cannot, however, show this for a reflexive anaphor like ras-u; such anaphors cannot be used in subject position because they have no possible antecedent in that position.
(7)  

a. Hullu-mm set mä’t’t'-at[tʃ].
    every-FOC woman.F come.PF-3FS.S
    ‘Every woman came.’

b. Man mä’t’t’a?
    who.M come.PF-3MS.S
    ‘Who came?’ (Leslau 1995:68)

Why then should object agreement be any different from subject agreement in this respect? Of course, it has been thought for a long time that some instances of agreement—especially object agreement—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. It has been suggested that [+specific] may be another of the features that can be present on nominals and involved in agreement (see e.g., Suñer 1988, Sportiche 1996:264). As a placeholder for a future account, this is OK, but as an official theory we consider it unpromising. First, whatever specificity is, it is primarily a semantic or pragmatic notion, not merely a morphosyntactic feature—indeed we don’t think that it is common for languages to mark such a feature systematically on nominals themselves (e.g., a book is ambiguous between specific and nonspecific readings in English). Second, while a specificity condition might rule out (5a,b), it is not clear that it would extend to (5c) and especially (5d) (without rendering the term “specificity” vacuous). Third, it is far from obvious along these lines why specificity should matter for object agreement in Amharic (and other languages) but not for subject agreement.

A more promising agreement-based theory that is responsive to at least some of these facts is to make 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) assumes such a view for certain Bantu languages, and Baker (2012a) uses it for Amharic. This seems more promising because the first idea is independently motivated by studies of object shift in Germanic languages in the rich tradition started by Diesing (1992). Thus, the visible difference in position in the DPs in (8a) and (8b) in Dutch seems attractively similar to the difference between (5a) and (1c) in Amharic (see Sportiche 1996: sec 7 for one early connection between clitic doubling in Romance and object shift/scrambling in Dutch).

(8)  

a. … dat Jan mijn huis waarschijnlijk -- zal kopen.
    that Jan my house probably -- will buy.
    ‘that Jan will probably buy my house’ (Broekhuis 2008:218)

b. *… dat Jan een huis waarschijnlijk -- zal kopen.
    that Jan a house probably will buy.
    ‘that Jan will probably buy a house’
    (Broekhuis 2008:218)
    (OK is: … waarschijnlijk een huis zal kopen)

So this view is better grounded theoretically than a simple Agree account. Indeed, we accept the idea that structures with OMs crucially involve object shift, as sketched in (4a,b), and nonspecific indefinites cannot undergo this sort of movement. This can account for the badness of (5a). But on a closer look we discover that the account is not general enough to be complete. In particular, it does not carry over to examples with universal quantifiers like (5c), or examples with reflexive anaphors like (5d). The reason is

However, developing such an approach does pose some nontrivial issues for the theory of Agree, in that one needs to say why v cannot agree with DP unless DP moves out of VP, since v agreeing into VP is normally taken to be possible. (For Baker (2008), this motivates saying that Agree must be upward in certain languages, for example.)
simply that analogous DPs can undergo object shift in languages like Icelandic (G. Harðarson, p.c.) and Dutch; examples are in (9), with two potential landing sites for the shifted DP in Icelandic in (9)a.

(9)  a. Sámur leigði {hverja spólu} eflaust {hverja spólu} oft
    Sam rented {each tape} doubtlessly {each tape} often.
    ‘Sam probably rented each video tape often.’
    (G. Harðarson, p.c.; see also Broekhuis 2008:222 for Dutch)

b. ... dat Hans zichzelf waarschijnlijk-- heeft bekritiseerd
   that Hans himself probably has criticized
   ‘…that Hans has probably criticized himself.’ (Broekhuis, p.c.)

Therefore, one cannot explain the badness of OMs doubling DPs like these simply by saying that they cannot undergo object shift. Rather there must be some additional condition that rules out such examples in a language with OMs that does not apply in a language with object shift only. So the Agree-based account is incomplete in this respect, and there is room for a clitic doubling account to do better.

2.2 OMs and Weak Crossover

Our thesis is that the clitic-doubling account sketched in (4) can easily fill this explanatory gap, once it takes on board the additional assumption that the D in Spec vP at the crucial stage in (4c), repeated as (10), is interpreted as a normal pronoun at LF.

(10)  [TP Lämma [\(v\) [D] [\(v\) [DP D [dog]] see ] \(v\) [T]]]

After all, we know that the situations in which a pronoun can be interpreted as bound by a quantifier are rather restricted, significantly more restricted than when it can be interpreted as referring to a definite DP. This is the well-known Weak Crossover phenomenon, seen in examples like (11). Throughout, we indicate covaluation/referential dependence with underlining.

(11)  a. His mother loves John.

b. ?*His mother loves everyone.

The proposal, then, is to derive the contrast between (1c) and (5c), given schematically with English-like word order in (12), from the same condition.\(^6\)

(12)  a. Mary him-loves John

b. ??Mary him-loves everyone.

On the informal, lingua franca, working-syntax version of weak crossover, this result follows essentially immediately. This says roughly that “a pronoun cannot be bound by a quantifier unless it is c-commanded by a trace (in A-position) of that quantifier.”\(^7\) After QR, (12b) looks roughly like (13).

(13)  [TP everyone [TP Mary [\(v\) him \(v\) [\(v\) loves <everyone*> ]]]]

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\(^6\) In deriving conditions on clitic doubling from WCO in this way, we are reintroducing and expanding on an insightful idea of Rizzi’s (1986) about why quantified NPs cannot undergo CLLD in Italian and French.

\(^7\) See Büring (2005) for a contemporary way of building this condition into the semantic interpretation scheme, where wh-words (and presumably moved quantifiers) and other nominals can both introduce lambda-extraction to bind variables, but the two kinds of operators are kept distinct, so that a quantifier cannot directly bind a pronoun.
Here the D in Spec vP counts as a pronoun, and it is in the scope of ‘everyone’, so the interpretation being aimed for is semantically conceivable. However, the trace of the quantifier is inside VP, where it does not c-command the D; on the contrary, D c-commands the trace of the quantifier. Hence, (13) violates the familiar condition (indeed, it is actually a case of strong crossover). In contrast, (12a) does not have a quantifier, so it is not at risk of violating this condition, just as (11a) is not (although we will have to say why it does not violate Condition C; see Section 2.4 below).

This result follows almost as readily on more recent and refined approaches to Weak Crossover. To illustrate, we consider the version in Safir (2004b). According to Safir, the following two principles are the crucial ones for explaining (11a) versus (11b).

(14) Quantifier Dependency Condition (QDC):  
X can be interpreted as dependent on a quantified antecedent Y only if X is a q-variable of Y, or X is dependent on a q-variable of Y, or there is no q-variable of Y.

(15) Independence Principle:  
If X depends on Y, then X (or an NP containing X) cannot c-command Y.

We want to interpret the clitic D ‘him’ as depending on the quantified antecedent ‘everyone’ adjoined to TP in (13), in accordance with (14). To do this, we need to decide what is a q-variable of ‘everyone’. There are two chains here: the one produced by object-shift-plus Reduce consisting of ‘him’ and ‘everyone*’, and the one produced by QR, consisting of ‘everyone’ and ‘everyone*’. We assume that the two chains are parallel but independent: ‘him’ does not count as a q-variable of ‘everyone’. (Part of the reason for this might be that the distinctively quantificational properties of the DP are lost on the higher copy of the object shift chain in Spec vP as an effect of Reduce. Therefore the higher copy of this chain cannot undergo QR; only the lower one can.) ‘Everyone*’ does count as a q-variable for ‘everyone’, however, in the normal way. Therefore Y= ‘everyone’ has a q-variable, and X= ‘him’ is not it. Therefore X= ‘him’ can be interpreted as dependent on Y= ‘everyone’ only if X is dependent on Y’s only q-variable, namely ‘everyone*’. Now the Independence Principle in (15) steps in to say that this is impossible, because ‘him’ c-commands the q-variable ‘everyone*’. So (12b) is ruled out by these more refined principles on par with (11b), as desired.8

Weak crossover is of course a rather general condition, holding not just for universal quantifiers, but for quantifiers more generally. For example, it also rules out examples like (16a), where a pronoun tries to be bound by an interrogative phrase (indeed, this was Postal’s (1971) original case, motivating the term ‘crossover’). In the same way, it can rule out clitic-doubling structures like (16b) with overt wh-movement, and (16c), without overt wh-movement. This is desirable, since examples like (16c) are indeed ruled out in Amharic, as seen in (5b).

(16) a. ?*Who does his mother love?  
b. ?*Who does Mary him-love?  
c. ?*Mary him-love who?

Weak crossover effects are also found with negative quantifiers like ‘nobody’ in English (?*His accountant loves nobody). It is not clear that Amharic has an exact analog of nobody in English, but the functional equivalent is a word like mannimm, marked for focus, together with negation on the verb. Such expressions can be used as direct objects, but they too cannot be doubled by an OM.

8 Technically this doesn’t yet rule out (12b); it only says that ‘him’ cannot have the value of ‘everyone’. It is conceivable that it could still refer deictically, or to some other antecedent in discourse. However, we assume that this interpretation is also deviant, because then the clitic D ‘him’ is not properly related to any thematic role in the sentence—i.e. ‘Mary him-likes everyone’ is then out for the same reason that ‘Mary likes everyone him’ is out in English. Again, however, there is more to say about the grammatical (12a) in comparison with this; see Section 2.4.
In contrast, negatively quantified DPs can undergo object shift in Dutch and Icelandic (Broekhuis 2008, p.c.; G. Harðarson, p.c.). Thus, a whole family of examples that cannot necessarily be ruled out by restrictions on object shift or by restrictions on Agree can be ruled out by our hypothesis that the OM is a pronoun, and as such is subject to weak crossover.

However, it is also well-known that what exactly counts as a quantified antecedent for purposes of a WCO condition like (14) can be a subtle matter, with some elements falling under the condition and other superficially similar elements not—the latter being instances of what Lasnik and Stowell (1991) memorably called “weakest crossover”. While the ultimate account of what makes something a quantifier in this 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 WCO or weakest crossover in a language like English should also affect whether that type of DP can undergo clitic doubling in Amharic. For example, a distinction needs to be drawn between 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 WCO violations (see (11b)), whereas the violation can be weak or absent with the plural DPs:

(18) Their incautious statements ended up ruining all my friends.  (Cinque 1990:11, Safir 2015)

The expectation for Amharic, then, is that plural DPs with a quantifier like ‘all’ can be doubled by a plural OM, even though singular DPs with a quantifier like ‘every’ or ‘each’ cannot be. This is true, as shown in (19), with the interesting qualification that there is no lexical distinction between ‘every’ and ‘all’ in Amharic; both are translated as *hullu*.

(19) a. Almaz hullu-n-imm tämari agäññ-atʃʃtʃ(*-iw)
   Almaz every-ACC-FOC student meet.PF-3FS.S(-(3MS.O)
   ‘Almaz met every student.’

b. Almaz hullu-n tämari-wotʃʃ agäññ-ätʃʃtʃ-ʃʃatʃʃʃʃw
   Almaz all-ACC student-PL meet.PF-3FS.S-3PL.O
   ‘Almaz met all the students.’

Presumably either ‘all N-PL’ does not undergo QR at all, or it does undergo something like QR, but its trace does not count as a q-variable for purposes of the QDC in (14) (cf. Safir 2004b:87).

We believe that an observation of Kramer’s (2014), to the effect that OMs in Amharic cannot double a simple question word like ‘who’ or ‘what’ but can double a D-linked wh-word like ‘which N’ (see (20)), can be explained in similar terms (see Dobrovie-Sorin 1990 on a similar contrast in Romanian).

(20) a. Girma tinant männ-in ayy-ä(*-w)
   Girma.M yesterday who.M-ACC see.PF-3MS.S(*-3MS.O)
   ‘Who did Girma see yesterday? (Kramer 2014:601)
b. Almaz tinant yätiñnaw-in tämari ayy-ätt[ʃ]-iw?
   Almaz.F yesterday which.M-ACC student see.PF-3FS.S-3MS.O
   ‘Which student did Almaz see yesterday?’ (Kramer 2014:601)

We explain this contrast also by saying that canonical question words count as true quantifiers for (14), but D-linked ones do not (always). Indeed, it has been observed that WCO effects can be weaker or absent with which N than with who in English; for example, Wasow (1979:163) gives (21) as significantly better than examples like (16a) (but see Safir (2015) on variability in this data).

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

So this range of data supports our claim that the restrictions on clitic doubling in Amharic follow from the same principles that give WCO patterns in languages like English.9

2.3 OMs and reflexivity

In Amharic, an OM is also bad as a double for a reflexive anaphor, as shown in (5d), and again in (22)a. In contrast, an OM can double a normal pronoun ((22)c), and the reflexive is fine as the object if there is no OM double ((22)b).

(22)  a. *Lämma ras-u-n gäddäl-iw.
     Lemma.M head.M-his-ACC kill.PF(3MS.S)-3MS.O
     Lemma killed himself.

     b. Lämma ras-u-n gäddäl-à
     Lemma.M head.M-his-ACC kill.PF-3MS.S
     ‘Lemma killed himself.’

     c. Lämma issu-n gäddäl-iw
     Lemma.M he-ACC kill(3MS.S)-3MS.O
     ‘Lemma killed him.’

These are not cases of Weak Crossover, but they do yield readily, we claim, to our general strategy of taking the OM to be a D interpreted as a pronoun at LF. Another condition or set of conditions that pronouns are subject to is the Binding theory. In particular, since the clitic D has phi-features, but no intrinsic descriptive content and no special reflexive feature (it is used in many nonreflexive sentences, including (1)b), it qualifies as a pronoun, and should be subject to Condition B of a classically framed, Chomsky (1981)-style binding theory. A lingua franca version of this is (23).

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9 Other types of DPs that fall somewhere between clearly referential DPs like ‘Mary’ and ‘the woman’ and clearly quantificational DPs like ‘every woman’, ‘no woman’ and ‘who’ on an informal cline of intrinsic referentiality are generic NPs (‘women’) and specific indefinite NPs (‘a certain woman’, one reading of ‘two women’). In fact, there is at least a strong tendency for these not to be clitic-doubled in Amharic.

A classic instance of weakest crossover is that pronouns can be bound by operators in cleft constructions and nonrestrictive relative clauses, although not in questions. Our prediction then is that OMs should be possible doubling object gaps in clefts and nonrestrictive relatives in Amharic. This is clearly true; see Leslau 1995:85ff and 105ff. for examples. However, OMs double object gaps even in restrictive relatives in Amharic, so these OMs might be resumptive pronouns rather than clitic doubles of a null operator in a movement construction. We leave this open, pending a full analysis of relative clauses in Amharic (see Demeke 2001 for some preliminary analysis).
A pronoun cannot be interpreted as being dependent on another DP that c-commands it in the same clause.

This is clearly violated in (22)a on the intended interpretation: the clitic D ‘him’ is dependent on the subject of the clause ‘Lemma’ (unlike in (22)c), giving a violation. In contrast, there is no such D in (22)b to rule it out, so the undoubled anaphor can take ‘Lemma’ as its subject with no problem.

Again, we should perhaps show that this result follows also on the best current versions of binding theory. We do not attempt this in detail, in part because it is not so obvious which more recent version(s) to choose. But we do not foresee any serious details in updating. For example, in the Reflexivity framework of Reinhart and Reuland (1993) conditions A and B are formulated by saying that a clause has a reflexive interpretation if and only if its predicate is reflexive-marked by a verbal morpheme or by ‘self’ marking on an argument of the verb. In these terms, it seems highly reasonable to say that an OM like ‘him’ counts as a non-reflexive marker, contradicting any reflexive marking one might have gotten from there being a reflexive anaphor in the object position. Then (22)a has a reflexive interpretation but no reflexive marking (or inconsistent marking), which is a violation. Another contender is Safir’s (2004a) competition-based binding theory, which avoids positing a distinct Condition B; rather, he says that a pronoun cannot have a given DP as an antecedent if it is possible to use a “less dependent” form such as an anaphor in the same position to get the same interpretation. In Safir’s terms, we could say that ‘him … himself’ in (22)a counts as a kind of discontinuous anaphoric strategy, and as such it is in direct competition with ‘(Ø…)himself’ in (22)b. (22)b is well-formed, has the intended interpretation, and its form of anaphora is intrinsically less dependent than that in (22a) (assuming that the presence of ‘him’ in combination with the ‘self’ form makes it less dependent, just as pronoun+self forms are less dependent than self+self forms in Safir’s system.) Therefore, (22a) is bad, blocked by (22b).

In short, we do not take a firm stand on what version of Conditions A and B of the Binding Theory is best, but we do assert that OM-doubling of a reflexive anaphor is (or should be) ruled out by whatever version ultimately wins. We see, then, that more than one condition applies to pronouns at LF, and each of these conditions plays a role in explaining why some examples of OM-doubling are ruled out.

2.4 OMs and Condition C

Now, however, we must be careful that our proposal does not go too far, and rule out virtually any instance of OM-doubling. (1c) showed that an OM can double a simple definite DP; similarly it can double a proper name, as in (24).

(24) Lämma Aster-in ayy-at
     Lemma.M Aster.F-ACC see.PF(3MS.S)-3FS.O
     ‘Lemma saw Aster.’

OM doubling is also possible with simple pronouns (see (22c)), common nouns with possessors (see (30)) and common nouns with a demonstrative—basically the full range of definite and fully referential DPs found in Amharic.

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10 Once again, another step is needed to make sure that (22a) is ruled out not just on the intended interpretation, but on any interpretation. As in note 8, interpreting ‘him’ as referring to something distinct from ‘John’ and ‘himself’ runs afoul of the Theta Criterion, as does ‘John criticized himself him’ in English.

11 Safir himself does not use the possibility of discontinuous anaphoric strategies—and including this in his system may raise technical issues—but plausible putative examples exist in his work on anaphora in (e.g.) Lubukusu.

12 One would expect that OM doubling a reciprocal anaphor is ruled out on similar grounds. However, this prediction cannot be checked in Amharic, because reciprocal verbs include the detransitivizing prefix tā-, and as such do not have direct objects that could be doubled by an OM (see Leslau 1995:61-62, Amberber 2002:70-75).
But now we need to ask why such examples do not violate Condition C of the Binding theory, the classical generalization that a pronoun cannot be understood as coreferential with a normal referring expression that it c-commands. If the OM counts as a pronoun interpreted like other pronouns at LF, then why isn’t the schematic version of (24) in (25a) ruled out for the same reason that (25)b is in English?

(25)  
   a. Lemma her-sees Aster.  
   b. *She loves Aster’s father.

A tempting answer would be that the pronoun in (25)a doesn’t violate Condition C because it is part of the same chain as ‘Aster’ in (25)a (although not in (25)b), so the two automatically co-refer. However, this option is probably not open to us, because we do not want to say that pronouns are automatically OK by virtue of being in a chain with something else (a quantified DP or a reflexive anaphor) for the examples we ruled out in the previous two sections. We are crucially saying that pronouns are interpreted at LF separately from the DPs they are derivationally related to, so it would be cheating to abandon that view now, unless a principled distinction between Condition C and the other conditions can be found.

Rather, we suggest that (24)/(25)a does not violate Condition C simply because there is no such condition at LF. This time it is crucial that we do not stick with a simple lingua-franca (GB-style) version of the relevant condition. There is a robust tradition originating with Reinhart (1983) that Condition C is really a pragmatic effect, not a syntactic condition in its own right, and it can be eliminated in terms of other conditions, like those on bound variable anaphora; see Safir (2004a, 2015) and Büring (2005) for recent versions and much discussion. In these terms, (25)b is not used to say that Aster exhibits the virtue of filial piety because there is a better way to say this, namely (26), where a pronoun is in the lower position rather than the independently referring DP.

(26)  
   Aster/she loves her father.

If a theory along these lines is correct, we can, without committing ourselves to too many technical details, ask what would be involved in saying that (25)a is ruled out on grounds analogous to (25)b. One thing that such a claim would have to include is another example that is closely parallel to (25)a and that has the desired interpretation, which can block (25)a the way that (25)b is blocked by (26). But what would that competing structure look like? It may be something like (27), created from (25)a by switching the positions of the name and the pronoun, as (26) does for (25)b.

(27)  
   Lemma Aster-loves her.

But no structure like (27) exists in Amharic, and we know approximately why. The doubling structures are not simply formed freely by external merge; rather, they are formed derivationally, by Move followed by Reduce. (27) then would have to be the result of doing the same kind of movement that we saw in (4) (object shift), but with the tail of the chain reducing to a pronoun rather than the head of the chain. But this is impossible, at least in the class of languages we are studying here: Reduce is a governed operation; it does not happen freely, but is triggered by the particular sort of EPP feature that v has, one that allows movement in principle but allows only the smallest possible element to sit in its Spec (see Section 3.3 for discussion). If that is right, then no structure like (27) can be formed by the derivational engine of syntax. Then (25)a does not have the kind of competition from something like (27) that (25)b has from (26). Therefore, it is plausible to say that (25)a on the intended interpretation is not blocked pragmatically the way that (25)b is. So that is what we say. Crucially the Weak Crossover Principle is not a pragmatic principle, but a syntactic one, as is widely acknowledged, and Condition B is either not pragmatic, or (better maybe) it loses its competition to something that can be generated, namely (22b).

While we have the issue of how the examples are derived in mind, we can clean up another loose end in our account. We have mentioned (in notes 8 and 10) that if a clitic D is barred from being interpreted as referentially dependent on something else in the structure (the object) by the Weak
Crossover Condition or Condition B, then the structure is uninterpretable, a violation of the Theta Criterion. But (24)/(25)a does not violate the Theta Criterion. Therefore, it must be enough for a pronoun that is not in a thematic position to be referentially dependent on something else that is (here the object) to satisfy the Theta Criterion. But we do not normally think of mere coreference as being a strong enough relation to save Theta Criterion violations, because examples like (28) are bad:

(28) *John told Mary that Sue will sing him.

Here him is in a non-thematic position (complement of an intransitive verb), and the example is ruled out; the fact that him could be coreferent with the matrix subject does not help here. Why then is (28) out, but not (24)? Our answer is that X being coreferent with Y is in principle enough for X to be licit without a theta-role of its own at LF; the difference is that (24) can be generated syntactically, but (28) cannot be, because a principle like (29) holds.

(29) An argumental DP can only be first-merged into A-position X if X is associated with a theta-role.

(28) violates this condition, but (24) does not, because the pronoun ‘him’ is not first-merged in Spec vP in (24); rather it is created by Move-and-Reduce. Therefore, the possibility of licensing something in nonargument position by mere referential dependence arises only for pronouns that are created derivationally. That something like (29) is descriptively true has been held for a long time. It has rarely been stated as a principle because of the thought that it is made superfluous by Full Interpretation at LF. But now we see that it is not superfluous (for us), so we state it. Nor does (29) seem out of the spirit of recent theorizing, which emphasizes derivational economy that can be evaluated locally, without much “look ahead”— i.e., without waiting for the interfaces to filter egregious generative errors.

2.5 An extension: OMs and nominals that contain a bound variable

Finally, there is one less familiar contrast that our account 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 (30).

(30) Lämma lidʒ-ih-in ayy-āw
     Lemma.M child.M-your.M-ACC see.PF(3MS.S)-3MS.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 (31) with an OM on the verb cannot have the otherwise easily available interpretation that every person x loves x’s own child.13

(31) hullu sāw lidʒ-u-n yi-wādd-(#aw)-all
     Every person child.M-his-ACC 3MS.S-love-(3MS.O)-AUX.3MS.S
     ‘Everyone loves his child.’ (Bad with OM and bound variable anaphora to the subject)

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13 Two of our three consultants clearly get this effect, although one seems not to, and Leslau (1995) has quite a few examples of this type, none of which has an OM. The same effect can be found in clitic doubling constructions in Latin American Spanish, Greek, and Bulgarian, according to our colleagues. ‘His child’ is arguably a type of “novel definite”, of the sort that Anagnostopoulou (1999: sec 3, especially p. 773) shows cannot be clitic-doubled in Greek; however, not all of her “novel definites” resist doubling in Amharic, but only those that are quasi-quantificational in some way. For example, a definite DP that answers a ‘what’ question can be doubled in Amharic.
We want to say that the judgment in (31) is also a sort of weak crossover violation. Although ‘his child’ here is not syntactically a quantifier phrase in terms of its internal structure, it is semantically analogous to a quantified phrase in that the semantic value of [x’s child] ranges over different individuals as the variable x inside it varies over different individuals. In other words, a phrase containing a variable bound by a quantified DP itself counts as a quantified DP in the relevant sense. The same thing can be seen in English, as shown by the paradigm in (32), although the matter is not often discussed.

(32)  
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 (32)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 quite bad, in sharp contrast to the control sentences in (32)b (where the corresponding direct object does not contain a bound variable) and (32)c (where the desired antecedent containing the bound variable c-commands the pronoun her). (32)a then has the quality of a WCO violation, because the object containing a variable bound by a quantifier itself behaves like a quantifier in this respect. Once again, we find a parallelism between how pronouns are interpreted in English and when doubling by an OM is possible in Amharic, as expected given that the OM is not a mere agreement but rather a true pronoun, interpreted as such at LF.

Indeed, both (31) and (32)a follow immediately from Safir’s Independence Principle in (15). Since ‘his child’ and his mother vary in their semantic values, the pronouns ‘him’ and her must truly depend on them in the syntax; there is no chance of ‘him’ or her mimicking the intended interpretation by actually taking some other DP from the context or discourse as its true antecedent. But (15) says that it is impossible for a pronoun or the DP that contains it to c-command something that it is referentially dependent on. Therefore (31) and (32)a are ruled out by (15) (whereas (32)c is not).14

We take this new discovery to be rather important, 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 datum, and does not explain it. For example, there is no reason at all to think that ‘his child’ has different phi-features in (31) from ‘your child’ in (30) such that it cannot trigger third masculine singular agreement on the verb. Nor does an account in terms of object shift extend to (31), 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. (33) is an example from Dutch (Broekhuis, p.c.).

(33) ... 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.’

Rather, 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. It thus increases the diversity of the examples that can be explained by our clitic doubling analysis and not by competing accounts.

14 We thank Ken Safir (p.c.) for discussion. In terms of Büring’s (2005) more semantic approach, the story would go a bit differently. He says that the relevant sentences would be analyzed by an E-type pronoun strategy, in which pronouns can undergo a rule of “pronoun expansion” which replaces them with a variable and a relation taken from the context. In these terms, we might say that the D in Spec vP as result of Reduce cannot be “expanded” in this way, because of the condition that Spec vP cannot contain anything bigger than a head. This approach would have the potentially interesting consequence that the restriction on Spec vP holds at LF, not just derivationally.
2.6 Summary

In this section, we have shown that the restrictions on what objects can be doubled by an OM cannot readily be explained if the OM is simply a realization of ordinary object agreement, even if we assume that object agreement is only possible if it is fed by object shift. In contrast, the restrictions can be explained in terms of well-known principles if we say that the OM is a pronominal clitic, as long as we also say that it is interpreted as a pronoun at LF. Then the observed restrictions follow from the Weak Crossover Condition and Condition B of the Binding Theory (or the equivalent). In contrast, Condition C effects are not found, because Condition C reduces to a pragmatic condition, and the clitic doubling structure does not face the kind of competition needed to trigger an obviation effect. Finally, the Weak Crossover Condition can be used to draw some rather fine distinctions in the data, explaining why true quantifiers cannot be doubled, whereas certain near analogs can be, and extending to explain why definite DPs that contain a bound variable cannot be bound by an OM.  

Hopefully, then, our readers are now convinced that our particular version of clitic doubling sketched in (4) has merit for bringing a rather rich array of data under analysis. If so, they will now be curious how such derivations and representations are possible. We turn next to fleshing out this derivation, and facing the theoretical issues that it raises.

3. The Derivation in Detail

In this section, we begin by walking through the analysis for the base case of an OM associated with a direct object (Sections 3.1 and 3.2), providing motivation for individual components of the analysis and making some comparisons to related proposals. We then identify some important consequences for linguistic theory and typology that follow from our assumptions in Section 3.3.

3.1 OM with direct object: Narrow Syntax

A typical datum is in (34), where the OM doubles the direct object s’ähafiwan ‘the secretary.’

(34) s’ähafi-wa-n i-fällig-at-allä-hu
    secretary-DEF.F-ACC 1S.S-want-3FS.O-AUX-1S.S
    ‘I will look for the secretary.’

We propose that the generation of the OM in sentences like (34) happens in five broad steps.

(35) Step 1: Agree between v and DP
     Step 2: DP moves to Spec vP
     Step 3: DP undergoes Reduce
     Step 4: Reduced DP undergoes Spec-Head Merge to v
     Step 5: The copies of the DP are interpreted/realized at the interfaces

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15 An alternative analysis 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 does not explain all the restrictions (e.g., it leaves open why ‘which NP’ can be doubled but not ‘what;’ see Eilam 2009:224), and it does not fit well with previous research on topics in Amharic (Demeke and Meyer 2007 propose that all topics are at the left periphery, whereas doubled objects can be within the VP; see (3)). In addition, native speaker linguists have reported that adding an OM can result in a contrastive focus interpretation for the doubled object, not a topic interpretation (Haile 1970, Demeke 2003:Ch.4). It is even grammatical to have an OM double a definite DP that is the answer to a wh-question -- a clear case of doubling a focused DP. So, while topics are certainly capable of being doubled by the OM (see note 3), not all doubled objects seem to be topics, so referentiality restrictions probably cannot be derived from the idea that they are.
Before describing each step in more detail, we comment on how this derivation overall compares to influential proposals from the previous literature on clitic doubling. Our view is not radically different from these predecessors, but the differences are not trivial either. For example, we take from Sportiche (1996) the idea that movement to a specifier position, akin to object shift in Germanic, is involved in clitic doubling. However, for Sportiche the movement is to a novel kind of position, the specifier of a clitic phrase, and the clitic itself is base-generated as the head of this phrase. The “big DP” hypothesis of Uriagereka (1995) also uses movement, but he enriches the base structure in a different way, by assuming that the object originally consists of one DP generated inside the projection of another D. As a result, one D can move to join with the verb, while there is still a complete DP with an overt D head left behind in the object position. A drawback to this view is that there is little independent motivation for the existence of such big DPs in other syntactic positions, with a second D head appearing inside the DP itself.

Our proposal is different from these forerunners in two important ways. First, and most importantly, it is different in that the clitic is interpreted as a pronoun distinct from its DP associate at LF. Sportiche and/or Uriagereka-style accounts could probably take this new assumption onboard as a friendly amendment and achieve the same empirical results. Second, we get the fact that clitic doubling structures have two D-like elements—the clitic itself and the D inside its DP associate—not by semi-ad hoc enrichments of the structure, but by the copying that is part and parcel of movement within minimalism. Sportiche and Uriagereka-style proposals both enrich the structure—either the verbal spine (Sportiche) or the internal structure of DP (Uriagereka)—in ways that may not be independently motivated or cross-linguistically valid, so as to get two D-like positions where material can be base-generated (the normal D and a second D or a clitic head; proposals along these lines include Alexiadou and Anagnostopoulou 1997, Anagnostopoulou 1999, Roberts 2010, Nevins 2011, among others). In contrast, (35) gets the fact that there are two D (like) elements directly out of the copying intrinsic to movement, which any cliticization-type account makes use of, by definition. Current theories of how movement chains are realized are somewhat more flexible than before, so that a derivation like (35) possible. And given that it is possible, we consider it an elegant way to get the necessary representations at LF and PF.

The prior theory of cliticization that (35) comes from most directly is Matushansky’s (2006) merger theory, as developed and amended by Harizanov 2014 and Kramer 2014. Our version has two crucial differences. First, Reduce and Spec-Head Merge are taken to be two distinct steps in the derivation (both also distinct from Object Shift). Second, they both happen in the syntax proper, not at PF. These difference are essential so that there will be a D interpreted as a pronoun in Spec vP by LF, such that restrictions on clitic doubling can be explained in terms of the Weak Crossover Condition and Binding theory, in the ways we discussed in Section 2.16

With these comparisons in mind, let us look more closely at the individual parts of the derivation in (35). In (4), we described the first step of the analysis as movement of the DP object to Spec vP. However, in standard minimalism (Chomsky 2000, 2001), movement of an XP to the specifier of a functional head F generally does not occur unless F and XP Agree. Indeed, many recent approaches to clitic doubling have argued that this type of movement in particular is licensed by Agree (see e.g., Béjar and Rezac 2003; Rezac 2004, 2008; Roberts 2010; Nevins 2011; Preminger 2011), and there is good empirical evidence from Amharic that an Agree relation is in fact established between v and DP’s like ‘the secretary’ in (34). This evidence comes from intervention effects: a higher goal for v blocks the OM from being associated with a lower goal, as per the usual locality restrictions on Agree. Such effects with the OM are well-attested in Amharic (Demeke 2003, Eilam 2009, Baker 2012a, Kramer 2014), indicating that v participates in an Agree relation with the DP associate of the OM. For example, when both a goal argument and a theme are present, the OM must be associated with the goal, not the theme, as in (36a).

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16 We have a similar concern about Anagnostopoulou’s (2003) analysis of clitic doubling as movement of the object’s features to v or T. The intuitions that drive her proposal are similar to ours, but our version has the advantage of assigning a well-defined A-position to the clitic in (the vicinity of) Spec vP, which enables us to apply conditions on pronoun interpretation to it at LF. (See the discussion of (43) for an argument that it is not literally the clitic adjoined to the verb that best defines its referential properties, but rather something in approximately Spec vP.)
Similarly, in the context of a source internal argument and a theme internal argument, the OM can only be associated with the source, as shown in (36b).

(36) a. Girma li-Almaz mäs’haf-u-n sătt’-at
   ‘Girma gave the book to Almaz.’ (Kramer 2014:600)

b. Lämma Aster-in gänzäb-u-n särräk’-at.
   ‘Lemma robbed Aster of the money.’ (Baker 2012b:49-50)

Given intervention effects like these, we conclude that there is an Agree relation between v and the OM associate. We take this to be a precondition to the movement of the object DP to Spec vP.

In not allowing an OM to double the theme in the presence of a goal, Amharic seems to be significantly different from many Indo-European languages, which do allow the theme to be doubled by an OM when there is a goal present. (37a) is an example from Greek (Anagnostopoulou 2001).

(37) a. (To) edosa tu Petru to vivlio
   it.ACC gave.1.S.S the.GEN Peter.GEN the.ACC book.ACC
   ‘I gave (it) Peter the book.’ (Anagnostopoulou 2001:15)

b. (*Tin) didaksa ta pedhia tin gramma tiki ton arxion ellinikon
   it.ACC taught.1.S.S the.ACC children.ACC the.ACC grammar the.GEN ancient Greek
   ‘I taught (it) the children the grammar of ancient Greek.’ (Anagnostopoulou 2001:12, 17)

This contrast might make one think that Amharic OMs show a kind locality that is characteristic of Agree, whereas Greek OMs show a different kind of locality because they involve D(P) movement, rather than Agree. However, examples like (37b), also from Anagnostopoulou (2001), show that this would be a wrong conclusion. Anagnostopoulou observes that a small number of verbs like ‘teach’ in Standard Greek (and a larger number in Northern Greek) take two accusative objects rather than one genitive (=dative) object and one accusative object. With these predicates, only the higher of the two arguments (the goal) can be doubled by an OM on the verb—exactly as in Amharic. To capture the clear parallel between (37b) and (36), we want to say that Agree and DP movement are both involved in both languages. The goodness of (37a) then suggests that the genitive goal is different enough in its features from the accusative theme that v can see the theme past this sort of goal. For concreteness, we can say that ‘Peter’ in (37a) bears the feature [GEN] (or maybe P), and v can probe for [GEN] (or P) separately from [ACC] (or D). Then there is no intervention between v and the theme in (37a), although there is in (36b) and (37b) where the two internal arguments have exactly the same features. We then complete the account by stipulating that “dative” case in Amharic in examples like (37a) does not count as a feature distinct from [ACC] (or D). In essence, this means that dative in Amharic is weaker than dative/genitive in Greek. This seems to be true, in that the goal in (36a) is only optionally dative; it can also be accusative Almaz-in in free variation, whereas dative/genitive does not alternate freely with accusative in the relevant I-E languages. The fact that the precise features of both probes and goals matter here confirms that Agree is at work. (We thank Elena Anagnostopoulou for generous discussion of these patterns.)

We move on now to Step 2 in (35): the movement of the Agree-with DP to Spec vP (see also Alexiadou and Anagnostopoulou 1997, 2000; Anagnostopoulou 1994, 1999, 2003 for Greek; Harizanov 2014 for Bulgarian, among others, for other clitic doubling analyses that rely on movement to Spec vP).

In Section 2.1, we mentioned that the specificity restrictions on the associate can be very similar to the

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17 This was, for example, Baker’s (2012ab) primary reason for thinking that OMs were exponents of object agreement in Amharic.
restrictions on object shift, and these restrictions are evidence in favor of movement of the associate to Spec vP. In Section 2 as a whole, we showed that an object shift analysis does not fully characterize the set of DPs that can be doubled (e.g., reflexive pronouns are specific but cannot be doubled), deriving those from the fact that there is a pronominal copy of the associate in Spec vP. However, since specificity is a necessary (although not sufficient) condition for doubling, we maintain that object shift has a role to play in the analysis of clitic doubling in Amharic, that clitic doubling necessarily involves movement to Spec vP. Indeed, many previous researchers have seen a connection between object shift and clitic doubling, including Sportiche 1996, Uriagereka 1995, Nevins 2011, and Suñer 2000.\textsuperscript{18} Our choice of Spec vP as the landing site for this movement is mostly for concreteness (following e.g., Nevins 2011, Baker 2012a, Harizanov 2014, Kramer 2014) and for consistency with the object shift literature. For Amharic, it fits well with the fact that the OM surfaces on the main verb, even in the presence of auxiliaries, as in (34). This suggests that movement in Amharic targets a relatively low functional head, below T and Aux, and not far above V itself—the region of clause structure where we expect to find v.\textsuperscript{19}

Here we can add a brief word about the optionality of clitic doubling with definite DPs in Amharic, shown already in (1a) versus (1c). We can think of this as akin to—ideally identical to—the optionality of definite DPs undergoing object shift in Germanic (see e.g., Broekhuis 2008:11-12). This typically is said to have a semantic/pragmatic effect, but one that is harder to pin down exactly for definites than for indefinites (Broekhuis describes it as whether the DP is part of the focus of the clause or part of its presupposition). Amharic linguists talk about DPs doubled by OMs as being somehow “emphasized” (see e.g., Haile 1970, Demek 2003), and part of what this seems to mean is that doubled DPs are more prominent discourse antecedents for pronouns in the nearby environment (cf. Leslau 1995:186, sec 41.14, Kramer 2014:604-605). We do not give a full account of these pragmatic/semantic effects here. Rather, we think of object shift in Amharic (and Germanic) as being triggered by an optional feature of the v head—an EPP feature; see (46) below—which thereby creates a new syntactic structure. The C-I interface then exploits this structural distinction for its pragmatic purposes in ways that are hopefully rather systematic across languages, but which we leave to others to explicate further.

Once a copy of the associate has moved to Spec vP, it undergoes our distinctive Step 3: Reduce. Once again, it is crucial that the operation which results in the creation of the OM/clitic occurs in the syntax for our analysis, and not at PF as in the other approaches. If the reduction happens only at PF, then it is too late for the DP in Spec vP to be interpreted as a pronoun at LF and the type of explanation offered in Section 2 is lost. We can state Reduce as follows:

\begin{equation}
\text{Reduce: Given a phrase [XP (…YP) X (ZP..)] delete YP (…) and ZP (…) to yield X.}
\end{equation}

For example, in the derivations under consideration, Reduce takes a phrase headed by D (the DP in Spec vP) and deletes its specifier (e.g., a possessor) and/or its complement (an NP or NumP sister to D)—and indeed anything that might be adjoined to D—to give a minimal DP, consisting only of D itself. (See also Section 4 for Reduce applied to PPs.) This is a novel syntactic operation, but of a familiar sort. It bears similarities to ellipsis, in that it deletes information from the derivation, and like ellipsis, we assume that it is subject to a recoverability condition. The recoverability condition requires that all the structure, features, etc., that Reduce deletes must be retained in full elsewhere in the representation. This has the effect that Reduce can only apply to copies, i.e., to XPs whose full structure is present elsewhere.

Step 4 Spec-Head Merge is the last step in the derivation that takes place in the narrow syntax. It takes the D head that results from Reduce and adjoins it to the nearby v head. From a syntactic perspective, this operation looks very familiar; it takes two syntactic objects and makes them into one.

\textsuperscript{18} See Section 3.3 on clitic doubling with subjects, which happens at T rather than v, and Section 5 on clitics that do not put any semantic restrictions on doubled DP.

\textsuperscript{19} Amharic is (like Bantu languages) different from I-E languages in this: in I-E languages, clitics generally end up on the highest auxiliary, the one inflected for tense. We are open to the idea that object shift (and Spec-head merge) might target somewhat different heads in the clausal spine in the two types of languages.
just like the syntactic operation Merge (and as suggested by the previous name m-merger; see Matushansky 2006:96 for discussion of the connections between syntactic Merge and PF m-merger). We propose that the operation which unites the reduced D to v is in fact a species of Merge, and name it accordingly. Other types of Merge are generally triggered by features on a head—either selectional features which cause a complement to be merged, or EPP features which cause a specifier to be merged. Similarly, we propose that a feature causes Spec-Head Merge; we refer to this feature as [EPP-HEAD]. The [EPP-HEAD] feature on X is satisfied when a specifier of XP that is a minimal projection (i.e., a head) adjoins to X. We assume, following Chomsky’s (1986) notion of “structure preservation”, that it is not possible to adjoin a maximal projection to a minimal projection, so in order for [EPP-HEAD] to be satisfied the specifier must be minimal. This operation is defined in (39) and schematized in (40).

(39)  Spec-Head Merge
Given a head X, and a head Y in Spec XP, Merge Y to X with the result that Y adjoins to X

(40)  ![Spec-Head Merge Diagram]

Like Reduce, Spec-Head Merge has been taken to happen at PF in previous treatments. Although we have less need to insist on it here, there is some empirical evidence that even this final step happens in the syntax. It is well known that a complex head comprised of an OM/clitic and a verbal head can undergo head movement to a higher position. For example, in Rioplatense Spanish, the clitic moves along with the verbal head as a unit up to C in questions (Suñer 1988:406-407); see (43)b below for an example. This is unsurprising in an analysis that generates the clitic and attaches it to the verbal head as a syntactic operation; the resulting complex head is fully available to the syntactic derivation later as needed. However, this moving as a unit in the syntax is less expected if the clitic is formed and attached to the verbal head at PF. Matushansky (2006)—and, less explicitly, Harizanov (2014)—outline some assumptions about cyclic derivation according to which this is allegedly possible, but they seem artificial and problematic to us. For example, unlike traditional “freezing” of a syntactic constituent that has undergone Spell Out but still exists as an opaque chunk to the syntax, their m-merger requires syntax to manipulate a constituent that it did not build. It seems best, then, to do all of this in the syntax proper.

This is what needs to be said about the narrow syntax derivation. There is independent evidence that v and the DP Agree (intervention effects) and that the DP moves to Spec vP (object shift, requiring or inducing specificity). Since (we assume) v has the feature [EPP-HEAD], the derivation will crash unless Spec vP undergoes Spec-Head Merge with v. However, in order for this to occur, the DP in Spec vP must undergo Reduce, which is permitted since it is a copy. This DP reduces to D, and then undergoes Spec-Head Merge to v, which results in the OM being attached to v. The derivation is shown in detail in (41),

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20 One potential benefit of m-merger being at PF is that the traditional ban on excorporation falls out because the internal structure of PF-made constituents is unavailable for syntactic operations. However, see Roberts (2010:206-208) for recent evidence that this traditional ban may not hold up under closer scrutiny. This argument assumes that V-to-C movement is a type of head movement that can occur in the syntax (as we tend to believe); it does not hold if (this sort of) head movement happens only at PF, as some have claimed. Note however that V-to-C movement does seem to affect semantic/LF phenomena like NPI licensing in examples like Won’t anyone come early? vs. Will anyone not come early? (There may also be movements that apply to the verb but leave a clitic behind, like those that give verb-clitic order in imperatives in Romance languages. We do not try to sort this out, Amharic not having any such alternations between proclitic and enclitic.)

21 Thanks to Omer Preminger (p.c.) for bringing this observation to our attention.
which follows Kramer 2014 in assuming that V has already moved to v (see also Roberts 2010:55). We assume head-finality is enforced in PF at Linearization; lower copies are in angled brackets.

(41)  

a. Agree between v and DP  

\[
\begin{array}{c}
\text{vP} \\
\text{v [val } \varphi \text{]}
\end{array}
\]

b. DP Moves to Spec vP  

\[
\begin{array}{c}
\text{vP} \\
\text{DP}
\end{array}
\]

\[
\begin{array}{c}
\text{V} \\
\text{v} \\
\text{[val } \varphi \text{]}
\end{array}
\]

\[
\begin{array}{c}
\text{vP} \\
\text{DP}
\end{array}
\]

\[
\begin{array}{c}
\text{V} \\
\text{v} \\
\text{[val } \varphi \text{]}
\end{array}
\]

\[
\begin{array}{c}
\text{vP} \\
\text{DP}
\end{array}
\]

\[
\begin{array}{c}
\text{V} \\
\text{v} \\
\text{[val } \varphi \text{]}
\end{array}
\]

A crucial part of this derivation for the purposes of the present paper is that Spec-Head Merge leaves a Reduced copy of D in Spec vP --- this is interpreted as a pronoun at LF leading to the restrictions on which objects can be doubled that we explored in Section 2.22 In the following section, we consider how (41d) interfaces with PF and LF so that the right copies get pronounced and interpreted.

3.2: OMs with Direct Objects at the Interfaces

The derivation in (41) contains valued phi features on v as a result of Agree (a prelude to the movement) as well as three related copies: (i) the lowest, theta-marked copy of the DP, (ii) the reduced copy of the DP in Spec vP, and (iii) the reduced copy of the DP that is attached to v. We devote this section to clarifying how PF and LF realize and interpret these copies and the associated phi features.

On the PF side, we assume Kandybowicz’s (2007) modification of Nunes (2004). According to this view, two copies are treated as distinct at PF if they are morphosyntactically non-isomorphic. As in Harizanov 2014 and Kramer 2014, the theta-marked DP in clitic doubling structures is morphosyntactically non-isomorphic from the other copies after Reduce has applied, since it alone is phrasal. Therefore, it will be treated as a distinct copy at PF and realized morphophonologically. This accurately captures the fact that the lowest copy of an object shifted DP is spelled out in clitic doubling

22 An alternative approach to this data could focus on changing the nature of Spell Out. Suppose that Spell Out to LF waits until after Spell Out to PF and m-merger of v and DP has taken place. Then, the structure would include the complex head [D-v], one of whose components can be interpreted as a pronoun at LF. However, this would be non-standard cyclicity, conforming neither to cyclic Spell-Out (Chomsky 2000, 2001) nor to the single output model (see e.g., Bobaljik 1995). It may be possible to develop this approach (see e.g., Cecchetto 2004, Matushansky 2006:95 fn.28), but considering that there is no outstanding empirical evidence for it, we see no reason to pursue it.
constructions, in which Reduce applies, but not in otherwise similar object shift derivations in Germanic languages, where Reduce does not apply.\textsuperscript{23}

The two reduced copies are morphosyntactically identical, yet it is the copy that is adjoined to $v$ that is morphophonologically realized. In order to account for this, we propose there is a PF requirement that the OM must be part of a complex head with $v$, capturing the fact that the OM is a clitic on $v$. Similar PF requirements have been proposed for clitics in Swedish and Danish (Embick and Noyer 2001:581) and for definite markers in Amharic (Kramer 2010:212). Realizing the copy adjoined to $v$ satisfies this PF requirement, whereas realizing the copy in Spec $vP$ would not. This is a common state of affairs: Bošković and Nunes 2007 argue that PF requirements can force the realization of a lower copy in a variety of environments across languages.

As for the phi features on $v$ as a result of the initial Agree, we suggest that they are morphophonologically null for economy reasons (see Kramer 2014). As has been reported for many languages (see e.g., Kinyalolo 1991, Rezac 2008), there a strong tendency not to realize the same set of phi features more than once within the same complex head.\textsuperscript{24} Thus, the phi features of $v$ are realized as null, and at PF only the D that is attached to $v$ and the DP in theta position are realized – as per the facts.

Turning to how the copies are interpreted at LF, we assume again that the DP copy in the theta position is considered distinct from the other two copies – LF can see that it is structurally different (a maximal and not a minimal projection). The other two copies are morphosyntactically isomorphic, but LF only interprets the copy in Spec $vP$ (not the copy adjoined to $v$) and, crucially, it interprets this D as a pronoun. We propose that this is because LF can only interpret a bundle of D, phi features, reference features, etc., as a pronoun when that bundle is in an A-position. Here we can think of “A-position” as roughly the specifier or complement of a certain class of functional heads, including $T$, $v$ and V but not C, Focus or the like. The copy in Spec $vP$ is in an A-position, but the copy adjoined to $v$ is not since it is adjoined to a head. This restriction presumably has its roots in Binding theory – namely, the traditional stipulation that Binding theory concerns only phrases in A-positions. We therefore propose the following partial characterization of what is taken to be a pronoun at LF:

\begin{equation}
\text{(42) A syntactic element } X \text{ is interpreted as a pronoun at LF if } X \text{ is in an A-position, } X \text{ has phi features, and } X \text{ has no descriptive lexical content.}\textsuperscript{25}
\end{equation}

In contrast, we assume that the phi features and the D adjoined to $v$ are not interpreted as pronouns at LF. Indeed, they are arguably not interpreted at all, on a par with phi features that are found within a verbal inflectional complex generally. This proposal fits well with the move away from feature interpretability towards feature valuation as the key component of syntactic features (see, e.g., Chomsky 2001), and it allows for LF to determine according to its own principles which features are (un)interpretable.

\textsuperscript{23}Note that we are assuming here that all definite nominals—including simple proper names—are in articulated structures including a D head, possibly null (cf. Longobardi 1994). One possible exception to this could be weak pronouns, which might consist of only a D head merged into the object position. Then object shift happens, but Reduce applies vacuously, since there is nothing but D in DP. In that case, the copy of D in Spec $vP$ and the copy inside VP are morphosyntactically identical, and we might say that the lower copy deletes after all. This could be a fine derivation for examples like (1)b, expressing the fact that there are no weak pronouns distinct from OMs in Amharic. (In contrast, OMs can double strong pronouns, as in (22c), but we take it that those also have complex internal structure, as suggested by their morphological complexity (see Déchaine and Wiltschko 2002 on pronouns with internal syntactic structure, and Leslau 1995:178 on plural markers in Amharic pronouns).

\textsuperscript{24}This raises the question of why the phi features are null, and not the clitic. There are several possible explanations. Preminger (2011:69) has suggested that languages prefer to realize pronominal material, like the clitic, rather than functional material, like the phi features on $v$. Alternatively, the original formulation of Kinyalolo’s (1991) generalization restricted realization to the highest head with the repeated set of phi features, and the clitic is higher than $v$ if we assume c-command in adjunction structures. Finally, Kramer 2014 (618:fn.35) observes that not realizing the clitic would remove a main source of evidence to language learners that clitic doubling has taken place.

\textsuperscript{25}In a DM approach to word formation, this can be phrased as “X has no root.”
We can support the idea that it is the copy of D in Spec vP that is interpreted at LF, not the copy of D that is adjoined to v, by looking at examples in which the clitic+verb has moved to C, like (43)b from Spanish. There is no condition C violation between the object clitic lo and Juan inside the subject in (43)a; the object can refer to Juan, as in English. This is expected, since the clitic near Spec vP does not c-command into the subject in Spec TP. Crucially, there is also no condition C violation in (43)b, where the object clitic has moved with the verb to C, above the subject: ‘him’ can still refer to Juan.

(43) a. ...que la madre de Juan lo-vió. (Spanish, José Camacho and Liliana Sanchez, p.c.)
   ...that the mother of Juan him-saw
   ‘...that Juan’s mother saw him.’

   b. Cuando lo-vió la madre de Juan?
   When him-saw the mother of Juan
   ‘When did Juan’s mother see him?’ (OK: him=Juan)

This confirms that it is not literally the clitic attached to the verb that is relevant for Binding theory at LF, but rather the copy of D in the Spec vP position, which is present in (43)b just as it is in (43)a. The structure of (43)b is given roughly in (44), where the crucial copy for LF is bolded.

(44) [CP when him+saw+v+T+C [TP [DP the mother of Juan] T [vP <him> v [vP <saw> ... ]]]]

This then supports (42), as well as the more general claim that Move initially targets Spec vP in these derivations, and does not go straight to the v head (as in, e.g., Anagnostopoulou 2003).

3.3 Consequences of the Analysis: Features and Typology

At the heart of our analysis is the claim that Reduce and Spec-Head Merge are distinct syntactic operations that apply semi-independently. Since these two operations apply largely in tandem in Amharic clitic-doubling derivations, a natural question to ask is whether there is independent evidence that each can apply on its own. We submit that there is.

It might seem like Spec-Head Merge can’t operate without Reduce since specifiers are phrasal and Spec-Head Merge takes a head as its input. However, (weak) pronouns can be simultaneously maximal and minimal, so we might see Spec-Head Merge attested without Reduce in any context where there is cliticization but no clitic doubling. This is attested, and may in fact be quite common. Many languages may have obligatory cliticization with object pronouns, but not with full object DPs, such as French, standard Italian, and some Bantu languages like Lubukusu. Examples from Lubukusu are in (45).

(45) a. N-a-**mu**-bon-a.
   1.s-PST-**Lo**-see-FV
   ‘I saw him.’ (Diercks and Sikuku 2013:1)

   b. N-a-(*mu)-bon-a       Wekesa
   1.s-PST-**Lo**-see-FV  1Wekesa
   ‘I saw Wekesa.’ (Diercks and Sikuku 2013:9)

Following a suggestion of Diercks and Sikuku (2013) regarding Lubukusu, we propose that these languages lack Reduce and thus can only do Spec-Head Merge with elements that from the beginning are
both heads (so they can do Spec/Head Merge) and XPs (so they can undergo A-movement). The two copies of the pronoun are morphosyntactically isomorphic at PF, so only the higher copy is pronounced.  

Conversely, we can ask if there are derivations that have Reduce but not Spec-Head Merge. What this would look like in a situation close to the contexts we are focusing on here would be a language in which weak/clitic pronouns (pronouns that seem to be a single D head) appear relatively high in the clause and can be doubled by a full DP lower in the clause, but the weak/clitic pronoun does not form a single complex Xo with the verb for (e.g.) purposes of head movement. Perhaps since it is a weak pronoun it is still a clitic in some phonological sense—either a simple clitic that leans on whatever happens to be next to it, or a second position clitic of some sort. South Slavic languages like Bulgarian, Macedonian, and Slovenian are possible cases in point, in that the object clitics that double referential DPs are arguably second position clitics (see, for example, Legendre 1998, Dimitrova-Vulchanova and Hellan 1999), and they certainly vary far more in their placement than OMs in Amharic do, the latter consistently appearing adhered to the end of the main verb. Therefore, one may not want to say that the Ds formed by Reduce adjoin to a particular functional head in South Slavic. If not, then Move-and-Reduce can happen without Spec-Head Merge.  

Further afield, another possible use of Reduce might be to derive resumptive pronouns rather than pure traces in the tail positions of wh-movement chains wherever Delete cannot fully happen for reasons akin to the old ECP. This arguably happens when, for example, the theta-position of a moved wh-phrases is inside a PP in a language like Hebrew (cf. Shlonsky 1992). Comparing clitic doubling with resumptive pronouns in the light of Reduce would be a good area for future study, we suggest.  

Another relevant comparison is with the varieties of object shift found in Scandinavian. As is well known, this can apply to full DPs in Icelandic, but only to pronouns in the mainland Scandinavian languages (MSc). So v in the latter languages apparently imposes a condition on the syntactic object that moves into its specifier, that it has to be a minimal category as well as a maximal category. However, this is not the result of Reduce, because the relevant object in MSc needs to start out as D head, not just end up as one (i.e., there is no doubling). So MSc is like French, Italian, and Lubukusu, not like Amharic, Rioplatense Spanish, or Greek in this sense. However, the requirement that the Spec vP be a head is not imposed on it by the needs of Spec-Head Merge, since pronouns in MSc are not clitics in the sense that they are in Romance languages. In particular, they are not carried up to C with the verb when the verb moves there in verb-second clauses, for example (see Thráinsson 2001, ex. 12a).  

Beyond showing that the elemental subparts of the complex operation formerly known as “merger” can be empirically distinct as well as logically distinct, these cases point toward a typology of v heads in which they are distinguished by what they allow in their specifiers, and what syntactic operations

27 It is not certain, however, that this type exists: for example, Bošković (2015:4) claims that clitic doubling is found only in Slavic languages with “verb attached” clitics as opposed to second position clitics. If it is true that weak pronouns that do not merge with a particular functional head are never involved in doubling phenomena, then we might replace the value [EPP: Reduce-to-Min] with the value [EPP: Reduce-to-Merge]. What this would mean is that Reduce happens to make cliticization to the head possible, not to make movement to the specifier legitimate. That would be a fairly minor change. We hope that experts in other languages will join us in figuring which of the logical possibilities are actually allowed by universal grammar. (Note also that object clitics in Romance are somewhat freer in where they land than in Amharic, but less free than in Slavic—more puzzles to work out.)  

28 In Lubukusu, the lower copy is pronounced when the object pronoun is emphatic, resulting in a very limited form of doubling (Diercks and Sikuku 2013:26). Indeed, even French allows clitic doubling with strong pronouns (Kayne 2000:164-165). Diercks and Sikuku speculate that, because the lower copy is interpreted as focused, it is no longer isomorphic to the higher copy, and we tentatively follow them in this. Languages that allow clitic doubling only with pronouns do seem rather common, though, and they deserve closer study than we can give them here.  

29 Safir (2004b: 115-121) argues against resumptive pronouns in Hebrew being “spelled out traces” in this way, because constructions with resumptive pronouns show certain semantic restrictions that constructions with true gaps do not show (drawing on work from Doron 1982, Demirdache 1991, and Sharvit 1999). But this is not at all decisive against our potential version of this view. For us, it is perfectly possible that the pronoun created by Reduce is interpreted differently at LF than a gap created by Delete; indeed, this is expected.
they trigger in order to satisfy their needs. Let us call these distinguishing features of \( v \) across languages EPP features in a somewhat extended sense. Then we can envision the following values of such features.

\[(46)\]
\begin{itemize}
  \item [a.] \([EPP: \text{Max}]\) Dutch, German, Icelandic object shift
  \item [b.] \([EPP: \text{Min}]\) MSc object shift, French, Lubukusu
  \item [c.] \([EPP: \text{Reduce-to-Min}]\) Amharic, Bulgarian, Greek, Rioplatense Spanish
  \item [d.] \([EPP: \text{Head}]\) French, Amharic, Greek, Lubukusu (not MSc, not Bulgarian?)
  \item [e.] \([EPP: \text{null}]\) English
  \item [f.] (no EPP at all?)
\end{itemize}

There are some logical connections between the new (46)b-e values here. \([EPP: \text{Reduce-to-Min}]\) is a subtype of \([EPP: \text{Min}]\). Both kinds of \( v \) require that only a small functional head can occupy the Spec \( v \)P position as a result of movement; \([EPP: \text{Reduce-to-Min}]\) can invoke Reduce to satisfy this requirement, resulting in clitic doubling, whereas mere \([EPP: \text{Min}]\) does not, resulting in weak pronouns being in Spec \( v \)P but no clitic doubling. \([EPP: \text{Head}]\) implies that there is also (in effect) either \([EPP: \text{Min}]\) or \([EPP: \text{Reduce-to-Min}]\), since only an \( X^0 \) can merge with the \( v \) by structure preservation.

The overall conception behind this range of features is that there are intermediate values for whether a functional head \( F \) tolerates a specifier or not between (46)a, where \( F \) tolerates any specifier, and (46)e,f, where \( F \) tolerates no specifier, or at least no overt specifier (cf. standard analyses of English where \textit{wh}-phrases move through the Spec \( v \)P position on their way to Spec CP, but no overt specifier can appear there). In between these “extreme” possibilities are the possibilities that \( v \) can have something overt in its specifier, but only the smallest relevant category ((46)b,c) as in MSc, and the possibility that \( v \) can have something in its specifier, but only if it then attaches to the verb, vacating the Spec \( v \)P on the surface, as in French. Clitic doubling languages like Amharic have \( v \)s with both \([EPP: \text{Head}]\) (as in Section 3.1) and \([EPP: \text{Reduce to Min}]\) (to differentiate Amharic from a non-doubling language like French). These features are optional on \( v \) in Amharic, in that it is fine for \( v \) to have no specifier and no \( D \) head adjoined to it, as happens with intransitive verbs, or transitive verbs with no clitic doubling. But if a token of \( v \) does take up the option of having one of these EPP features, then it must have both.

One might expect, then, that other functional heads can also have intermediate values for their EPP feature as in (46)—\( T \) for example. Well-attested for \( T \) are the values of \([EPP: \text{Max}]\) and \([EPP: \text{null}]\) or no EPP. \( T \) in English has \([EPP: \text{Max}]\), since any size DP can appear in Spec TP (and indeed something must); \( T \) in a VSO language like Irish presumably has \([EPP: \text{null}]\) or \([EPP: \text{no}]\), since the subject stays lower than the tense marker or verb inflected for tense. Are there then languages with only weak pronouns or clitics in Spec TP position? The answer is probably yes, for example in Colloquial French (CF, Culbertson 2010) and some Northern Italian dialects with widespread subject clitics. CF in particular is much like Amharic, in that a doubling clitic is optional with a referential DP subject, but forbidden with a quantified DP and with (the trace of) a \textit{wh}-phrase (Culbertson 2010:86).

\[(47)\]
\begin{itemize}
  \item [a.] Jean (il) parle.
      John he speaks.
  \item [b.] Personne (*il) n’a rien dit.
      Nobody he has anything said
\end{itemize}

---

29 Maybe all languages allow at least a trace to be in Spec \( v \)P—but maybe not. Some Austronesian languages including Tagalog do not allow \textit{wh}-movement of objects or other phrases properly inside VP, except under special conditions. A possible account of this is that nothing can move into Spec \( v \)P, so that simple extraction out of VP is ruled out by the PIC (except under special conditions); see Aldridge (2005) for an account along these lines.

30 The Italian dialect that most closely matches is the pattern is Veneto (Poletto 2000:141, Roberts 2010:111).
CF is different in this respect from both (e.g.) “standard”/written French, where a weak subject pronoun co-occurs with an overt DP only if the DP is dislocated, and from Italian dialects like Piedmontese, where the subject clitic appears with all sorts of subjects, even quantified and interrogative ones (Poletto 2000, Goria 2004). So whereas the so-called subject clitic can be analyzed as pure agreement in Piedmontese, something more like Amharic should be said for CF. We can tentatively say that T in CF is also [EPP: Reduce-to-Min]. Therefore, this intermediate EPP value that we use for v to get languages like Amharic can probably be found on T too.31 (The fact that the overt subjects in (47) appear before the finite verb implies then that the subject has moved to some overt position higher than Spec TP, where the subject clitic is—perhaps Spec SubjP in the sense of Rizzi (2006) and Cardinali et al. (2004), or a position inside the CP space, as Poletto (2000:148-153) argues for Italian dialects.32 This complicating factor should not be crucial, given that Poletto (2000:140) states that the pattern of having subject clitics with referential subjects but not quantified ones (but never the other way around) is also attested with subjects that appear after the main verb in Italian dialects, although she is not explicit about which ones have this.)33

Thinking of these EPP values on different heads confirms that it is heads that govern these operations, not languages as a whole. For example, English has [EPP: Max] on T, but [EPP: null] on v, two very different values. Icelandic has [EPP: Max] on both T and v, but MSc has [EPP: Min] on v while maintaining [EPP: Max] on T. And so on. In this light, we can ask whether our distinctive operation of Reduce is available in some languages throughout and not available at all in other languages, or whether its availability is keyed to particular functional heads. Preliminary evidence suggests that its availability is indeed keyed to individual functional heads. CF, for example, allows subject clitics to double full subjects as in (47)a and has object clitics but does not allow object clitics to double full objects. So T in CF is [EPP: Reduce-to-Min], but v is [EPP: Min] only. Similarly, European Spanish allows clitic doubling of dative indirect objects but not of accusative direct objects: that suggests that the v that selects ApplP is [EPP: Reduce-to-Min] but the v that selects VP is [EPP: Min]. (In contrast, both vs are [EPP: Reduce to Min] in Rioplatense Spanish, and both are [EPP: Min] in French.) So languages are not uniform in whether clitics/weak pronouns can be doubled by overt DPs or not. Since clitic doubling is the result of Reduce on our analysis, this means that whether Reduce can apply in a given context is determined locally by the particular functional head involved. That helps to justify the implementation in (46), where Reduce and Spec-Head Merger are triggered by features of the functional head.34

Although CF suggests that clitic doubling can happen with subjects on par with how it happens with objects in Amharic, Greek, and Bulgarian, it seems that this is not so common. When one tests OMs, they turn out to be clitics rather than pure agreement as often as not (see Section 6), whereas when one tests SMs, they usually turn out to be pure agreement. This is certainly true in Amharic, where one finds subject agreement (cf. (7)) and object clitics; exactly the same is true in Spanish, Greek, and Bulgarian. In contrast, the opposite situation of a language having subject clitics but object agreement seems to be very rare, and may not even exist. So there seems to be a kind of subject-object asymmetry here: SMs are tilted toward agreement, whereas OMs may be 50-50 or tilted toward clitics.

31 In addition, T seems to be [EPP: Head] in CF, but not in otherwise similar Venuto, given that the verb can move into the C space in matrix questions, leaving the subject clitic behind in Venuto (Poletto 2000:42-45) but this sort of clitic-verb inversion has been almost entirely lost in Colloquial French (Culbertson 2010:100-101).
32 On the importance of whether this preverbal subject position is an A-position or an A-bar position, see the last paragraph of Section 5 below.
33 One could also think about having this range of features on Ds. English with full DP possessors in Spec DP would be [D-EPP: Max], Spanish with ‘her N’ but not *‘Maria’s N’ (rather ‘the N of Maria’) would be [D-EPP: Min], Hebrew which allows clitic doubling of possessors inside nominals (Borer 1984) might be [D-EPP:Reduce-to-Min], a language that had only ‘the N of Maria/her’ but allowed extraction out of NP would be [D-EPP: Null], and a language that had only ‘the N of Maria/her’ and no extraction out of NP (e.g., Kinande) would be [D-EPP: none].
34 Further cases of language-internal variation can be found if we look at EPP features on D, as in fn. 33. For example, French allows clitic doubling of possessors in DPs (if the possessor is dative) (Tremblay 1989) but not of nonpronominal direct objects. Conversely, many Latin American Spanish speakers allow clitic doubling of direct objects but not of possessors in DP (José Camacho and Liliana Sanchez, p.c.).
Can we make something of this theoretically? Perhaps. We know that it is very common (for whatever reason) for T to have [EPP: Max]; after all, that is where the EPP property originated, and SVO languages are significantly more common than VSO languages. In contrast, it is less common for \( v \) to have [EPP: Max] and common for it to have [EPP: null]. Thus, in head initial languages it is rare to have Subj T Obj V XP order; this is attested only in a few West African languages (e.g., Bambara, Koopman 1992). (In SOV languages it is harder to tell, because of the ambiguous word order and the possibility of scrambling in addition to object shift proper.) Suppose, then, that T is biased toward having [EPP: Max], whereas \( v \) is biased against it. Then [EPP: Min] and [EPP: Reduce to Min] being more common for \( v \) than for T could be part of this larger pattern of \( v \) not tolerating full specifiers as readily as T does.\(^{35}\) This then gives us at least the beginning of an explanation for the potentially important fact that clitic doubling is more common with objects than with subjects (see also Section 5 for another relevant consideration).

4. The Analysis Extended: OMs and PPs

Conceived of as a general syntactic operation, Reduce can in principle apply to phrases other than DP. For example, it could also apply to PPs in Spec vP to reduce them down to their P head. In this section, we argue that this is the analysis of what looks like a preposition plus an OM doubling a PP in Amharic, in data like that shown originally in (6). In Section 4.1, we lay out the basic facts of the phenomenon. In Section 4.2, we develop the analysis, which requires minimal theoretical innovation beyond what we have already introduced in Section 3.

4.1 P-OMs: The Facts

(48) repeats the example of the unusual phenomenon of “prepositional object markers” given in (6).

(48) dañña-w lä-Aster färräd-ä-(ll-at).
    judge-DEF.M for-Aster.F judge.PF-3MS.S-LL-3FS.O
    ‘The judge judged in Aster’s favor.’ (Amberber 1997:4,(10a))

Here the benefactive argument lä-Aster ‘in Aster’s favor’ is optionally doubled by a two-part expression in the same position as normal OMs. The first part of this complex marker is a P-like element (ll-) apparently cognate with the benefactive morpheme lä on the benefactee. The second part is an OM that matches the complement of the P in phi features (-at). We refer to the two parts together as the P-OM. The benefactive argument can also be pro dropped (see (6)b), and then the P-OM is obligatory, just as the OM is obligatory when the direct object is pro-dropped. In addition to benefactives, ll+OM can also double a goal phrase used with a verb like ‘return’.

Amharic also has a second instance of P-OM: this is the formative bb-OM, which can double a PP of the form bā-DP, where the PP expresses a malefactive, as in (49), or an instrument, as in (50).

(49) dañña-w bā-Aster färräd-ä-(bb-at).
    judge-DEF.M against-Aster.F judge.PF-3MS.S-BB-3FS.O
    ‘The judge judged against Aster.’ (Amberber 1997:3,(9a))

(50) Aster bā-mät’rāgiya-w mäskot t’ārrāg-āt]f-[ibb-āt]
    Aster.F with-broom-DEF.M window clean-3FS.S-BB-3MS.O
    ‘Aster cleaned a window with the broom.’ (Amberber 1997:3, (8a))

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\(^{35}\) It would make sense, in turn, if this held for prosodic reasons. If T is the highest head in the clause, Spec TP will be at the edge of the clause, where it is easy to pronounce as a separate prosodic phrase if necessary. However, \( v \) is not the highest head in the clause, so Spec vP is not generally at the edge of the clause, but internal to it. It might be that this creates prosodic problems if Spec vP can be of arbitrary complexity and length. [EPP Min], [EPP Reduce-to-Min], [EPP: Head] and [EPP: null] could be formal tools to “manage” this potential problem in pronounceability.
Similarly, when both a benefactive and an instrument are present, only the benefactive can be doubled:

\[(54) \quad *\text{dañña-w lā-Aster fārrād-ā-ll} \]
judge-DEF.M for-Aster.F judge.PF-3MS.S-LL.

Intended: ‘The judge judged in Aster’s favor.’

Crucially, the P-OM in examples like these behaves just like a “normal” OM in many significant respects (Kramer 2014, Baker and Kramer 2014b), most of which are well-known and uncontroversial in the Amharic literature. First, the second part of the P-OM is almost always morphologically identical to the normal OM; for example, the third person feminine singular marker -ät in (24) is the same as the feminine singular marker -at after the ll in (48).36 Second, the P-OM and the OM are in the same morphological position with respect to the verbal complex: in perfective clauses, both are final suffixes on the inflected verb, appearing after subject agreement, as in (24) and (48); in imperfective clauses, the OM or P+OM follow the stem but are followed by an auxiliary. This is seen for OMs in (34), and for a P-OM in (52) (see fn. 19 on differences in the position of the OM across clitic doubling languages).

\[(52) \quad \text{k’ut’t’àñña mist-u hulligize ti-
} \]
quick.tempered wife-his always 3FS.S-shout-BB-3MS.O-AUX-3FS.S

‘His quick-tempered wife is always shouting at him.’ (Leslau 1995:427)

Third, Amharic verbs can only bear a single OM, even with ditransitive verbs in examples like (36) (Baker 2012a, Kramer 2014). In the same way, they can only bear a single P-OM, as in (53). Nor can a verb bear both an OM and a P-OM. So OMs and P-OMs fall under the same generalization, that a verb can bear only one nonsubject clitic in Amharic.

\[(53) \quad *\text{Girma lā-Almaz yāhonā dāddīg bū-māt’tāgiya-w t’ārrāg-ā-ll-at-bb-āt} \]
Girma.M for-Almaz.F some doorway with-broom-DEF.M sweep.PF-3MS.S

Intended: Girma swept some doorway with the broom for Almaz.

P-OMs are also like other OMs in two more subtle ways, which are important in our analysis. First, they obey a form of intervention: when both a benefactive and a theme are present, only what we take to be the higher of the two—the benefactive—can be doubled by an OM, as shown in (54).37

\[(54) \quad \text{Girma lā-Almaz mās’haf-u-n anābāb-ā-ll-at read-3MS.S-LL-3FS.O} \]

‘Girma read the book for Almaz.’

Similarly, when both a benefactive and an instrument are present, only the benefactive can be doubled:

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36 The only difference is in the third person masculine singular: this is usually -w as a simple OM (see ((1)c)), but -ät as a P-OM, as in (50) and (52). This is not unprecedented in Amharic, since the normal third person masculine singular object marker is -t after the labial sounds [u] and [o], and the affix bb- arguably counts as one of these (the ä being epenthetic). Perhaps then the only exceptional fact is that ll -also triggers the -t allomorph of 3MS.O.

37 In contrast, instrumental DPs do not necessarily block agreement with the theme. We tentatively suggest that instruments need not be merged in Spec AppiP, although they can be (Chichewa is similar in this (Baker 1988)).
(55) Girma là-Almaz yählen dältàj bá-mät’rägiya-w t’ärrág-ä-ll-at. (*t’ärrág-ä-bb-ät)
Girma for-Almaz some doorway with-broom.DEF.M sweep.PF-3MS.S-LL-3FS.O
‘Girma swept some doorway with the broom for Almaz.’

This is parallel to the fact that in (36a) the goal but not the theme can be doubled by an OM. We take this to motivate the fact that Agree and Move are involved in the analysis of these structures as well, subject to the usual locality conditions.

Finally, P-OMs are like OMs in that the doubled DP inside PP is subject to specificity and referentiality conditions. For example, the P-OM cannot double a non-D-linked wh-phrase, a reflexive pronoun, or a singular universal quantifier any more than a simple OM can, as seen in (56).

(56) a. Lämma là-hullu-mm säw wälal-u-n t’ärrág-ä(*-ll-ät)
   Lemma.M for-every-FOC person floor-DEF.M-ACC sweep.PF-3MS.S-LL-3MS.O
   ‘Lemma swept the floor for everyone.’

b. Lämma là-ras-u wäläl-u-n t’ärrág-ä(*-ll-ät)
   Lemma.M for-self-his floor-DEF.M-ACC sweep.PF-3MS.S-LL-3MS.O
   ‘Lemma swept the floor for himself.’

c. là-man näw Girma mägbiya-w-in yä-t’ärrág-ä(*-ll-ät)
   for-who.M is Girma.M doorway-DEF.M-ACC c-sweep.PF-3MS.S-LL-3MS.O
   ‘Who did Girma sweep the doorway for?’

So we want our theory of OMs causing weak crossover violations to carry over to these constructions too, motivating the use of Reduce and our way of interpreting the resulting structures. More generally, we conclude that it would miss important generalizations to say that the P-OM and the ‘normal’ OM are two different types of elements. Rather, we submit that the P-OM must be generated by the same mechanism as the normal OM, and we turn now to the details of that mechanism.

4.2 The Analysis of P-OMs

In this section, we show how the P-OM is generated via the same means as the simple OM. The process is relatively straightforward, not requiring any real departures from our analysis in Section 3, but only some additional steps with clear precedents in the literature. In a nutshell, we build on Rezac (2008, 2011) and propose that the prepositions bā- and là- are phi probes. Because they acquire phi features, v can Agree with a PP headed by these prepositions. The Agreed-with PP then moves to Spec vP and undergoes Reduce and Spec-Head Merge, leaving a copy of the P in Spec vP that is interpreted as a pronoun according to (42). The P adjoined to v then undergoes the operation Fission at PF to yield the P-OM.

4.2.1 PP Agreement

The first step in the generation of any OM is the establishment of an Agree relation between v and the XP associate. In contexts where a P-OM is generated, the associate is a PP, as indicated by the presence of the prepositions bā- and là-. Evidence that the associate is a PP, not DP, comes from the fact that it does not block movement of the direct object to subject position in the passive, as shown in (57).

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38 In Baker and Kramer 2014a, bā- and là- are not true adpositions, but instead are realizations of oblique case assigned by null adpositions. This distinction plays only a minor role in our analysis here, however (see fn. 45).
(57) gänzäb-u b-Aster tää-särräk’-ä-bb-at. (cf. Yabe 2007)

money-DEF.M against-Aster.F PASS-rob.PF-3MS.S-BB-3FS.O

‘The money was stolen on Aster.’ (Baker and Kramer 2014b: (27))

If b-Aster were a DP, then (57) would presumably be a violation of Shortest Move requirements.

However, PPs are not usually targets for Agree in natural languages. A big part of the reason for
the difference between PPs and DPs in this regard is taken to be that DPs bear the features that probes are
looking to agree with—phi-features, including person, number, and gender—whereas PPs do not. In
minimalist terms, DPs, but not PP’s, Match the unvalued features of probing functional heads like v and T. To address this issue, we follow proposals by Rezac (2008, 2011) that allow PPs to Match the features
on a probing functional head in certain very limited cases.

Rezac’s (2008, 2011) fundamental assumption is that PPs are phases (see also Abels 2003, Baker
2008, etc.). Therefore, probing functional heads cannot normally see the phi features of a DP complement
to P since the DP complement has already been spelled out. However, Rezac also claims that it is possible
(although uncommon) for a P head to be a probe itself with unvalued phi features. The P probe looks into
its c-command domain to find a matching goal, and its own DP complement is immediately available.
Thus, the P’s phi features are valued by its DP complement. A result is that, since the P now bears phi
features, the PP it heads can serve as a licit matching goal to a probing functional head. These operations
are shown in (58); the DP is struck through to indicate that it has been spelled out.

(58)

```
PP[φ]  Agree  PP[φ]
```

The designation of certain heads as phi probes is a known point of crosslinguistic and language-
internal variation. For example, English has a phi probe on T for subject agreement, whereas Amharic has
a phi probe on Asp (Demeke 2003:45). English has a phi probe only on finite Ts, and not on non-finite Ts.
Similarly, whether prepositions are phi probes and which prepositions are phi probes is also a matter
of arbitrary variation. Rezac (2011) proposes that no prepositions are phi probes in English, but some
prepositions are phi probes in certain dialects of Basque. He also claims that in Nepali, where ergative
PPs participate in agreement but dative PPs do not, ergative Ps are phi probes whereas dative Ps are not.

We propose that Amharic is similar to Rezac’s claim about Nepali: only the prepositions bāï- and
lä- are phi probes, whereas all other adpositions are not. Thus, these Ps probe and Agree with the phi
features of their DP complements, and the PPs they head will Match a v with unvalued phi features. This
expresses within our theory the fact that P-OM doubling constructions are possible in Amharic only with
bāï-DP and lä-DP, not with the various other superficially similar looking PPs in Amharic (kā-DP ‘from
DP’, wäddä-DP ‘toward DP’, etc.).

For PP to be a target of agreement, it needs not only to Match the probe but to be in the right
syntactic configuration. In particular, it must be within the c-command domain of v, and close enough to v
that v can find it.³⁹ Normally, this is not necessarily true: adjunct PPs might be adjoined outside the c-
command domain of v, and argument PPs (like the locative of ‘put’) might be low in VP, so that v would
Agree with the theme/object instead. To make sure that doubled PPs are in the right configuration for v to
Agree with them, we assume that these are high applicative constructions, in which the benefactive,
malefactive, or instrumental PP is generated as the specifier of an applicative phrase, where v takes ApplP
as its complement, and Appl takes the normal VP as its complement (cf. Marantz 1993, Demeke 2003,
Pylkkänen 2008). These Appl heads have no phonological exponent in Amharic (they are not the source of
–bb- and –ll); they are different from canonical (Bantu-like) applicatives only in that their specifier is a

³⁹ Unlike v, Asp (the locus of subject agreement) never agrees with a PP in Amharic. Following Baker (2012b), we
assume that Amharic’s Asp has an obligatory EPP(ːMax) feature, PP cannot satisfy it, and Asp must agree with the
XP that satisfies its EPP feature. v is freer to Agree with a PP, because it does not have the same EPP property

29
PP rather than an DP. Although this invocation of ApplP structure is somewhat abstract, it fits well with the fact that the range of P-OM constructions in Amharic is very similar to the range of applicatives in (say) Bantu languages: both are possible with benefactives, malefactives, goals, instruments, and maybe (under some circumstances) some locatives, but not with other kinds of PPs. The structure is in (59).

\[
\begin{array}{ccc}
\nuP & \text{AGREE (v, PP)} & \nuP \\
\uparrow & & \uparrow \\
\nu & \text{ApplP} & \nu \\
\varphi & \text{PP [3FS \varphi]} & \varphi \\
\text{Appl} & \text{Appl} & \text{Appl} \\
\text{VP} & \text{VP} & \text{VP} \\
\end{array}
\]

As a result of the applicative structure, then, the benefactive, maleactive, or instrumental PP is inside the c-command domain of v and higher than the theme argument—the perfect spot for v to Agree with it.\(^{41}\)

4.2.2 Interfaces

After an Agree relation is established between v and the PP in Spec ApplP, the derivation continues in much the same way as with simple object clitics. In this context too, v has unvalued phi features, and it can have both a conventional EPP feature to trigger movement and an [EPP: Reduce-to-Min] feature. The phi features are valued by v entering into an Agree relation with the benefactive, maleactive, or instrumental PP. The entire PP moves to Spec vP as triggered by the EPP feature on v; then the [EPP: Reduce-to-Min] feature causes the PP to reduce to its P head. Finally, [EPP: Head] causes this P in Spec vP to undergo Spec-Head Merge, adjoining to v as per (39). (v in Amharic has both [EPP: Head] and [EPP: Reduce-to-Min] or it has neither; see Section 3.3.) The resulting head is \([v, P[\varphi] [\varphi] V]\].

At PF copy realization proceeds as it did with the normal OM. The full PP in thematic position is morphosyntactically non-isomorphic to the Reduced copies, so it must be pronounced. In contrast, the reduced P in Spec vP is not pronounced since it has a PF restriction that it must be part of a complex head; rather the P adjoined to v is realized. Again, the actual phi features on v are not pronounced for economy reasons, since another copy of the same phi features is present within the same complex head.

Interpretation at LF also proceeds in a now-familiar fashion. The PP in the theta position is interpreted and the P adjoined to v is treated as part of the verbal inflection and so is not interpreted. As for the reduced P in Spec vP, it is important to recall our principle for determining what is interpreted as a pronoun at PF, originally given in (42) and repeated here as (60).

\[(60)\] A syntactic element X is interpreted as a pronoun at LF if X is in an A-position, X has phi features, and X has no descriptive lexical content.

According to this principle, the P in Spec vP is interpreted as a pronoun: it is in an A-position, it has phi features (as a result of agreement, as it happens) and it has no descriptive content. Thus, we can explain why the normal OM and the P-OM induce the same kinds of restrictions on the doubling phrase: both count as pronouns for the Weak Crossover condition and Binding theory. Even though it is somewhat unusual for a P with phi features to be interpreted as a pronoun, we contend that it is a direct result of PP acquiring phi features and then being Reduced to its head, as our account independently requires.

\(^{40}\) Amharic seems to allow \(bb\)-OM with a locative expression only if the locative applied argument is relativized (Leslau 1995:428-9). Interestingly, similar restrictions are found in other languages (e.g., Chimwiini).

\(^{41}\) (54) follows if the Appl that adds a benefactive is higher than the Appl that adds an instrument. This is consistent with Bresnan and Moshi 1990, phrased in terms of a thematic hierarchy with benefactive above instrument.
There is more to say about the morphology of the P-OM, however. Our analysis so far results in a P adjoined to v, but it does not automatically explain how the phi features and the P itself are exponed separately. Indeed, there is something of an antinomy to be seen in the P-OM in Amharic. On the one hand, there are clearly two distinct morphological pieces: one that is cognate with a preposition, and one that is cognate with normal object markers. On the other hand, the two must occur together in these constructions, and they make up one inviolable unit—almost as if they were a single morpheme. (This makes P-OM constructions in Amharic deeply different from applicatives in Bantu, where the applied affix and the object marker are entirely separate morphemes, on different sides of the verb root, and function independently of each other.) So it is tempting to say that the P-OM unit is a single morpheme consisting of two distinct morphemes. But when put like that, this is a contradiction.

The right theoretical tool for this job, we claim, is Fission, as introduced within Distributed Morphology (DM) by Halle and Marantz 1993; see also Noyer 1997, Frampton 2002, and McGinnis 2013 among others. Fission is a PF (post-syntactic) operation that is used when multiple morphological exponents seem to be inserted at one syntactic node, as we have here. Certain nodes are marked for Fission, i.e. as allowing multiple iterations of Vocabulary Insertion. The procedure is as follows:

\[(61)\]  
a. Insert the most specified Vocabulary Item at a Fission-marked node A  
b. Any non-discharged features are Fissioned off onto a new node B.  
c. Insert the most specified Vocabulary Item at B.  
Repeat (b) and (c) until no features remain to be discharged.

In addition to the basic P categorial feature, the P head must contain another feature that differentiates bb-OM from ll-OM so that there is some reason to expon one node as bb- and one as ll-. Since just these two prepositions participate, we propose that it is a binary feature: \([+/ENDPOINT]\) following Baker and Kramer 2014b. This seems plausible in that \(l\ddot{a}\)-PPs express a reached endpoint (they mark goals, and goal-like phrases) whereas \(b\ddot{a}\)-PPs say nothing about endpoints at all (they mark intermediate regions of paths, like ‘by way of’, or intermediate means, as in instrumental constructions). However, we do not go too far into the lexical semantics of this feature, since we are not experts in the lexical semantics of adpositions, and because that the exact features do not matter to the overall structure of our account.

We claim, then, that a syntactic terminal node containing P and [ENDPOINT] is marked for Fission in Amharic in the context of an adjacent v. For example, in a structure like (48), PF receives from the syntax the feature bundle \{P, [+ENDPOINT], \[FS \varphi\]\} to be exponed on v. The Vocabulary Items in (62) then compete for insertion in this node, among others.

\[(62)\]  
a. \([3], [F], [S] \leftrightarrow -at / v\)  
b. \([P][+ENDPOINT] \leftrightarrow -ll / v\)  
c. \([2], [F], [S] \leftrightarrow -f / v\)  
d. \([P],[-ENDPOINT] \leftrightarrow -bb / v\)

On the first step, (62)a matches the most features of v: it matches the three phi-features, third, singular, and feminine (whereas (62)c fails to match the person feature). Therefore -at is inserted in v’s position in the layered structure of the derived verb word, in accordance with the Subset Principle. However, (62)a does not expon all of the features of v (as it would for a simple D): the [+ENDPOINT] and [P] features remains unexpressed. Since P is marked for Fission, these features split off into a new node, as in (63).

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42 See Noyer (1992, 1997) for independent evidence that Fission applies in Afroasiatic languages to create discontinuous agreement markers—a phenomenon also found in Amharic subject agreement.

43 Previous accounts of Fission assume that Fissioned nodes always attach to the right of the original node. If that were so in Amharic, we would derive all as the realization of v, rather than llat. Therefore, we need to be a bit less restrictive on this point, holding that whether Fissioned nodes attach to the right or the left is an instance of language-specific variation (possibly related somehow to other ordering parameters).
Vocabulary Insertion then occurs at the node that contains [+ENDPOINT], and (62)b is inserted (not (62)d). This results in the correct, biexponential string -Ill-at realizing v for an example like (48), and similarly for other examples.44

In this section, we have shown that a superficially different—and crosslinguistically less common—kind of clitic can be derived by our proposal for clitic doubling, featuring the operation Reduce. In particular, Reduce can apply to PPs to give P clitics, as well as to DPs to give D clitics. This illustrates the generality of the proposal.45

44 There is another way of handling the mechanics of this derivation which would also work for our purposes. Rather than saying that the benefactive, malefactive, and instrumental Ps agree with their DP complements so as to get phi-features, we could say that they trigger head movement of D to adjoin to P, perhaps as P and D fuse into a single X° in combinations like de+le = du and a+le = au in French. D brings its phi-features with it to P, so v can agree with PP in phi as before. One advantage to this variant could be that we already have a complex head P+D formed in syntax, so one does not need Fission: ll can be inserted for P, and at can be inserted for D. Another would be that it might be more intuitive to say that P+D counts as a pronoun at LF (by virtue of the D part) rather than saying that P with phi-features does. A disadvantage to this alternative is that there is no independent evidence that D moves to P in Amharic. (Indeed, both D and P usually have no overt exponent in DPs, but are realized indirectly by way of the case or definiteness feature that they assign to their DP or NP complement: see Baker and Kramer 2014a for details.)

45 A full treatment of clitic-doubling structures in Amharic would also take into account the fact that it is possible to have a simple OM double what looks like a PP, as in (i) with ditransitive verb ‘give’, and to have a P-OM double what looks like a DP with accusative case, as in the optional variant of the applicative construction in (ii).

(i) Girma lä-Almaz mäs’haf-u-n sät’t’-at
   Girma.M to-Almaz.F book-DEF.M-ACC give(3MS.S)-3FS.O
   ‘Girma gave the book to Almaz.’ (Kramer 2014:600)

(ii) dañe-w Aster-in färräd-ii-ll-at
    judge-DEF.M Aster.F-ACC judge.PF-3MS.S-LL-3FS.O
    ‘The judge judged in Aster’s favor.’ (Amberber 1997:4, (10b))

We believe that both kinds of examples can be explained within our framework by distinguishing between the P itself and the inherent case assigned to DP by P. In fact, “prepositions” in Amharic are never direct manifestations of the P head, but rather spell out the oblique case assigned to DP by a null P, according to Baker and Kramer (2014a). Then (i) can result from a P like ‘to’, which assigns the same dative case to DP as ‘for’ does (spelled out as läi), but is not [+ENDPOINT], so it does not trigger Fission of P adjoined to v. The result is that ll cannot be inserted on v. Conversely, (ii) can result from a variant of the P ‘for’ that is [+ENDPOINT] (so Fission happens and ll is inserted), but which allows accusative case to be assigned to DP, rather than dative. (See Baker (2012b) for evidence from passives in favor of null Ps that allow accusative case assignment in ditransitive constructions in Amharic; these arguments generalize straightforwardly to examples like (ii).) Amharic is not radically different in these respects from I-E languages like German, where two distinct Ps can both assign dative case, and where the complement of a single P can be either dative or accusative. Filling out this analysis in detail would take some space without telling us anything new about conditions on clitic doubling or the mechanics of Reduce, so we refrain.
5. On OMs doubling experiencers

Many languages in the clitic doubling literature have predicates that take experiencer arguments, where the experiencer may or even must be doubled by an OM. Clitic doubling with experiencer arguments often has different properties from clitic doubling with ordinary theme arguments; see, for example, Krapova and Cinque (2008) for a recent discussion of this issue in Bulgarian, with references to other Balkan languages and to Romance languages. Essentially the same issue arises in Amharic. Amharic does not have dative subject constructions per se, but it does have a not-so-small set of predicates in which the erstwhile experiencer subject cannot trigger subject agreement, but rather is doubled by an OM on the verb. Such predicates may also take a theme argument; even if they do not, they generally also allow a cognate argument related to the verb root (see Leslau 1995:435-439, Amberber 2005:303-314). (64) gives examples with and without a distinct theme argument.

(64)  
- a. Almaz(-in) (rab) rab-at  
  Almaz(-ACC) (hunger) hunger(3MS.S)-3FS.O  
  ‘Almaz is hungry.’
- b. Aster gänzäb t’äff-at  
  Aster money lose(3MS.S)-3FS.O  
  ‘Aster lost some money.’

Interestingly, in this environment, it is possible for less-than-fully-referential DPs to be doubled by the OM, as shown in (65). This contrasts with the badness of OMs doubling such DPs used as theme-objects. (This is essentially the same as the contrasts that Krapova and Cinque document for Bulgarian.)

(65)  
- a. Mann(-in) ammäm-äw ?  
  who(-ACC) hurt(3MS.S)-3MS.O  
  ‘Who is sick?’
- b. Hullu säw gänzäb t’äffä-w  
  every person money lose(3MS.S)-3MS.O  
  ‘Everyone lost some money.’
- c. Mann-imm säw gänzäb al-t’äffä-w-imm  
  who-FOC person money NEG-lose(3MS.S)-3MS.O-FOC  
  ‘No one lost money.’

In these examples, the OM seems to behave the way that we would expect agreement to behave, rather than like a pronominal clitic. Because of facts like this, previous researchers on (e.g.) Romance languages have sometimes proposed that dative clitics are really agreement morphemes, whereas accusative clitics are true clitics (Sportiche 1996, Bleam 1999, Ormazabal and Romero 2013). But it is not very satisfying simply to stipulate this difference, given that we see the same asymmetry in many languages: OMs with experiencer “subjects” are agreement-like, but OMs with themes are more pronoun-like, never the other way around. Stipulating this is even less attractive in Amharic, where there is no distinction (at least overtly) between dative OMs and accusative OMs, the way that there is in many I-E languages. We seem to have the very same elements in (65) that we have in (5), so the question arises why these elements trigger referentiality restrictions in one context but not the other.

In fact, it is not as hard as one might think to give a unified account of this within our theory of OMs. According to us, examples of an OM doubling a quantified object are ruled out as crossover violations: the pronoun created by moving to Spec vP and Reducing cannot be referentially dependent on a DP that it c-commands. However, it is well-known that moving a quantified DP to an (A) position higher than the pronoun removes the violation. This is seen in familiar pairs like (66) in English, as well as many places in the literature on clause-internal scrambling.

(66)  
- a. *It seems to her father that every girl is beautiful.
b. Every girl seems to her father to be beautiful.

We can, then, reconcile the idea that OMs are always pronominal clitics in Amharic with the goodness of (65) if we assume that experiencers move to an A-like position higher than the Reduced D in experiencer constructions, whereas themes of transitive clauses do not move higher. And this seems like an eminently reasonable thing to assume, given that experiencers are notional subjects of the clauses in (64) and (65); they are the highest arguments thematically, and the natural topics of the clause (cf. Amberber 2005:313). They are like dative subject constructions in I-E languages in that they seem like subjects except for properties of case and agreement. Therefore, it is reasonable to say that the experiencers in these examples raise (or at least may raise) to a subject position, such as Spec SubjP in the sense of Cardinaletti (2004) and Rizzi (2006). The structure, then, of an example like (65b) is approximately (67).

(67)

Here the experiencer argument generated inside VP moves to Spec vP and Reduces to its D head, just as in other examples (e.g. like the goal argument in (36a)). But it also moves to the subject position, above Spec vP, as experiencer subjects do in Icelandic and other languages. From there it can undergo QR, adjoining to the clause as a representation of its scope at LF. When this happens, the q-variable bound by the quantifier is in Spec SubjP, where it c-commands the pronominal D in Spec vP. As a result, the D in Spec vP can be referentially dependent on the quantifier in this structure, in accordance with Safir’s QDC and INP, or the equivalents. In contrast, it is the agent that moves to subject position in transitive clauses, so the object cannot move to an A-position above Spec vP, so WCO is necessarily violated when the internal argument is quantified, as discussed in Section 2.2. Therefore, we do not have to stipulate that in Amharic some OMs are true agreement and others are not—a very desirable property of our account.46

46 Our use of Spec SubjP in (67) is to indicate that one probably needs a more articulated structure in order to give a full account of the case and agreement properties of experiencer subject constructions in Amharic—in particular, the fact that experiencer arguments must be doubled by an OM, cannot trigger subject agreement, and cannot trigger accusative case on a lower argument theme in examples like (64b). Experiencer arguments differ in these ways from the theme arguments of ordinary unaccusative predicates, which cannot be doubled by an OM. Baker (2012b) offers an analysis of these facts about experiencer constructions using the assumption that experiencer arguments (but not the themes of unaccusatives) are embedded in a PP shell with a null P head—the same kind of null P mentioned in note 45. This PP shell then prevents the experiencer argument from moving to the typical case-and-agreement position for subjects, and this drives the distinctive properties of the construction. Our account here can be harmonized with Baker’s account if we distinguish the case-agreement position for subjects (which cannot host PPs) from SubjP, which is not related to case and agreement (which can host null-headed PPs)—see Cardinaletti (2004). Compare also (47) from French, where there is also reason to distinguish the typical Spec TP position from SubjP.
The logic of this analysis also gives us a second possible reason why subject markers (SMs) so often seem to be agreement markers in languages of the world, whereas OMs behave like clitics as often as not, supplementing our reason in terms of EPP features discussed in Section 3.3. It might be common/normal for subjects to be able to move to a Spec SubjP position that is even above the Spec TP position where the subject sits in many languages; we mentioned that this must happen in the CF examples in (47), given the Subject-(Clitic)-Verb order of those examples. In languages where this Spec SubjP position counts as an A-position, we then expect that the WCO effect with quantified DPs that we are using to diagnose a true pronominal clitic will be washed out, as it is in (67) in Amharic. Evidently the relevant landing site in CF is not an A-position, but rather an A-bar position, given that the contrast between referential DPs and quantified DPs persists. But many Italian varieties do allow QP-Clitic-Verb structures, including Milanese, many Lombard dialects, Ligurian, and most Piedmontese dialects (Poletto 2000:142). This could be because the SM is really an agreement morpheme in those dialects, but it could also be because the preverbal subject position above TP can count as an A-position even though the SM is pronominal. In general, then, if one wants to test whether an SM is a pronominal clitic or not, it is safer to use examples in which the subject stays low (if available), to avoid this possibly confounding factor.\footnote{Goria (2004:29-32) shows that SMs in the Piedmontese dialects she studies are present regardless of whether the subject is referential or quantificational, and regardless of whether it is preverbal or after the main verb. For us, this implies that SMs in Piedmontese are true agreement markers, not pronominal clitics. If a dialect had pronominal subject clitics and an A-position for subjects above TP, we should see a contrast between referential DPs and QPs with postverbal subjects but not with preverbal subjects.}

6. On diagnostics for clitic doubling vs agreement

Finally, we can consider in a preliminary way what implications our argument that OMs in Amharic are clitic pronouns, not agreement markers, has for similar issues in other languages. Since we derive the restrictions on what kind of DP can be doubled by an OM rather directly from the hypothesis that the OM is a pronoun together with two crosslinguistically robust principles of grammar—the Weak Crossover Condition and the Binding theory (Principles A/B)—we expect relatively little room for crosslinguistic variation on this matter, other than perhaps around the edges, like what exactly counts as a quantifier or a reflexive marker in a given language. Indeed, informal inquiries suggest that the results are robust across a range of languages often taken to have canonical clitic-doubling. For example, singular universal quantifiers, un-D-linked wh-phrases, negative quantifiers/NPIs, reflexive anaphors, and DPs containing a possessor bound by a quantifier cannot be doubled by an object clitic in Latin American Spanish (Suñer 1988, José Camacho and Liliana Sanchez p.c.), in Greek (Elena Anagnostopoulou 1994, 1999 and p.c.), and in Bulgarian (Harizanov 2014 and Todor Koev p.c.).

This suggests that we should be able to use this property more broadly, as a reliable diagnostic for whether or not a morpheme that is attached to the verb and varies with the phi-features of the object should be deemed a case of pure object agreement or a pronominal clitic derived from the object by movement. If the morpheme is systematically incompatible with quantified DPs, anaphoric DPs, and DPs containing a bound variable, then it is a pronominal clitic; if it is compatible with them, then it is a manifestation of true object agreement.

For starters, then, we can ask whether any language has true object agreement, by this test. Nevins (2011:960-61) (citing unpublished work by Ellen Woolford) has asserted that, once one distinguishes clitics from agreement, object markers always turn out to be clitics, and there can only be one true agreement per clause, with the nominative (or absolutive) argument (cf. also Preminger 2009). Our diagnostic, however, gives the opposite result, that some languages do have true object agreement.

One such language is the isolate Burushaski, spoken in Northern Pakistan. In addition to having object agreement with definite referential nominals like proper names, pronouns, and definite DPs (see (68a)),
Burushaski also allows object agreement with reflexive anaphors ((68b)), question words ((68c)), and negative or nonspecific indefinite NPs ((68d)). For completeness, we also include (68e) with a universal quantifier, but since the universal quantifier in Burushaski is plural, this may be less relevant to the question at hand (see Section 2.2).

(68)  
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.PRX girl-ERG 3FSG-self.Y.ABS 3Y.O-kill-3FSG.S.PS  
‘This girl killed herself.’ (Willson 1996:18)

c. mu-ar men-∅ d-y-sú-č-a-m?  
her-DAT who-ABS PREV-3PL.O-bring-IMPF-1SG.S-NPRS  
‘Whom (all) will I bring to her?’ (Yoshioka 2012:186)

d. kholéi jé-e má-ma-r bés-an qhidmátan i-t-as  
here I-ERG you-OBL-DAT what-INDEF.SG service.IND.F.SG.ABS 3Y.O-do-INF  
a-ulán-C-a bá-a NEG-be.able.to-IMPF-1SG.S COP-1SG.S.PRES  
‘I cannot do anything (any service) for you here.’ (Yoshioka 2012:146)

e. icé čiiz-∅ hár hán uyoon-∅ muú rádi n-j-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.

Another language of this sort is the Bantu language Sambaa spoken in Tanzania, as described by Riedel (2009). (69a) shows that an object marker is possible in Sambaa with a nominal that is interpreted as definite, but that nominal can also be interpreted as an indefinite (specific or nonspecific). (69b) shows that an OM is possible with a negative polarity item or narrow scope indefinite, (69c) that it is possible with an in-situ wh-word, and (69d) that it is possible with a singular universal quantifier.48

(69)  
a. N-za-(mw)-ona ng’wana.  
1SG.S-PF.DJ-1.O-see 1child  
‘I saw the/a child.’ (Riedel 2009:46)

b. Si-chi-on-iye kintu chochoshe.  
NEG.1SG.S-7.O-see-PF 7thing 7any  
‘I didn’t see anything.’ (Riedel 2009:50)

48 Riedel also shows with some care that nominals doubled by an OM are not right dislocated in Sambaa. For example, in a structure of the form “Subject OM-verb Object” the verb can still be in conjunct 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 is still inside the VP even when the OM is present. Sambaa is quite different from some other Bantu languages (e.g. Zulu; Adams 2010, Zeller 2012) in this respect.
c. **U-wa-en** (wa)-ndayi?
   2SG.S-2.O-see.PF (PL.-)who
   ‘Who (all) did you see?’ (Riedel 2009:158)

d. **N-za-m-somea** [kia mwandisi] kitabu chakwe.
   1SG.S-PF-1.O-read.APPL every 1writer 7book 7his
   ‘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, specificity, or quantificational force. (The one major missing datum is an OM that doubles a reflexive anaphor, but this cannot be tested in Sambaa, because Sambaa, like other Bantu languages, expresses reflexivity by a special reflexive prefix on the verb (a variety of OM, perhaps), not by an independent DP.) So Sambaa too has object agreement, not object clitic doubling. Note however that there is by all indications significant variation within the Bantu family in this regard, with object markers in many other languages counting as doubling clitics, or even as clitics that cannot be doubled by an associate in situ but only by a dislocated DP as in Lubukusu. (See Author (2015) for preliminary discussion of this microparametric variation within the Bantu languages from our perspective.)

Next we can go on to ask how our diagnostic for agreement versus clitic doubling compares to other diagnostics from the literature. One recent 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 remain invariant across all TAM categories, then they are probably clitics. Indeed, Kramer (2014) shows that Amharic OMs do qualify as clitics by this test: subject agreement changes completely depending on the aspect of the verb (perfective or imperfective), but the object markers are unaffected by this or any other inflectional change on the verb. OMs are always suffixes at the end of the main verb (although before auxiliaries), 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 OMs in both Burushaski and Sambaa should be clitics by Nevins’s diagnostic, whereas they are true agreement according to ours. In Burushaski, subject agreement is a suffix which is intertwined with tense, and varies with tense, but object markers are prefixes on the verb, and there is only a single paradigm for them. In Sambaa, tense and object markers are closer in the linear structure of the verb: the morpheme order is SM-tense/aspect-OM-verb. But still the OM apparently does not vary (except maybe phonologically) with the tense, in that Riedel gives only one form for OMs in her Table 2.3 (p. 21) (and this is standard for Bantu languages). So the two diagnostics conflict here.

Another prominent recent diagnostic for clitic doubling as opposed to agreement comes from Preminger (2009). He draws attention to situations in Basque in which the 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, in such situations, some kind of default morpheme appears, like the third singular morphology found on impersonal verbs or verbs with quirky case subjects in many Indo-European 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 claims. He shows that absolutive marking in Basque is agreement by this criterion, whereas dative “agreement” is clitic doubling. This test also seems to work nicely 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 Sambaa. We do not have sophisticated data like Preminger’s from Basque to show that object agreement has failed because some other nominal intervenes. But one can at least consider intransitive verbs (especially perhaps unergative verbs, which have the same kind of v as transitives), where object agreement should fail simply because there is no object to agree with. Neither Burushaski nor Sambaa has
any kind of default object agreement marker in this situation, as shown in (70). So Preminger’s test suggests that these languages have object clitics, whereas ours says that they have object agreement.

(70) a. Sírfu hir-i girát-c-aan akhóle.  
only man-PL.ABS dance-NPST-3PL.S here
‘Only men dance here.’ (Willson 1996:19)

b. U-za-bua.  
2SG.S-PF-arrive
‘You arrived.’ (Riedel 2009:117)

What should we conclude from this mixed evidence? Our conclusion is that Preminger’s and Nevins’s diagnostics are unreliable. Although stories can be told that make their diagnostics seem not implausible, their logic isn’t necessarily compelling either. For example, it makes sense that if subject agreement is associated syntactically with T, that different tense values can condition different allomorphs of subject agreement. But it is also easy to imagine that subject agreement might be spelled out the same way whatever the other features of T might be—and it is even easier to imagine that object agreement might be spelled out the same way, since it is presumably on a different head (v). Similarly, there is a clear logic to Preminger’s diagnostic, but it begins to unravel 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 languages will often have only a few predicates (if any) that do not have a subject, but almost all will have many 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 to bother with one for when subject agreement fails. Thus both Nevins’s and Preminger’s diagnostics may pick up on differences between subject agreement and object agreement, more than on the difference between agreement and clitic doubling.

In contrast, we suggest that our diagnostic is firmer in that it gets to the heart of what it means to be an agreement morpheme as opposed to a pronoun, and it is grounded in well-established grammatical principles, namely the Weak Crossover condition and the Binding theory. What does it mean to be a pronominal clitic? It means to be a kind of (weak) pronoun that 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 no evidence that the OM is interpreted as a pronoun (unless there is a relevant difference in structure, as in Section 5), 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, then, is why we think our diagnostic is better. When all the diagnostics pretty much converge, as in Amharic, there is no problem. But when they diverge, as in Burushaski and Sambaa, one needs to make choices, and it is better to have a small set of theoretically well-grounded diagnostics that go to the heart of the matter than a larger set of plausible diagnostics that can go either way.49

7. Conclusion

In this paper, we have developed a potentially powerful diagnostic for distinguishing between pronominal clitic doubling and object agreement, thus addressing the worrying problem that we started with in Section 1. If an OM can appear with quantified DPs, anaphoric DPs, and DPs containing a bound variable, where the DP is structurally lower than the OM, it is agreement; if not, it is a doubled clitic. We

49 We do acknowledge 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, but one is more tightly bonded to the verb for phonological purposes, or one is more mobile than the other in word/morpheme order. Then it might make sense to say the more tightly bonded one is an affix and the less tightly bonded one a clitic. But this sort of morphophonological sense of clitic is not what the diagnostics in the syntax literature have been about.
showed how this diagnostic is rooted in well-known principles concerning the interpretation of pronouns, and how it leads to a clitic doubling analysis that has advantages in accounting for complex patterns of clitics in Amharic, including Amharic’s rather distinctive prepositional clitics. Our theoretical innovations that undergird this result are (i) the existence of Reduce as a distinct syntactic operation that can apply to copies to create what are effectively pronouns in the course of a derivation, and (ii) the idea that two D(P)s derivationally related by movement can be interpreted separately at LF. We also put our results in a broader cross-linguistic context at several points, contrasting agreement in Sambaa and Burushaski with clitic doubling in Amharic in Section 6, and showing how EPP features on functional heads are a crucial locus of variation for cliticization phenomena in Section 3. This provides at least the beginnings of an explanation for why clitic doubling seems rarer for subjects than for objects. A next step would be to further develop and test the cross-linguistic predictions of our approach, which we leave for future work.

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