

Information Structure Constraints on Object Marking in Manyika

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Abstract: Object markers in Bantu languages have commonly been analyzed as either agreement morphemes or incorporated pronouns. This paper documents a number of empirical facts concerning object marking in Manyika (Shona), showing that the distribution of object marking does not fit the predictions of either the agreement or pronominalization accounts. Specifically, we show that doubling of the object marker and the noun phrase object is in principle possible, but is constrained in a number of instances by the information structure status of the object. This paper therefore makes two distinct claims: first, Manyika object markers (and perhaps other object markers in Bantu languages) ought to be analyzed under the rubric of clitics, rather than as agreement morphemes or incorporated pronouns. Second, we claim that the constraints on clitic-doubling are not dependably syntactic in nature; instead, co-occurrence of an object marker and an object is licensed (or not) based on whether the object is in a non-focus domain.

1 Introduction¹

Manyika (Bantu S.10) is a variety of Shona, spoken by approximately 1 million people in eastern Zimbabwe and western Mozambique (Lewis 2009). As is common among Bantu languages, Manyika pronominalizes objects with a verbal prefix that typically occurs preceding the verbal stem and following other verbal inflections.

- 1) a. Ndi- ngo-farira Tendai.² [Manyika]
1sgS-HAB- like 1Tendai
'I like Tendai.'
- b. Ndi- ngo-mu- farira. **Object Marker (OM)**
1sgS-HAB-1OM- like
'I like him.'

As shown in (2), it is possible in Manyika to double an object marker (OM) with an overt NP object, in a manner familiar both from other Bantu languages and from the literature on Indo-European clitic doubling (e.g. Anagnostopoulou 2005, Riedel 2009, Sportiche 1996).

- 2) Ndi- ngo-mu- farira Tendai. [Manyika]
1sgS-HAB-1OM-like 1Tendai **OM-doubling**
'I like Tendai.'

The precise nature of OMs and clitics has long been a topic of debate in both the Bantu literature and the Indo-European literature, with the typical response being that they are

either incorporated pronouns or agreement morphemes. We show that this dichotomy as discussed within the Bantu literature is insufficient to account for the Manyika facts, requiring a more articulated theoretical treatment of object markers that can also begin to account for the broad range of variation in their properties across Bantu languages.

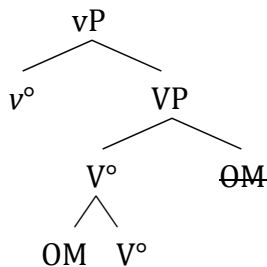
This paper contributes to this long-standing debate in the following ways. First, we document a variety of properties of object marking in Manyika. In addition, however, noting that there is a wide gulf in the traditions of research on Bantu object marking and Indo-European object clitics (though note Zeller 2009, Cardinaletti 2008, Labelle 2008), we make steps to unify analyses of Bantu OMs and Indo-European clitics in a way that helps elucidate the properties of Manyika and the nature of object marking in Bantu languages more broadly. We utilize a variety of diagnostics and proposals developed in the literature on Indo-European clitics, drawing 2 distinct conclusions: first, that the Manyika OM is a clitic adjoined to *v*, and second, that the OM necessarily triggers a non-focus reading of a doubled object. In these ways Manyika object marking proves to be essentially the Bantu equivalent of Modern Greek cliticization (cf. Kallulli 2000). The next section lays out the relevant typological and theoretical background, with section 3 and 4 laying out the distribution of object marking in Manyika. Section 5 gives a theoretical implementation of the cliticization analysis, and section 6 concludes.

2 Relevant Background

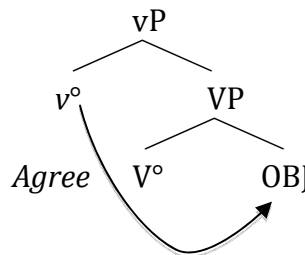
2.1 Summary of Theoretical Background

Bresnan and Mchombo (1987) demonstrated that the presence of an object marker in Chichewa creates a variety of possible word orders, but the object must be immediately postverbal without an OM.³ They concluded that the object marker in Chichewa is always an incorporated pronoun, related anaphorically to its associated object.⁴ This work was the precursor to two prominent views among researchers concerning Bantu OMs: with respect to their syntax, object markers in Bantu language are either agreement morphemes or incorporated pronouns. These two analyses are schematized in basic forms (3) and (4).⁵

3) Incorporation:



4) Agreement:



These core analyses, on the face of it, can be taken to represent the most observable property of OMs—whether or not they can co-occur with (i.e. *double*) an *in situ* object. Doubling is straightforwardly predicted by an agreement analysis but ruled out in an incorporation analysis like that in (3). This proposed dichotomy plays prominently in the literature: for example, Henderson (2006) argues that OMs in a given language are either

pronominal or agreement morphemes, with Buell (2005) and Adams (2010) following this dichotomy in evaluating the Zulu OMs (though with differing conclusions).

But because of the wide variation in object marking properties across many constructions (see Marten, Kula, and Thwala 2007 for an excellent summary), Riedel (2009) sets forth the claim that all object marking in Bantu languages is agreement, noting that the dichotomy between (3) and (4) is insufficient to explain the range of variation that occurs between languages and it should instead be rooted in the properties of Agree.⁶ This paper affirms that reasoning but contests the conclusion, proposing instead that object marking in Manyika is the result of a cliticization process. We propose an analysis for this cliticization process using recent theoretical tools developed for clitics in Romance and other Indo-European languages, and in doing so the dichotomy between agreement and pronoun incorporation is altered in a way that is more predictive of the range of variation that occurs between languages.

2.2 Previous Diagnostic Claims

In the spirit of traditional co-occurrence diagnostics, Henderson (2006) claimed that object marking in relative clauses should be considered diagnostic of the status of OMs as either agreement morphemes or pronominal arguments. This conclusion is drawn from an empirical observation from the available evidence at the time:

5) Relative Clause OM Generalization (Henderson 2006)

- a. languages that prohibit OMs in object relative clauses also prohibit doubling an OM with an in situ object
- b. languages that allow OMs in relative clauses also allow doubling

The argument, then, is that if OMs are ruled out in relative clauses, it is because they are pronominal (unable to co-occur with a gap in a relative clause because they are unable to serve as resumptive pronouns), but if OMs are possible in object relative clauses, they are agreement morphemes, as they do not compete for the same position with extracted objects.⁷ Henderson illustrates these patterns with evidence from Dzamba, which exhibits pattern (a) and is analyzed as a pronominal object marker, and Swahili, which exhibits pattern (b) and is analyzed as agreement.

Manyika, however, contradicts this generalization: doubling of an OM is possible in (6) (where the adverb is assumed to demarcate the vP), but the OM is nonetheless ruled out in an object relative clause, as shown in (7):

- 6) Ndi- cha-**u-** bika mu-ti mangwani. [Manyika]
 1sgS-FUT-3OM-cook 3-tree tomorrow **OM-Doubling**
 'I will cook the tree tomorrow.'

- 7) Nda- ka- ona [ndiro iyo mu-kadzi a- ka- **(*i)-** gura.] [Manyika]
 1sgS- PST-see 9plate 9COMP 1-woman 1s-PST- (***9OM**)-break **Object Relative Clause**
 'I saw the plate that the woman broke.'

It is clear, then, that a simplistic dichotomy between agreement and incorporation (as presented in (3) and (4)) is not sufficient to account for the facts, and additional mechanisms must be introduced to account for Manyika. Riedel (2009: 183) notes that this same pattern occurs in Haya, also pointing out that this challenges the generalization in (5), so Manyika is not alone in this pattern of OM-distribution. The next section introduces a variety of basic object marking properties in Manyika, proposing an explanation for (6) and (7), namely, that Manyika object markers can only double non-focused elements.

3 Properties of Manyika Object Marking

This section gives a general description of the distribution of object marking in Manyika, first tackling the properties of declaratives contexts, before moving to non-declarative contexts in section 3.2.

3.1 Object Marking in Declarative Contexts

3.1.1 Dislocation Contexts

Similar to many other object-marking languages, the object marker in Manyika obligatorily occurs with a dislocated object. (8) and (9) demonstrate the obligatory object marker with dislocated objects, where the presence of a comma indicates an intonational break.

- 8) Tendai, ndi- ngo-*(mu)- farira.
 1Tendai, 1sgS-HAB-*(1OM)-like
 'Tendai, I like him.'
- 9) Ndi- cha-*(ri)- bika , zingwa.
 1sgS-FUT-*(5OM)-cook 5bread
 'I will cook it, the bread.'

3.1.2 Doubling: OM + NP(OBJ)

As was shown in (2), Manyika object markers may appear with a coreferential *in situ* noun phrase. Another example is given in (10) below:

- 10) Ndi- cha- (a-) werenga ma-bhuku. [Manyika]
 1sgS- FUT- (6OM-) read 6-book
 'I will read the books.'

Riedel (2009) discusses a range of variation in Swahili and Smbaa with respect to which sorts of object NPs may be doubled by an object marker. Manyika is consistent in that it always permits the object marker to optionally co-occur with *in situ* lexical object NPs, but to our knowledge it is never required to co-occur.

- 11) Nd- aka- (mu-) chaya mu-koma wa-ngu. **Kinship terms**
 1sgS- PST - (1OM-) hit 1-older.sister 1-my
 'I hit my older sister.'

- 12) Nd- aka-(wa-) chaya mambo. **Terms of honor/respect**
 1sgS- PST- (2OM-) hit 2king
 'I hit the king.'
- 13) Nd- aka-(i-) chaya mbudzi. **Non-human animates**
 1sgS- PST- (9OM-)hit 9goat
 'I hit the goat.'
- 14) Nd- aka-(a-) chaya ma-bhuku. **Non-animates**
 1sgS- PST- (6OM-) hit 6-book
 'I hit the books.'

According to the metrics of (3) and (4), then, the preceding data seem to fall in with an approach to object marking as agreement, as the object marker is not in complementary distribution with an *in situ* object.

3.1.3 Right-Dislocation: Temporal/Manner Adverbs

As long-discussed in cliticization and OM literature (Riedel 2009, Henderson 2006, Anagnostopoulou 2005) it must be demonstrated that the NP object in OM-doubling is in fact in canonical object position, and not right-dislocated. Henderson (2006) and Riedel (2009) utilize an adverb placement diagnostic:

- 15) [VP [VP V OBJ] Adv]

Given this structure of a low adverb, if an object can be followed by such an adverb, we take this to indicate that it is *in situ*. If the adverb must appear to the left of the object, however, this would indicate that the object NP is right-dislocated. As shown in (16) and (17), doubled object NPs in Manyika are indeed located in their base positions, allowed inside a manner adverb and only occurring outside when a clear pause marks right dislocation (as in (16)c).

- 16) a. Ndi- cha-bika mu-ti mangwani.
 1sgS-FUT- cook 3-tree tomorrow
 'I will cook the tree tomorrow.'
- b. Ndi- cha-u- bika mu-ti mangwani. **# # # V OBJ ADV**
 1sgS-FUT-3OM-cook 3-tree tomorrow
 'I will cook the tree tomorrow.'
- c. Ndi- cha-u- bika mangwani *(,) mu-ti. **# # V ADV , OBJ**
 1sgS-FUT-3OM-cook tomorrow , 3-tree
 'I will cook it tomorrow, the tree.' (afterthought reading)

The same facts hold for manner adverbials:

- 17) a. Nda-ka- i- hya mi-ti zvishoma nezvishoma.
1sgS-PST-4OM-eat 4-tree slowly
'I ate the trees slowly.'
- b. Ndi- cha-mu- tsvoda mw-ana nekukasika.
1sgS-FUT- 1OM-kiss 1- child quickly
'I will kiss the child quickly.'

It is instructive to note that these facts do actually contrast with the patterns in other languages – for example, Lubukusu and Dzamba—in which these same contexts require precisely the opposite pattern, wherein an OM-doubled NP object must appear *outside* the temporal adverb (cf. Diercks and Sikuku 2011, Henderson 2006). We therefore take the preceding data to show that there is no complementary distribution between an object marker and an *in situ* object – that is, OM-doubling does not occur as a result of right-dislocation in Manyika, a fact traditionally taken as evidence of an agreement relation (see Henderson 2006, Riedel 2009).

3.1.4 Raising-to-Object (RtO)

An additional argument that OM-doubled objects need not be right-dislocated comes from the class of Raising-to-Object (RtO) predicates, where there is a licensing relationship between the matrix verb and the embedded subject. In English this is realized in accusative case-marking on the infinitival subject (*I want him to leave*), whereas in many Bantu languages this is realized by object marking on the matrix verb and/or raising of the embedded subject into the matrix clause, as shown in (18)b.

- 18) a. Ndi- ngo- da [kuti Tendai a- hy-e sadza.]
1sgS-HAB- want that 1Tendai 1s-eat-SBJ 5sadza
'I want Tendai to eat sadza.'
- b. Ndi- ngo-mu-da Tendai [kuti a-hy-e sadza.]
1sgS-HAB-1OM-want 1Tendai that 1s-eat-SBJ 5sadza
'I want Tendai to eat sadza.'

We assume here that the embedded subject in (18)b has raised into an Agr projection in the matrix clause. It is unclear how the raised embedded subject could possibly be interpreted as right-dislocated here – any structure for (18)b requires the embedded subject to have raised to some non-dislocated position within the matrix clause, yet OM-doubling is still possible. We therefore interpret the fact that embedded subjects can be OM-doubled by the matrix verbs as additional evidence that Manyika OMs may double *in situ* NP objects, a fact consistent with an agreement analysis of the Manyika OM.

3.2 Object Marking in Non-Declarative Contexts

Despite availability of OM-doubling constructions, doubling is not universally available – specifically, OM-doubling is ruled out in all object extraction contexts in Manyika. The example in (19) is an additional example of OMs ruled out in object relative clauses.

- 19) Nda-ka- ona [ch-uma icho nda-ka- (*chi)- tenga.]
 1sgS-PST-see 7- necklace 7COMP 1sgS- PST -(*7OM)- buy
 ‘I saw the necklace that I bought.’

This pattern holds true for other cases of object extraction as well. The Manyika doubled OM is ruled out with object clefts and with *in situ* question words, as is seen in the following examples.

- 20) Wa-komana awo mu-sikana a- ka- (*wa)- tsvoda. ***OM + Cleft**
 2-boy 2COMP 1- girl 1S-PST -(*2OM)-kiss
 ‘It is the boys that the girl kissed.’
- 21) Inyi icho mu-kadzi a- ka- (*chi)- gura? ***OM + Wh-Cleft**
 what 7COMP1-woman1S- PST -(*7OM)-break
 ‘What is it that the woman broke?’
- 22) Mu-kadzi a- ka- (*chi)- gure- nyi? ***OM + wh-in-situ**
 1- woman 1S-PST-(*7OM)-break-7what
 ‘What did the woman break?’

Taking all of the preceding data together, we are left with the empirical generalizations in (23):

23) Patterns of Manyika OMing

- OM-doubling is possible (but not required) with an overt *in situ* object
- OM-doubling is ruled out in object relative clauses and object clefts
- OM-doubling is ruled out with *wh-in-situ*

To preview the direction of our argumentation, we propose that the following analysis can account for this distribution of OM-doubling in Manyika:

- 24) OM-doubling in Manyika is unacceptable in focus contexts.

Defending and structurally implementing this claim will occupy the rest of this paper, so we do not offer much discussion here before moving to a variety of supporting evidence. It is relevant, however, to define our intention in using the term ‘focus’: for our purposes here, we adopt the definitions of focus and topic as given in Kallulli (2000).⁸

- 25)a. focus: the most informative part of an utterance, often *new information*
 b. topic: the complement of focus (Kallulli 2000: 218)

The claim, then, is that the interpretation of OM-doubling is incompatible with the focus-type interpretation of the constructions in (19)-(22) (a *foregrounding* interpretation, in the sense of Schachter 1973, where certain information is assigned a higher degree of communicative importance). Operating on these definitions, the next section explores the evidence for the analysis in (24), which is then given a theoretical implementation in §5.

4 Manyika Object-Marking as Non-Focus

Following the diagnostics utilized by Kallulli (2000) to establish the obligatory topic-interpretation of Modern Greek direct object clitic-doubling, we demonstrate that OM-doubling is only felicitous in contexts where the object receives a non-focus interpretation. The examples in (26) and (27) give basic transitive sentences differing only in OM-doubling.

- | | | |
|-----|---|--------------------|
| 26) | Tendai w- aka-werenga bhuku nekukasika. ⁹
1Tendai 1fs-PST- read 5book quickly
'Tendai read the/a book quickly.' | Non-doubled |
| 27) | Tendai w- aka-ri- werenga bhuku nekukasika.
1Tendai 1fs- PST -5OM-read 5book quickly
'Tendai read the (particular) book quickly.' | Doubled |

The following examples utilize the fact that when an item is questioned, in the response, the answer to that question is NEW information (i.e. new-information focus). As (27) shows, the OM-doubled sentence is illicit in response to questioning the VP, but the non-doubled version in (26) is acceptable.

Response:

- | | <u>non-doubled</u> | <u>doubled</u> |
|-----|---|--------------------------------|
| 28) | Tendai w- aka-ite-nyi?
1Tendai 1fs-PST-do-what?
'What did Tendai do?' | ✓ (26) # (27) |

Example (29) is an object question, and again in the response the OM-doubled sentence in (27) is ruled out, but the non-doubled version in (26) is not.

Object-focus:

- | | | |
|-----|---|--------------------------------|
| 29) | Tendai w- aka-werenge-nyi?
1Tendai 1fs-PST- read -what?
'What did Tendai read?' | ✓ (26) # (27) |
|-----|---|--------------------------------|

In contrast, when the verb alone is focused, but the object itself is not new information, (27) becomes acceptable as a response (with (26) remaining acceptable).

V-focus:

- 30) Tendai w- aka-ite-nyi nge bhuku?
 1Tendai 1fs-PST- do-what with 5book ✓ (26) ✓ (27)
 'What did Tendai do with the book?'

The same is true of subject-focus contexts like (31), where the object is also non-focused. Both the non-doubled and doubled responses are acceptable in (32), again consistent with the generalization that OM-doubling occurs only in non-focus contexts.

Subject-Focus

- 31) Ndi- ani w-aka- werenga bhuku ri-ya?
 It.is-1who 1fs-PST- read 5book 5-that
 'Who read that book?'
- 32) Tendai ndi-ye w- aka-(ri)- werenga bhuku ri-ya.
 1Tendai FOC-1 1fs-PST-(5OM)-read 5book 5-that
 'Tendai read that book.'

As a final instance of new-information focus, following Kallulli (2000) we assume that in yes/no questions the entire sentence is in focus. As shown in (33), OM-doubling is ruled out in yes/no questions.

- 33) Tendai w- aka-(*ri-) werenga bhuku ri-ya here?
 1Tendai 1fs-PST- (*5OM-)read 5book 5-that q
 'Did Tendai read that book?'

These facts are summarized in (34), showing that OM-doubling is only possible in non-focus contexts, where the doubled object is familiar information. In instances where the object falls within a focus domain, OM-doubling is ruled out.

34) Summary: (non)-focus properties of Manyika OM

	No OM-doubling	Doubling OM+OBJ
Object-focus	✓	#
VP-focus	✓	#
Sentence-focus	✓	*
V-focus	✓	✓
Subject-focus	✓	✓

What is not clear in the preceding examples, however, is whether it is focus and not a lack of specificity that rules out doubling in focus contexts, though the whole-sentence focus in (33) is a first argument against a specificity analysis of these facts. In the following data, the non-focus generalization is strengthened, as object focus is triggered in contexts where a specific reading of the focused element is acceptable, but OM-doubling is nonetheless ruled out. The first example is an out-of-the-blue context, triggering sentence-focus, where OM-doubling is infelicitous:

As a response to the question, 'What happened?'

- 35) Tendai a- ka- (#ri-) hya sadza r-angu.
1Tendai 1S-PST-(#5OM-)eat 5sadza 5-my
'Tendai ate my sadza.'

Likewise, when either the object or the VP/clause is focused contrastively in (36) and (37), respectively, doubling of the OM and an overt object is impossible.

- 36) Tendai a- ka- (*ri-) hya sadza r-angu basi, kwete mu-punga.
1Tendai 1S-PST-(*5OM-)eat 5sadza 5-my only, not 3- rice
'Tendai ate only my sadza, not my rice.'

- 37) Tendai a- ka- (*ri-) hya sadza ri-ya , h- a- a- zi ku-bika mu-punga.
1Tendai 1S-PST-(*5OM-)eat 5sadza 5-this , NEG-1S-PST-NEG INF-cook 3-rice
'Tendai only ate this sadza, he didn't cook the rice.'

In contrast, however, and consistent with the patterns shown in (34), when the subject is contrastively focused, OM-doubling becomes acceptable.

- 38) Mirai h- a- a- zi ku- (ri-) hya sadza r-angu, asi Tendai.
1Mirai NEG-1S-PST-NEG INF-(5OM-)eat 5sadza 5-my, but 1Tendai
'Mirai didn't eat my sadza, Tendai did.'

Kallulli (2000) argues on the basis of parallel data from Modern Greek and Albanian that clitic-doubling constructions are topic-oriented in those languages. We make the same claim on the basis of the parallel data in Manyika – object marker doubling is necessarily non-focus. This explains the lack of object marking in extraction contexts in Manyika as well – object extraction contexts in object clefts and object wh-clefts are focused objects, and objects in relative clauses are foregrounded in a manner that unify them with focus in this context (see section 5.2 for more discussion on this issue). Wh-objects *in situ* are assumed to be focused (like all wh-elements), unifying the lack of doubling there with the lack of doubling in instances of overt wh-extraction. We conclude (like Riedel 2009) that the traditional dichotomy of Bantu OMs as either agreement markers or incorporated pronominals is not sufficiently explanatory to explain the distribution, but propose instead that Manyika OMing is a cliticization process, which is constrained by information structure.

It is worth noting that this analysis revisits a claim from Bresnan and Mchombo (1987), who claimed that a prohibition on object marking in questions in Chichewa was also explained by a non-focus interpretation of an object that is doubled by an object marker. Their motivations within their framework of analysis do not apply completely to the Minimalist analysis here (particularly given our rejection of a pronominal incorporation analysis for Manyika, which they adopt for Chichewa). But their work is a precedent for engaging the role of information structure in the distribution of OM-doubling, as was explored in this section.

5 Manyika OM as a clitic

Following the conclusions from the preceding section, the core claim of this paper is laid out in (39):

39) The Manyika OM is an object clitic that triggers a non-focus interpretation.

Section 5.1 provides various arguments for grouping the Manyika OM with clitic phenomena, and section 5.2 adopts a Big DP analysis of clitic doubling to offer a structure for the relevant constructions.

5.1 Overview of the issue

The critical question at this juncture is whether the differences between cliticization and agreement (as well as pronominalization) are substantive, or merely terminological. In many ways, recent works like Roberts (2010), Nevins (2011), and Kramer (2011) begin to conflate the concepts of agreement and clitics, as all consider an Agree relation a prerequisite for cliticization. While this paper does not attempt to provide a conclusive response to this question (which has long vexed syntacticians), this section looks at two syntactic properties of clitics—optionality and mobility—and draws on the Manyika evidence to claim that the Manyika OM should be classed with the sort of elements that are generally considered clitics.

Preminger (2009) proposes a straightforward diagnostic for distinguishing cliticization and agreement. On the analysis that Agree relations may fail without causing a derivational crash (Preminger 2011), he proposes a diagnostic of breaking the relationship between a morpheme and a corresponding full NP (e.g. intervention effects). If the morpheme in question disappears entirely it should be considered a clitic, but if a default agreement form occurs it should be considered an agreement morpheme.

Essentially, this is a claim that agreement morphemes are obligatorily present, and clitics are optional. For our concerns, this relates to a broad-reaching generalization for verbal morphology across the Bantu family: subject markers tend to be obligatory (resulting in default forms when they do not overtly agree with the logical subject), but object markers are optional in many languages.¹⁰ On this basis we assume that agreement affixes are simply valuation of previously unvalued features on a syntactic head, and therefore tend to be obligatory, because they do not carry any additional morphosyntactic features (Chomsky 2001, Preminger 2009, 2011). In contrast, clitics have some degree of independent syntactic status, presumably because they do contain additional morphosyntactic features (van Riemsdijk 1999, Anagnostopoulou 2005, Kramer 2011). This suggests, therefore, that optional OMs in Manyika and other Bantu languages are in fact clitics that surface internal to the verbal form.

An additional property of clitics is that they display some degree of morphosyntactic independence relative to agreement morphemes (van Riemsdijk 1999). This morphosyntactic independence is evidenced by the fact that they tend to be syntactically mobile, whereas agreement morphemes tend to be more morphologically restricted. Therefore we find clitic climbing constructions in some languages, such as the French

causative in (40)c, where the clitic referencing the embedded object must surface on the highest verb.

- 40)a. Elle fera manger ce gâteau à son enfant [French]
 she will-make eat this cake to her child
 b. *Elle fera **le** manger à son enfant
 c. Elle **le** fera manger à son enfant (van Riemsdijk 1999: 6)

Similarly, some clitics may either precede or follow their hosts, which in some Romance languages depends on the finiteness of the host verb, as in the Italian examples in (41).

- 41)a. Lo voglio fare [Italian]
 it I-want do
 b. *Voglio lo fare
 c. Voglio far lo (van Riemsdijk 1999: 18)

As with the optionality diagnostic, we argue that Manyika shows a clitic-like property in mobility of OMs. To indicate possession in Manyika, a sentence consists of a copula followed by a ‘with’ PP. As shown in (42) and (43), respectively, the copula may be either null (in present tense) or overt. Important for our purposes here is the fact that that pre-stem object markers are impossible in possessive constructions (b), and the pronominal form of the object must instead be realized postverbally (a), which we argue to be an alternative realization of the object marker, as it is performing the same role as an object marker in pronominalizing an object.

- 42) a. Ndi- na- (**ro**) ruwa iri. [Manyika]
 1sgS- with-(5POM) 5flower 5this
 ‘I have this flower.’
Possessive Construction
 b. Ndi- (***ri-**) na ruwa.
 1sgS- (*5OM-)with 5flower
 ‘I have a/the flower.’
- 43)a. Nda-i- we na- **wo**.
 1sgS-dist.PST-be with-3POM
 ‘I had it (3) (dist. past).’
 b. *Nda- i- **u-** we na.
 1sgS- dist. PST -3OM- be with

As (42)a shows, OM-doubling is possible in possessives with the postverbal OM, just as it is in simple transitives with the pre-stem OM, which suggests to us that the postverbal OM here is not some form of special resumptive pronoun or relative marker (as similar forms often are in related Bantu languages, cf. Henderson 2006). Important to note here is that the postverbal object marker is disallowed with regular transitive verbs, as shown in (44).

44)a. *Ndi-no- wenga-yo.
1sgS-HAB- hate -9POM
Intended: 'I hate it.' (class 9)

[Manyika]
Simple Transitive

b. Ndi- no- i- wenga.
1sgS-HAB-9OM- hate
'I hate it (9).'

We interpret this mobility of the object marker as additional evidence that it should be interpreted as part of the class of elements identified as clitics, rather than strictly an agreement morpheme. We attribute the slightly different morphological form of the OM in pre-stem and postverbal positions to allomorphy related to spellout of the clitic in word-final position. To our knowledge this same pattern occurs in Kiswahili possessive constructions, but not in Lubukusu possessive constructions, despite the surface similarities of possessives in those languages (Justine Sikuku, personal communication). Further investigation into the structure possessives across Bantu languages is necessary to interpret the significance of these kinds of variation.¹¹ In order for this analysis to hold, of the postverbal clitic as simply a different position of the OM, it must be shown that OM-doubling in possessives has similar properties, that is, doubling should have the same effect on information structure as the more canonical form of OM-doubling. The evidence suggests that this is in fact the case:¹²

45) a. Ndi- ne ruwa iri
1sgS-with 5flower 5this
'I have this flower.'

b. Ndi- na- ro ruwa iri.
1sgS-with-5OM 5flower 5this
'I have this flower.'

In an out-of-the-blue context, such as that triggered by a question like *What's going on?*, non-doubling (45)a is acceptable, but the doubling (45)b is infelicitous. This is consistent with the previous evidence for the pre-stem OM-doubling, which is ruled out in focus contexts. Contexts of contrastive object focus, as with the pre-stem object marker, also rule out clitic doubling with the postverbal object marker:

46) a. Ini ndi- ne ruwa iri basi , kwete mu-ti.
I 1sgS-with 5flower 5this only , not 3- tree
'I have only this flower, not a tree.'

b. *Ini ndi- na- ro ruwa iri basi , kwete mu-ti.
I 1sgS-with-5OM 5flower 5this only , not 3- tree
'I have only this flower, not a tree.'

As with the preceding cases, it is not only object focus alone that rules out clitic doubling, but VP focus contexts like the VP-contrastive focus in (47):

- 47) a. Ndi- ne ruwa iri asi ha- ndi- ri- fariri.
 1sgS-with 5flower 5this but NEG-1sgS- 5OM- happy.with
 'I have this flower, but I'm not happy with it.'
- b. *Ndi- na- ro ruwa iri asi ha- ndi- ri- fariri.
 1sgS- with-5OM 5flower 5this but NEG- 1sgS- 5OM- happy.with
 'I have this flower, but I'm not happy with it.'

Looking at one last piece of evidence in this respect, as with the pre-stem object marker, subject-focus contexts where the object is familiar information allow OM-doubling, as shown in (48)b, in contrast to the preceding cases where the object fell within a focus domain.

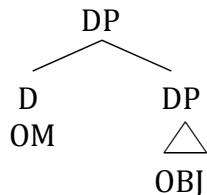
- 48) a. Mirai a- ne ruwa r-angu , kwete Tendai.
 Mirai 1-with 5flower 5-my , not Tendai
 'Mirai has my flower, not Tendai.'
- b. Mirai a- na- ro ruwa r-angu , kwete Tendai.
 Mirai 1-with-5POM 5flower 5-my , not Tendai
 'Mirai has my flower, not Tendai.'

We conclude, therefore, that the postverbal object clitic shares similar properties with the pre-stem object marker, which we interpret as additional evidence in support treating these as two distinct positions for the same morphosyntactic element.

5.2 Clitic Analysis

In order to account for this array of facts we adopt the basic analysis that doubled clitics originate from within the same DP as their associates, utilizing the structure in (49):

49) Structure of OM-Doubling



The specific analysis here is adopted from Kramer's (2011) modification of an analysis from Nevins (2011), though the analysis of clitic doubling as resulting from a Big-DP structure has a rich history (see Belletti 1999, Bleam 1999, Cechetto 2000, Uriagereka 1995, among others). Our claim, therefore, is that the structure in (49) has a specific non-focus interpretation, explaining the general distribution of the Manyika OM.

- 50) The Big-DP structure in (49) necessarily triggers a non-focus interpretation.

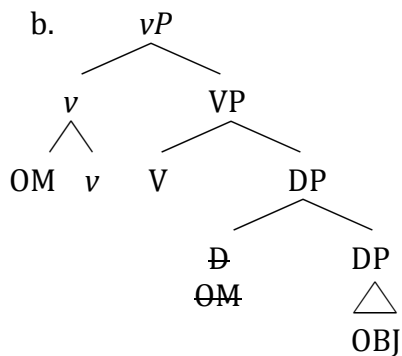
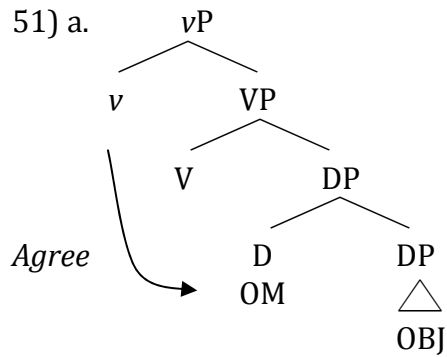
The claim in (50) accounts for the generalizations about the non-focus distribution of OMs discussed in the preceding sections: if a Big-DP (with its non-focus interpretation) occurs in a focus domain, this creates a logically impossible interpretation where an argument is considered both old and new information (or, as noted below, where it is interpreted as both backgrounded and foregrounded). Because Big-DPs result in doubling constructions, doubling constructions are ruled out in focus contexts.¹³ The lone exception to our analysis here (to our knowledge) is the impossibility of OM-doubling in relative clauses, which do not clearly display focus properties of the extracted object (at least, not in the *new information* sense of focus).

Schachter (1973) points out that despite differences between relative clauses and focus clefts (i.e. relativized objects tend to be topical, as opposed to focused objects), they in fact share many syntactic and semantic similarities, which he attributes to a shared foreground vs. background information structure between relative clauses and focus clefts. Foregrounding, Schachter claims, is the process of assigning different parts of a sentence different degrees of communicative importance; in a focus construction, new information is foregrounded and familiar information is backgrounded. Schachter claims that relative clauses share this foreground/background structure, despite the fact that this structure is not the new/familiar structure of focus constructions. It may be that, strictly speaking, OM-doubling is restricted to backgrounded contexts—a more general characteristic that is shared by both focus clefts and relative clauses—rather than strictly non-focus contexts (in the sense of *new information*); this is certainly a matter for future research.¹⁴ Note, however, that this definition of foregrounding is not inconsistent with Kallulli's (2000) definition of focus as “the most informative part of an utterance,” this definition being the one which we adopt in this paper.

5.2.1 Basic Doubling Analysis

We assume following much recent work that an Agree relation precedes the cliticization process, essentially, that it is an Agree relation between *v* and the OM-clitic that triggers cliticization (Matushansky 2006, Roberts 2010, Kramer 2011, and Nevins 2011).¹⁵ Roberts (2010) proposes that head movement and cliticization are essentially the same process, that is, when a head agrees with a Goal that is a proper subset of its features, this operation triggers incorporation of the Goal into the head.

Though we adopt the structure in (49) from Kramer (2011) and Nevins (2011), we assume (following Roberts 2010) that the D head that is the OM is featurally defective, consisting of nothing but phi-features (and a categorial feature), and that it is this minimal structure therefore triggers its incorporation into *v*.



Roberts' (2010) analysis of cliticization raises important questions for locality, especially concerning violation of the Head Movement Constraint (Baker 1988, Travis 1984) that constrains head movement from skipping intervening heads. While space constraints do not allow us to revisit the arguments, we refer the reader to Roberts (2010: chapter 4) for evidence and arguments that long-distance head movement is in fact possible.¹⁶

A key difference between more familiar Indo-European clitic constructions and Bantu OMs, however, is that the OM appears infixal to the verb. On our analysis, the clitic appears infixal in the verb because, as has been long concluded for many Bantu languages, tense and aspect morphology are a separate syntactic and prosodic unit, essentially an auxiliary unit that must be pronounced adjacent to the verb stem for morphological reasons (see, among many others, Barrett Keach 1985, Ngonyani 1999, Myers 1998, Julien 2002).

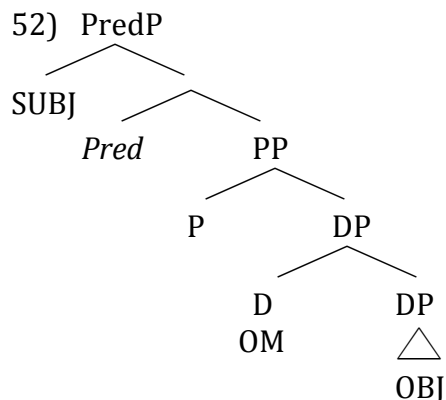
5.2.2 Possessive Doubling Analysis

An important question, then, is how is it that the mobility of the OM that motivated the cliticization analysis in the first place can be accounted for by the analysis sketched out above. Recall from (42) the OM occurs postverbally (following the preposition) in possessive constructions:

42) a. Ndi- na- (ro) ruwa.
 1sgS- with- (5POM) 5flower
 'I have a/the flower.'

[Manyika]
Possessive Construction

Given that possessive constructions in Manyika are composed of a copula and a preposition (*na* ‘with’) (example (42)a is repeated above), we assume the predicational structure of a OM-doubled possessive to be that given in (52).



Assuming that P is a phase head, in the structure in (52), it is not possible for a higher functional head (including Pred here) to probe the DP object of the preposition (Chomsky’s 2001 Phase Impenetrability Condition). Given that no Agree relation holds between the Pred (or *v*) and the OM, in these cases, the OM cannot incorporate into the higher functional structure of the verb, ruling out a pre-stem OM. We propose, however, that the object marker morphologically requires a non-nominal host, and as such at PF it encliticizes leftward onto P and is realized as a postverbal clitic on the P, as shown in (42)a.

6 Conclusions

In this paper we have introduced a number of relevant empirical facts concerning Manyika object marking, concluding that the following analysis explains the OM’s distribution:

39) The Manyika OM is an object clitic that triggers a non-focus interpretation.

We implemented this analysis by proposing that doubled OMs originate in a Big-DP structure with their associate DPs, and that this Big-DP structure is necessarily linked to non-focus interpretations in Manyika. On this analysis, OMs are featurally deficient syntactic elements and an Agree relation between *v* and the Big-DP results in head movement of the clitic D head to *v*, realized as a pre-stem OM in Manyika.

It is worth pointing out that the proposal in (39) essentially makes two separate contributions: first, we claim that Manyika OMs (and potentially OMs in other Bantu languages) ought to be analyzed under the rubric of clitics, rather than as agreement morphemes or incorporated pronouns. Second, we claim that the constraints on OM-doubling are not dependably syntactic in nature, as OM-doubling in Manyika in principle is possible syntactically, but is licensed (or not) based on information structure concerns.

These two claims make distinct predictions. First, the claim that the distribution of OM-doubling is restricted by information-structure constraints predicts that languages which show the same non-focus properties of object marking that were laid out in §4 should also prohibit object-marking in object extraction contexts. Conversely, languages that allow object marking in object-extraction contexts should not show strictly non-focused object

marking doubling. We are unaware of a systematic investigation of these focus/non-focus contexts for OM-doubling in any Bantu language that contains the data to verify these predictions at present, but this claim is easily testable.¹⁷

These conclusions also require a different approach to the traditional dichotomy of pronoun incorporation vs. agreement morphemes in the analysis of OMs in Bantu languages, which in its crudest form predicts a binary (or perhaps near-binary) split between OM properties cross-linguistically. But facts like the widespread optionality of Oming across Bantu languages raise the possibility that in fact most or all Bantu Oming results from a cliticization process akin to those that have been proposed for Indo-European languages (see Anagnostopoulou 2005, Roberts 2010, Kramer 2012, Nevins 2011 and references therein for good overviews of the relevant literature). Both agreement and pronominalization are (relatively) well-understood processes, and a strict dichotomy between them suggests a restricted degree of variation between languages. On the other hand, clitics are by definition intermediate elements, displaying some degree of morphosyntactic independence that is nonetheless fairly limited.

The proposal that at least some Bantu OMs are clitics therefore predicts that we should find a complex set of fine-grained variation in a variety of morphosyntactic properties with respect to object marking in Bantu languages, similar to that which has been discovered in Indo-European languages. As noted previously, this does seem to be the emerging result of both typological and single-language investigations of the morphosyntactic properties of Bantu Oming (e.g. Marten, Kula, and Thwala 2007, Riedel 2009, Diercks and Sikuku 2011).¹⁸

In addition, a more specific prediction of this cliticization account is that we ought to find additional instances of morphosyntactically mobile OMs in Bantu languages, like the postverbal position of OMs in possessive constructions in Manyika. The absence of this mobility is of course not the death knell of a cliticization analysis in any particular case, but the account advanced here does predict that morphosyntactically mobile OMs should in principle be possible in languages whose OMs are clitics.

Analyses of cliticization like that adopted here offer more sophisticated tools for understanding and analyzing the range of Oming properties among Bantu languages than have previously been available under the agreement vs. pronoun dichotomy. The 'dichotomy' line of argumentation has produced a lot of interesting and useful research, but simply cannot account for the kinds of variation that we see between languages without seriously complicating our ideas of agreement or pronominalization.

On one hand, this conclusion could be seen as simply throwing a complicated puzzle in with other complicated puzzles in an attempt to obscure an ambivalent conclusion about the status of the Manyika OM. On the other hand, if the properties of Bantu OMs do in fact show the same kind of fine variation that are attested in Indo-European clitics, as we show for Manyika here, it is necessary to group all of these elements together so we can analyze them in relation to their counterparts across the language families. This cross-familial approach (like that of Zeller 2009, Cardinaletti 2008, and Labelle 2008) opens the door for a richer interaction of research on Indo-European clitics and Bantu object markers, where Bantu researchers can benefit from a rich set of existing theoretical proposals, and Indo-European researchers from a rich set of new but related empirical phenomena.

Notes

- 1 The research reported in this paper arose out of a field methods class at Pomona College in Spring, 2011, working with Manyika speaker from Zimbabwe. As such we have benefited from the research produced by the students in that class, as well as from the many contributions of Mary Paster to understanding the structure of Manyika generally. Additional research was completed in Claremont, CA, with the generous support of Pomona College and the Summer Undergraduate Research Program. Our thanks to Kristina Riedel, Vicki Carstens, Claire Halpert, Brent Henderson, Peter Jenks, Joey Sabbagh, and the audience at LSA Portland for helpful comments. Thanks also to two anonymous reviewers for this special issue. We are very grateful to Mazvita Mazvinga for her continued help with this project. The authors are listed in alphabetical order.
- 2 All Manyika examples are written in Manyika orthography, which to our knowledge is an adaptation of standard Shona orthography. Most orthographic forms are relatively transparent from their IPA and English equivalents, but some relevant forms are: ‘ch’ [tʃ]; ‘zv’ [ʒ]; ‘hy’ appears to be a breathy palatal approximant, though this analysis needs additional verification; ‘tsv’ is a labiodental-alveopalatal sibilant. Tone marking is omitted for lack of a guiding analysis and therefore a lack of confidence in our transcriptions. The glosses used in this paper include the following: COMP = complementizer; FOC = focus; FUT = future; HAB = habitual; INF = infinitive; NEG = negative; OM = object marker; POM = postverbal object marker; PST = past; SBJ = subjunctive; Q = question marker; S = subject agreement; 1sg = first person singular; 1-18 denote noun class.
- 3 Given the constraints of this paper it is not possible to give a full review of the literature on object marking in Bantu languages; we refer the reader to Riedel (2009) and Marlo (2011), and references therein.
- 4 Their analysis utilizes Lexical Functional Grammar, so an “incorporated pronoun” proposal does not necessarily carry all the same implications in that framework as it does in a Minimalist framework.
- 5 See Baker 1988 on incorporation, Diercks & Sikuku 2011 for a more in-depth discussion of these analytical possibilities.
- 6 See also earlier work like Byarushengo et.al. 1976 and Tenenbaum 1977 for analyses of OMs as pronominal.
- 7 Henderson’s (2006) claim is part of a larger study on resumptive pronouns in Bantu languages in which he concludes that pre-stem OMs are not resumptive pronouns.
- 8 An outstanding issue with this hypothesis is the question of the role of an extracted object in an object relative clause, as this is not traditionally considered focus in the sense of *new information*. We revisit this question in section 5.2, first addressing the role of OM-doubling in focus constructions.
- 9 The subject marker in these cases is glossed as ‘1f’ for “class 1 formal,” used in this case because *Tendai* is interpreted here as a respected figure; this agreement form (homophonous with class 2) is at times are used as a signal of deference/respect.
- 10 Our thanks to Vicki Carstens for her comments pointing out the significance of this issue.
- 11 Locative postverbal object markers have a different distribution than their non-locative counterparts. They may occur with transitive locative verbs, and may also co-occur with a regular, non-locative object marker.

- (i) A- bva- po (pa-Pomona.)
1S-leave-16POM (16-Pomona)
'He left there (Pomona).'
- ii) Nda- ka- ri- tsveta-po (pa-tafura.)
1sgS- PST- 5OM-put-16POM (16-table)
'I put it (5) there (on the table).'

Although it may co-occur with regular object markers, this locative POM is not licit with a regular locative object marker, as shown in (iii) (though do note the available realization of the locative OM in preverbal position).

- iii) A- pa- bva- (*po) pa-Pomona.
1S-16OM-leave-(*16POM) 16-Pomona
'He left Pomona.'

We attribute the more general possibility of postverbal object markers for locatives to the presence of functional heads specifically for locative licensing, though we leave the matter to future research (see Diercks 2011a, 2011b, Carstens and Diercks 2011 for discussion of AgrL in Lubukusu).

- 12 Thanks to Brent Henderson for pointing out the importance of these data to us. Claire Halpert points out another potential alternative analysis of these elements based on observations from Zulu, namely, that the clitic in these possessives is in fact a reduced form of the demonstrative. As we see in (42)a and (45)a, the clitic can co-occur with an overt demonstrative, suggesting to us that the clitic is not simply a reduced form of the demonstrative. This holds true of all demonstrative forms we are aware of in the language, both deictic and discourse demonstratives.
- 13 We assume that this explains the obligatory presence of OMs in the topic constructions of right- and left-dislocation, as noted in §3.1.1, though the full nature of dislocations in Manyika is properly a matter for future research.
- 14 An anonymous reviewer notes that, given the potential shortcoming of the non-focus generalization with respect to relative clauses, perhaps OM-doubling could simply be clause-bounded, and therefore ruled out with any extracted object. The presence of clitic-left-dislocation structures is a potential counter-argument to that hypothesis, but that would require more research to determine whether left-dislocation behaves as a movement operation or not in Manyika. But it is certainly plausible that there is a constraint on OMin an extracted object, and the presence of the other overlapping non-focus restrictions is merely coincidental. But we believe that the generalization that Schachter notes with respect to foregrounding is sufficient to unify object relative clauses with the focus contexts discussed in this paper.
- 15 Nevins assumes that the embedded DP is in fact embedded in a KP shell, which makes it inaccessible to the probing head. Matushansky argues for head movement consisting of movement of a head to a specifier position followed by a rebracketing m-merger operation that fuses the two heads into a single complex head, a variation of which Kramer (2011) adopts.
- 16 The optionality that Preminger (2009) identifies as a property of clitics is encoded in the analysis adopted here by the variation in object choice – the merger of a single DP or a Big DP will determine whether OM-doubling will occur, but the presence of an OM D head is always optional.

- 17 The second author has work underway with students at Pomona College on Kikuria which suggests a pattern similar to that shown here in Manyika, as well as ongoing work with Justine Sikuku on Lubukusu OMinG that, while not the same pattern, likewise suggests some sort of information structure influence on the availability of OMinG.
- 18 Unfortunately space prohibits an extended discussion of the variations in patterns of object-marking properties that have been uncovered – we refer the reader to Marten, Kula, and Thwala 2007, Riedel 2009, Diercks and Sikuku 2011 to get a sense of this variation.

References

- Adams N.** 'The Zulu ditransitive verb phrase' (Doctoral thesis, University of Chicago, 2010).
- Anagnostopoulou E.** 2005. Clitic doubling. In Everaert M and van Riemsdijk H (eds) *The Blackwell Companion to Syntax, Volume 1*. Oxford: Blackwell, pp 520-581.
- Baker M.** 1988. *Incorporation: A theory of grammatical function changing*. Chicago: University of Chicago Press.
- Barrett-Keach C.** 1985. *The syntax and interpretation of the relative clause construction in Swahili*. New York: Garland.
- Belletti A.** 1999. Italian/Romance Clitics: Structure and Derivation. In van Riemsdijk H (ed) *Clitics in the Languages of Europe*. Berlin: de Gruyter, pp 543-579.
- Bleam T.** 'Leísta Spanish and the Syntax of Clitic Doubling' (Doctoral thesis, University of Delaware, 1999).
- Bresnan J & Mchombo S.** 1987. Topic, pronoun, and agreement in Chichêwa. *Language* 63:741-782.
- Buell L.** 'Issues in Zulu morphosyntax' (Doctoral thesis, UCLA, 2005)
- Byarushengo ER, Hyman L & Tenenbaum S.** 1976. Tone, accent and assertion in Haya. In Hyman L (ed) *Studies in Bantu tonology*. Los Angeles: Department of Linguistics, University of Southern California, pp 183-205.
- Cardinaletti A.** 2008. On different types of clitic clusters. In De Cat C and Demuth K (eds) *The Bantu-Romance Connection*. Amsterdam: John Benjamins, pp 41-82.
- Carstens V & Diercks M.** 2011. Agreeing 'how'? Manuscript.
- Chomsky N.** 2001. Derivation by phase. In Kenstowicz M (ed) *Kan Hale: A life in language*. Cambridge: MIT Press, pp 1-52.
- Cechetto C.** 2000. Doubling Structures and Reconstruction. *Probus* 12: 93-126.
- Diercks M.** 2011a. Incorporating location in argument structure: The Lubukusu locative clitic. In Bokamba E, Shosted R & Ayalew BT (eds) *Selected Proceedings of the 40th Annual Conference on African Linguistics: African Languages and Linguistics Today*. Somerville, MA: Cascadilla Proceedings Project, pp 65-79.
- Diercks M.** 2011b. The morphosyntax of Lubukusu locative inversion and the paramaterization of Agree. *Lingua* 121(5): 702-720.
- Diercks M & Sikuku J.** 2011. Object Marking as Pronominal Incorporation in Lubukusu. Manuscript.
- Henderson B.** 'The syntax and typology of Bantu relative clauses' (Doctoral thesis, University of Illinois, 2006).
- Julien M.** 2002. *Syntactic Heads and Word Formation*. Oxford: Oxford University Press.

- Kallulli D.** 2000. Direct object clitic doubling in Albanian and Greek. In Beukema F & den Dikken M (eds) *Clitic Phenomena in European Languages*. Amsterdam: John Benjamins, pp 209-248.
- Kramer R.** 2011. Clitic doubling or object agreement: An Amharic investigation. Manuscript.
- Labelle M.** 2008. Pronominal object markers in Romance and Bantu. In De Cat C & Demuth K (eds) *The Bantu-Romance Connection*. Amsterdam: John Benjamins, pp 83-110.
- Lewis MP** (ed.). 2009. *Ethnologue: Languages of the World, Sixteenth edition*. Dallas: SIL International. Online version: <http://www.ethnologue.com/>.
- Marlo M.** 2011. Prefix-Stem Fusion in Bantu. Manuscript.
- Marten L, Kula N & Thwala N.** 2007. Parameters of morphosyntactic variation in Bantu. *Transactions of the Philological Society* **105**: 253-338.
- Matushansky O.** 2006. Head movement in linguistic theory. *Linguistic Inquiry* **37**(1): 69-109.
- Myers S.** 1998. AUX in Bantu morphology and phonology. In Hyman L & Kisseberth C (eds) *Theoretical aspects of Bantu tone*. Stanford: CSLI Publications, pp 231-264.
- Nevins A.** 2011. Multiple Agree with clitics: person complementarity vs. omnivorous number. *Natural Language & Linguistic Theory* **29**(4): 939-971.
- Ngonyani D.** 1999. X⁰-movement in Kiswahili relative clause verbs. *Linguistic Analysis* **29**: 137-159.
- Preminger O.** 2009. Breaking agreements: distinguishing agreement and clitic doubling by their failures. *Linguistic Inquiry* **40**: 619-666.
- Preminger O.** 'Agreement as a fallible operation' (Doctoral thesis, MIT, 2011).
- Riedel K.** 'The syntax of object marking in Sambia: A comparative Bantu Perspective' (Doctoral thesis, Leiden University, 2009).
- Roberts I.** 2010. Agreement and head movement: Clitics, incorporation, and defective goals. Cambridge: MIT Press.
- Schachter P.** 1973. Focus and Relativization. *Language* **49**(1): 19-46.
- Sportiche D.** 1996. Clitic Constructions. In Rooryck J & Zaring L (eds) *Phrase Structure and the Lexicon*. Dordrecht: Kluwer, pp 213-276.
- Tenenbaum S.** 1977. Left- and Right-Dislocations. In Byarushengo ER, Duranti A & Hyman L (eds) *Haya grammatical structure*. Los Angeles: Department of Linguistics, University of Southern California.
- Travis, L.** 'Parameters and effects of word order variation' (Doctoral thesis, MIT, 1984).
- Uriagereka J.** 1995. Aspects of the Syntax of Clitic Placement in Western Romance. *Linguistic Inquiry* **26**: 79-124.
- Van Riemsdijk HC.** 1999. Clitics: A State-of-the-Art Report. In van Riemsdijk HC (ed) *Language Typology, Vol. III: Clitics in the Languages of Europe*. Berlin/New York: Mouton de Gruyter, pp 1-30.
- Zeller J.** 2009. On clitic left dislocation in Zulu. In Ermisch S (ed) *Focus and Topic in African languages*. Köln: Rüdiger Köppe Verlag.