Object Clitics in a Bantu language: Deriving Pronominal Incorporation in Lubukusu[*]

Michael Diercks & Justine Sikuku
Pomona College & Moi University
Draft Date: September 12, 2013

1   Introduction

Object marking on verbs in Bantu languages is generally realized by a prefix that appears morphologically adjacent to the verb root, as is shown below in (2) for Lubukusu, a Bantu language spoken in Western Kenya.[1]

1)   N-a-bon-a   Wekesa   [Lubukusu]
      1sgSM-PST-see-FV   1Wekesa
      'I saw Wekesa.'

2)   N-a-**mu**-bon-a
      1sgSM-PST-1OM-see-FV
      'I saw him.' (licit in a context where *Wekesa* is salient in the discourse)

The object marker in (2) is class 1 – the animate class, singular, third person, agreeing with the class 1 discourse antecedent *Wekesa*.

     In many ways object marking among Bantu languages is reminiscent of Romance object clitics. A wide variety of Romance languages have clitics appearing verb-initially that mark objects, but there is also wide range of variation with respect to the properties of those clitics. One prominent illustration of this variation in clitic properties is whether or not they can double an *in situ* object; for example, an object clitic can double a direct or indirect object in varieties of Spanish, but this doubling is not possible in French, as shown in (3)-(5) below.

3) Lo vimos   a Juan.   [Rioplatense Spanish]
   Him we-saw *a* Juan
   'We saw Juan.'

4) Miguelito (le)   regaló un caramelo a Mafalda.   [All dialects of Spanish]
   Miguelito Cl-dat gave   a candy   a Mafalda
   'Miguelito gave Mafalda a piece of candy.'

5) Jean (*lui) a   donné des bonbons à Marie.   [French]
   Jean Cl-dat has given the candies   to Marie
   Jean gave candies to Marie.   (Anagnostopoulou 2006: 520)

---

[1] Lubukusu belongs to the Luyia subgroup of Bantu languages, of which it has been estimated that there are at least 23 different dialects spoken in Western Kenya and Eastern Uganda (Marlo 2009). Estimates vary between 550,000 and 800,000 as to the number of Lubukusu speakers (see Mutonyi 2000 and Lewis 2009). Originally classified as E31c, Lewis (2009) reclassified it to J30, and Maho (2008) to JE31c.

Variation in object marking among Bantu languages parallels Romance object clitics with respect to the doubling differences shown above, as well as in a wide variety of other properties that will be discussed in what follows. The task for syntacticians, then, is to determine what the underlying (morpho)syntactic differences are between languages that create the variation in object marking patterns. In this paper we make two main contributions: first, we document a new typological pattern of Bantu object marking, found in Lubukusu, and second, we argue that this is perhaps the clearest case yet of a long-hypothesized theoretical analysis of object markers—that they are incorporated pronouns.[2] As we will show, however, a traditional head-movement-based incorporation analysis (Baker 1988) of the Lubukusu OM does not hold up under empirical scrutiny, suggesting that a more sophisticated mechanism for deriving Lubukusu object marking is necessary. Therefore we will argue that Lubukusu OMs are best analyzed as clitics, and will show that the cliticization mechanism we adopt explains the close similarities between the Lubukusu OM patterns and those predicted by a head-movement analysis of pronoun incorporation.

A prominent debate among Bantuists dating (at least) to Bresnan and Mchombo's (1987) seminal paper has been whether or not object markers in Bantu should be treated as pronominal arguments incorporated into the verbal structure, or whether they are in fact instances of grammatical agreement between the verb (or a functional projection of the verb) and the noun phrase object (cf. Keach 1995, Woolford 2001, Buell 2006, Henderson 2006, Adams 2010, Riedel 2009, among others). Almost any Bantuist researching object marking or using object marking as a diagnostic comments in some way on this issue. But as Riedel (2009) argues, the wide range of cross-linguistic variation in object-marking properties uncovered in recent typological surveys raises the question of whether the dichotomy between incorporated pronouns and agreement is sufficiently explanatory to account for Bantu object marking generally (this is taken up in much more depth in section 2.1 below, see Marten, Kula, and Thwala 2007a,b, Marlo 2013). This paper shows a similar result, showing that even a near-prototypical instance of object marking as pronominal incorporation must nonetheless allow for more complex kinds of patterns to emerge than is predicted by a traditional analysis of pronominal incorporation based on head movement.

The paper proceeds in the following manner. Section 2 introduces the relevant theoretical and empirical background on Bantu object marking, discussing the range of empirical patterns that have been reported, as well as describing the existing theoretical approaches to Bantu object marking. The third section then explores the relevant properties of Lubukusu object marking, building the empirical and diagnostic evidence for the Lubukusu OM as the most prototypical instance of pronoun incorporation yet reported. Section 4 lays out a traditional form of an incorporated pronoun analysis, and discusses several empirical patterns that call this traditional analysis into question. Section 5 then lays out our analysis of pronoun incorporation using current mechanisms for cliticization, claiming that the Lubukusu OM is in fact a clitic that shows the properties of incorporation in many ways. Sections 6 and 7 discuss some loose ends and conclude.

2 Object Marking in Bantu languages

Verbal forms across Bantu languages are highly similar, facilitating cross-linguistic comparative work. The main components of the stereotypical Bantu verbal form are given

---

[2] Late in the writing process of this paper Letsholo (2013) was published, which shows that Ikalanga object marking shares many similarities in distribution with Lubukusu object marking.

in (6), where SM stands for 'subject marker,' OM for 'object marker,' and 'verbal base' includes the verb root and various derivational suffixes (Marten and Ramadhani 2001, based on Meeussen 1967, Schadeberg 1992):

6)

1	2	3	4	5	6	7	8
Pre Initial Neg	SM	Post Initial Neg	Tense Marker	OM	Verbal Base	Final	Post Final

Not all languages adopt this basic format, but overall this basic structure is widespread among narrow Bantu languages.[3] But while morphological verbal forms are highly similar cross-linguistically, the morphosyntactic properties of the various inflectional and derivational suffixes vary widely. This sort of micro-variation proves highly useful for clarifying the underlying structures that result in a particular language's properties.

2.1 General Typology of Bantu Object Marking

Beaudoin-Lietz, Nurse, and Rose (2004) identify three types of object-marking in their survey of over 70 Bantu languages. For Type 1, pronominalization of object arguments occurs in a pre-stem position, though independent pronouns may appear postverbally in addition to or instead of the preverbal OM. This is the prototypical OM position that is shown in slot 5 in (6). In their Type 2 languages the OM appears only post-finally (slot 8 in (6)), and in Type 3 languages the OM can occur either in pre-stem position or post-finally. Lubukusu is a Type 1 language by their characterization, though this depends on the classification of locative clitics in Lubukusu, which appear postverbally.

Looking more specifically at Type 1 languages, in a series of papers Marten and Kula (2007a,b) and Marten, Kula, and Thwala (2007) report a typological study addressing parameters of morphosyntactic variation between Bantu languages, a major focus of which is on parameters of object marking. While their study is typologically oriented (as opposed to theoretically oriented), one theoretical gain of their work is that they succeed in making crosslinguistic theoretical investigation of Bantu object marking more systematic and comprehensive, providing a template for future research moving forward. The relevant parameters that they address are listed below in (7):

---

[3] In Lubukusu, the post-final slot is occupied by locative clitics (Diercks 2011a,b), Lubukusu has both pre-initial and post-intial negation (with postverbal negative markers appearing distinct from the verbal form). Additional research on tense and aspect is necessary to determine what slots the various postverbal tense/aspect marking appear in (for example, whether they actually replace the final vowel in the Final slot, or if they appear in what this template labels 'Verbal Base.'

7) Parameters of the Bantu Typological Study

Object Markers	
1 OM-obj NP	Can the object marker and the lexical object NP co-occur?
2 OM obligatory	Is co-occurrence required in some contexts?
3 OM loc	Are there locative object markers?
4a One OM	Is object marking restricted to one object marker per verb?
4b Restr 2 OM	Are two object markers possible in restricted contexts?
4c Mult OM	Are two or more object markers freely available?
4d Free order	Is the order of multiple object markers structurally free?
Relatives	
8 Agr Rel mark	Does the relative marker agree with the head noun?
9a Res OM obl	is an object marker obligatory in object relatives?
9b Res OM barred	Is an object marker disallowed in object relatives?
9c Res OM optional	Is an object marker optional in object relatives?

Reproduced in part from (Marten, Kula, and Thwala 2007: 259)

This paper will address all of the above syntactic contexts, so we will not discuss here at length either the parameters or their theoretical implications. The results of their survey are given in (8) below, for the ten Bantu languages that they considered as well as for Lubukusu, which we have added as an 11th column on the right.

8) Parameters of the Typological Study

	Swah.	Chaga	Ha	Bemba	Chich.	Nseng.	Tswa.	Lozi	Swati	**Her**.	**Lub**.
Object Markers											
1 OM-obj NP	yes	no	yes	yes	no	?	no	yes	no	**no**	**no**
2 OM obligatory	yes	yes	?	no	no	?	no	no	no	**no**	**no**
3 OM loc	yes	yes	yes	yes	yes	yes	yes	no	no	**yes**	**no**
4a One OM	yes	no	no	no	yes	?	no	yes	yes	**yes**	**yes**
4b Restr 2 OM	no	no	no	yes	no	?	no	no	no	**no**	**no**
4c Mult OM	no	yes	yes	no	no	?	yes	no	no	**no**	**no**
4d Free order	no	no	no	no	no	?	yes	no	no	**no**	**no**
Relatives											
8 Agr Rel mark	yes	?	yes	yes	yes	yes	yes	yes	no	**yes**	**yes**
9a Res OM obl	no	?	no	no	yes	no	yes	no	yes	**no**	**no**
9b Res OM barred	no	?	no	yes	no	no	no	yes	no	**yes**	**yes**
9c Res OM possible	yes	?	yes	no	no	yes	no	no	no	**no**	**no**

Reproduced in part from (Marten, Kula, and Thwala 2007: 283)

As will be seen in this paper, Lubukusu most closely resembles Herero, though not in every way (see also Letsholo 2013 for discussion of Ikalanga, which shows similar patterns to Herero and Lubukusu). That being said, the investigation in this paper will not be restricted to the parameters of variation laid out by Marten, Kula, and Thwala. For example, this paper also considers issues

of object marking in interrogatives and clefts, object marking with independent pronominal objects, and some other more general properties of non-subjects and non-subject marking.

2.2   Theoretical & Analytical Background

It has long been claimed for a variety of Bantu languages that object markers are incorporated pronouns (van der Spuy 1993 and Zeller 2009 for Nguni, Zerbian 2006 for Northern Sotho, Byarushengo et al. 1976, Duranti and Byarushengo 1977, and Tenenbaum 1977 for Haya, though see Riedel 2009 for arguments against these claims for Haya). What we will show, however, is that Lubukusu is one of the most promising cases yet documented of object markers showing the properties of incorporated pronouns; we will be forced to complicate the picture, however, and claim that Lubukusu OMs are clitics that are capable of showing the properties of pronoun incorporation in many (but not necessarily all) instances.

In their seminal paper, Bresnan and Mchombo (1987) argue that subject and object markers in Chichewa may be either grammatical agreement or anaphoric agreement. Examples (9) and (10) show the basic object-marking alternation in Chichewa, where an object marker optionally occurs with an immediately postverbal object.

9)   Njûchi   zi-ná-lúm-a   alenje.
      bees   SM-PAST-bite-INDIC hunters
      'The bees bit the hunters.'

10)   Njuchi   zi-ná-**wá**-lum-a   alenje.
       bees   SM-PAST-OM-bite-INDIC   hunters
       'The bees bit them, the hunters.'

Bresnan and Mchombo demonstrate that there is a strict correlation between object marking and available word orders in Chichewa: when a verb occurs without an object marker the NP object must occur postverbally, as shown in (11).

11) a. SuVO: Njûchi zi-ná-lúm-a   alenje.   (B&M 1987: 744-745)
              bees   SM-PAST-bite-INDIC hunters
              'The bees bit the hunters.'
    b. VOSu: Zinálúma alenje njûchi
    c. OVSu: *Alenje zinálúma njûchi
    d. VSuO: * Zinálúma njûchi alenje
    e. SuOV: * Njûchi alenje zináluma
    f. OSuV: *Alenje njûchi zináluma

On the other hand, when the object marker is present on the verb a variety of word orders become possible, as shown in (12).

12) a. Njuchi zi-ná-wá-lum-a   alenje.   (B&M 1987: 745)
         bees   SM-PAST-OM-bite-INDIC   hunters
         'The bees bit them, the hunters.'
    b. VOSu: Zináwáluma alenje njûchi
    c. OVSu: Alenje zináwáluma njûchi

d. VSuO: Zináwáluma njûchi alenje
e. SuOV: Njûchi alenje zináwáluma
f. OSuV: Alenje njûchi zináwáluma

Bresnan and Mchombo's analysis is that the Chichewa object marker is an instance of anaphoric agreement, such that when it occurs, it is not subjected to the strict locality that they assume is necessary for grammatical agreement to occur. Therefore, they claim that the object marker is essentially an incorporated pronoun. In support of this analysis, they cite evidence from tone patterns, the aforementioned word order, *wh*-questions and relative clauses in support of their analysis. Some of this evidence is reviewed below, as we point out several major objections in recent research that force us to reconsider Bresnan and Mchombo's analysis for Chichewa.

While there are a range of languages that have been argued to display pronominal incorporation, the comprehensive argumentation and broad influence of Bresnan and Mchombo (1987) has attracted special attention in the literature, and we will address some of the argumentation against their analysis for Chichewa here as an exposition regarding the as-yet-unsettled claims that pronominal incorporation exists as a means of object marking in Bantu languages. Riedel (2009) and Henderson (2006) raise important questions for the analysis of Chichewa object markers as incorporated pronouns. One brand of argument is simply that some of B&M's evidence and argumentation in their LFG analysis is not applicable within the current framework for generative syntax—Chomsky's (1995, 2000, 2001) Minimalist Program—as the implementations of the concepts of 'pronoun' and 'agreement' vary across frameworks. The more substantial criticisms revolve around a key prediction of B&M's analysis: if the object marker is in fact an incorporated pronoun, it ought to have originated as the object of the verb itself. Therefore, if an incorporated pronoun co-occurs with a postverbal object, that object must not be in its base position, but must instead be dislocated to some other position. As far as we can tell, this core prediction is stable across various syntactic frameworks. In support of this analysis, B&M cite tonal evidence in their favor, relying on a phonological process in Chichewa that retracts final high tones to a low-toned preceding syllables in phrase-final position. This is illustrated by the two examples below, the second of which demonstrates the high-tone-retraction on the verb in the absence of a postverbal object.

13) Ndikufúná kutí áná ánga [a-pitiriz-é phúnziro.] [Chichewa]
I-want that children my SM-continue-SUBJN lesson (B&M: 750)
'I want my children to continue the lesson.'

14) Ndikufúná kutí [a-pitirĭz-e] aná ánga.
I-want that SM-continue-SUBJN children my
'I want my children to continue.'

Using this diagnostic for phrase-final position, Bresnan and Mchombo show that the tonal pattern on an object-marked verb with a postverbal object in fact shows high-tone retraction, suggesting that the object is not in fact in canonical object position.

15) Ndikufúná kutí áná ánga [a-li-pítírĭz-e] phúnziro. [Chichewa]
I-want that children my SM-OM-continue-SUBJN lesson (B&M: 750)
'I want my children to continue it, the lesson.'

Henderson (2006) points out some troublesome syntactic facts, however, which challenge this interpretation of the tonal evidence. The first relates to B&M's use of double object constructions (DOCs) as evidence of object dislocation in the presence of an object marker. B&M note that the preferred word order of a non-object-marked DOC is V IO DO, whereas the unmarked order of an object-marked instance is V DO IO: these two examples are given below.

16) Ndikufúná kutí [mu-pats-é   alenje   mphâtso.]
     I-want   that 2sg-give-SBJ   hunters   gift
     'I want you to give the hunters a gift.'

17) Ndikufúná kutí [mu-wa-páts-é   mphâtso]   alenje.
     I-want   that 2sg-2OM -give-SBJ   gift   hunters
     'I want you to give them a gift, the hunters.'

B&M note that inverting the order of the objects in (17) creates a marginal result, but notably not a fully ungrammatical result, and Henderson (2006) reports of speakers spontaneously producing such examples, though he doesn't contest the marginality of the example.

18) ??Ndikufúná kutí [mu-wa-páts-é   alenje   mphâtso.]
      I-want   that 2sg-2OM -give-SBJ   hunters gift
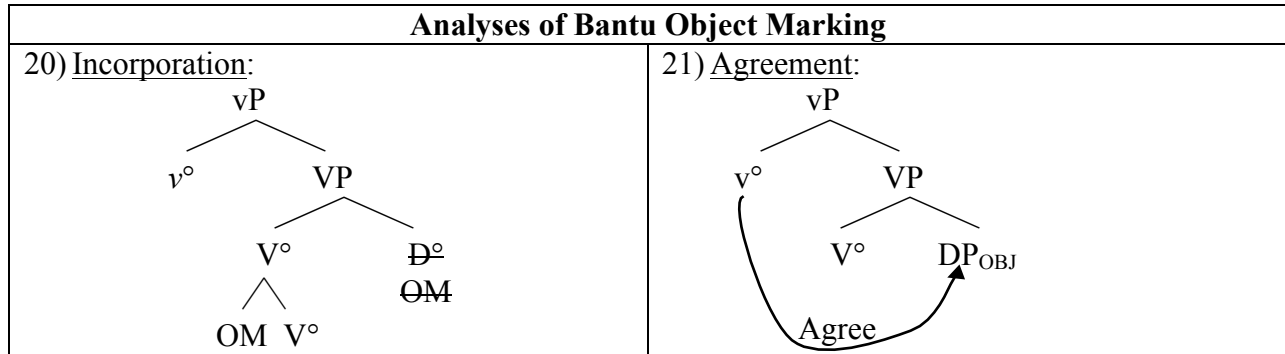   'I want you to give the hunters a gift.'

The potential availability of (18) for some speakers raises an important question about the B&M's analysis, as a word order preference is insufficient evidence – if (though somewhat dispreferred) an *in situ* object is possible with an object marker, that object marker could not possibly have originated in the base object position itself. Moreover, Henderson (2006) demonstrates that even for examples like (17) with a purportedly right-dislocated object, that temporal adverbs (which are largely assumed to be VP-adjoined) occur to the right of both objects.

19) Ndi-na-funa   kuti   mu – wa – pats – é   mphatso   alenje   dzulo
     1sg-PST-want   COMP 2sg-2OM-give-SBJ   3gift   2hunters   yesterday
     'I wanted you to give the hunters a gift.'

This suggests that despite the canonical inversion of the IO and DO when an object marker is added in Chichewa, the IO is still VP-internal. This would suggest (by B&M's locality metric), that the object marker in this case may not in fact be anaphoric agreement in this instance, but instead is grammatical agreement (i.e. *not* pronominal). Riedel (2009) and Henderson (2006) raise a number of additional concerns that are not critical to recount here; it is sufficient to note that both conclude, the tonal evidence non-withstanding, that there are serious questions of an analysis of Chichewa object markers as incorporated pronouns (and, as we will see below, Riedel 2009 build a similar line of argumentation against the analysis of Haya OMs as incorporated pronouns).

In this context, the predominant analytical approach among scholars of Bantu languages has been that object markers can be classified as one of two different analyses of their syntactic status. First, the object markers may be agreement morphemes, realizing a syntactic agreement

relation between the verb (or some syntactic projection of the verb) and the object NP, an analytical option generally corresponding to Bresnan and Mchombo's 'grammatical' agreement. The core alternative is that object markers are themselves pronominal arguments of the verb originating in argument position, which appear prefixed on the verbal root via an incorporation operation (cf. Jelinek 1984, Baker 2003, among others). For clarity of exposition, these two different analyses are sketched in (20) and (21).

Analyses of Bantu Object Marking	

20) <u>Incorporation</u>:
 	
        vP
      / \\
  $v°$ VP
        / \\
     V°   ~~D°~~
    /\\   ~~OM~~
  OM V°
	21) <u>Agreement</u>:
	
	        vP
	      / \\
	  $v°$ VP
	        / \\
	     V° DP_{OBJ}
	    Agree

Due to the wide mixture of properties in object marking illustrated above in (8), along with the weaknesses in existing pronominal incorporation analyses of object-marking in Chichewa and Haya, Riedel (2009) sets forth the claim that all object-marking in Bantu is agreement, with all languages realizing some version of the analysis in (21). The pronominal incorporation analysis, on the other hand, makes much more rigid predictions which Riedel claims have not been met by any documented Bantu language.

One contribution of this paper is to continue to enrich the data set for Bantu object marking, providing a thorough treatment of object marking in Lubukusu. Critically, however, more than any of the languages reported in the typological surveys above, Lubukusu displays the properties predicted by a pronominal incorporation analysis of object-marking, particularly the fact that in most instances doubling an object marker with an *in situ* object is ruled out. As we will show, however, despite the general accordance to the predictions of a pronoun incorporation analysis, such an analysis is insufficient on its own. This will lead us to propose that Lubukusu OMs (along with OMs in other Narrow Bantu languages) ought to be analyzed as clitics, considered comparatively with object clitics in other languages, and analyzed with the same kinds of mechanisms as clitics are more generally. The mechanism for cliticization that we invoke in turn offers an explanation for the incorporation-like properties of the Lubukusu OM.

3   Object Marking in Lubukusu
This section details the empirical distribution of the object marker in Lubukusu in a relatively theory-neutral manner, reserving most of the theoretical analysis for section 4 and following. In Bantu languages each noun is lexically specified as belonging to a particular noun class, and therefore object markers can take a variety of morphological forms, as illustrated below for a subset of the Lubukusu OMs.

22) Forms of the OM (partial listing, Wasike 2007: 40):

Class	OM	Example: 'They'll take X'	
1	mu-	ba-la-**mu**-bukula	'They'll take him/her.'
2	ba-	ba-la-**ba**-bukula	'They'll take them.' *(animate)*
3	ku-	ba-la-**ku**-bukula	'They'll take it.'
4	ki-	ba-la-**ki**-bukula	'They'll take them.' *(non-human)*
5	li-	ba-la-**li**-bukula	'They'll take it.'
6	ka-	ba-la-**ka**-bukula	'They'll take them.' *(non-human)*
7	si-	ba-la-**si**-bukula	'They'll take it.'
8	bi-	ba-la-**bi**-bukula	'They'll take them.' *(non-human)*
9	ki-	ba-la-**ki**-bukula	'They'll take it.'
10	chi-	ba-la-**chi**-bukula	'They'll take them.' *(non-human)*

This section progresses by giving a relatively in-depth description of Lubukusu object marking with respect to a variety of empirical diagnostics noted in existing literature (cf. Bresnan and Mchombo 1987, Henderson 2006, Riedel 2009, Marten, Kula and Thwala 2007, Marten and Ramadhani 2001, Keach 1995, Woolford 2001, Baker 2003, van der Spuy 1993, Zeller 2009).

3.1   Object Marking in Declarative Contexts

3.2   OMs Cannot Double Objects

First to be considered is the interaction of the Lubukusu OM with an *in situ* object. As is shown in (23) and (24), object marking in neutral contexts in Lubukusu cannot occur with an *in situ* noun phrase (headed by a lexical noun).

23)   N-a-mu-bon-a   (*Wekesa)   [Lubukusu]
       1sgSM-PST-1OM-see-FV   (*1Wekesa)
       'I saw him.' (not possible: 'I saw Wekesa.')

24)   N-a-ba-bon-a   (*baa-somi)
       1sgSM-PST-2OM-see-FV   (*2-students)
       'I saw them.' (not possible: 'I saw the students.')

As Riedel (2009) discusses, there is a large amount of variation across Bantu languages with respect to how the features of object noun phrases affect their ability to be doubled by an object marker. For example, proper names, kinship terms, and terms of respect in Sambaa are obligatorily doubled by an object marker:

25) N-za-*(mw)-ona   tate   [Sambaa]
    1SM-PERF.DJ-1OM-see 1father   (Riedel 2009: 46)
    'I saw father'

Other sorts of object noun phrases do not require object marking in Sambaa, however, and instead simply display optionality of object-marking, including non-human animates, non-animates, and animate noun phrases that are not included in the aforementioned subsets (i.e.

kinship terms, respected positions, proper names). So even in languages that allow doubling, it is not allowed or required with all objects.

As is demonstrated below, however, Lubukusu always disallows the co-occurrence of the object marker with an *in situ* object noun phrase in most discourse contexts. As shown below, it is not possible to double kinship terms (26) or terms of respect (27) with the object marker, and (28) shows that non-human animate and inanimate noun phrases also disallow doubling:

26)   N-a-mu-bon-a   (*papa)   [Lubukusu]
      1sgSM-PST-1OM-see-FV   (*1father)
      'I saw him.' (not 'I saw father.')

27)   N-a-mu-bon-a   (*o-mw-aami)   [Lubukusu]
      1sgSM-PST-1OM-see-FV   (*1-1-honorable.one)
      'I saw him.' (not 'I saw the king.')

28) a. N-a-ki-bon-a   (*e-mbwa)   [Lubukusu]
      1sgSM-PST-9OM-see-FV   (*9-dog)
      'I saw it.' (not 'I saw the dog.')

    b. N-a-ka-bon-a   (*ka-ma-baale)
      1sgSM-PST-6OM-see-FV   (*6-6-stones)
      'I saw them' (not 'I saw the stones.')

It is clear, then, that human animates (of varying levels of social importance, including proper names, third person noun phrases, terms of kinship, and terms of respect), non-human animates, and non-animates are all similar in that none allow the object marker to co-occur with the *in situ* lexical object noun phrase. By a simplistic metric of complementary distribution, the fact that the object marker and the *in situ* object cannot co-occur may be argued to be a result of the OM and the object noun phrase being the same sort of syntactic element, that is, both object arguments of the verb. While more empirical description follows, the preceding data provide strong initial evidence for the pronominal incorporation analysis of OMs, where the OM is the argument of the verb, realized on the verb itself, and not an agreement morpheme on the verb.[4]

3.3   Object Marking in Dislocation Contexts

There are contexts where the object marker may in fact occur in the presence of an overt lexical NP object, namely, when that object is either right- or left-dislocated (these kinds of clitic left-dislocations (CLLD) are relatively common among Bantu languages, see Zeller 2009). Examples (29) and (30) are cases of left-dislocation in topicalization contexts, in which case the object marker is required.

---

[4] It is worth noting here that since there are no instances above where an object marker may double an *in situ* NP object (with a lexical noun), there are also no instances where the OM obligatorily occurs with any sort of object. Obligatory object marking has been invoked by Riedel (2009) (among others) as a diagnostic of an agreement process, so its absence is relevant to our claims here.

29) a. N-a-siima   Wekesa
       1sgSM-PST-like   1Wekesa
       'I like Wekesa.'

    b. Wekesa,   n-a-*(mu)-siima
       1Wekesa   1sgSM-PST-*(1OM)-like
       'Wekesa, I like him.'

30) a. Mayi   a-siima   ba-ba-ana
       1mother   1SM-like   2-2-children
       'The mother likes the children.'

    b. Babaana,   mayi   a-*(ba)-siima
       2-2-children   1mother   1SM-*(2OM)-like
       'The children, the mother likes them.'

In these cases the object marker occurs functioning as a pronominal argument of the verb, anaphorically related to the topicalicalized object, which is clearly dislocated to the left periphery of the clause.

The more problematic issue tends to be identifying the status of a postverbal object occurring in the presence of an object marker on the verb. The pronominal incorporation analysis of object marking predicts that postverbal NP objects should only co-occur with OMs in the event that the postverbal NP object is right-dislocated (as discussed above for Chichewa). That is to say, the OM and *in situ* object NPs occur in the same position in this analysis, so they are predicted to be in complementary distribution. The question, then, is what constitutes evidence for right-dislocation of an object NP. Riedel (2009) proposes the following criteria:

31) **A right-dislocated phrase …**
      a. … is a nominal phrase in clause-final position (following all of the core sentence components, including tense and location and any adverbial modifiers expressing these).
      b. … is co-indexed with a pronominal element inside the clause.
      c. … has an afterthought reading (a kind of repair strategy disambiguating an underspecified reference).
      d. … is phrased separately phonologically.   (Riedel 2009: 68)

We accept this characterization of right-dislocated phrases, though the final two descriptors are the critical ones, demonstrating an afterthought reading and demonstrating the phonological evidence for separate phonological phrasing.

The issue that Riedel takes up at length is the existing analyses of the object marker in Haya as an incorporated pronoun, which claim that object NPs are right-dislocated on the basis of tonal evidence and evidence from conjoint/disjoint distinctions in verbal morphology (cf. Byarushengo et al. 1976; Duranti and Byarushengo 1977; Tenenbaum 1977, Hyman 1999). While Riedel agrees that this evidence is relevant, she also provides syntactic evidence that argues against a right-dislocation analysis of Haya object-marked objects. Henderson (2006) points out that if an object-marked object were right-dislocated in clause-final position, it ought

to follow temporal adjuncts in simple clauses on the assumption that temporal adjuncts are VP-adjoined (see also van der Spuy 1993). Riedel (2009) demonstrates that is not the case for Haya, however, as demonstrated in (32) for both object-marked and non-object-marked objects, (a) and (b), respectively.

32) a. Y-aa-mu-bona   Kato   kileki.   [Haya]
    1SM-PST1.DJ-1OM-see 1Kato today   (Riedel 2009: 71)
    'He saw Kato today.'

   b. Y-a-bona   Kato   kileki.
    1SM- PST1.CJ- see 1Kato today
    'He saw Kato today.'

Riedel interprets this as evidence against the right-dislocation argument for Haya object-marked NPs. She also presents similar evidence from double object constructions with temporal modifiers, leading to the same conclusion (similar to the evidence discussed for Chichewa above). She goes on to demonstrate that right-dislocated subjects in Haya must necessarily occur outside of temporal modifiers, a useful control to show that the syntactic position of right-dislocated phrases is indeed outside the scope of temporal adjuncts.

       Therefore, using similar lines of reasoning to Henderson's criticisms of the pronominal incorporation analysis of Chichewa, and seemingly in conflict with the phonological evidence, Riedel concludes that object-marked object NPs in Haya cannot be right-dislocated, and therefore are not amenable to a pronominal-incorporation analysis. While the morphophonological evidence still leaves open questions, the syntactic evidence based on temporal modifiers is fatal to the analysis of Haya object-marked objects as obligatorily right-dislocated (the same applying to Chichewa, as noted above).

       Looking at Lubukusu, however, we see that the arguments against Haya object marking as pronominal incorporation do not hold for Lubukusu, as Haya and Lubukusu show very different properties with respect to the dislocation properties of postverbal objects. As noted above, doubling of an object marker and an overt *in situ* object is unacceptable. It is possible, however, to have a postverbal object occur with an object-marked verb, but only when the object is clearly and obviously pronounced in a separate phonological phrase, marked by a significant pause, as shown in (33) and (34). In these instances the object NPs receive an afterthought reading.

33)   N-a-ki-bon-a ,   e-mbwa   **Phonological Phrasing diagnostic**
    1sgSM-PST-9OM-see-FV   9-dog
    'I saw it, the dog.'

34)   N-a-ba-bona ,   baa-somi
    1sgSM-PST-2OM-see 2-students
    'I saw them, the students.'

Looking at the placement of temporal adverbs, Lubukusu again shows the predicted effects if the OM is analyzed as an incorporated pronoun, as shown in (35). When an OM is present the postverbal object NP must appear to the right of the temporal adverb (b), and the postverbal object NP occurs to the left of the temporal adverb (i.e. within the VP) if there is no OM on the

verb (a). Example (c) shows that doubling an object that occurs within the VP (demarcated by the temporal adverb) is unacceptable.

35) a. N-a-bon-e   baasomi   likolooba   **no OM**
        1sgSM-PST-see-PST 2-students   yesterday
        'I saw the students yesterday.'

    b. N-a-ba-bon-e   likolooba , baa-somi   **OM+Dislocation**
        1sgSM-PST-2OM-saw-PST yesterday   2-students
        'I saw them yesterday, the students.'

    c. *n-a-ba-bon-e   baa-somi   likolooba   **OM, no dislocation**
        1sgSM-PST-2OM-saw-PST 2-students   yesterday

Therefore, diagnostic evidence from both phonological phrasing and adverb placement suggest that when an OM is present on the verb, the postverbal NP object cannot remain in argument position within the VP. Instead, it must be dislocated outside of the VP, either to the right or to the left.

      All of this evidence is consistent with an analysis that the object marker in Lubukusu is in fact an incorporated pronoun (i.e. itself an argument of the verb merged as the complement of the verb, that has then been incorporated into the verb), as its presence on the verb rules out the presence of an independent object noun phrase within the VP. If the object marker were simply an agreement morpheme that arose on a functional head (rather than as an independent NP), we would have no *a priori* reason to rule out the OM co-occurring with an *in situ* object.[5]

      There are, however, theories of agreement that might predict the effects above, namely, that the agreement with an object is only triggered when an object is dislocated outside of the VP. Baker (2008), Carstens (2005), and Collins (2004) all argue for different implementations of what Diercks (2011) refers to as the Upward Agreement Hypothesis (UAH): a head in Bantu languages (among others) agrees with a phrase that is structurally higher than it.

36)   [NP^1 H [… NP^2 …]]

That is to say, under the UAH the second instance of NP doesn't trigger agreement on H, it is NP^1 that would do so. The mechanism for achieving agreement, then, would be to move (i.e. displace) the relevant NP over the relevant head H. Baker (2008) claims that this is indeed the process, and that heads in Bantu are incapable of agreeing with a structurally lower XP (cf. Agree in Chomsky 2000, 2001 and much following work). Carstens (2005) and Collins (2004) formulate this differently, instead claiming that heads can in fact agree with structurally lower NPs, but this agreement relation necessarily triggers movement. Under either approach, movement is very closely linked with agreement.[6]

---

[5] As we will see below, there are selected instances where doubling an in situ object is possible, including when that object is a free pronoun. These examples are introduced and analyzed in section 4.

[6] See Carstens and Diercks (2013) for an argument against Baker (2008) and Diercks (2011), that heads in Bantu probe upwards. Evidence in that paper is drawn from manner adverbs ('how') in Luyia languages that agree with the subject of the sentence.

The relevance of these theories to our discussion of object marking is that it is possible to claim that object marking in Lubukusu is in fact agreement that can only be triggered in the event that the object has been dislocated, because it is this dislocation which brings the object into a configuration in which is capable of triggering agreement. As will be seen in what follows, this analysis does not in fact hold up for Lubukusu when considering extraction environments of objects.[7]

3.4 Object Marking in Non-Declarative Contexts

This section expands on the description of the Lubukusu OM to non-declarative contexts, such as relative clauses, interrogatives, and clefts, which all show that object movement to a structurally higher position is an insufficient condition to trigger object marking.

As is shown in (37) and (38), in an object relative clause it is impossible to have an object marker on the verb (agreeing with the head of the relative clause, the extracted object: the extraction gaps are noted with empty underlining).

37) Wekesa a-a-som-a   [sii-tabu   ni-syo   n-a-(*si)-kula ___]   **Object RC**
     Wekesa 1SM-PST-read-FV   7-book   COMP-7   1sgSM-PST-(*OM7)-buy
     'Wekesa read the book which I bought.'

38) N-a-bon-a   [o-mu-khasi   ni-ye   Wekesa   a-(*mu)-siima ____]
     1sgSM-PST-see-FV   1-1-woman   COMP-1   1Wekesa   1SM-(*1OM)-love
     'I saw the woman the Wekesa loves.'

This pattern contrasts with reported patterns in other Bantu languages: for example, Henderson (2006) demonstrates that Zulu, Sesotho, and Tswana all show obligatory object marking in object relative clauses.

39) a. incwadi isitshudeni   a–isi-*(**yi**)–funda–yo   [Zulu]
        9letter   7student   REL-7AGR-**9OM**-read-RS
        'the letter that the student is reading'

    b. setulo **seo** basadi   ba–*(**se**)-rek-ile-ng   kajeno   [Sesotho]
        7chair 7REL 2women   3PL - **7OM**-buy-PERF-RStoday
        'the chair which the women bought today'

---

[7] If we were to apply the Upward Agreement Hypothesis to Lubukusu in this way, however, it would create an additional (major) theoretical difficulty, mainly, how to explain object marking for the languages where the OM commonly co-occurs with an *in situ* object (as demonstrated by Riedel 2009 for languages like Haya, Sambaa, and Swahili). As suggested by Diercks (2006) and Baker (2008), it may be preferable to assume that postverbal subjects in Haya (and others like it) are not in their base position, but have moved to a position atop the object-agreeing head (e.g. AgrO), and that movement of the verb over this position has obscured the object-movement. This approach rules out the application of the UAH as an explanatory mechanism for the distinct properties of Lubukusu object marking (i.e. the lack of OM-OBJ doubling constructions), which would instead need to be explained by another point of structural variation, such as the availability of verb movement, but we have no evidence of other correlating syntactic differences (e.g. verb movement) that the object marking variation might be attributed to.

c. dikwelo   tse   ke-*(**di**)-bone-ng   [Tswana]
   10books   10REL   1SG.PST-**10OM**-see-RS
   'The books which I saw …'   (Marten, Kula, & Thwala 2007)

Henderson claims that the pattern of object marking in relative clauses is diagnostic of the status of the OM, namely, whether it is pronominal or whether it is an agreement morpheme. Henderson notes that those languages in his survey that allow object marking in relative clauses (like those in (39)) are those that also allow object marking with an *in situ* object and those that disallow object marking in relative clauses (as in 40)) are those same languages which do not allow the object marker to co-occur with an *in situ* object NP:

40) a.   omusajja Petero gwe o–la-(***mu**)-bye   musomesa   [Luganda]
         1man   1aPeter 1REL 1aSA-PRES-**1OM**-see 1teacher
         'The man that Peter has seen is a teacher.'   (Walusimbi 1996)

    b.   ibitabo   Yohani a–a–(***bi**)-somye   [Kirundi]
         7books   John   3SG-PST-**7OM**-read:PERF
         'the books that John read'   (Ndayiragije 1999)

    c.   imundondo   mú-(***mu**)-kpa-aki   omoto   [Dzamba]
         5jug   5AGR-**5OM**-took-PST 1person
         'the jug which the person took'   (Bokamba 1976)

What we find, then, is that the Lubukusu examples in (37) and (38) support Henderson's generalization, as Lubukusu rules out the object marker in relative clauses, and also rules out the object marker with an *in situ* object NP.[8] If we expand the data set to other cases of object extraction, we can see that this generalization holds up across various forms of object extraction – the OM is ruled out with object clefts as shown in (41) and (42), and object wh-clefts as illustrated in (43).

41)   A-a-ba   Wekesa   ni-ye   n-a-(*mu)-bona   ***OM + Cleft**
       1SM-PST-be 1Wekesa COMP-1   1sgSM-PST-(*1OM)-see
       'It is Wekesa who I saw.'

42)   Sy-a-ba   si-tabu ni-syo   n-a-(*si)-bona   ***OM + Cleft**
       7SM-PST-be 7-book COMP-7   1SGSM-PST-(*7OM)-see
       'It is the book that I saw.'

43)   Naanu ni-ye   w-a-(*mu)-bona?   ***OM+ WH-CLEFT**
       1who COMP-1 2sgSM-PST-1OM-see
        'Who did you see?'

---

[8] Note that Bax and Diercks (2012) show that Manyika Shona does not adhere to Henderson's generalization (allowing object marking of a postverbal object but ruling it out in an object relative clause), but they analyze the prohibition of OMs inside object relative clauses as the result of a general prohibition against object marking foregrounded elements in a sentence (we refer the reader to Bax and Diercks for details).

For completeness, we also note that object marking is impossible with an *in situ* wh-word, though the analysis of this fact falls in more with the previous section on object NPs than with extraction contexts (see Riedel 2009 on wh-object marking in other Bantu languages).

44)   W-a-(*mu)-bona   naanu?
       2sgC-2sgSM-PST-1OM-see 1who
       'Who did you see?'

The data here expand Henderson's generalization beyond relative clauses to object clefts, wh-questions, and object wh-clefts, but our conclusions continue to support Henderson's generalization, namely, that languages where the OM is prohibited with an immediately postverbal object also rule out the OM in object-extraction contexts. Importantly, this is precisely the prediction of an account of the OM as an incorporated pronoun – if the object marker originates in the base position of an NP object, then it should not be possible to extract an operator from that same position—the gap in the relative clauses and clefts in the preceding examples.

3.5   A Conjunction Diagnostic

Buell (2005) mentions one additional diagnostic that is worth addressing here, though the full implications of these facts about conjunction/ellipsis will have to be left for future research given the limited amount of research on ellipsis in Bantu languages (and Lubukusu in particular). Buell (2005: 52) points to the example in (45) as evidence that the OM in Zulu is an agreement morpheme (notably not an uncontroversial claim, cf. Adams 2010, Henderson 2006, van der Spuy 1993, Zeller 2009, 2012, among others).

45)   Ngi-dle-e   a-mahhabula a-mabili,   no-Sipho   u-*(wa)-dl-ile   [Zulu]
       1sgSM-eat-PERF 6-6apple   6.REL-6two and:1-1Sipho 1SM-6OM-eat-PERF
       'I ate two apples, and so did Sipho.'   (lit. 'I ate two apples, and Sipho ate them, too)

Buell points out that (45) requires an object marker in a context that is neither definite nor specific (i.e. normal interpretive contexts for OMing in Zulu), arguing that a pronominal analysis of the OM in (45) should yield a strict interpretation of the object marker with a meaning along the lines of the English *I ate two apples, and Sipho ate them too*, where the pronominal form yields the pragmatically odd interpretation that Sipho and I both ate the same apples. Given that the sloppy interpretation is the proper interpretation in this sentence, Buell argues that the only sufficient analysis is that the OM is an agreement morpheme that agrees with an object DP in the second conjunct, which is then elided.

Taking Buell's diagnostic at face value, our analysis predicts that the sloppy reading that is available for Zulu should not be available for Lubukusu – that is, if the Lubukusu OM is an incorporated pronoun, in the Lubukusu example in (46) the OM should only be able to refer to the same *kamachungwa kabili* 'two oranges' referred to by the object in the first conjunct.

46)   Wekesa   a-lya   ka-ma-chungwa ka-bili, akhaba Lionell   yeesi a-ka-lya
       1Wekesa 1SM-ate 6-6-oranges   6-two   CONJ   1Lionell also 1SM-6OM-ate
       'Wekesa ate oranges two, and Lionell ate them too.' (i.e. the same oranges)

As predicted by the analysis we have presented here, (46) yields the (pragmatically odd) reading that Wekesa and Lionell ate the same oranges.[9] In order to get the sloppy reading for the object in the second conjunct, both the verb and its object must be elided (parallel to English):

47)   Wekesa   a-lya   ka-ma-chungwa ka-bili,   akhaba   Lionell   yeesi
       1Wekesa   1sm-ate 6-6-oranges   6-two   conj   1Lionell   also
       'Wekesa ate two oranges, and Lionell did too.'

We therefore interpret these data as further evidence in support of our analysis that the OM in Lubukusu is an incorporated pronoun, rather than the realization of an agreement relation on a functional head. The next section takes up more specifically the theoretical implementation of this account, and tackles some important outstanding data.

4   Building an Analysis of Lubukusu OMing

4.1   A Head-Movement Incorporation Analysis

As we have seen in the data to this point, when viewed from within the traditional dichotomy of OMs analyzed as either agreement morphemes or incorporated pronouns the Lubukusu OM behaves consistently as if it were an incorporated pronoun. Of particular interest for our concerns here is that the OM in Lubukusu exhibits perhaps the most pronoun-like behavior of the Bantu languages that are documented in this respect.[10] This section sketches a traditional head-movement incorporation analysis of these facts, which will lay the foundation for the rest of the data analysis and theoretical implementation moving forward.

    If the object marker is an incorporated pronoun, a natural analysis is that the object marker originates in the normal base position for arguments of verbs, assumed here to be the sister to V°.

48)   vP   (to be rejected)

      v°   VP

           V°   ~~D°~~
          /\\   ~~OM~~
       OM   V°
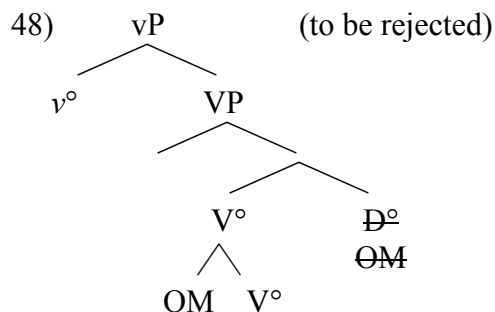
This approach assumes that the object marker is a D head, merged as the complement of V°. Following the basic principles of incorporation laid out in Baker (1988), and based on the Head

---

[9] A fact that we currently cannot explain is that in the event that object in the first conjunct is a bare plural, the presence of an OM in the second conjunct allows both the sloppy and strict readings: *Wekesa alya kamachungwa, akhaba Lionell yeesi akalya* 'Wekesa ate oranges, and Lionell also ate them' allows the interpretation that Lionell ate the same oranges, or different oranges. Presumably bare plurals have some sort of semantic ambiguity that opens the door for the sloppy reading in this instance. Bare singulars, in contrast, again require the strict reading. We leave the question of how the bare plurals allow for sloppy readings of the OM for future research.

[10] Marten et al document similar facts for Herero, though not including the full scope of the data here, and recent work Letsholo 2013 reaches similar conclusions to ours for Ikalanga, which shares many OMing properties in common with Lubukusu.

Movement Constraint of Travis (1984), the object marker incorporates into the V° head via head movement from its base position, as shown in (48). The verb then proceeds via a standard verb-raising operation to raise to *v*° and onward.

This analysis therefore captures the fact that the OM rules out an *in situ* DP object in any form, instead requiring dislocation of the DP object (either right- or left-dislocation), via straightforward complementary distribution—the D° head that is the OM is merged as the complement of V, and therefore any other realization of that argument must be merged as a dislocated phrase at a later point in the derivation. Likewise, the operator in an object-extraction context and the object marker both compete for the same base position of objects (i.e. first-merge position), therefore ruling out the object marker in any object-extraction construction. This analysis therefore explains the patterns of non-co-occurrence between OMs and full DP objects recounted in the preceding section, providing a theoretically-familiar and empirically-sufficient analysis of the prototypical properties of Lubukusu as a pronoun-incorporation language. This analysis makes strong predictions, however: if OMs cannot double in situ object noun phrases because both elements are merged into the same positions, creating a basic effect of complementary distribution, this pattern must be non-exceptional. That is to say, this mechanism of object marking rules out all instances of doubling an OM and a postverbal object. In addition, if incorporated pronouns are derived by head-movement we would expect only complements of verbs to be licit to undergo incorporation, as only complements would be structurally capable of head-moving into the verb. These predictions in fact run into some problems in some particular exceptional cases of object marking.

4.2 Challenging Pronoun Incorporation as Head Movement

This section takes up three different empirical patterns that challenge the notion that Lubukusu OMs can be analyzed via a head-movement incorporation analysis.

4.2.1 Confirmation Statements[11]

As it turns out, there are in fact a very particular set of contexts in which doubling an OM with an in situ object is in fact acceptable, which we refer to as confirmation statements.

Context: My son has brought a book and a magazine on a trip with me where we are traveling to join his mother. I have discussed with his mother that we both expect he will read the magazine. So when we arrive, his mother asks, 'Did he read the book or the magazine?"

(if he read both ...)
49) A-bi-som-ile
       1SM.PST-8OM-read-PST
       'He read them.'

We see, then, that it is possible to use a default class 8 OM to represent the two objects *li-gazeti* '5-magazine' and *sii-tabu* '7-book.' If it is the fact that the boy in question read only the magazine and not both, however, there are two licit responses: the first is to include the noun phrase object with no OMing on the verb at all, as in (50), or as is shown in (51) it is possible to

---

have an OM co-occur with an in situ object, the first instance of doubling we've encountered for Lubukusu.

50) A-som-ile   li-gazeti
    1SM.PST-read-PST 5-magazine
    'He read the magazine.'

51) A-li-som-ile   li-gazeti
    1SM.PST-5OM-read-PST 5-magazine
    'He definitely read the magazine.' (i.e. confirmation reading, that it occurred as expected)

Note here that it is in fact infelicitous in this context to only OM the object on the verb, despite the fact that the class 5 OM suffices to disambiguate between the two kinds of reading material in question (with 'book' being class 7).

52) #A-li-som-ile
    1SM.PST-5OM-read-PST
    'He read it.' (magazine = class 5)

What we see, then, is that while in many contexts doubling is ruled out, in particular discourse contexts doubling is licensed. This at least happens with confirmation readings, though more research is necessary to establish whether there are additional discourse contexts that license OM-doubling. This is an effect similar to what was documented in Manyika Shona by Bax and Diercks (2012): OM-doubling is possible in Manyika, but only in non-focus contexts. Bax and Diercks argue that the Manyika OM is a clitic and clitic doubling is licensed by particular kinds of pragmatic/semantic meanings, a familiar pattern from clitic-doubling in Indo-European languages (see, among others, Kallulli 2000 and Anagnastopoulou 2006).

Data like these bring into question the head-movement incorporation analysis discussed in the preceding section: if doubling is sometimes possible, this ought to rule out any mechanism for object marking where the OM head and the full object noun phrase are in complementary distribution as the complement of the verb, at least without positing an entirely separate mechanism for OM-doubling. We conclude, then, that while Lubukusu OMs may still be discussed as incorporated pronouns in a broad sense, that they in fact ought to be analyzed under the rubric of clitics, and that clitic doubling is in principle possible but triggers a very particular discourse reading (in fact, more restricted in Lubukusu than in other languages like Manyika Shona, Albanian, or Greek). This also allows the analysis to rely on the strength of a long tradition of clitic analyses in the theoretical literature for modes of analysis, rather than the overly-restrictive head-movement incorporation analysis. What needs to be laid out, then, is an analysis of cliticization that allows for the tight restrictions on pronoun distribution that occur in Lubukusu (and which allows for a story where doubling is possible in these specific contexts). Before getting to those points in section 5, however, we will first bring up two additional challenging empirical points for a head-movement incorporation analysis.

4.2.2 Reverse Binding facts

A familiar pattern from cliticization patterns cross-linguistically is that clitic doubling an object can help repair Condition B/C violations when a possessive pronoun in the subject DP is bound

by a co-indexed object (Harizanov 2013 for Bulgarian, Kramer 2013 for Amharic, Suñer 1988 for Rioplatense Spanish; Alexiadou and Anagnostopoulou 1997, Anagnostopoulou 2003 for Greek). As can be seen in (53), in Lubukusu (as in English) a pronoun in a subject cannot be bound by an R-expression in object position. Example (54) shows, however, that OM-doubling the object rescues this binding violation, allowing for both the bound and free readings of the pronoun.

53) Mayi   wewe$_{*i/j}$ a-siim-a   Yohana$_i$
    mother his   1SM-1OM-like-FV John
    'His$_{*i/j}$ mother likes John$_i$.'

54) Mayi   wewe$_{i/j}$ a-mu-siim-a   Yohana$_i$
    mother his   1SM-1OM-like-FV John
    'His$_{i/j}$ mother likes John$_i$.'

For our purposes in this section, it suffices to note that an object marker in this instance can double an in situ object, in contrast to the neutral contexts presented earlier in the paper. Like the confirmation readings above, this is yet another instance of a doubling context that should be impossible if doubling were ruled out by a true complementary distribution analysis like the head movement analysis of pronoun incorporation. We take up the question of how this pattern of co-reference is enabled by clitic doubling once the analysis is given below.

4.2.3 **Incorporation out of multiple positions**

As has been well-established since at least Bresnan and Moshi (1990), different Bantu languages vary with respect to the degree to which their objects show symmetrical properties. As can be seen in (55), for example, the two objects of the lexical ditransitive 'give' can occur in either order:

55) a. N-a-wa   Wekesa   sii-tabu
       1sgSM-PST-give   1Wekesa   7-book
       'I gave Wekesa the book.'

    b. N-a-wa   sii-tabu   Wekesa
       1sgSM-PST-give   7-book   1Wekesa
       'I gave Wekesa the book.'

Relevant for our concerns here, ditransitive objects in Lubukusu are also symmetrical in that either object may be OMed on the verb.

56) a. N-a-mu-wa   siitabu
       1sgSM-PST-1OM-give   7-book
       'I gave him the book.'

    b. N-a-si-wa   Wekesa
       1sgSM-PST-7OM-give   1Wekesa
       'I gave it to Wekesa'

These data also raise questions for the head-movement analysis of pronoun incorporation: as discussed above, that approach to pronoun incorporation predicts that only complements (structural sisters of verbs) may be OMed, but that is clearly not the case, as benefactive arguments of the verb 'give' may also be OMed on the verb (and this general symmetry extends to other kinds of ditransitives as well: Diercks and Sikuku 2011, Baker, Safir, and Sikuku 2012). These facts therefore would require an exceptional analysis if Lubukusu OMing were derived by head-movement-based incorporation explaining how incorporation is possible out of more positions than just the complement of the verb.

The relevant conclusion from the discussion in this section is that the pronoun incorporation analysis of object marking based on head movement (Baker 1988) for Lubukusu OMs simply cannot hold up: if OMs are in fact heads that head-move into the verbal heads, they should not ever co-occur with an in situ object, and they should only ever arise from the direct object complement of the verb. Of course, it is clear from all of the preceding data that in many instances Lubukusu OMs do in fact show the properties we would expect from incorporated pronouns. Given this state of affairs, the next section will sketch an analysis of Lubukusu OMs as clitics—by their very nature intermediate sorts of elements—and of the particular mechanisms of cliticization that derive the effects that make Lubukusu OMs in most ways essentially incorporated pronouns.

5   Incorporated Pronouns as a Cliticization Process
What we have seen this far, then, is that Lubukusu displays the expected properties of the long-hypothesized "pronoun incorporation" sort of object marker as much as, or more than, any other (yet-reported) Bantu language (Herero and Ikalanga possess the two most similar patterns yet documented). The previous section showed, however, that a traditional head movement analysis of pronoun incorporation makes the wrong predictions, as there are in fact instances in Lubukusu where it is licit for OMs to double an object. Granted, those particular discourse contexts are particular licensing conditions that clearly alter the patterns from the neutral interpretations, but if OMs are derived by head-movement incorporation in Lubukusu it is analytically undesirable to posit a completely different operation for object marking in these specific discourse contexts.[12]

Recall from the discussion of object marking in Bantu languages in section 2, however, that this 'exceptional' departure from a predicted pattern is far from unusual crosslinguistically. In fact, it is far more common crosslinguistically for languages to fail to adhere consistently to the predictions of a pure analysis of either 'agreement' or 'pronoun incorporation.' Therefore the 'exceptional' patterns within a language are more the norm than the exception.

For this reason, along with the particular patterns of OMing in Manyika (Shona), Bax and Diercks (2012) posited that Manyika OMs are in fact clitics at the *v*P phase and propose that OMs in Bantu languages more broadly ought to be analyzed as clitics, using the same kinds of theoretical mechanisms used for such phenomena crosslinguistically. Similarly, Ranero et al (2013) and Diercks et al (2013) conclude that OMs in Kuria ought to be analyzed as clitics, providing a variety of morphological, syntactic, and phonological evidence for this conclusion.

---

[12] As we'll discuss below, it is obviously necessary to posit some kind of different operation or structure for these particular discourse contexts – ideally, however, this alteration for these exceptional contexts would be a variant of the normal operation rather than two distinct operations altogether. Note that it it is likely that UG contains different mechanisms for cliticization that are at use between languages (Marchis and Alexiadou 2013) or even within a single language (Ranero et al 2013), but the kinds of evidence that motivated those proposals in those instances don't appear to be present here in Lubukusu.

Zeller (2012) concluded that OMs in Zulu were intermediate elements, displaying the properties of both agreement and pronouns. Clitics as a crosslinguistic class are essentially intermediate elements, sharing properties with agreement affixes in being morphophonologically dependent on other syntactic elements (usually verbs), but they usually display some degree of morphosyntactic independence as well, and making the intricate kinds of variation that occur within and between languages in OMing in fact the expected result. Calling OMs clitics is not so much an analysis in and of itself (clitics are themselves a continuing and challenging area of research) but rather a first step to proper analysis, making available a range of theoretical tools that allow for a more precise accounting of the relevant facts.

5.1   A theory for clitics

For the purposes of our discussion here, we are going to focus mainly on some recent claims about the nature of clitic-doubling. Cliticization has long been a topic of investigation within the field of syntax (for some overview see Anagnostopoulou 2006, van Riemsdijk 1999, Beukema and den Dikken 2000). The traditional range of analyses have been between claims that clitics are base generated in argument position and move to their final position (e.g. Kayne 1975, Uriagereka 1995, among others) and claims that clitics are essentially the result of agreement relations (Suner 1988, Sportiche 1996, Franco 2000, among others).

Many modern claims show a composite approach in ways. Roberts (2010) claims that a clitic is incorporated into the target head as the result of an Agree relation in his analyses of various Romance languages; Kramer (to appear) and Harizanov (to appear) claim that Agree relations precede movement operations that result in cliticization to the verb. Our analysis here will build on the suggestions of Kramer and Harizanov to provide a mechanism for deriving the 'pronoun incorporation' sort of object marking that occurs in Lubukusu.[13] In this sub-section we lay out the details of the Kramer/Harizanov theory of clitic-doubling, and in the next sub-section we will explain how this is useful for deriving the Lubukusu facts.

The Harizanov/Kramer proposals critically rely on Matushansky's (2006) proposals for deriving head movement. Matushansky proposed that head movement is not a primitive of UG, and is instead derived by movement of a head to a specifier, as shown in (57) (from Matushansky 2006, Kramer to appear):
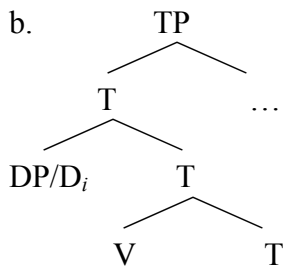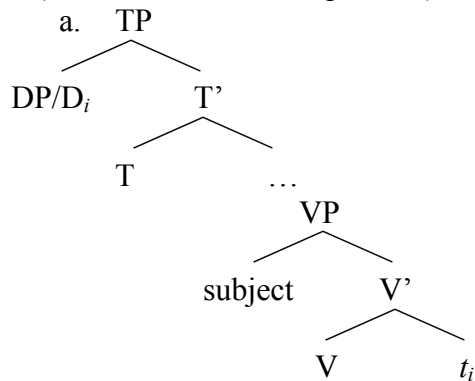
57)
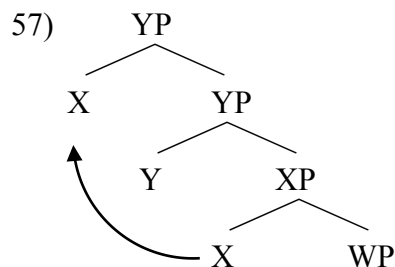
This movement-to-spec is followed by a morphological merger (m-merger) of that head into the head of the phrase to which it has moved, creating a complex head of the sort that is commonly assumed to be created by head movement.

---

[13] Our thanks in particular to Ruth Kramer for her useful discussion on this topic. Some version of this idea undoubtedly came from her in its first form in those discussions.

58)
```
              YP
            /    \
          Y        XP
        /   \
       X     Y
```
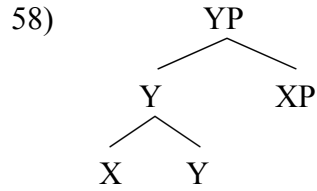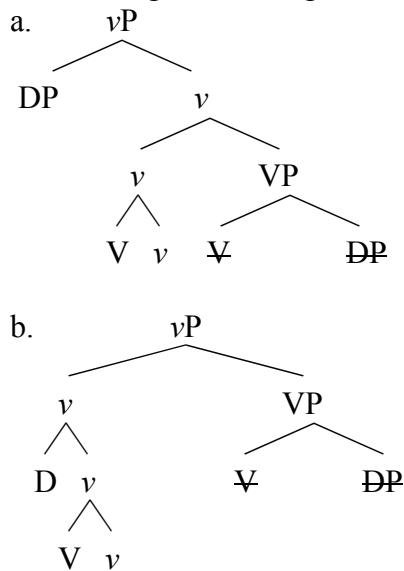
Matushansky (2006) suggests in a short discussion that clitics may well be dealt with in this manner, essentially undergoing phrasal movement to a specifier of a functional head and then undergoing m-merger to form a complex head with some head in the verbal structure, essentially cliticizing onto the verb. So in the following structures from Matushansky (2006: 85), a clitic (simultaneously a minimal and maximal projection, DP/D) raises to Spec, TP (as shown in (59)a) and undergoes m-merger to form a complex head at T (as shown in (59)b).

59) Romance clitics, simplified (Matushansky 2006: 85)
   a.
```
         TP
       /    \
   DP/D_i    T'
           /    \
          T       …
                   VP
                 /    \
           subject      V'
                       /   \
                      V      t_i
```
   b.
```
            TP
          /    \
         T        …
       /    \
   DP/D_i     T
            /    \
           V      T
```

Both Harizanov and Kramer take advantage of this m-merger mechanism, but take it a step farther to also explain clitic doubling in Bulgarian and Amharic, respectively. They claim that instead of clitics alone undergoing movement and then m-merger, that clitic doubling can be explained by movement of the entire DP object to Spec, *v*P, followed by m-merger of that DP with *v*. The new proposal in this regard is that phrasal elements, not simply minimal categories, are capable of undergoing m-merger.

60) Clitic doubling via m-merger of DP in Spec, *v*P (Kramer to appear: 22)

a.
```
            vP
          /    \
        DP       v
               /    \
              v      VP
             / \    /  \
            V  v   V̶    D̶P̶
```

b.
```
            vP
          /    \
         v       VP
        / \     /  \
       D   v   V̶    D̶P̶
          / \
         V  v
```

Because the result of m-merger is a complex head, the DP is necessarily compressed to a reduced
form, and this reduced form is the clitic that arises in clitic doubling. Therefore clitic doubling is
simply another instance of pronouncing multiple copies in a chain (Nunes 2004, Kandybowicz
2008), licensed by the fact that the higher copy of the DP is not recognized by the linearization
algorithm as the same as the lower copy of the DP because it has merged with *v* (see Nunes
2004).[14] This kind of analysis is justified by Harizanov and Kramer by the fact that clitic
doubling in Bulgarian and Amharic show properties of A-movement (e.g. affecting binding
relations). For example, Harizanov shows that clitic-doubling licenses the same kind of reverse
binding construction in Bugarian as we showed above for Lubukusu in section 4.2.2: Harizanov
claims that this licit binding results because the clitic is in fact a (reduced) copy of the object
which has raised to Spec, *v*P, into a position where it can c-command its antecedent in the
subject NP. We assume this same kind of analysis can apply to the analogous Lubukusu facts.

Implicit in both of their accounts is that the approach to clitic doubling schematized in
(60) is reliant not just on m-merger, but also on a mechanism capable of reducing the DP to a
reduced form (D) that is capable of forming a complex head, whether this reduction operation
occurs preceding or simultaneously with m-merger (Kramer, personal communication). It is this
additional mechanism that will be central to our analysis of pronoun incorporation.

5.2   The analysis of Lubukusu cliticization

In short, our claim is that the cliticization mechanism in Lubukusu is essentially the same as
proposed by Harizanov and Kramer and outlined in (60) above, with the critical exception being
that in neutral contexts Lubukusu lacks the mechanism for reducing a full DP to a reduced form
so that it can undergo m-merger with *v* (see section 5.4 for some discussion of different
operations triggering different interpretations). The result, then, is that only minimal categories
(D°) are capable of undergoing cliticization in Lubukusu, because a non-minimal maximal
category (DP) will be incapable of reducing to a form that is capable of forming a complex head.

---

[14] Note that this is the same story given for these facts and for doubling of a reflexive marker and an object anaphor
in Sikuku 2012.

61) Derivation of cliticization in Lubukusu

a.

```
            vP
          /    \
        D        v
               /    \
             v        VP
            / \      /    \
           V  v    V̶      D̶
```

b.

```
          vP
        /    \
      v        VP
     / \      /    \
    D  v    V̶      D̶
       / \
      V  v
```
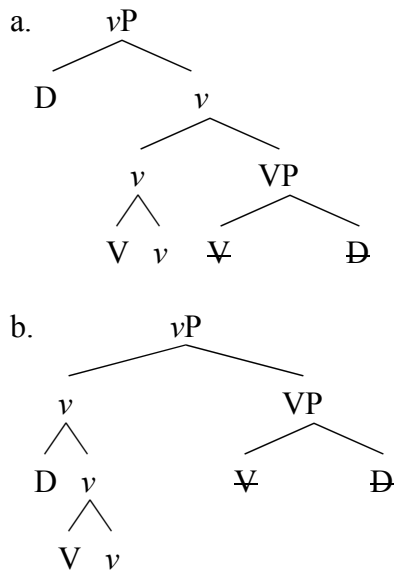
In (61)a we see the process familiar from above: the D clitic/object marker is first merged in argument position, and as the derivation proceeds, it raises to the edge of the vP phase. At this point m-merger applies, and (61)b shows the result, where the D head has become a complex head with v, cliticized onto the verb. In principle, then, the cliticization operations are the same between a language like Amharic or Bulgarian with clitic doubling and a language like Lubukusu without it, with the difference being the availability of the operation to reduce a higher copy of the object to a reduced form that can undergo m-merger. Lubukusu cannot reduce a DP to D in the process of undergoing m-merger, and therefore clitic doubling is ruled out (in neutral contexts at least, see discussion below).

What we find, then, is that this analysis is not entirely dissimilar from the head movement analysis of pronoun incorporation, but on a more nuanced view where head movement is derived by movement to specifier followed by m-merger to form a complex head, as proposed by Matushansky (2006). But this broader view of incorporation leaves open the door to explain some of the exceptional cases in Lubukusu in a way that the traditional head-movement analysis does not (which are discussed in section 5.4).   First of all, this m-merger approach to incorporation addresses the data from (55) and (56) above, that the single object marker on a Lubukusu verb may come from postverbal arguments in a variety of positions, not simply from the complement of the verb. While the traditional head-movement analysis of incorporation only predicts incorporation out of the complement of the verb, this analysis of phrasal-type movement to specifier followed by m-merger in fact predicts that any argument within vP could undergo this incorporation-cliticization, whether the complement of the verb or an argument merged into the specifier of an applicative head, as phrasal movement to the edge of the vP phase is not constrained by the extreme locality the way that a head-complement relationship is.[15]

---

[15] The symmetry facts (that a lower object may be object-marked in the presence of the higher object) are still an issue to be explained, independent of the mechanism of object marking that we tackle here. We refer the reader to Baker and Collins (2006) and McGinnis (2001) for two different approaches to the symmetry effects in double object constructions in many languages, and Safir, Baker, and Sikuku (2012) for a discussion of symmetricality in Lubukusu.

5.3 Another instance of OM-doubling: Pronominal objects

It is relevant in this context to consider one more instance of exceptional OM-doubling, in addition to the instances of contrastive topics and reverse binding given above. As is long-familiar in languages with rich agreement, use of a free pronoun triggers an emphatic/contrastive reading. As can be seen in (62) and (63), however, it is possible to OM-double independent pronouns.

62) N-a-khu-bona   (ewe)
    1sg.SM-PST-2sg.OM-see (you(sg))
    'I saw YOU (sg) (not someone else).'

63) N-a-ba-bona   (nibo)
    1sg.SM-PST-2OM-see   (them)
    'I saw THEM (not someone else).'

This is a familiar exception to OM-doubling generalizations, one example being that in Kuria OM-doubling is ruled out in monotransitives except in instances that the doubled object is a free pronoun (Ranero et al 2013). The lack of prosodic break in the preceding examples suggests that the free pronouns here are not dislocated, as does the pattern in (64)a: OM-doubled pronouns may occur to the left of a temporal adverb, inside the vP, in contrast to full DP objects.[16]

64) a. N-a-khu-bona   ewe   likolooba
       1sgSM-PST-2sgOM-see you(sg) yesterday
       'I saw YOU (sg) yesterday (not someone else).'

    b. N-a-khu-bona   likolooba , ewe
       1sgSM-PST-2sgOM-see yesterday you(sg)
       'I saw YOU (sg) yesterday (not someone else).'

Given the analysis sketched in the preceding sections, however, this is not altogether unexpected. If OMs are generated by movement of a D head to the edge of vP followed by m-merger, and doubling is mainly ruled out by the inability to reduce a full DP to a pronoun in order to undergo m-merger, then it is unsurprising that independent pronouns CAN be doubled, since they are already capable of undergoing m-merger with a head. In this instance, then, the object pronoun is copied and re-merged in Spec, vP, at which point it can undergo m-merger and be realized as an OM on the verbal form. The presence of OM-doubling of an independent pronoun is therefore simply the realization of both copies of the chain, made possible because the m-merger operation at v has served to make both copies of the chain distinct from each other with respect to the linearization algorithm (Nunes 2004). Presumably some kind of focus interpretation on the object within the VP is responsible for licensing the pronunciation of both copies here, but given the proposed mechanisms for cliticization, this kind of effect is not unexpected.

---

[16] Analogous patterns for reflexive and reciprocal pronouns are reported by Sikuku (2011) and Safir, Sikuku & Baker (to appear).

5.4 Discussion of exceptional cases of OM-doubling

Even given this analysis, it still remains a question why doubling is in fact possible in some instances, albeit very specific discourse contexts. Given space constraints, we will leave our discussion here at a broader level, mainly focusing on the fact that clitic-doubling has long been known to trigger particular interpretive effects. For both Bantu languages and Indo-European languages these effects have been classified as related to specificity, definiteness, and animacy (cf. Suner 1988, Dobrovie-Sorin 1990, Leonetti 2008, Riedel 2009). The effects of more discourse-related information structure concerns like topic and focus have also been shown to play a large role in licensing clitic-doubling in both Indo-European languages (Kallulli 2000, 2008) and Bantu languages (Bax and Diercks 2012), with the familiar generalization being that clitic-doubling is only possible in non-focus discourse contexts.

Our claim is that clitic-doubling in Lubukusu is like clitic doubling in many other languages, therefore, in being restricted to a particular set of discourse/semantic contexts. Implementing this analysis theoretically depends on the mechanisms for cliticization that are adopted. Bax and Diercks (2012) argue for clitic-doubling in Manyika via a "Big DP" that combines a clitic and its associate in a single DP, and therefore claim that the Big DP structure itself triggers the non-focus interpretations that are triggered by clitic-doubling.

In contrast, the mechanism that we adopt here is centered on movement to the edge of the vP phase, followed by m-merger of the OM into the v head. Clitic doubling is ruled out in most instances because the mechanism that allows doubling in Kramer's and Harizanov's proposals is a reduction of the higher copy of the object to a pronominal form, an operation that we claimed was not available in most instances in Lubukusu. So instead of associating the particular interpretations of clitic doubling with a particular structure, as Bax and Diercks proposed, we must claim here that the operation that reduces a DP to a small form that can undergo m-merger is available (as expected if it is part of the architecture of UG), but it comes at a 'cost' as it were, triggering a very particular sort of discourse-interpretation. So for us the presence of particular operations is associated with a particular interpretation, not just particular structures.[17]

This discussion is relatively informal, and very much an area for future research both in Lubukusu and in the other languages where clitic-doubling is licensed by specific interpretive effects. A more articulated theory is necessary, of course, but awaits in-depth investigation into the discourse effects of clitic doubling in languages with very constrained interpretations of the construction. The advantage over the head-movement analysis of pronoun incorporation, however, is that the theoretical tools used to explain this process of cliticization make available doubling in principle, with the question remaining of when reduction of a higher copy is possible being linked to specific sorts of discourse interpretations. On the head-movement analysis an entirely different analysis of object marking would be necessary in the exceptional doubling contexts, which is undesirable given the lack of evidence for a different original of object marking in those contexts.

---

[17] An alternative approach would be to instead link the interpretive constraints on clitic-doubling in Lubukusu to the position of objects themselves; perhaps a full DP object shifted to the left edge of vP carries very specific interpretive effects in Lubukusu, and therefore clitic doubling (resulting from a shifted full DP object) only occurs in those particular discourse contexts.

6   Explaining the single object marker restriction

Considering again for a moment the traditional approach to incorporation, one prediction of the head-movement analysis is that there it should never be possible for two object markers to appear on the verb: if OMs are generated by head movement of the complement of V into the V head, this mechanism allows for only a single incorporation operation. It is in fact true of Lubukusu that only a single OM can occur on the verb in most instances, demonstrated below with examples from the preceding benefactive DOC in (66):

65)   Wekesa   a-atekh-el-a   Sara   by-akhulia
       1Wekesa   1SM-PST-cook-AP-FV   1Sara   8-food
       'Wekesa cooked Sara food.'

66) a. *?Wekesa   a-a-bi-mu-tekh-el-a
        1Wekesa   1SM-PST-8OM-1OM-cook-AP-FV
        Intended: 'Wekesa cooked her it.'

     b. **Wekesa   a-a-mu-bi-tekh-el-a
        1Wekesa   1SM-PST-1OM-8OM-cook-AP-FV
        Intended: 'Wekesa cooked her it.'

If OMs are derived by movement to *v*P and m-merger with the *v* head, however, it is unclear what would prevent multiple objects to successively undergo this operation (and, in fact, many Bantu languages in fact allow multiple OM clitics to occur in a verbal form – see Marlo 2013 for an impressive catalog of the existing knowledge of multiple OMing). The question becomes, if the cliticization mechanism that we invoke allows for multiple OMing in principle, what restricts Lubukusu verb forms to appearing with only a single OM? The following sections show that there are in fact a few exceptional contexts where a multiple OM structure is possible, raising important questions about the nature of this restriction.

6.1   The interaction of OM and RFM

To lay the groundwork for our analysis of the single-OM restriction in Lubukusu, we draw on related evidence from reflexivation as dealt with by Sikuku (2011, 2012), who points out that it is possible for an object marker and a reflexive marker (RFM) to co-occur. Standard reflexive predicates in Lubukusu are marked with an object-marker-like verbal prefix [*i-*][18], which occurs in the same position as object markers, and which is generally in complementary distribution with object markers, as illustrated in (67).

67) a. W- i- siing-anga   (wamw-eene)
        2sgSM-RFM-wash-ASP 2sg-self
         'You wash yourself.'

     b. *W- khu-i- siing-anga
        2sgSM-2sgOM-RFM-wash-ASP
         'You wash yourself.'

---

[18] The RFM also surfaces as [*e-*], in a phonologically-conditioned alternation.

68) a. A-a-e-ira
       1SM-PST-RFM-kill
       'He killed himself.'

   b. A-a-mu-(*i)-ir-a
      1SM-PST-1OM-(*RFM)-kill
      'He killed him(*self).'

The RFM differs from OMs in that it is invariant with respect to the grammatical features of its referent, a fact common across the Bantu family. However, like the OM, it allows an optional *in situ* pronominal form (referred to by Sikuku 2011 as *Agr-eene*). Therefore, in the same way that the OM allows a doubled pronominal form, *Agr-eene* allows a doubled anaphor. We set aside the analysis of this form at present, instead referring the reader to Sikuku (2011, 2012) and Safir, Sikuku, and Baker (2012) for discussion.

 Another parallel between object markers and reflexive markers comes in nominalization contexts, in infinitive constructions. The infinitive construction utilizes the class 15 subject marker, and is analyzed as a verb heading an IP, hence a nominalized clause (in cases that it is nominal and not a verbal). The nominal infinitive is demonstrably based on a verbal structure because it takes certain aspectual and mode markers (though not tense) and it can always co-occur with other conventional verbal affixes such as the object marker, applicative, reflexive, reciprocal, and causative. The following examples demonstrate the use of both an object marker and a reflexive marker in a nominalized infinitive:[19]

69) Khu-mu-siim-is-il-anga kama-lwa khu-a-mu-reer-er-e   bu-tinyu
  15INF-1OM-like-CAUS-AP-HAB 6-beer 15SM-PST-1OM-brought-AP-FV 14-problem
  'Pleasing him with beer brought him problems.'

70) Khu-khw-i-siim-is-il-anga   kama-lwa khu-a-mu-reer-er-e   bu-tinyu
  15INF-15INF-RFM-like-CAUS-AP-HAB 6-beer 15SM-PST-1OM-brought-AP-FV 14-problem
  'Pleasing oneself with beer brought him problems.'

Notice that both the OM and the RFM can occur in infinitives, but the two occupy the same pre-verbal position.

 Given these similarities, among others, we follow Sikuku (2012) in adopting the same analysis for the Lubukusu RFM that we have argued for the OM, namely, that it is an incorporated pronominal form derived by the same cliticization mechanisms. The complementary distribution noted in the preceding examples therefore derives from the fact that the RFM and the OM originate from identical syntactic positions (i.e. the transitive object) in those examples. This raises the question of whether, if a context could be constructed where the RFM and the OM did not originate from identical positions, the OM and the RFM could in fact co-occur. As it turns out, this is in fact the case.

---

[19] The doubled class 15 prefix in the second example is a phonologically-triggered variant – the second prefix structure is deleted preceding consonant-initial roots, therefore it is deleted preceded the C-initial object marker, but not before the V-initial reflexive marker (see Mutonyi 2000).

The complementarity in distribution is only present if a verb is mono-transitive. However, if one of the valence increasing affixes such as causative is added, or a ditransitive verb is used, then the RFM and the OM can co-occur.

71)   A-a- ba- e- ir- isy-a
        1SM-PST-2OM-RFM-kill-CAUS-FV
        'He made them$_k$ kill themselves$_k$.'

72)   Wekesa a-a-mu-i-siim-isy-a
        Wekesa 1SM-PST-1OM-RFM-like-CAUS-FV
        'Wekesa made him$_k$ like himself$_k$.'

In causativized verbs, the cause of the event described by the verb is added as an argument, and the 'causee' expressed by the OM is the antecedent of the RFM. Note, however, the parallel sorts of constructions with two object markers (OM+OM) rather than the OM+RFM are ruled out.

73)   *A-a- ba- mu- ir- isy-a
        1SM-PST-2OM-1OM-kill-CAUS-FV
        'He made them kill him.'

74)   *Wekesa a-a-mu-ba-siim-isy-a
        Wekesa 1SM-PST-1OM-2OM-like-CAUS-FV
        'Wekesa made him like them.'

This suggests that there is some property of the RFM which qualifies it to serve as an 'extra' object marker in (71) and (72). Sikuku (2012) analyzes this difference between OMs and RFMs as a result of a different site of incorporation – RFMs incorporate into voice heads, whereas OMs incorporate into the accusative Case-licensing head. While this analysis may well serve to explain why RFMs and OMs may co-occur, it is not clear still why there are restrictions against multiple OMs occurring in Lubukusu (when, for example, many other languages like Haya, Sambaa, or Kuria freely allow multiple OMs; see Riedel 2009, Ranero et al 2013).

6.2   Templatic-based restrictions on OMs

What we will suggest, here, is that restrictions on the number of OMs may well be the result of a morphological constraint, essentially a template delimiting which morphemes may co-occur in a verbal form. A related proposal appeared in an earlier version of Marlo (2013), which was seeking to capture an interesting empirical generalization from a broad range of Bantu languages, namely, that whatever the standard number of object markers allowed by a single Bantu language, in it is relatively common for that language to generally allow that number of OMs +1, in the event that the +1 is a first person object marker or a reflexive marker.[20] This is illustrated

---

[20] Lubukusu is in fact one of several languages which doesn't wholly fit the +1 generalization, as the first person object marker, though a nasal as in many other Bantu languages, does not trigger the +1 effect (Marlo cites Havu, Lozi, and Tharaka as other Bantu languages that show this same pattern). We recommend the reader to Marlo (2013) for a discussion of constraint rankings that allow such a situation to arise.

for Rimi in (75), where underlining and bold relates the English pronominal translations to their Rimi object marker counterparts:[21]

75) a. *w-a-**va**-ko-tom-ɩ-aa   'he sent **them** to <u>you</u>'   [Rimi]
   *n-a-**ʊ**-<u>va</u>-rʊɣ-ɩ-aa   'I cooked **it**$_{14}$ for <u>them</u>'
   *n-a-**va**-<u>ʊ</u>-rʊɣ-ɩ-aa   'I cooked **it**$_{14}$ for <u>them</u>'
  b. w-a-**ʊ**-<u>n</u>-dʊɣ-ɩ-aa   'he cooked **it**$_{14}$ for <u>me</u>'   **OM + 1sg OM**
   w-a-**va**-<u>n</u>-tʊm-ɩ-aa   'he sent **them** to <u>me</u>'
   ʊ̀-**vá**-<u>n</u>-tʊ́m-í-à   'to send **them** to <u>me</u>', 'to send me to them'
  c. à-<u>mw</u>-**ì**-ràfìɩy-à   'he has sworn **himself** to <u>him</u>'   **OM + RFM**
   n-gʊ́-<u>v</u>-**ì**-tòm-í-à   'I will serve <u>them</u>'
   ʊ̀-<u>v</u>-**ì**-kʊ́t-y-à àváà   'to satisfy <u>these people</u>$_2$'

The preceding data show that while multiple CV object prefixes are ruled out in (a), multiple OMs are nonetheless acceptable when one of the object prefixes is the first singular nasal (b) or the reflexive marker (c). The Lubukusu RFM facts discussed in the preceding sub-section clearly fall in with the +1 generalization here, as Lubukusu is generally restricted to a single object marker, but allows two just in case the additional object marker is a RFM.

   Various authors (Marlo 2013, Sikuku 2012, Muriungi 2008) have attributed the exceptional patterns of 1sg and reflexive markers to different sites of origin of those morphemes, essentially granting a syntactic solution to the puzzle of why certain kinds of OMs (and the reflexive marker) are exceptional to the more general restrictions on numbers of OMs in a given language. There have also been several previous proposals that restrictions on the number of object markers can be attributed to morphophonological conditions of some sort, however (cf. Polak 1986, Adams 2010, Ndayiragije 2003). Marlo's earlier suggestion was that in the cases where reflexive markers and 1sg OMs license an additional object marker, those morphemes are morphologically reanalyzed as part of the stem, supported by evidence from many languages that those OMs are often reduplicated as part of the stem in verbal reduplication processes. The intuition is that since the RFM and the 1sgOM are morphologically considered part of the stem, they do not contribute to the overall restriction on number of object markers for a particular language, creating the +1 effect across a range of languages irrespective of their particular restrictions on the number of object markers that may possibly occur on a verb. In Adam's (2010: 69) analysis of object marking in Zulu, she suggests that multiple object marking is possible in Zulu, but a morphological constraints prevents any more than one object marker from being pronounced on the verb (comments in Polak 1986 suggest a similar approach based on morpho-phonology). So the idea of morphological constraints explaining restrictions on OMing has been floated at various points before, though without a large degree of technical precision.

   The precise proposals regarding morphophonological constraints are not critical here; the result is that due to morphological constraints on the verbal form, a language is specified as essentially allowing only a single pre-stem object marker, or only two pre-stem object markers, etc.[22] It is our claim that this kind of constraint must be the explanatory mechanism for the single

---

[21] This data set is given here as presented in Marlo (2011), which is compiled from data reported in (Hualde 1989: 183-185; Olson 1964; Polak 1986; Schlindwein 1986). The underlining and bolding in glosses are our additions.
[22] We do not rule out the possibility that in some languages the restriction is in fact syntactic, but such an analysis would require demonstrably syntactic qualities.

object marker restriction in Lubukusu, and the next section provides evidence supporting this claim.

6.3   An exception to prove the rule

We have not provided any evidence, yet, that the restriction to a single OM in Lubukusu is morphological and not syntactic.   But the general approach leaves open an interesting possibilitym– in principle, multiple object markers should be allowed in the event that they are not ruled out by the aforementioned morphological constraint, namely, if one of them does not arise in the immediately pre-stem position. Lubukusu offers an interesting testing ground for this hypothesis, because locative phrases are not pronominalized by pre-stem object marker, but by the postverbal clitic.   In fact, any non-subject pronominalization of a locative object is realized as the postverbal locative clitic, for example locative direct objects (i.e. not simply instances where a verb selects specifically for a location).   This gives rise to an interesting asymmetry, illustrated below with the verb –*okesia* 'show'.   As demonstrated in (76), either object of the verb –*okesia* may be OMed, both the benefactive applied object *Lionell* (b) and the direct object *lusimu* 'phone' (c).

76) a. N-okesia   Lionell   lusimu
       1sgSM-showed   1Lionell 11-phone
       'I showed Lionell the phone.'

    b. N-a-mu-okesia   lu-simu
       1sgSM-PST-1OM-show   11-phone
       'I showed him the phone.'

    c. N-a-lu-okesia   Lionell
       1sgSM-PST-11OM-show   1Lionell
       'I showed it to Lionell.'

As shown in (77), however, it is impossible to object-mark both objects – either order of the two preverbal OMs from (76) is ungrammatical.   This is the expected result, given the generalizations established thus far.

77) a. *N-a-mu-lu-okesia
       1sgSM-PST-1OM-11OM-show

    b. *N-a-lu-mu-okesia
       1sgSM-PST-11OM-1OM-show

The critical data come from when the direct object of the verb –*okesia* is a locative phrase.   As shown in (78)c the locative phrase is object-marked by a postverbal locative clitic.

78) a. N-okesia   Lionell   mu-nju
       1sgSM-showed   1Lionell   18-house
       'I showed Lionell the inside of the house.'

b. N-a-mu-okesia   mu-nju
   1sgSM-PST-1OM-show   18-house
   'I showed him the inside of the house'

c. N-okesia-mo   Lionell
   1sgSM-showed-18L   1Lionell
   'I showed Lionell it/there'

When both arguments are pronominalized, as opposed to the examples in (77), the result is acceptable, as shown in (79).

79)   N-a-mu-okesia-mo
       1sgSM-PST-1OM-show-18L
       'I showed him it/there.'

We interpret this evidence as confirmation of a morphological/templatic approach to this question, namely, the claim that the restriction to a single object marker (in Lubukusu, at least) is the result of a morpho-phonological constraint on pre-stem morphological material, rather than any syntactic constraint on object marking *per se*. The result is not only an explanation of the single-object-marker restriction, but also confirmation that a cliticization operation that in principle allows for cliticizing multiple objects onto the verbal form is in principle a desirable approach, as this is clearly possible from the view of the syntax. It is simply templatic-morphological constraints that rule out the appearance of multiple pre-stem OMs in Lubukusu.

7   Conclusions and Comparative Theoretical Consequences

In this paper we have argued that in many ways Lubukusu instantiates the long-hypothesized but contentious analysis that object markers are incorporated pronouns in some Bantu languages. We revisited classical diagnostics for object marking but also expanded our discussion to include a variety of different syntactic contexts, all of which pointed to the conclusion that Lubukusu object markers are not realizations of agreement on a functional head (*contra* Riedel 2009) but instead are pronominal arguments of the verb, incorporated into the verb's morphological structure.

Despite this conclusion that Lubukusu is in many ways the prototypical instance of pronominal incorporation, we gave multiple data patterns that bring into question a strict head-movement-based incorporation analysis. This led us to analyze Lubukusu OMs as clitics, derived by similar cliticization processes as have been proposed recently for other languages. In particular, we claimed that OMs raise to Spec, vP and are incorporated into the verb via m-merger (Harizanov 2013, Kramer 2012, Matushansky 2006).

We then addressed another traditionally thorny morphosyntactic puzzle, namely, the restriction to a single object marker in Lubukusu, as compared to other languages that allow multiple object markers. We concluded that the Lubukusu facts necessitate that the restriction to a single object marker is in fact a morphological constraint (or perhaps a prosodic one) and not a syntactic one.

Looking back at the typological variation in (8), as reported in works like Marten, Kula, and Thwala (2007) and Marlo (2013), it remains clear that the dichotomy between incorporated pronominals and agreement morphemes is not sufficient to explain the typological facts. The

approach taken here, however, in which pronoun incorporation is in fact a particular kind of realization of a more general cliticization analysis, opens the door to analyzing OMs in Bantu languages as clitics with similar ranges of variation in properties as the clitics of various Indo-European languages (Bax and Diercks 2012 on Manyika, Ranero at el 2013 on Kuria). This certainly leaves much work to be done, but at the very least it makes available a broad range of theorized mechanisms that may be useful for analyzing the Bantu patterns, and furthermore it will serve to bring a large range of existing data on Bantu OMing into the discussion of cliticization patterns in language more broadly.

8   References

Adams, Nicki. 2010. The Zulu ditransitive verb phrase. Chicago: University of Chicago dissertation.

Alexiadou, Artemis and Elena Anagnostopoulou. 1998. Parameterizing AGR: Word order, V-movement, and EPP-checking. *Natural Language & Linguistic Theory* 16.3: 491-539.

Anagnostopoulou, Elena. 2006. Clitic doubling. In *The Blackwell Companion to Syntax, Volume 1*, ed. Martin Everaert and Henk van Riemsdijk, 520-581. Oxford: Blackwell.

Baker, Mark. 1988. Incorporation: A theory of grammatical function changing. Chicago: University of Chicago Press.

Baker, Mark. 1996. The polysynthesis parameter. Oxford: Oxford University Press.

Baker, Mark. 2003. Lexical categories: Verbs, nouns, and adjectives. Cambridge: Cambridge University Press.

Baker, Mark. 2008. The syntax of agreement and concord. Cambridge: Cambridge University Press.

Baker, Mark, Roberto Aranovich and Lucía Golluscio. 2005. Two Types of Syntactic Noun Incorporation: Noun Incorporation in Mapudungun and Its Typological Implications. *Language* 81: 138-177.

Baker, Mark, Ken Safir, and Justine Sikuku. 2012. Sourcesof (A)symmetry in Bantu Double Object Constructions. Ms, Rutgers University and Moi University. To appear in the proceedings of the West Coast Conference on Formal Linguistics.

Bax, Anna and Michael Diercks. 2012. Information structure constraints on object marking in Manyika. *Southern African Linguistics and Applied Language Sciences* 30.2: 185-202.

Beaudoin-Lietz, Christa, Derek Nurse, and Sarah Rose. 2004. Pronominal object marking in Bantu. In *Proceedings of the 4th World Congress of African Linguistics, New Brunswick 2003*, eds. Akinbiyi Akinlabi and Oluseye Adesola, 175-188. Köln: Rüdiger Köppe.

Belletti, Adriana. 1999. Italian/Romance Clitics: Structure and Derivation. In: *Clitics in the Languages of Europe*, Henk van Riemsdijk, 543-579. Berlin: de Gruyter.

Beukema, Frits and Marcel den Dikken, eds. 2000. *Clitic phenomena in European languages*. Amsterdam: John Benjamins.

Bokamba, Eyamba. 1976. Question formation in some Bantu languages. Bloomington: Indiana University dissertation.

Bowers, John. 2010. Arguments as relations. Cambridge: MIT Press.

Bresnan, Joan, and Sam Mchombo. 1987. Topic, pronoun, and agreement in Chichêwa. *Language* 63:741–782.

Bresnan, Joan and Lioba Moshi. 1990. Object asymmetries in Bantu syntax. *Linguistic Inquiry* 21: 147-185.

Buell, Leston. 2005. Issues in Zulu morphosyntax. Los Angeles: UCLA dissertation.

Byarushengo, Ernest R., Larry M. Hyman, and Sarah Tenenbaum. 1976. Tone, accent and assertion in Haya. In *Studies in Bantu tonology*, ed. Larry M. Hyman, 183–205. Los Angeles: Department of Linguistics, University of Southern California.

Campos, Héctor. 2005. Noun modification, pseudo-articles, and last resort operations in Arvantovlaxika and in Romanian. *Lingua* 115: 311-347.

Carstens , Vicki. 2005. Agree and EPP in Bantu. *Natural Language & Linguistic Theory* 23: 219-279.

Carstens, Vicki and Michael Diercks. 2011. Agreeing 'how'? University of Missouri and Pomona College, ms.

Cechetto, Carlo. 2000. Doubling Structures and Reconstruction. *Probus* 12: 93-126.

Chomsky, Noam. 1995. Bare Phrase Structure. In *Government and Binding Theory and the Minimalist Program*, ed. Gert Webelhuth, 385-439. Oxford: Blackwell.

Chomsky, Noam. 2000. Minimalist inquiries: The framework. In *Step by step: Essays in honor of Howard Lasnik*, ed. Roger Andrew Martin, David Michaels, Juan Uriagereka, 89-155. Cambridge: MIT Press.

Chomsky, Noam. 2001. Derivation by phase. In *Kan Hale: A life in language*, ed. Michael Kenstowicz, 1-52. Cambridge: MIT Press.

Collins, Chris. 2004. The agreement parameter. In *Triggers*, ed. Anne Breitbarth, Henk van Riemsdijk, 115-136. Berlin: Mouton de Gruyter.

Diercks, Michael. 2006. Object Agreement in Swahili and the Interpretation of Objects. Washington, DC: Georgetown University, ms.

Diercks, Michael. 2010. Agreement with subjects in Lubukusu. Washington, DC: Georgetown University dissertation.

Diercks, Michael. 2011. The morphosyntax of Lubukusu locative inversion and the parameterization of Agree. *Lingua* 121: 702-720.

Diercks, Michael. 2012. Incorporating location in argument structure: The Lubukusu locative clitic. To appear in the *Proceedings of ACAL 40*. Cascadilla Proceedings Project.

Diercks, Michael, Rodrigo Ranero, and Mary Paster. 2013. Evidence for a clitic analysis of object markers in Kuria. Ms, Pomona College.

Dobrovie-Sorin, Carmen. 1990. Clitic doubling, wh-movement, and quantification in Romanian. *Linguistic Inquiry* 21.3: 351-397.

Downing, Laura. 1998a. On the prosodic misalignment of onsetless syllables. *Natural Language & Linguistic Theory* 16: 1-52.

Downing, Laura. 1998b. Prosodic misalignment and reduplication. In *Yearbook of Morphology* 1997, ed. Geert Booij and Jaap van Marle, 83-120. Dordrecht: Kluwer Academic Publishers.

Downing, Laura. 1999. Prosodic stem ≠ prosodic word in Bantu. In *Studies on the phonological word*, ed. T. Alan Hall and Ursula Kleinhenz, 73-98. Amsterdam: John Benjamins.

Downing, Laura. 2006. *Canonical forms in prosodic morphology*. Oxford: Oxford University Press.

Downing, Laura. 2009. Linear disorder in Bantu reduplication. Paper presented at the *Workshop on the Division of Labor between Morphology and Phonology and Fourth Network Meeting*, Meertens Instituut, Amsterdam.

Duranti, Alessandro, and Ernest R. Byarushengo. 1977. On the notion of "direct object". In *Haya grammatical structure*, ed. Ernest R. Byarushengo, Alessandro Duranti, and Larry M. Hyman, 45–71. Los Angeles: Department of Linguistics, University of Southern California.

Franco, Jon. 2000. Agreement as a Continuum: The case of Spanish pronominal clitics. In *Clitic Phenomena in European Languages*, eds. Frits Beukema and Marcel den Dikken, 147-190. Amsterdam: John Benjamins.

Harizanov, Boris. To appear. Clitic doubling at the syntax-morphophonology interface: A-movement and morphological merger in Bulgarian. *Natural Language & Linguistic Theory*.

Henderson, Brent. 2006. The syntax and typology of Bantu relative clauses. Urbana-Champaign: University of Illinois dissertation.

Hualde, José. 1989. Double object constructions in Kirimi. In *Current Approaches to African Linguistics* 5, ed. Robert Botne and Paul Newman, 179-189. Dordrecht: Foris Publications.

Hyman, Larry. 1999. The interaction between focus and tone in Bantu. In *The grammar of focus*, ed. Georges Rebuschi and Laurie Tuller, 151-177. Amsterdam: John Benjamins.

Jelinek, Eloise. 1984. Empty categories, case, and configurationality. *Natural Language & Linguistic Theory* 2: 39-76.

Kallulli Dalina. 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.

Kallulli, Dalina. 2008. Clitic doubling, agreement, and information structure: The case of Albanian. In *Clitic doubling in the Balkan languages*, eds. Dalina Kallulli and Liliane Tasmowski, 227-256. Amsterdam: John Benjamins.

Kandybowicz, Jason. 2008. *The Grammar of Repetition: Nupe Grammar at the Syntax–Phonology Interface*. Amsterdam: John Benjamins Publishing Company.

Kayne, Richard. 1975. *French Syntax: The Transformational Cycle*. Cambridge: MIT Press.

Keach, Camillia. 1995. Subject and Object Markers as Agreement and Pronoun Incorporation in Swahili. In *Theoretical Approaches to African Linguistics. Trends in African Linguistics 1*, ed. Akinbiyi Akinlabi, 109-116. Trenton, NJ: Africa World.

Kramer, Ruth. To appear. Clitic doubling or object agreement: An Amharic investigation. *Natural Language & Linguistics Theory*.

Kratzer, Angelika. 1996. Severing the External Argument from its Verb. In *Phrase Structure and the Lexicon*, ed. Johan Rooryck and Laurie Ann Zaring, 109-138. Dordrecht: Kluwer Academic Publishers.

Leonetti, Manuel. 2008. Specificity in clitic doubling and in differential object marking. Probus 20.1: 33-66.

Letsholo, Rose. 2013. Object Markers in Ikalanga. *Linguistic Discovery* 11.1: 105-128.

Lewis, M. Paul. (ed.). 2009. Ethnologue: Languages of the World, Sixteenth edition. SIL International, Dallas. Online version: http://www.ethnologue.com/.

Maho, Jouni. 2008. NUGL Online: the web version of the New Updated Guthrie List, a referential classification of the Bantu languages. Version dated March 25th, 2008. Available online at http://goto.glocalnet.net/maho/bantusurvey.html.

Marlo, Michael. 2009. Luyia Tonal Dialectology. Talk given at the University of Nairobi, December 16.

Marlo, Michael. 2011. Prefix-Stem Fusion in Bantu. Columbia: University of Missouri, ms.

Marten, Lutz and Nancy Kula. 2007. Object marking and morpho-syntactic variation in Bantu. To appear in *Proceedings of the 5th World Congress of African Linguistics*.

Marten, Lutz, Nancy Kula and Nhlanhla Thwala. 2007. Parameters of morphosyntactic variation in Bantu. *Transactions of the Philological Society* 105: 253-338.

Marten, Lutz and Deograsia Ramadhani. 2001. An overview of object marking in Kiluguru. *SOAS Working Papers in Linguistics* 11: 259-275.

Matushansky, Ora. 2006. Head movement in linguistic theory. *Linguistic Inquiry* 37:69–109.

Meeussen, A. E. 1967. Bantu grammatical reconstructions. *Africana Linguistica* III: 79-121.

Muriungi, Peter. 2008. Phrasal movement inside Bantu verbs: deriving affix scope and order in Kĩĩtharaka. Ph.D. dissertation, University of Tromsø.

Mutonyi, Nasiombe. 2000. Aspects of Bukusu morphology and phonology. Columbus: The Ohio State University dissertation.

Ndayiragije, Juvenal. 1999. Checking Economy. *Linguistic Inquiry* 30.3: 399-444.

Ndayiragije, Juvenal. 2003. Théories linguistiques et réciprocité en Chichewa: la leçon du Kirundi. In *Typologie des langues d'Afrique et universaux de la grammaire, Volume 1*, ed. Patrick Sauzet and Anne Zribi-Hertz, 169-210. Paris: L'Harmattan.

Nunes, Jairo. 2004. *Linearization of Chains and Sideward Movement*. Linguistic Inquiry Monographs. Cambridge, MA: MIT Press.

Olson, Howard. 1964. *The phonology and morphology of Rimi* (*Hartford Studies in Linguistics* 14). Hartford: Hartford Seminary Foundation.

Perlmutter, David M. and Paul Postal. 1984. The 1-advancement exclusiveness law. In *Studies in Relational Grammar*, eds. David M. Perlmutter and Carol G. Rosen, 81-125. Chicago: University of Chicago Press.

Polak, Louise. 1986. Les infixes ("préfixes objets") du bantu et leur reconstruction. *Africana Linguistica* X: 365-421.

Pylkkänen, Liina. 2008. Introducing Arguments. Cambridge: MIT Press.

Ranero, Rodrigo, Michael Diercks, and Mary Paster. 2013. One of these things is not like the other: Epiphenomenal cliticization in Kuria. Ms, Pomona College.

Riedel, Kristina. 2009. The syntax of object marking in Sambaa: A comparative Bantu perspective. Leiden University dissertation.

Roberts, Ian. 2010. *Agreement and head movement*. Linguistic Inquiry Monographs. Cambridge, MA: MIT Press.

Safir, Ken, Justine Sikuku, and Mark Baker. 2012. Complex anaphora in Lubukusu. Ms, Rutgers University and Moi University.

Schadeberg, Thilo. 1992. *A sketch of Swahili morphology, 3rd edition*. Köln: Köppe.

Schlindwein, Deborah. 1986. On the invisibility of the first person singular object marker in KiRimi. Paper presented at *Annual Conference on African Linguistics* 17, Indiana University.

Sikuku, Justine. 2011. Syntactic patterns of anaphoric relations in Lubukusu. Nairobi: University of Nairobi disseration.

Sikuku, Justine. 2012. Comparing Reflexive and Object marking in Lubukusu. To appear in the proceedings of the World Congress of African Linguistics.

Sportiche, Dominique. 1996. Clitic Constructions. In: *Phrase Structure and the Lexicon*, eds. Johan Rooryck and Laurie Zaring, 213–276. Dordrecht: Kluwer.

Suñer, Margarita (1988). The Role of Agreement in Clitic-Doubled Constructions. *Natural Language and Linguistic Theory* 6: 391– 434.

Tenenbaum, Sarah. 1977. Left- and Right-Dislocations. In *Haya grammatical structure*, ed. Ernest R. Byarushengo, Alessandro Duranti, and Larry M. Hyman. Los Angeles: Department of Linguistics, University of Southern California.

Travis, Lisa. 1984. Parameters and effects of word order variation. Cambridge: MIT dissertation.

Uriagereka, Juan. 1995. Aspects of the Syntax of Clitic Placement in Western Romance. *Linguistic Inquiry* 26: 79–124.

van der Spuy, Andrew. 1993. Dislocated noun phrases in Nguni. *Lingua* 90: 335-355.

van Riemsdijk Henk C. 1999. Clitics: A State-of-the-Art Report. In *Language Typology, Vol. III: Clitics in the Languages of Europe,* ed. Henk C van Riemsdijk, 1-30. Berlin/New York: Mouton de Gruyter.

Walusimbi, Livingston. 1996. *Relative clauses in Luganda*. Köln: Rudiger Koppe Verlag.

Woolford, Ellen. 2001. Conditions on object agreement in Ruwund (Bantu). In *Indigenous languages* (*University of Massachusetts Occasional Papers in Linguistics* 20), ed. E. Benedicto, Amherst, MA: GLSA.

Zeller, Jochen. 2009. On clitic left dislocation in Zulu. In *Focus and Topic in African languages*, ed. Sonja Ermisch. Köln: Rüdiger Köppe Verlag.

Zeller, Jochen. 2012. Object Marking in isiZulu. *Southern African Linguistics and Applied Studies*. 30.2: 219-235.

Zerbian, Sabine. 2006. *Expression of information structure in the Bantu language Northern Sotho*. Humboldt University dissertation.