Evidence for a Clitic Analysis of Object Markers in Kuria

Michael Diercks, Rodrigo Ranero, and Mary Paster

1. Introduction: the analysis of Bantu object markers

As is common for many Bantu languages, an object in Kuria may be pronominalized on the verbal form via a pre-stem morpheme commonly referred to as an object marker (OM):

(1) a. n-aa-tém-ér-é ómo-gámbi
    FOC.1sgSA-PST-hit-PF-FV 1-king
    ‘I hit the king.’

   b. n-aa-mó-tém-ér-e
    FOC.1sgSA-PST-1OM-hit-PF-FV
    ‘I hit him.’

As has been the case for clitics in Indo-European languages, the precise nature of object markers has long been an area of study for Bantu languages, with the main proposals centering on whether they are essentially pronouns, or essentially agreement morphemes. In this same spirit, in this paper we

---

1. All the authors are affiliated with Pomona College; direct correspondence to michael.diercks@pomona.edu. This paper was developed in concert with Ranero et al (2013), which analyzes the morphosyntactic derivation of Kuria OMs. These papers are therefore sister papers that should be considered in tandem for the most complete understanding of Kuria OMing. The data for this paper were elicited in Claremont, CA. The research finds its source in the Spring 2012 Field Methods class at Pomona College (and based on Diercks, Ranero, and Cramerus 2013). Our greatest thanks and appreciation go to Johnes Kitololo for his judgments and his endless patience that made this paper possible. Thanks also to the participants of ACAL at Georgetown University for their comments and feedback, and in particular to Norvin Richards, Coppe van Urk, Omer Preminger, Ruth Kramer, Michael Marlo, Brent Henderson, Patricia Schneider-Zioga and Claire Halpert for their insightful comments and critiques.

2. In the orthographic conventions we have used here, an intervocalic <g> represents a velar fricative [ɣ], an intervocalic <b> represents a bilabial fricative [β], <γ> represents a palatal approximant [j], <ny> represents a palatal nasal [ŋ], <r> represents an alveolar tap [ɾ] and <r> represents an alveolar trill [r]. Because these are (broad) phonetic transcriptions of only single sentences, punctuation and other kinds of orthographic conventions for marking sentences are not used here. High tone is marked by an acute accent on the vowel; low tone is unmarked. Unergammatical examples are not transcribed with tone markings. Numerals indicate Bantu Noun Class markers. Gloss abbreviations are as follows: APPL = applicative, CAUS = causative, CL = clitic, DAT = dative, DJ = disjoint, FOC = focus, FUT = future, FV = final vowel, HAB = habitual, IMP = imperative, INCEP = inceptive, OM = object marker, PASS = passive, PF = perfective, PST = past, SA = subject agreement, SBJ = subjunctive, SM = subject marker, T = tense, TAM = tense/aspect/mood.

3. Though tone is not the focus of this paper, it is worth explaining a bit about the tone system here since the careful reader will have observed a tone difference on the FV of the verb in (1a) vs. (1b). As detailed in Mwita (2008) and Marlo et al (to appear), the remote past tense (the form in which most examples in the present paper appear) assigns a H tone to the first mora of the verb’s macrostem (a unit to be discussed later; in effect, the H is assigned to the first OM if any, or to the first mora of the verb root if no OMs are present). The regular phonology of the language spreads a H tone rightward to all vowels in the phrase, up to and including the penultimate mora (in some cases spreading into the FV as well; spreading to the FV may be optional, or a principle may later be discovered that predicts when spreading to the FV is allowed). If a H tone is followed by another H in the phrase, the spreading will stop one mora short of the following H, leaving a toneless mora in between that is pronounced as a low tone. These principles, along with the assumption that nouns have an underlying H tone on the initial mora of the root, suffice to account for all of the tone patterns observed in the data in this paper, except for some idiosyncratic tones on nouns/proper names that we take to be lexically specified, and a few other cases as noted.
investigate the nature of the object marker in Kuria, concluding that it ought to be analyzed as a clitic like its Indo-European counterparts. In this paper, then, we provide evidence for the clitic nature of the Kuria OM but also provide discussion defending this approach in spite of the different morphological context of Bantu OMs vs. Indo-European clitics (Bantu OMs occur inside some number of verbal prefixes). In the rest of this first section we will briefly lay out the backdrop of existing research on these issues, surveying empirical and theoretical conclusions.

1.1 Existing patterns of clitic-doubling

A number of relevant kinds of patterns are long familiar from studies of clitics in Romance and Indo-European languages when considering the morphosyntax of cliticization. In Rioplatense Spanish direct objects can be clitic doubled, meaning that a clitic may co-occur with an in situ object (Anagnostopoulou 2006: 520):

(2) Lo vimos a Juan. [Rioplatense Spanish]
   Him we-saw a Juan
   ‘We saw Juan.’

All dialects of Spanish allow indirect objects to be clitic doubled (Anagnostopoulou 2006: 520):

(3) 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.’

These patterns contrast with French, which does not allow clitic doubling at all (Anagnostopoulou 2006: 520):

(4) Jean (*lui) a donné des bonbons à Marie. [French]
    Jean Cl-dat has given the candies to Marie
    ‘Jean gave candies to Marie.’

Similar kinds of patterns have been documented for various Bantu languages. Many languages allow an object marker to co-occur with an in situ object, though the particular discourse and syntactic contexts in which this is possible vary from language to language. The example in (5) comes from Manyika Shona (Bax and Diercks 2012: 185):

(5) Ndi-ngo-mu-farira Tendai. [Manyika]
   1sgS-HAB-OM-like 1Tendai OM-doubling
   ‘I like Tendai.’

In contrast, other languages prohibit co-occurrence of an object marker with a postverbal object. Diercks and Sikuku (2013: 9) show that Lubukusu disallows doubling an OM with an object in most instances.

(6) N-a-mu-bona (*Wekesa) [Lubukusu]
    1sgSM-PST-OM-see (*1Wekesa)
    ‘I saw him.’ (not possible: ‘I saw Wekesa.’)

There is additional variation with respect to the number of OMs that can occur. While other languages like Sambaa allow multiple pre-stem OMs, Lubukusu is restricted to one pre-stem OM.4

---

4 There are a small set of exceptions to this single-OM restriction in Lubukusu: see Marlo (2013a,b), Diercks and Sikuku (2013), and Sikuku (2012) for discussion.
(7) a. Wekesa a-a-tekh-el-a Sara by-akhulia [Lubukusu]
   ‘Wekesa cooked Sara food.’

b. *?Wekesa a-a-bi-mu-tekh-el-a
   Intended: ‘Wekesa cooked her it.’

As (8) shows, Sambaa even allows both OMs to double objects in specific circumstances (Riedel 2009: 106):

(8) N-za-chi-m-nka ng’wana kitabu [Sambaa]
   ‘I gave the child a book.’

The precise morphosyntactic nature of object markers in Bantu languages has long been a matter of investigation (as with clitics crosslinguistically). The next section discusses the kinds of analyses that have been given for these morphemes and the contribution of this paper with respect to Kuria object marking.

1.2 On the analysis of object markers

It has long been assumed (dating at least to Bresnan and Mchombo 1987) that object markers in Bantu verb forms may be one of two elements: incorporated pronouns or agreement morphemes. Narrowing the available analyses to these two dichotomous options has often been a useful analytical tool for researchers analyzing OMs. As for the analysis of incorporated pronouns, on a standard generative approach this is taken to rule out the co-occurrence of an OM and a postverbal object (because the OM originates as the object of the verb and incorporates into the verb itself). The agreement analysis, on the other hand, posits that an OM originates on a functional head higher in the syntactic structure and distinct from the object, which has its features valued via an Agree operation by the features of the object. This readily explains co-occurrence of an OM with a postverbal object, and in fact predicts it in most instances. But as pointed out by many researchers, the empirical patterns of OMs do not fall into two distinct and non-overlapping sets, as might be predicted by a simple contrast between an agreement analysis and a pronominal analysis (Riedel 2009, Marten et al 2007, Marten and Kula 2012, Zeller 2012).

Bax and Diercks (2012) put forth the claim that OMs in Manyika (and in Bantu languages more broadly) ought to be analyzed as clitics—essentially intermediate elements that cannot be solely identified as pronominal or as agreement morphemes (see Zeller 2012 on this point as well). This label may be somewhat uninformative, as clitics in the Indo-European literature have long been given analyses of either movement of the clitic pronouns (Kayne 1975, Uriagereka 1995, Anagnostopoulou 2003) or realizations of agreement relations (Suñer 1988, Sportiche 1996, Franco 2000). Therefore, detailing the terms under consideration and their content is important for clarifying the contribution of such a claim.

We take clitics (descriptively) to be intermediate elements between agreement affixes and pronouns (independent syntactic elements). Therefore, we expect that while clitics ought to be morphophonologically dependent on other elements, they should still bear some degree of morphosyntactic independence, and that combinations of these traits ought to serve to distinguish them from morphemes that are simply affixal elements. In what follows we show that this is in fact the case: in the following 4 subsections we consider separate arguments that Kuria OMs are clitic elements, followed by a short discussion of the morphophonological credibility of analyzing Kuria OMs as

---

word-internal clitics. We don’t take up the specific theoretical mechanisms that generate Kuria OMs – this matter is addressed in Ranero et al (2013). This paper therefore contributes to the theoretical discussion by giving additional empirical support to the analysis of Bantu OMs as clitics, in this instance relying on phonological, morphological, and syntactic evidence from Kuria. The empirical contribution of the paper is a description and summary of the morphosyntactic and morphophonological properties of object marking in Kuria.

2. Kuria n+1 effect

In order to contextualize the arguments we put forward to treat Kuria OMs as clitics, it is necessary to familiarize the reader with the general patterning of object marking and OM doubling found in the language. For a more detailed description and analysis of this topic, we refer the reader to Ranero et al (2013). In single object constructions, an in situ DP cannot be doubled:

(9)  *n-aa-ri-biringit-ir-i
     FOC.1sgSA-PST-5OM-roll-CAUS.PF-FV  5-stone

However, doubling is allowed under certain conditions in multiple object constructions. In ditransitives, a single object DP may be doubled when there are two OMs on the verb and the doubled DP corresponds to the inner OM. The only acceptable doubling configuration in ditransitives is schematized below in (10) and an example is given in (11):

(10)  Ditransitive OM doubling Generalization
      OM₁-OM₂-verb  OBJ₂

(11)  omo-múrá  n-aa-bá-chí-kóbéés-ir-i  ichim-bíría
      1-man  FOC.1SA.PST-2OM-100M-lend-PF-FV  10-money
     ‘The man lent them (the women) the money.’

Moving on to three object constructions, there are several possible doubling configurations. With three OMs on the verb, either or both inner OMs can double postverbal objects. With two OMs on the verb, the inner OM may double a single postverbal object. With one OM on the verb, no doubling is possible. A schematization of the maximal doubling configuration in tritransitives is given below in (12) and an example is given in (13):

(12)  Maximal possible 3-object OM doubling
      OM₁-OM₂-OM₃-verb  OBJ₂  OBJ₃
      with some additional patterns possible

(13)  omo-óná  n-aa-mú-ge-gá-ráágir-ify-i
      1-child  FOC.1SA.PST-1OM-4OM-6OM-eat.APPL-CAUS.PF-FV  4-cat  6-milk
     ‘The child fed the cat milk for him (the chief).’

The empirical pattern observed in Kuria results in the following generalization regarding OM-doubling:

---

6 For theoretical/syntactic analysis of object marking in Kuria (along with additional relevant data) we refer the reader to Ranero et al (2013).
7 Regarding our notation, we bold a single pattern of note in an example. When there are two patterns addressed, we bold the first and underline the second. When there are three patterns, we italicize the third. These annotations are not analytically significant, but are instead simply intended to highlight the relevant data patterns for the reader.
8 See Ranero et al (2013) for a proposal regarding the necessity of two distinct doubling mechanisms being available in Kuria in order to account for the empirical data that result in this doubling restriction.
OM doubling in Kuria is \(n+1\)

Any doubling of an OM with an \textit{in situ} object requires the presence of at least one additional object marker on the verb (\textit{which must be positioned outside the doubled OM(s)}).

However, the aforementioned generalization only pertains to the doubling of DPs. An \textit{outermost} OM may double an object, as long as the doubled object is a smaller syntactic element. Observe (15) below which shows a pronoun being doubled in a single object construction and (16) which shows an outermost OM doubling a pronoun in a ditransitive:

(15) \[ n-\text{baa-mó-mááh-ér-é} \quad \text{wí} \quad \text{FOC-2SA.PST-1OM-see-PF-FV} \quad \text{3sg} \]

‘They saw him.’

(16) \[ n-\text{aa-mó-ké-háá-y-é} \quad \text{wí} \quad \text{ége-tábo} \quad \text{FOC.1sgSA-PST-1OM-7OM-give-APPL.PF-FV} \quad \text{3sg 7-book} \]

‘I gave him a book.’

An important point must be highlighted though: an outermost OM may never double a full DP. An example of this is shown below in (17):

(17) \[ *n-\text{aa-ke-mo-haa-y-e} \quad \text{wí} \quad \text{ége-tabo} \quad \text{FOC.1sgSA-PST-7OM-1OM-give-APPL.PF-FV} \quad \text{3sg 7-book} \]

While comprehending the details of an analysis which captures the full range of OM doubling in Kuria is not essential to assessing our proposal of the basic nature of the OMs as clitics, it is important to keep in mind the \(n+1\) restriction given in (14) to understand the data presented throughout this paper.

3. Evidence that OM doubled objects are \textit{in situ}

One long-standing question about clitic doubling (both in Indo-European traditions and Bantuist traditions) is whether the associated object of the clitic/OM is \textit{in situ} within the VP (or vP), or whether it has been right-dislocated in some manner. This is critical, of course, because if objects that are purportedly doubled by OMs are in fact right-dislocated, a strict pronominal analysis of OMs is readily available. The major question in the analysis of clitic doubling is how two relatively independent syntactic elements can originate as the same argument of the verb, so it is necessary to establish that these are in fact clitic doubling contexts.

3.1 Prosodic evidence

One way of testing whether a doubled object is vP-external or not has to do with typical correlates of right-dislocation, such as prosodic evidence and various sorts of word order evidence. These have long been productively used to diagnose the positions of the object associates of clitics. To use a closely related example, consider Lubukusu, which disallows OM doubling of objects in most instances (examples from Diercks and Sikuku 2013):

(18) a. \[ N-a-ba-bona. \quad (*\text{baa-somi}) \quad \text{[Lubukusu]} \]

\[ 1sg\text{SM-PST-2OM-see} \quad (*2\text{-students}) \]

‘I saw them.’ (not possible: ‘I saw the students.’)

b. \[ N-a-ba-bona, \quad \text{baa-somi.} \quad \text{[Lubukusu]} \]

\[ 1sg\text{SM-PST-2OM-see} \quad 2\text{-students} \]

‘I saw them, the students.’

\footnote{In example (15), the single OM counts as an outermost one.}
As can be seen in the two examples above, an OM cannot co-occur with a postverbal object in Lubukusu in neutral contexts unless there is a clear prosodic break between the verb and the object, marked here with a comma. This is strongly suggestive that in the presence of an OM, objects in Lubukusu must be right-dislocated.

Another very useful way of testing this is temporal adverbs that demarcate the edge of vP. As can be seen in the example below from Lubukusu, when an object marker appears on the verb, the DP object cannot be present to the left of the adverb (19a) and can only appear if right-dislocated (19b), which is evident from its position to the right of the adverb along with a prosodic break (examples from Diercks and Sikuku 2013).

(19) a. N-a-bon-e baasomi likoloba. [Lubukusu]
   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

This is therefore an argument from word order that makes the same point as the prosodic evidence above: in situ objects cannot be doubled by OMs in Lubukusu. Diercks and Sikuku’s (2013) conclusion, then, is that in most discourse contexts in Lubukusu doubling an OM with an in situ object is impossible, because for any doubling that does occur the object cannot appear inside the vP, as evidenced by adverb positions and prosodic breaks. These diagnostics have long been utilized to these ends (see Riedel 2009, Henderson 2006, Zeller 2012, among many others).

For Kuria, then, the question becomes to what extent these diagnostics are useful. Without reproducing the examples here, all of the instances of doubling reported in this paper and in Ranero et al (2013) occur without any kind of clear intonational breaks of the sort that are present in Lubukusu. In fact, the available phonological evidence points towards the doubled object belonging to a unit that contains the macrostem of the verb. As can be observed throughout this paper (see also footnote 3 and references therein), a H tone on the verb will spread rightward to the penultimate mora of the phrase, including a doubled object. As just one example, consider (21) below, where the H tone assigned to the OM /ga-/ spreads rightward all the way through the verb, including the FV, and onto the first vowel of the noun class prefix of the doubled object ‘chief’ (further spreading is blocked by the H tone on the first vowel of the noun root). We interpret this as evidence the doubled objects in Kuria are in situ in the vP and part of the verb phrase constituent. This evidence is not conclusive since a phonological phrase does not necessarily correspond to a syntactic phrase in all instances in all languages, but given the contrast with languages like Lubukusu it is still informative. Adverb evidence would be clearer syntactic evidence, but to the extent that we have been able to discern, most adverbs in Kuria have unconstrained distributions, readily appearing in almost any position in the clause. This raises important questions for a theory of adverb ordering in Kuria, but the end result for our purposes here is that adverbs cannot be depended on to demarcate the edge of vP. There are several useful diagnostics from word order that can be made, however, which we take up in the next sections.

3.2 Undoubled objects as a diagnostic

While adverbs are not useful to diagnose the position of objects in Kuria, as a proxy for this kind of diagnostic we utilize objects within the vP – an undoubled object without any additional prosodic clues is assumed to occur inside the vP, and therefore if a clitic-doubled object can occur inside of a non-doubled object, this would suggest that the doubled object is itself within the vP. As can be seen in example (21) below, this is in fact the case:
(20) omo-ônà n-aa-rââgir:-iîy-i ómo-kâmá i-nyâámû áma-bêêre
1-child FOC-1SA.PST-eat.APPL-CAPS.PST 1-chief 4-cat 6-milk
‘The child fed the cat milk for the chief.’

(21) omo-ônà n-aa-gâ-mú-rââgir:-iîy-i ómo-kâmá i-nyâámû
1-child FOC-1SA.PST-6OM-1OM-eat.APPL-CAPS.PST 1-chief 4-cat
‘The child fed the cat it (the milk) for the chief.’

We interpret this as evidence that clitic-doubled objects in Kuria are in fact in their canonical positions inside the vP.

3.3 Evidence from Raising-to-Object (RtO) constructions

RtO constructions are verbs that take complement clauses (often verbs like want or expect) which treat their embedded subject like an object of the main clause verb, often with respect to case licensing (cf. English I want him (*he) to leave). RtO constructions can also be useful evidence for demonstrating whether a doubled object is right-dislocated or not (Kallulli 2000, Bax and Diercks 2012, Sportiche 1996). The argument here is that if the embedded subject of an RtO complement is capable of being doubled by a clitic or OM, this is suggestive that dislocation is not prerequisite for clitic-doubling, as any right-dislocation would necessarily place the subject of the RtO complement to the right of the complement clause. This argument has been used for Greek, for example (Sportiche 1996: 253, attributed to Patricia Schneider-Zioga).

(22) o Yiorghos tin-perimene [ [tin Maria] na paraponebëte ]
the G. Clacec expected the Maria.acc subj complain
‘George expected Maria to complain.’

Constructing such examples in Kuria is slightly more complicated, of course, due to the general constraints on clitic-doubling (the n+1 effect). For a basic RtO complement the only possible predicted doubling given the preceding conclusions is with pronominal arguments. As seen in (23) and (24), this effect holds: 10

(23) n-da-gany-a we á-tånór-ê
1sgSA-INCEP-expect-FV 3sg 1SA-leave-SBJ.FV
‘I expect him to leave.’

(24) n-da-mo-gany-a wë á-tånór-ê
1sgSA-INCEP-1OM-expect-FV 3sg 1SA-leave-SBJ.FV
‘I expect him to leave.’

10 Examples (23) and (24) exhibit tonal properties worth noting here. These examples are in what Mwita (2008) terms the “Hortatory Imperative” (which we treat as an inceptive form, though in English it is often translated as present tense), which assigns a H tone to the fourth mora counting from the left edge of the macrostem. Remarkably, as detailed in Marlo et al (to appear), this mora ‘counting’ continues into a post-verbal word when the verb itself has fewer than four moras. Thus, when no OM is present, as in (23), the H tone ends up on the vowel of the prefix of the following verb since that is the fourth mora; when there is an OM, as in (24), the fourth mora belongs to /we/ and so that is where the H is assigned. This is the pattern observed in Chacha Mwita’s idiolect, which is the subject of Mwita (2008). Marlo et al (to appear) reported that, unlike Mwita, the present speaker does not count moras of a post-verbal word for purposes of H tone assignment; the examples in (23) and (24) seem to contradict that generalization, so reconciling the conflicting data remains a task for future research.

Note also that these examples have an overt H on the phrase-final vowel. The position of the H is expected since Mwita (2008) describes the subjunctive as assigning H to the third mora of the macrostem, though the appearance of a H on the FV contradicts the ‘non-finality’ restriction on H tones that seems to obtain elsewhere.
To find doubling of a full DP subject of a RtO complement clause, an example must be constructed where an additional object marker may be present outside the one doubling the embedded subject. Such a context is available in the case that the RtO is causative, providing a causee object that can be OMed as the outermost OM:

(25) a. n-aa-mó-gánya-iri
    FOC.1sgSA-PST-1OM-expect-CAUS.PF-FV
    ‘I made him expect the dog to leave.’
    é-séesé  é-tánɔr-ɛ
    9-dog     9SA-leave-SBJ.FV

b. n-aa-mó-gánya-iri
    FOC.1sgSA-PST-1OM-expect-CAUS.PF-FV
    ‘I made him expect the dog to leave.’
    wé     é-séesé  é-tánɔr-ɛ
    3sg   9-dog     9SA-leave-SBJ.FV

c. n-aa-mó-gégánya-iri
    FOC.1sgSA-PST-1OM-9OM-expect-CAUS.PF-FV
    ‘I made him expect the dog to leave.’
    wé      é-séesé  é-tánɔr-ɛ
    3sg   9-dog     9SA-leave-SBJ.FV

These examples together show that it is possible to clitic-double subjects of RtO complements whether they are pronominal or full DPs. This suggests (consistent with the preceding evidence) that the objects that undergo clitic-doubling in Kuria are in fact in situ in their canonical positions, and not right-dislocated.

All of these diagnostics therefore lead us to conclude that in Kuria contexts where OMs are capable of co-occurring with postverbal objects, the postverbal objects are in their base object positions (as opposed to right-dislocated). These are therefore instances of OM-doubling (and as we will conclude in what follows, clitic doubling).

4. Distinguishing clitics from agreement affixes

The preceding section established that co-occurrences of objects and OMs in Kuria are true instances of doubling the OM with an in situ object. Given the tradition of analyses in Bantu languages, it is plausible therefore to simply analyze Kuria OMs as agreement affixes. This section will show that there is good reason to believe that this is insufficient, however, as in many ways OMs do not show expected properties of agreement affixes.

4.1 Optionality as a diagnostic

Preminger (2009) proposes a diagnostic for distinguishing clitics and agreement morphemes based on the properties of Basque morphology. Preminger’s diagnostic is given in (26):

(26) Preminger’s diagnostic
Given a scenario where the relation R between an agreement morpheme M and the corresponding full noun phrase N is broken—but the result is still a grammatical utterance—the proposed diagnostic supplies a conclusion about R as follows:
   a. M shows up with default φ-features (rather than the features of N) → R is Agree
   b. M disappears entirely → R is clitic doubling

The basic idea here is that agreement morphemes and clitics can be distinguished based on when their relationship with their associate is broken in some way: default forms appear for agreement morphemes, but clitic morphemes simply disappear. Without even building a specific context for breaking agreements in Kuria, a broader-level observation is relevant here: OMs in general are optional, in the sense that a given verbal form may or may not have an OM present (depending on discourse context). This is true of non-doubled OMs (27) and doubled OMs (28):
In contrast, subject marking in Kuria is (to our knowledge) always obligatory, meaning that some form of subject agreement will always appear, as opposed to object markers, which may or may not appear on the verb depending on discourse context. This is the widespread pattern of SMs and OMs in Narrow Bantu languages, where subject marking is obligatory (spelled out as a default in some contexts) but object marking optional. A natural avenue to analyze this fact (following Preminger’s diagnostic in (26)) is that OMs are clitic elements (we assume within the vP domain), but SMs are in fact purely the realization of phi-feature agreement on T.

4.2 Featural coarseness of clitic doubling

Another potential diagnostic for agreement relations vs. clitic doubling relationships comes from the featural coarseness of clitic doubling, as opposed to the more fine-grained characteristic of agreement proper:

(29) The Coarseness Property of Clitic-Doubling (Preminger 2011: 63)

If CL' is the result of clitic-doubling of some noun-phrase a, then CL' will reflect the full set of φ-features on a.

Preminger’s (2011) claim here is that a single agreement form is capable of reflecting features derived from distinct noun phrases, or capable of reflecting only a subset of a noun phrase’s φ-features (e.g. number only, or gender only). Clitic-doubling, on the other hand, is expected to lack that ability to display the features of a single person probe or number probe, instead copying an entire NP’s features onto the probing head.

The morphological situation in many Bantu languages, and Kuria in particular, limits the applicability of this diagnostic – in general it is incredibly rare to find agreement morphemes with the particular probing of individual features (as opposed to a collective bundle of phi-features) in the kinds of ways that are more evident in contexts like omnivorous agreement (for example, see Preminger 2011 on Kichean, Rezac 2003, Béjar and Rezac 2009 on Basque). Nonetheless, evidence of differences through featural coarseness can be uncovered in Kuria. Recall above that we claimed that

11 An exception to this generalization is imperative constructions, but these are likely lacking the relevant heads bearing the phi-features for subject agreement in the first place.

12 The theoretical significance of the optionality of OMing across Bantu was first brought to our attention by Vicki Carstens.
the optionality of OMs is evidence that OMs are clitics, whereas SMs are solely the realization of agreement relations. Evidence from agreement with conjoined subjects (contrasted with doubling of conjoined objects) proves very helpful here. Consider the following examples from Meyer and Diercks (2013), which show the range of agreements that are possible when class 3 and class 5 subjects are conjoined. The first example shows the availability of first conjunct agreement in these instances:

(30) umu-bííra ni-iri-géëna n-gu-bin-ir-e
     3-ball and-5-stone FOC-3SA-sing-PF-FV
     ‘The ball and the stone sang.’

Other kinds of resolved/default agreements are possible, however. Example (31)a shows that class 4 agreement (the plural version of class 3, i.e. in the same gender) is possible, meaning that the gender of the first conjunct is retained in the subject agreement, but the plurality of the entire conjoined NP determines the number. (31)b shows that a default class 8 agreement is possible as well.

(31) a. umu-bííra ni-iri-géëna n-gi-bin-ir-e
     3-ball and-5-stone FOC-4SA-sing-PF-FV
b. umu-bííra ni-iri-géëna m-bi-bin-ir-e
     3-ball and-5-stone FOC-8SA-sing-PF-FV
     ‘The ball and the stone sang.’

We refer the reader to Meyer and Diercks (2013) for a more comprehensive summary of conjoined agreement in Kuria, together with discussion of the various complexities introduced by animate noun classes. What is relevant for our point here is simply that subject agreement can effectively represent an amalgam of features derived from different sources (default agreement in (31), and a resolved agreement with features from different components of the conjoined NP in (31)). Crucially, these patterns are not possible for OMs.

As can be seen from example (32), it is possible to OM-double a conjoined object, but OMs corresponding to both conjuncts appear on the verb (note that the example is constructed within the constraints of the n+1 effect and is an appropriate doubling context, with the class 7 ke OM corresponding to a class 7 object ‘knife’).

(32) Mokámí n-aa-ké-re-gé-kéb-éëy-é iri-ikó ni-i-nyama
     1Mokami FOC-1SA-PST-7OM-5OM-9OM-cut-APPL-PF-FV 5-fruit and-9-meat
     ‘Mokami cut the fruit and meat with it (knife).’

It is not possible to OM-double only one of the conjuncts, with first-conjunct OM doubling attempted in (33).

(33) *Mokami n-aa-ke-re-keb-eey-e iri-iko ni-i-nyama
     1Mokami FOC-1SA-PST-7OM-5OM-cut-APPL-PF-FV 5-fruit and-9-meat

13 Unlike examples elsewhere in the paper, the verb in this example lacks a H tone. This is because the verb here is in what Mwita (2008) calls the “Hodiernal past anterior focused” tense rather than the remote past. Morphologically, this appears to be a present perfective form (it lacks the past tense prefix but has a perfective suffix). This tense assigns a H tone to the third mora of the macrostem, if that mora is non-final; in this case the third mora belongs to the FV, which is phrase-final, so the H is not assigned. Note also the failure of H tone spreading from the subject onto the verb; we tentatively conclude that subject+verb is not a domain for H spreading.
14 The nasal prefix on the verb here is subject to nasal place assimilation and is realized as [ŋ]. Nasal place assimilation applies to all instances of the FOC prefix; we follow orthographic convention in representing it as ‘n’ before [g].
Note also that while a default class 8 form is in fact possible, it is not possible to OM-double a default class 8 OM with *in situ* objects; the default form is only available in non-doubling contexts:

(34) Mokámi n-aa-ké-bí-kéb-ééy-e
1Mokami FOC-ISA.PST-7OM-8OM-cut-APPL.PF-FV
(*jiri-iko ni-i-nyama*)
(*5-fruit and-9-meat*)

‘Mokami cut them (fruit and meat) with it (knife).’

The exact mechanism that allows this pattern of doubling both conjuncts in a conjoined object is still a matter of investigation, but for present purposes, the relevant point is that the available methods for subject marking and object marking conjoined arguments differ in distinct ways in Kuria: subject markers are capable of drawing their features from distinct sources (the gender of the first conjunct + the plurality of a conjoined NP), or of being spelled out as a default, whereas neither of these options is available for OM doubling. Doubled OMs, in contrast, must be spelled out as fully distinct OMs that faithfully represent the full φ-feature sets of the conjuncts in the conjoined object. We interpret this state of affairs in light of (29), that as clitics, OMs are not capable of reflecting any set of φ-features other than the full φ-set of a given lexical NP. The result, then, is that OMs are distinct from SMs, and again show properties that are familiar from clitics cross-linguistically, in this instance the feature-coarseness property.

4.3 OM Mobility in Possessive Constructions

In this section we replicate a diagnostic identified in Bax and Diercks (2012) for the clitic nature of OMs in Manyika. The observation in that previous work was that one hallmark of clitic morphemes is that they display some degree of morphosyntactic mobility: i.e. they are not wholly restricted in their syntactic position (van Riemsdijk 1999). This is long familiar from Indo-European clitics, like the example in (35) from Spanish where clitics occur in a different position in imperatives than in declaratives:

(35) a. Ellos cantarán aquella canción.
they 3pl.FUT.sing that song
‘They will sing that song.’

b. Ellos **la** cantarán.
they **CL** 3pl.FUT.sing
‘They will sing it (that song).’

c. ¡Cánten=la!
3pl.IMP.sing=CL
‘Sing it!’

The main point here is that one property of clitics that distinguishes them from canonical agreement morphemes is their ability to occur in different morphosyntactic positions. Bax and Diercks (2012) showed that in Manyika, OMs occur in different positions in possessive constructions as compared to non-possessives, a pattern that is replicated in Kuria. As in Manyika, Kuria possessive constructions are essentially a combination of a copula and a prepositional phrase (‘be with’ possessives).

(36) n-aa-ré ní-iri-hwá
FOC.1sgSA-PST-be with-5-flower
‘I had a flower.’
Significant for our concerns is that when an object of a possessive is pronominalized, it does not show up as a pre-stem affix, instead appearing as an enclitic on the prepositional element.\(^{15}\)

\[(37)\]  
\[\text{n-aa-ré ná-ryo}\]  
FOC.1sgSA-PST-be with-5OM  
‘I had it.’

Bax and Diercks (2012) demonstrate that in Manyika these postverbal OMs in possessives show the same general distribution as pre-stem OMs with respect to when doubling is possible or not; given the particular distribution of OM doubling in Kuria (ruled out in monotransitives) it is not possible to replicate the doubling patterns of OMs in possessives.

The only case in Kuria where doubling of an OM is possible in a monotransitive is with free pronouns in object position; example (38) shows that it is in fact possible to double a pronoun in object position despite the fact that it is impossible to double a full noun phrase (38)b.

\[(38)\]  
a. \[\text{n-aa-ré ná-ryó ryo}\]  
FOC.1sgSA-be with-5OM 5it  
‘I had it.’

b. \[*\text{n-aa-re na-ryo iri-hwa}\]  
FOC.1sgSA-PST-be with-5OM 5-flower  
Intended: ‘I had the flower.’

As with the optionality and feature-coarseness diagnostics, we interpret the morphosyntactic mobility of Kuria OMs as evidence that these elements ought to be identified with the class of syntactic elements cross-linguistically that are identified as clitics, and therefore subject to cliticization analyses such as the one advanced here (the specific derivation of the the Kuria cliticization process is take up by Ranero et al 2013).

### 4.4 OM Mobility in Ordering of OMs

In the spirit of demonstrating the morphosyntactic mobility of OMs, another pattern that is relevant is that when there are multiple OMs on a verb, their relative order is not predetermined. The examples below are from Ranero et al (2013):

\[(39)\]  
\[\text{omo-óná n-aa-\text{mú-gé-gá-rágír}:íiy-i}\]  
1-child FOC-1SA.PST-\text{1OM-4OM-6OM-eat.APLL-CAUS.PF-FV}  
‘The child fed it (the cat) it (the milk) for him (the chief).’

\[(40)\]  
OMs may occur in any order

- \[\text{omo-óná n-aa-\text{mú-gé-gá-rágír}:íiyi}\]
- \[\text{omo-óná n-aa-\text{mú-gá-rágír}:íiyi}\]
- \[\text{omo-óná n-aa-\text{gá-mú-rágír}:íiyi}\]
- \[\text{omo-óná n-aa-\text{gá-gé-mú-rágír}:íiyi}\]
- \[\text{omo-óná n-aa-\text{gá-gé-mu-rágír}:íiyi}\]

Without considering the particular analyses of this variable morpheme ordering, the mere fact that their relative ordering is relatively free suggests a certain degree of morphosyntactic independence that

\(^{15}\) The reader may notice the different morphological form of the postverbal object marker: this is a recurring fact across many Bantu languages with similar patterns (e.g. Manyika and Swahili). We simply assume that this is allomorphy.
is unexpected on an analysis of these morphemes as solely agreement affixes.\(^{16}\) We refer the reader to Ranero et al (2013) for more details about the ordering and derivation of object markers on the verb.

5. Cliticization inside the verb form

In the preceding subsections we provided mainly syntactic or morphosyntactic evidence for the analysis that we had been assuming to this point in the paper, that Kuria OMs are clitic elements. This raises an important point, however: if clitics are syntactically-independent elements, their classification as clitics crucially relies on demonstrating some degree of phonological dependence. So there ought to be some evidence that demonstrates that OM clitics are morphophonologically dependent on the verb stem. In one sense this is obvious, as OMs appear internal to the verbal form (with various inflectional prefixes preceding it on the inflected verb), but there should nonetheless be evidence that the the OM and the stem (root+suffixes) form a morphological/phonological unit. The analysis advanced by Ranero et al (2013) is that this cliticization happens at the vP level syntactically, preceding affixation of the higher tense/agreement; we take the vP phase to be a plausible syntactic correlate of the edge of the morphological stem in Kuria verbs.

\begin{equation}
\text{Cliticization at the edge of vP (adapted from Ranero et al 2013)}
\end{equation}

The stem (root + suffixes) is a commonly assumed unit across Bantu languages. In Kuria, as in other Bantu languages, some evidence for the stem comes from reduplication. As detailed in Mwita (2008: 231 et seq), the stem (meaning the verb root and everything following it in the verb, including derivational suffixes and the FV) is the unit targeted by verbal reduplication in Kuria. Reduplication copies all or part of the stem, and the reduplicated material is prefixed to the stem, as in \textit{oko-héétó-héétók-a ~ oko-héétóká-héétók-a} ‘to remember repeatedly’ (reduplicant is underlined; Mwita 2008: 233). Prefixes that occur before the stem are not included in the reduplicant.\(^{17}\) This suggests that the stem is a viable morphophonological unit that can be targeted for cliticization.

The notion that the OM+stem (referred to as the ‘macrostem’) is a distinct unit from the material that precedes it is also a well-established idea in the Bantuist tradition. Ngonyani (1999) uses this notion to explain the fact that relativizing morphemes in Swahili (plausibly C heads) may appear internal to the verbal form, between subject agreement/tense and OMs. To defend this claim he draws on evidence from the historical development of tense morphemes, stress assignment, and the fact that some speakers in informal writing place spaces between the tense+agreement constituent and the OM+stem constituent (see Henderson 2006, Keach 1980, and Julien 2002 for similar kinds of analyses in Swahili and Shona).

It has also been long established that the OM+stem in Bantu verbs is a \textit{phonologically} relevant domain. Grammatical tone assignment, tonal phonology, and/or phonological minimality restrictions refer to the macrostem in Bantu languages including Shambaa (Odden 1982), Namwanga (Bickmore

\(^{16}\) Note that we are not claiming that a fixed ordering of morphemes would be evidence against a clitic analysis, only that the morphosyntactic mobility that allows them to be freely ordered is consistent with a cliticization analysis and less expected if they were strictly agreement affixes.

\(^{17}\) The only exception is that a tense or OM prefix may be included in the reduplicant if necessary to fulfill a disyllabic minimality constraint on reduplicants (i.e., if the stem has fewer than two syllables), as in \textit{tá-móhá-móh-á ‘(do) give him repeatedly’} (Mwita 2008: 238). The inclusion of prefixes in the reduplicant is prohibited if the stem has two or more syllables (e.g., \textit{oko-mó-roma-rom-a} ‘to bite him repeatedly’; *\textit{oko-moroma-mo-roma} (Mwita 2008: 247)).
2000), Makaa (Heath 2003), Zulu (Buell 2005), Khayo (Marlo 2009), and many others. The following structure is commonly assumed for the Bantu verb (simplified from Downing 2003):

(42) **Structure of the Bantu verb**

```
VerbWord
INFL    MacroStem
(OM)    [Stem]
```

In Kuria, there is clear evidence from tone assignment for OM+stem as a distinct unit within the verb. As discussed at length in Mwita (2008) and Marlo et al (to appear), tense-aspect-mood-polarity (henceforth ‘tense’) distinctions in Kuria are marked in part by the assignment of a high (H) tone to specific positions in the verb; as in many other languages, these positions are determined relative to the edge of the macrostem. The Inceptive (‘be about to do X’), for example, assigns a H tone to the fourth mora of the macrostem. As shown in (43), when no OMs are present, the stem and macrostem boundaries coincide, so the H appears on the fourth mora of the stem (it then spreads rightward to the penultimate syllable via regular H tone spreading; see Mwita (2008) and Marlo et al (to appear) for details). The vowel targeted by the tense-specific H tone assignment rule is underlined here and in the examples below.

(43)  
```
to-ra-[hɔɔtɔtɛr-a]
1plSA-INCEP-[reassure-FV]
‘We are about to reassure (someone).’
```

Example (44a) shows that when an OM is present, the H tone assignment rule begins ‘counting’ moras starting with the OM – i.e., the left edge of the macrostem – so now the H tone appears on the third syllable of the stem (which is the fourth mora of the macrostem). (44)b gives further evidence for the analysis; with the addition of a second OM, the H tone is still assigned to the fourth mora of the macrostem – now the second mora of the stem.

(44)  
a. to-ra-[mu-hɔɔtɔtɛr-a]  
```
1plSA-INCEP-[1OM-reassure-FV]
‘We are about to reassure him.’
```

b. to-ra-[mu-ba-hɔɔtɔtɛr-a]
```
1plSA-INCEP-[1OM-2OM-reassure.APPL-FV]
‘We are about to reassure him for them (the women).’
```

The data in (45) confirm the analysis by exemplifying the same phenomenon in a different tense, the Remote Future, which assigns H tone to the third mora of the macrostem. Again, the counting begins at the left edge of the macrostem, so that the H tone shifts relative to the stem boundary depending on the presence of OMs. With no OMs present, the H tone appears on the third mora of the stem (45)a; with one OM present, the H tone appears on the second mora of the stem (45)b; and with two OMs present, the H tone appears on the first mora of the stem (45)c.

(45)  
a. n-to-re-[hɔɔtɔtɛr-a]  
```
FOC-1plSA-FUT-[1OM-reassure-FV]
‘We will reassure (someone).’
```

b. n-to-re-[mu-hɔɔtɔtɛr-a]
```
FOC-1plSA-FUT-[1OM-reassure-FV]
‘We will reassure him.’
```

c. n-to-re-[mu-ba-hɔɔtɔtɛr-a]
```
FOC-1plSA-FUT-[1OM-2OM-reassure.APPL-FV]
‘We will reassure him for them (the women).’
```

This is therefore a classic sort of evidence for the morphophonological constituent noted in (42), the macrostem: rules of tone assignment in Kuria must refer to a constituent portion of the verb that consists of the object markers and stem, to the exclusion of the higher inflections. We interpret these
facts as evidence for the spellout of OMs in Kuria as clitics at the edge of a morphosyntactic constituent, the vP phase, and forming a phonological domain distinct from the affixes that are added at a later point in the derivation.

6. Conclusions

The morphosyntactic nature of Bantu OMs continues to be a domain of productive research. This paper has taken up the claim that Kuria OMs should be analyzed as clitics, the same sort of element as clitics in Indo-European languages. After describing the basic patterns of OM doubling in Kuria (the n+1 effect) we showed that OM-doubled objects are in fact in situ within the verb phrase, displaying true instances of OM doubling (as opposed to being dislocated objects). We then gave a variety of morphological, syntactic, and phonological evidence that Kuria OMs are clitics. We showed that Kuria OMs display the properties of clitics as opposed to agreement affixes (optionality, feature coarseness, and morphosyntactic mobility). We also showed that OMs form a morphophonological unit with the target of their affixation (the verbal stem), forming a larger unit (the macrostem), a domain that is specifically referenced by some processes of tone assignment.

Our conclusion, then, is that Kuria OMs ought to be analyzed as clitics, rather than agreement affixes. They show a similar mix of morphosyntactic and morphophonological properties as clitics in Indo-European languages, and therefore future research on Bantu OMs will benefit from similar kinds of analyses to those that have been given to clitics cross-linguistically. We have not taken up at all the specific syntactic derivation of these morphemes, for discussion on that topic we refer the reader to Ranero et al (2013). But the conclusions here serve to document the general properties of Kuria OMming and take a step toward analyzing them in light of their correlates in other languages.

References

Diercks, Michael and Justine Sikuku. 2013. Deriving pronominal incorporation in Lubukusu. Ms, Pomona College and Moi University.
Marlo, Michael R. 2013a. On the number of object markers in Bantu languages. Ms, University of Missouri.
Marlo, Michael R. 2013b. Exceptional patterns of object marking in Bantu. Ms, University of Missouri.
NLLT.
Ranero, Rodrigo, Michael Diercks, and Mary Paster. 2013. One of these things is not like the others:
Epiphenomenal object marking in Kuria. Ms, Pomona College.
Byarushengo, Alessandro Duranti, and Larry M. Hyman. USC Department of Linguistics.