Pragmatic Effects of Clitic Doubling: Two Kinds of Object Markers in Lubukusu

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Abstract: Object markers (OMs) in Bantu languages have long been argued to be either incorporated pronouns or agreement morphemes, distinguished mainly by their ability (or not) to co-occur with (i.e. double) in situ objects. Lubukusu appears to be an instance of OMs-as-incorporated pronouns, as OMs in neutral discourse contexts cannot double in situ objects in a broad range of syntactic contexts. As we show, however, certain pragmatic contexts in fact do license OM-doubling; we demonstrate that OM-doubling in Lubukusu is licit only on a verum (focus) interpretation. We analyze OM-doubling within a Minimalist framework as the result of an Agree relation between the object and a verum-triggering Emphasis head (Emph°). The non-doubling OM results from an incorporation operation. We therefore claim that Lubukusu displays two distinct syntactic derivations of OMs (generating doubling and non- doubling) with the interpretive effects of OM-doubling arising from the semantic/pragmatic properties of Emph°.

1   Relevant Background

1.1   Introduction

Object marking on verbs in Bantu languages is a mechanism for referring to discourse-familiar entities, similar to pronominalization. Object marking is generally realized by a prefix that appears morphologically adjacent to the verb root, as is shown below in (2) for Lubukusu [lúuβukusu], a Bantu language spoken in Western Kenya.[2]

1)   *n-á-βon-a   weekesa*[3]   [Lubukusu]
       1sgS-REM.PST-see-FV   1Wekesa
       'I saw Wekesa.'

2)   *n-á-**mu**-βon-a   (#weekesa)*[4]
       1sgS-PST-1O-see-FV   (#1Wekesa)
       'I saw him.'   (licit in a context where *Wekesa* is salient in the discourse)

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[2] Lubukusu belongs to the Luyia (also written Luhya) subgroup of Bantu languages. Lewis et al. (2016) treat Luyia as a 'macrolanguage', and Marlo (2009) estimates that there are at least 23 different varieties spoken in Western Kenya and Eastern Uganda. The 2009 Kenyan census indicates an ethnic population of 1,433,000. There is no recent survey or estimate of the number of Lubukusu speakers. Maho (2008) classifies Lubukusu as JE31c.

[3] The glossing conventions that are adopted here are as follows: PST, FUT, and PFV stand for past tense, future tense, and perfective aspect, respectively. Cardinal numbers on their own in glosses represent noun class; person features are marked by a number followed by a number specification (e.g. 1sg is first person singular, 2pl is second person plural). The S and O that appear on verb forms designate subject marking and object marking, respectively, C stands for C-agreement (agreement on a complementizer head), L stands for locative marking. COMP = complementer; DEM = demonstrative; AP = applicative; CAUS = causative; CJ and DJ = conjoint and disjoint, respectively; NEG = negation; FV = final vowel; RFM = reflexive marker; ASP = unspecified aspect marking; REM.PST = remote past. See Mutonyi (2000) for an overview of Lubukusu morphology.

[4] We use "#" to mark inflecitious or inappropriate sentences (i.e. that are acceptable in some contexts, but not the current context), and "*" to mark ungrammatical sentences (which are always unacceptable in the language).

The object marker in (2) is noun class 1, agreeing with the class 1 discourse antecedent *Wekesa*. As example (2) shows, doubling an object marker (OM) with an *in situ* object is unacceptable in neutral discourse contexts. Section 2 discusses the basic distribution of Lubukusu object marking in neutral discourse contexts, particularly with regard to traditionally-used (syntactic) diagnostic contexts.

Explaining the properties of object markers/clitics and clitic doubling has long been a domain of syntactic investigation and in this paper we contribute a variety of new empirical patterns regarding the distribution of Lubukusu OMs. In particular we investigate the interaction of syntax and pragmatics in explaining the distribution of OMs: despite most contexts ruling out co-occurence of an OM and an *in situ* object (OM-doubling, as shown in (2)), a very specific set of discourse contexts allows doubling to occur, as illustrated below.

3)   *n-aa-βu-l-ií⁺lé*   *βúu-suma*[5]
        1sgS-PST-14O-eat-PFV   14.14-ugali[6]
        'I DID eat the ugali!''

The example in (3) (like its English translation) is licit in a context where somebody is doubting that the speaker ate the ugali. The sentence above asserts this fact with added confidence, for example in a debate or an argument (among other instances). We will show in section 3 that the interpretation of OM-doubling in Lubukusu is best analyzed as *verum* (also referred to as *verum focus*), providing a wide range of evidence to describe the discourse conditions licensing the distribution of OM-doubling.

Even after establishing the nature of the pragmatic effects of OM-doubling, examples like (3) raise important questions for the syntax-pragmatics interface, namely, how is it that a specific pragmatic context licenses a syntactic process like OM-doubling? As we show in section 4, there are in fact syntactic effects of OM-doubling which suggest that doubled OMs are generated via different syntactic mechanisms than non-doubled OMs: we propose that doubled OMs are derived via an Agree relation between a functional head and the DP object. In contrast, the derivation of an undoubled OM involves movement of a pronoun (the OM) to the edge of *v*P, where it undergoes an m-merger process to become part of a complex head with the verb (both of these solutions are reminiscent of traditional kinds of analyses for clitics in Indo-European languages: agreement vs. pronominal incorporation).

The conclusion has various analytical and theoretical consequences. In the most narrow sense, the evidence that a single language can generate OMs/clitics via different mechanisms joins a growing amount of evidence for this conclusion from other Bantu languages, and in this way is similar to thoughts on the matter based on Indo-European clitics (Woolford 2001, Sportiche 1996).[7] These conclusions also have further implications for the proper analysis of

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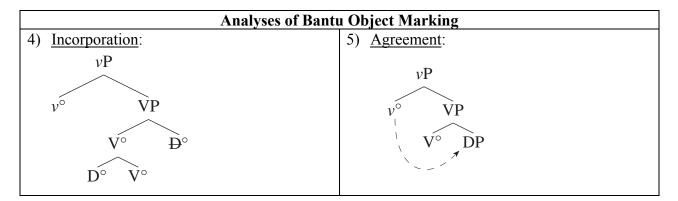[5] The downward facing arrow is a part of the tonal transcription, marking downstep.

[6] *Ugali* is the Swahili (and Kenyan English) word for the staple stiff cornmeal porridge dish of East Africa.

[7] In this paper we use the terms *object marker* (OM) and object marker doubling (OM-doubling), following the traditional terminology of Bantu linguistics. That said, we see no substantive difference between OMs/OM-doubling in Bantu languages and clitics/clitic-doubling in Indo-European languages and, as will be clear, we rely on theoretical approaches that were originally proposed for cliticization processes. Therefore we find it appropriate to refer to Lubukusu OMs as clitics that are realized internal to the verbal form (cliticized to *v*P, we will argue). This relies on a relatively empirically-based designation for the term *clitic* as pronoun-like morphemes that realize arguments of a verb but have relatively more morphosyntactic freedom than agreement affixes do, and are not obligatory in the way that agreement affixes are. As will become clear, however, we assume that syntactic Agree

object marking across the Bantu family, suggesting that accurate analyses of the syntax of many object marking phenomena may not be possible without understanding the pragmatic/information structure usage of the relevant constructions. Furthermore, this adds a new construction to a group of recent research (on African languages in particular) exploring syntactic constructions that induce verum (focus) interpretive effects (see section 3.3). Finally, this paper describes and analyzes the syntax and pragmatics of Lubukusu object marking, contributing to a growing literature on the syntax of Bantu languages and of Lubukusu in particular.

1.2   Theoretical & analytical background

Traditionally object markers in various Bantu languages have been argued to be classified as one of two different sorts of syntactic elements: incorporated pronouns or agreement morphemes (Bresnan and Mchombo 1987). In the first instance object markers are themselves pronominal arguments of the verb originating in argument position, which appear prefixed on the verbal root via an incorporation operation (Jelinek 1984, Baker 2003, and Bresnan and Mchombo 1987). The core alternative is that object markers are thought to realize a syntactic agreement relation between the verb (or some syntactic projection of the verb) and the object noun phrase (Riedel 2009a). For clarity of exposition, these two different analyses are sketched in simplified forms in (4) and (5).[8]

Analyses of Bantu Object Marking	
4) <u>Incorporation</u>: _v_P ／＼ _v_° VP 　　／＼ 　 V° Đ° 　／＼ D° V°	5) <u>Agreement</u>: _v_P ／＼ _v_° VP ⌇　／＼ 　 V° DP （dashed arrow from _v_° to DP）

The simplest sort of diagnostic that arises from this dichotomy is a complementary distribution diagnostic. On an incorporation analysis, objects and OMs are the same sort of syntactic element and therefore ought not co-occur in the same syntactic contexts; on the agreement analysis, in

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relations may be used to generate these clitic morphemes, as do many other recent researchers (e.g. Nevins 2011, Roberts 2010, Kramer 2014, Harizanov 2014, Baker and Kramer 2016).

[8] Marten and Kula (2012) and Marten et al (2007) report a typological study addressing parameters of morphosyntactic variation between Bantu languages. A major focus of this study is on parameters of object marking, allowing for more systematic and comprehensive investigations of Bantu object marking utilizing their template. The relevant parameters that they address include issues like whether co-occurrence of an OM and a lexical object noun phrase is possible, and whether it's ever obligatory, how many object markers are possible (and under what contexts) and what ordering restrictions there are in those contexts, and also whether object marking is available/obligatory in relative clauses. This study was instrumental for this project (and others) in clarifying the relevant domains of variation to be considered in evaluation the object marking properties of a given language, and many of the diagnostics discussed here are consistent with the parameters of variation discussed in those works.

contrast, objects and OMs are distinct syntactic elements, and should have no (or fewer) constraints on their co-occurrence.[9]

It has long been claimed for a variety of Bantu languages that object markers are incorporated pronouns (Adams 2010 for Zulu, 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 2009a for arguments against these claims for Haya). In their seminal paper, Bresnan and Mchombo (1987) argue that verbal affixes may be either grammatical agreement or anaphoric agreement (incorporated pronouns), relying on evidence from word order, tone patterns, *wh*-questions, and relative clauses, specifically arguing that Chichewa OMs are anaphoric agreement, i.e. incorporated pronouns. For the sake of space we don't review all of their claims here, but their differentiation between grammatical agreement and incorporated pronouns set the stage for the kinds of dichotomous agreement-vs-pronoun analyses that followed.[10] Riedel (2009a) claims that all object-marking in Bantu is agreement, with all languages realizing some version of the analysis in (5) (see, for example, Henderson 2006, Riedel 2009a, Zeller 2012 for discussions of Zulu, Haya, and Chichewa). The pronominal incorporation analysis, on the other hand, makes much more rigid predictions about the non-co-occurrence of OMs and objects, which Riedel claims have not been met by any documented Bantu language (i.e. that they should *never* co-occur in non-dislocated contexts).[11] Baker (2016) suggests that the traditional distinction may be on the right track, with some languages generated OMs as pronouns (via the *Reduce* operation) and others doing so via Agree alone.

Lubukusu displays the properties predicted by a pronominal incorporation analysis of object-marking perhaps more than any of the languages documented at this point, particularly the fact that in most contexts doubling an object marker with an *in situ* object is unacceptable (this is demonstrated in the next section).[12] Despite the general accordance to the predictions of a pronoun incorporation analysis, such an analysis turns out to be empirically insufficient as a blanket analysis of Lubukusu object marking, as laid out in the sections that follow.

We instead argue that there are two distinct derivations of OMs in Lubukusu. In non-doubling contexts, we argue that the OM is an incorporated pronoun. When the OM co-occurs with an *in situ* object, we will claim that this is the result of an agreement operation arising on a syntactic projection that introduces a pragmatic operator to the syntax, triggering the verum

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[9] This is a simplification of the issues, as there are many proposals that clitic doubling arises out of a complex DP that contains both the pronoun/clitic and the object argument—a 'Big DP' (Uriagereka, 1995; Belletti, 1999; Cechetto, 2000; among others). We do not adopt a Big DP approach here but briefly revisit the issue in section 4.6, with comments on the advantages of our proposals.

[10] This tradition of analytical argumentation follows also on the vast literature addressing Indo-European clitics, which likewise often links cliticization with either movement of a pronominal element, agreement, or some combination of the two.

[11] A third alternative is that OMs in all/most Bantu languages are pronouns/pronominal clitics. This is attractive given the stark contrast in the language family between subject agreement (iterable across many functional heads in most languages) and object marking (limited to one OM per object in every language we have encountered), which suggests a quite distinct account of SMs (clearly agreement) and OMs (in our opinion, in many instances, clearly not agreement). The analysis presented here assumes OMs are actually either pronouns or agreement, but that different OMs within the same language may be derived distinctly in different contexts.

[12] Two possible exceptions to this claim are Ikalanga (Letsholo 2013) and Herero (Marten and Kula 2012, Marten et al 2007), both of which display similar patterns to Lubukusu, at least with respect to neutral discourse contexts. Letsholo (2013) in particular describes the Ikalanga patterns in a depth similar to what we do in section 2 of this paper, with patterns similar to the Lubukusu pattern.

focus readings associated with OM doubling. Section 2 overviews the fundamental syntactic properties of Lubukusu object marking, and section 3 outlines the interpretation of OM-doubling in Lubukusu, describing the pragmatic contexts that license OM-doubling. Section 4 then proposes the syntactic analysis and provides some additional evidence supporting our approach. Section 5 concludes.

2   Object Marking in Lubukusu

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.[13]

6)   Forms of the OM (partial listing; see Wasike 2007: 40):

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

This section describes Lubukusu object marking with respect to a variety of familiar empirical diagnostics that discriminate between the analytical options of incorporation vs. agreement, relying on the core diagnostic criterion of co-occurrence in a variety of syntactic contexts (cf. Bresnan and Mchombo 1987, Henderson 2006, Riedel 2009a, Marten et al 2007, Marten and Kula 2012, Marten and Ramadhani 2001, Keach 1995, Woolford 2001, Baker 2003, van der Spuy 1993, Zeller 2012, Zeller 2015, Baker 2016). This line of argumentation serves to situate the Lubukusu patterns in the literature on Bantu OMs generally, but will show that in neutral discourse contexts Lubukusu OMs behave very clearly as if they were incorporated pronouns. Therefore Lubukusu is in many ways a prototypical instance of the long-hypothesized pronoun incorporation analysis of object marking. The critical caveat, of course, is that this holds when we restrict the discussion to neutral pragmatic contexts (where each sentence considered is an assertion adding a proposition to the common ground). Section 3 will deal with the specific discourse contexts that license OM-doubling.

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[13] We follow Bantuist tradition by labeling noun classes by number, but note that these designations do not denote [person], which is instead denoted by the addition of a number specification (1pl for first person plural, 2sg for second person singular, etc).

2.1 OMs Generally Cannot Double Objects

First to be considered is the interaction of the Lubukusu OM with an *in situ* object. As is shown in (7) and (8), object marking in neutral contexts in Lubukusu cannot occur with an *in situ* noun phrase (headed by a lexical noun).

7) *n-á-**mu**-βon-a*   (#*weekesa*)   [Lubukusu]
    1sgS-REM.PST-1O-see-FV   (#1Wekesa)
    'I saw him.' (not possible: 'I saw Wekesa.')

8) *n-á-**βa**-βon-a*   (#*βaa-soomi*)
    1sgS-REM.PST-2O-see-FV   (#2.2-students)
    'I saw them.' (not possible: 'I saw the students.')

As Riedel (2009a) discusses, there is a large amount of variation across Bantu languages with respect to how the features of object noun phrases affect their co-occurrence with an object marker. For example, proper names, kinship terms, and terms of respect in Sambaa must obligatorily co-occur with an object marker, but other sorts of object noun phrases do not require object marking in Sambaa. So even in languages that allow doubling, it is not allowed or required with all objects.

However, in neutral discourse contexts Lubukusu always disallows the co-occurrence of the object marker with an *in situ* object noun phrase, regardless of the animacy and social status of the object DP. This is demonstrated in the examples below:

9) *n-á-**mu**-βon-a*   (#*paapá*)   [Lubukusu]
    1sgS-REM.PST-1O-see-FV   (#1father)
    'I saw him.' (not 'I saw father.')

10) a. *n-á-**ki**-βon-a*   (#*ée-m-bwa*)   [Lubukusu]
       1sgS-REM.PST-9O-see-FV   (#9-9-dog)
       'I saw it.' (not 'I saw the dog.')

    b. *n-á-**ka**-βon-a*   (#*ká-ma-baale*)
       1sgS-REM.PST-6O-see-FV   (#6-6-stones)
       'I saw them' (not 'I saw the stones.')

To the extent of our knowledge all lexical object DPs behave similarly in that the object marker is prohibited to co-occur with (i.e. double) the *in situ* lexical object noun phrase in neutral contexts.[15] By a simplistic metric of complementary distribution, the fact that the object marker and the *in situ* object cannot co-occur suggests that they are both object arguments of the verb, providing initial evidence for the pronominal incorporation analysis of Lubukusu OMs in neutral discourse contexts.[16]

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[15] The exception to this pattern is pronouns: see section 4.

[16] It is worth noting here that because there are no instances where an object marker *may* double an *in situ* DP object with a lexical noun (in neutral contexts, at least), there are necessarily no instances (in neutral contexts) where the OM *obligatorily* occurs with any sort of object. Obligatory object marking has been invoked by Riedel (2009a)

2.2 Object Marking in Dislocation Contexts

As is common for languages with OMs, the OM may occur in the presence of an overt lexical noun phrase object when that object is either right- or left-dislocated (these kinds of clitic left-dislocations are relatively common among Bantu languages, see Zeller 2009).

11) a. *n-á-siim-a*　　　　*weekesa*
　　　1sgS-REM.PST-like-FV 1Wekesa
　　　'I like Wekesa.'

　　b. *wéékésá,　n-á-**mu**-síim-a*
　　　1Wekesa　1sgS-REM.PST-1O-like-FV
　　　'Wekesa, I like him.'

In these cases the object marker can readily be analyzed as functioning as a pronominal argument of the verb, anaphorically related to the topicalized object that is dislocated to the left periphery of the clause.

　　　The more problematic issue is identifying the status of a postverbal object co-occurring with an object marker on the verb. The pronominal incorporation analysis of object marking predicts that postverbal DP objects should only co-occur with OMs in the event that the object is right-dislocated. We adopt relatively widely assumed criteria for right-dislocated phrases: they are clause-final via adjunction to a relatively high syntactic projection (unless followed by another dislocated phrase, cf. Zeller 2015), have an afterthought reading, and receive phonological phrasing apart from the other clausal material (Riedel 2009a).

　　　Riedel (2009a) examines these issues in depth concerning existing proposals that the object marker in Haya is an incorporated pronoun, which claim that object noun phrases 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 morphophonological 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 (2009a) demonstrates that is not the case for Haya, however, as demonstrated in (12) for both object-marked and non-object-marked objects, (a) and (b), respectively.

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

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

(among others) as a diagnostic of an agreement process, so this can be interpreted as an argument against an agreement analysis here, at least for pragmatically neutral contexts.

Riedel interprets this as evidence against the right-dislocation argument for Haya object-marked noun phrases (and also provides other evidence leading to the same conclusions), and therefore that Haya OMs are not amenable to a pronominal-incorporation analysis, despite the outstanding morphophonological evidence.[17] An anonymous reviewer disagrees that an object occurring inside a temporal adverb is evidence that it is still in VP, because the availability of a low topic position would allow for dislocation out of the base position while still remaining inside an adverb (this has been argued to be the case for Zulu by Cheng & Downing 2009, Buell 2009, and Zeller 2012). It is possible that this would explain the apparent contradictions between the syntactic evidence and phonological evidence in Haya and Chichewa: perhaps these *are* dislocation constructions, which the morphophonology reflects, but the dislocations are to such low positions that the relevant syntactic diagnostics did not recognize their dislocation (e.g. remaining inside of temporal adverbs). This may well be a correct analysis of Zulu, Chichewa, and Haya, but as will be evident below, this diagnostic shows quite clear distinctions in Lubukusu.

In Lubukusu, the arguments against Haya object marking as pronominal incorporation do not hold. As noted above, OM-doubling is unacceptable in neutral pragmatic contexts. 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 and easily perceptible pause, as shown in (13). In these instances the object noun phrases receive an afterthought reading, as represented in the translations.

13) *n-á-**ki**-βon-a*   *(,)   *ée-m-bwa*[18]   [Lubukusu]
    1sgS-REM.PST-9O-see-FV   9-9-dog
    'I saw it, the dog.'

Looking at the placement of temporal adverbs, Lubukusu again shows the predicted effects if the OM is analyzed as an incorporated pronoun, assuming that temporal adverbs demarcate the edge of the verb phrase. The postverbal object DP occurs to the left of the temporal adverb (i.e. within the VP) if there is no OM on the verb (a), but when an OM occurs on the verb the postverbal object DP must appear to the right of the temporal adverb (b). Example (c) shows that doubling an object that occurs within the VP (demarcated by the temporal adverb) is unacceptable.

14) a. *n-aa-βóóne*   *βaa-soomi*   *lukolooβa*[19]   **no OM**
         1sgS-PST-see.PFV   2.2-students   yesterday
         'I saw the students yesterday.'

     b. *n-aa-**βa**-βóóne*   *lukolooβa,*   *βaa-soomi*   **OM+dislocation**
         1sgS-PST-2O-see.PFV   yesterday   2.2-students
         'I saw them yesterday, the students.'

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[17] Riedel uses similar lines of reasoning to Henderson's criticisms of the pronominal incorporation analysis of Chichewa, and seemingly in conflict with the phonological evidence that shows dislocation patterns.

[18] It is perhaps worth comparing the non-right-dislocated construction: *n-á-ki-βon' éem-bwa*. This triggers the verum (focus) reading that we will discuss in what follows, as opposed to the afterthought topic reading seen in (13). Research on the morphophonological cues of syntactic structure is ongoing for Lubukusu, but this data pair would suggest that that the lack of the vowel deletion in (13) could be taken as an additional morphophonological clue as to the right-dislocated position of the object.

[19] This adverb has the form *likolooβa* for many speakers. We report Maurice Sifuna's pronunciations here.

c. *#n-aa-**βa**-βóóne*   *βaa-soomi*   *lukolooβa*   **OM, no dislocation**
     1sgS-PST-2O-see.PFV   2.2-students   yesterday

Therefore, diagnostic evidence from both phonological phrasing and adverb placement suggests that when an OM is present on the verb, the postverbal DP object cannot remain in its base argument position within the VP.

All of this evidence is consistent with an analysis that the object marker in Lubukusu (in neutral pragmatic contexts) is in fact an incorporated pronoun—that is, it is itself an argument of the verb merged as the complement of the verb, that has then been incorporated into the verb: the presence of an OM rules out the presence of an associated 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 DP), we would have no *a priori* reason to rule out the OM co-occurring with an *in situ* object.[20]

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 (2011a) refers to as the Upward Agreement Hypothesis (UAH): a head in Bantu languages (among others) only agrees with a phrase that is structurally higher than it.

15)   [DP$_1$ H   [… DP$_2$ …]]

That is to say, under the UAH DP$_2$ doesn't trigger agreement on H, it is DP$_1$ that would do so. One mechanism for achieving agreement, then, would be to move a relevant DP over the relevant head H in order for H to agree with that DP. 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 DPs, but this agreement relation necessarily triggers movement. Under either approach, movement is very closely linked with agreement, with the result that heads only Agree with DPs that are/end up structurally higher than the head itself.[21]

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 moved/dislocated, because a movement of some sort is necessarily correlated with agreement.[22] As will be seen in what follows, this analysis does not in fact hold up for Lubukusu when considering extraction environments of objects.[23]

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

[21] See Carstens and Diercks (2013) for an argument from Lubukusu against Baker's (2008) claim that heads in Bantu probe upwards. Evidence in that paper is drawn from manner adverbs ('how') in some Luyia languages that agree with the subject of the sentence, and in particular, the postverbal unaccusative subject in a locative inversion construction.

[22] For example, Zeller (2015) analyzes Zulu OMs in right-dislocation constructions as the result of an Agree relation on a right-facing topic head; Ranero (2017) adopts a similar approach for some right dislocations in Luganda.

[23] If we were to apply the Upward Agreement Hypothesis to Lubukusu in this way, however, it would create an additional (major) analytical difficulty, namely, how to explain object marking for the languages where the OM commonly co-occurs with an *in situ* object (as demonstrated by Riedel 2009a for languages like Haya, Sambaa, and Swahili). As suggested by 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

2.3 Object Marking in Non-Declarative Contexts

This section describes Lubukusu object marking in non-declarative contexts—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 (16) and (17), 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).

16) **Object Relative Clause**
wéékésá   k-á-som-a[24]   [*síi-taβu   ní-syo   n-á-(*si)-kul-a ___*]
Wekesa   1S-REM.PST-read-FV   7.7-book   COMP-7   1sgS-REM.PST-(*7O)-buy-FV
'Wekesa read the book which I bought.'

17) **Object Relative Clause**
n-á-βon-a   [*ómu-xasi   ní-ye   wéékésá   k-á-(*mu)-siim-a ____*]
1sgS-REM.PST-see-FV   1-1-woman   COMP-1   1Wekesa   1S-REM.PST-(*1O)-love-FV
'I saw the woman who 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. 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 are those that also allow object marking with an *in situ* object (citing Swahili, Zulu, and Chichewa) and those that disallow object marking in relative clauses are those same languages which do not allow the object marker to co-occur with an *in situ* object noun phrase (Lingala, Kirundi, and Dzamba).

What we find, then, is that the Lubukusu examples in (16) and (17) are in accordance with 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 noun phrase.[25] If we expand the data set to other

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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 (un)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 (and, in fact, Diercks 2011a crucially relies on verb movement to explain certain locative inversion constructions in Lubukusu).

[24] *k-* is epenthetic (and optional for some speakers), occurring in cl. 1 forms that would otherwise have an initial long vowel. There are a variety of contexts that give rise to initial *k-*. Most of these involve cl. 1 /a-/ followed immediately by a vowel: (i) a vowel-initial verb root, (ii) a vowel-initial tense prefix such as Remote Past *a-*, Hesternal Perfective *a-*, or Immediate Past *akha-*, (iii) and reflexive *e-*. An additional context is when cl. 1 /a-/ is immediately followed by the 1sg object prefix *n-*; pre-NC lengthening results in lengthening and thus *k-* epenthesis. The presence of initial *k-* in Remote Past forms is somewhat surprising since it is followed by a surface short vowel, which is the result of a tense-specific shortening found in Bukusu and other Luyia varieties (see Dalgish 1986). Although we treat k- as epenthetic, we simplify interlinear glosses here by identifying *k-* as the cl. 1 subject marker.

[25] 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), analyzing the prohibition of OMs inside object relative clauses as the result of a general prohibition against object marking

constructions, 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 (18), and object wh-clefts as illustrated in (19).

18) (k-á-β-a)   wéékésá   ní-ye   n-á-(*mu)-βon-a   ***OM + Cleft**
     1S-REM.PST-be-FV 1Wekesa   COMP-1   1sgS-PST-(*1O)-see-FV
     'It was Wekesa who I saw.'

19) naanu   ni-ye   w-á-(*mu)-βon-a?   ***OM+ WH-CLEFT**
     1who   COMP-1   2sgS-REM.PST-1O-see-FV
     'Who did you see?'

For completeness, we also note that object marking is impossible with an *in situ* wh-word:[26]

20) w-á-(*mu)-βon-a   naanu?
     2sgS-REM.PST-1OM-see-FV   1who
     'Who did you see?'

Our conclusions are consistent with 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. This of course is precisely the prediction of an account of the OM as an incorporated pronoun – if the object marker originates in the base position of a noun phrase object, then it should not be possible to extract an operator from that same position (i.e. the gap in the relative clauses and clefts in the preceding examples).

If we consider the clear prosodic break and dislocation of objects discussed in section 2.2 along with the lack of object marking in extraction contexts in this section, then, it appears that in neutral discourse contexts an OM may never co-occur in the same clause as its associated lexical object DP (excluding those objects adjoined via dislocation constructions). This is a clear and consistent pattern that shows a strong complementary distribution between OMs and their associated objects (again, limited to neutral pragmatic contexts). So whereas many languages would still allow for an agreement analysis of OMs where agreement is linked with dislocation/extraction, the Lubukusu patterns provide a strong argument against an agreement analysis (but see section 4 for our final word on the matter).

These extraction facts are also relevant in addressing a potential alternative analysis of (right-/left-) dislocation constructions. This alternative analysis claims that when the overt DP is dislocated there is a null *pro* in canonical object position (meaning that OMs are still agreeing in the case of object-dislocations, just with *pro* instead of the overt DP). This alternative analysis is

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foregrounded elements in a sentence, another instance (as we will show for Lubukusu) of information structure constraints creating effects that have commonly been analyzed on purely syntactic grounds.

[26] See Riedel 2009b on wh-object marking in other Bantu languages, which often shows distinct properties from object marking of non-wh-phrases. We don't pursue these patterns in this paper, but there may in fact be additional exceptional discourse contexts where OM-doubling is available for *in situ* wh-constructions: for example *w-á-mu-β on-a naanu?* would be fine where the interlocutors both know someone was seen but the one questioned doesn't want to freely admit it (say, he saw John but on first inquiry he says Peter, and on the second answers James). So this question as the third instance wants to put the matter to rest, and therefore the speaker expects the right answer. We will also see other instances of OM-doubling as viable in non-declarative contexts in what follows (albeit not in object-extraction environments).

unavailable for Lubukusu, however, given the facts presented in this section, as OMs are still ruled out in the presence of a gap in an extraction context (whether the gap is analyzed as an unpronounced copy of the extracted object or an operator).[27,28]

2.4 Challenging the Pronoun Incorporation Analysis

There are a variety of ways that a pronoun incorporation analysis could be implemented, such as a strict head movement approach where a pronominal complement of the verb head-moves into the V head (based on Baker 1988b and the Head Movement Constraint of Travis 1984), or perhaps an Agree-based theory of incorporation based on Roberts' (2010) analysis of clitics (see van der Wal 2015 for a Bantu-specific application), or even a movement-based approach of pronoun incorporation based on Matushansky's (2006) m-merger approach to head movement and the recent cliticization analyses based on m-merger (Harizanov 2014, Kramer 2014, Baker and Kramer 2016). Whatever the theoretical explanation, the core empirical generalization that underlies the whole notion of pronominal incorporation is a complementary distribution between OMs and *in situ* objects, as any theory that explains that complementary distribution will necessarily be designed to rule out co-occurrence of an OM and its associated object.

As we noted in the introduction, however, there are in fact contexts in which doubling an OM with an *in situ* object is acceptable in Lubukusu.[29] We illustrate with an instance here that proves a useful jumping off point for the discussions that will follow in the next section. Consider the context below and the examples that follow:

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?"

There are two (relevant) licit responses in this context: the first is to include the noun phrase object with no object marking on the verb at all, as in (21), or as is shown in (22) it is possible to have an OM co-occur with an *in situ* object (note the lack of a prosodic break here). This is precisely the sort of OM-doubling construction that was shown to be impossible in neutral discourse contexts in the preceding discussion.

21) *k-aa-sóóm-ile   líi-kazéeti*
     1S-PST-read-PFV   5.5-magazine
     'He read the magazine.'

22) *k-aa-**lí⁺**-sóóm-ile   líi-kazéeti*
     1S-PST-5O-read-PFV   5.5-magazine
     'He did indeed read the magazine.' (confirmation reading, that it occurred as expected)

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[27] Thanks to an anonymous reviewer for their comments on this issue. The patterns of free pronouns also become relevant at this point (given the alternative analysis of OMs as agreement with *pro*), but we take up the question of free pronouns in section 4.4 below once the core aspects of our analysis have been established.

[28] Buell (2005) relies on a conjunction diagnostic and sloppy/strict readings of OMs to argue that Zulu OMs are agreement morphemes. The Lubukusu facts yield the opposite result as the Zulu facts and again support the incorporated pronoun analysis, but space concerns lead us to leave discussion of those data aside.

[29] Our thanks to Mark Baker and Ken Safir for first bringing this pattern to our attention, including the first context we discuss below, which was suggested by Mark Baker.

What we see, then, is that while in most contexts doubling is ruled out, in this discourse context doubling is licensed.[30,31] It is not entirely clear from the example above, however, what the specific relevant contexts are: this will be the topic of the next section.

Data like these bring into question the pronoun incorporation analysis that to this point had seemed quite probable—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 a separate mechanism for OM-doubling as opposed to non-doubling OM contexts. As we will show, there is in fact good evidence that there are distinct syntactic mechanisms for doubling and non-doubling OMs, and in general OMs used in neutral discourse contexts (i.e. non-doubling OMs) are still amenable to a pronoun incorporation analysis.

The first major task, however, is to give a precise and restrictive description of which contexts allow the exceptional co-occurrence of OMs and corresponding objects; this is taken up in the next section, after which we address the syntactic analysis of the resulting empirical generalizations. The context used in (21)-(22) is a useful jumping-off point because it allows a variety of plausible explanations, so we start from this point in the next section.

3   The Pragmatic Contexts of Lubukusu OM-doubling

What are the precise contexts that allow OM-doubling in Lubukusu? We will consider a range of intermediate hypotheses as the data description advances, but in the end we will show that the best description of the relevant contexts is one defined in terms of pragmatic contexts like *common ground* (i.e. shared knowledge) and conversational participants' stances with respect to that shared knowledge. As mentioned above, Lubukusu OM-doubling constructions generate an interpretation much like verum (focus) constructions such as the English insertion of *do* in declaratives (*Alex DID drink my beer!*).

First, despite creating an emphatic interpretation in a sentence like '*Charlie DID rip my sweater,*' verum cannot be reduced to familiar sorts of focus like informational focus or contrastive focus, as is demonstrated in section 3.1.1 for Lubukusu OM-doubling (cf. Gutzmann and Castroviejo Miró 2011). And while focus constructions can generally affect truth conditions, verum has no influence on truth conditional meaning: instead, as proposed by Gutzmann and Castroviejo Miró (2011) (henceforth G&CM), the main interpretive contribution of verum instead is an instruction to take a particular issue being discussed (the *question under discussion*, or QUD) and effectively put it to rest (i.e. *downdate* the QUD). This is discussed for Lubukusu OM-doubling in section 3.1.2. For all of these issues we show how Lubukusu OM-doubling has the properties of verum constructions.

The conclusion that OM-doubling is essentially a verum construction leads us to an important discussion of the exact nature of the constraints on object marking in Lubukusu—are they pragmatic or syntactic? The answer will be 'both,' but this raises important questions for just how much pragmatics ought to be represented in the syntax, which we address in sections 3.3 and 4.

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[30] This effect is similar in broad strokes to what was documented in Manyika Shona by Bax and Diercks (2012) in being pragmatically-licensed OM-doubling, though very different in the details: 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 2000,2008 and Anagnastopoulou 2006).
[31] These contexts notably lack all the hallmarks of right-dislocation noted above; the object is *in situ.*

3.1 Clarifying the interpretive effect of OM-doubling

3.1.1 OM-doubling is not licensed by contrast or focus

Based on the *book vs. magazine* example that first introduced us to these patterns in (21)-(22), the presence of contrast is a viable hypothesis for a licensing context for OM-doubling. Consider first the contrastive focus constructions in (23) (which provides the basic construction) and (24), where OM-doubling is shown to be unacceptable.

23) *lionéeli*   *k-á-ly-a*   *kú-mú-tʃéele, se-k-á-ly-á*   *βúu-sumá*   *tá.*
     1Leonell   1S-REM.PST-eat-FV   3-3-rice   NEG-1S-REM.PST-eat-FV   14.14-ugali   NEG
     'Leonnel ate the rice, he didn't eat the ugali.'

24) *#lionéeli* *k-á-**ku**-ly-a*   *kúmú-tʃéele, se-k-á-ly-á*   *βúu-sumá*   *tá.*
      1Leonnel 1S-REM.PST-3O-eat-FV 3-3-rice   NEG-1S-REM.PST-eat-FV   14.14-ugali   NEG
     'Leonell ate the rice, he didn't eat the ugali.'
     (infelicitous in a neutral context)

While this is initial evidence that contrast is not sufficient to license OM-doubling, it is possible that what rules out doubling in (24) is the fact that these are focused elements, in addition to being contrasted objects. That is to say, perhaps the *book vs. magazine* context given above in (22) is best identified as a contrastive topic context, as there is a contrast at hand but in this instance both elements (*siitabu* 'book' and *ligazeti* 'magazine') are already salient and familiar in the discourse. This would distinguish this example from example (24), where without additional context neither *kumucheele* 'rice' nor *busuma* 'ugali' is discourse-familiar. And it does appear that focus itself cannot trigger OM-doubling; the example below shows that simple new information focus does not license OM-doubling.

25) Q: *lionéeli*   *k-á-ly-a*   *síina?*
        1Leonell   1S-REM.PST-eat-FV   what
        'What did Leonell eat?'

   A1: *lionéeli*   *k-á-ly-a*   *βúu-suma.*
        1Leonell   1S-REM.PST-eat-fv   14.14-ugali
        'Leonell ate the ugali.'

   A2: *#lionéeli*   *k-á-**βu**-ly-a*   *βúu-suma.*
        1Leonell   1S-REM.PST-14-eat-FV   14.14-ugali
        'Leonell DID eat the ugali.' (*needs a different context to be felicitous*)

Therefore, it could be possible that a contrastive focus construction like (24) cannot license OM-doubling because OM-doubling is incompatible with focus. Therefore we have not yet successfully ruled out contrast as a licensing property of OM-doubling.

Neeleman et al. (2009) propose that there are essentially three primitive notions with respect to grammaticized information structure: topic, focus, and contrast (vs. non-contrast), creating a four-way contrast between new information focus, contrastive focus, aboutness topics, and contrastive topics. To isolate contrast as distinct from focus, then, consider the contrastive topic contexts given below, where a topical element in a sentence is introduced as contrastive, signaling a shift in the discourse topic (but is not 'focused' in the sense of generating a set of alternatives). In this exchange

a question is posed as to who ate *ßusuma* 'ugali,' and in the response the topic is still what was eaten, but it is shifted to *kumucheele* 'rice' from *ßusuma*, to clarify that what was eaten is distinct from what was questioned in the question itself (i.e. establishing a contrast). As is clear from (1), it is not possible in these contexts to double an object marker with an *in situ* object.

26) <u>Contrastive Topic, OM-doubling not licensed</u>

    Q: *naan'*   *úú-l-iilé*   *ßúu-sumá*   *lúnó*   *músilo?*[32]
        Who   1S-eat-PFV   14.14-ugali   today   night
        'Who ate the ugali tonight?'
    A: *see-mány-á*   ꜜ*xú*   *ßúu-sumá*   *tá,*   *nekáxáálí …*
        NEG-1sg.know-fv   17   14.14-ugali   NEG,   but
        'Well, I don't know about ugali, but …'

    Continuation 1: *lionéeli*   *a-l-iilé*   *kú-mú-tʃéele*
                 1Leonell   1S-eat-PFV   3-3-rice
                 'Leonell ate the rice.'

    Continuation 2: #*lionéeli*   *a-**kú**-l-iile*   *kú-mú-tʃéele*
                 1Leonell   1S-3O-eat-PFV   3-3-rice
                 'Leonell DID eat the rice.'

This evidence suggests that a contrastive object is not sufficient to license OM-doubling, whether that contrast is a topical element or a focused element. Presumably, then, the contrasting of *book vs. magazine* in (22) is not what licensed OM-doubling in that context. Perhaps critically here, the diagnostic in (1) sets up sentence topics, but they are still unfamiliar in the discourse (i.e. not treated as given or taken for granted). In fact, speakers report the intuition in general that the OM-doubled object cannot be new information, and A2 in (1) it is new information despite being the topic of the sentence. As will become clear in what follows, discourse-familiarity is a necessary condition on OM-doubling, but not a sufficient condition.

        It is relevant to note here that the truth-conditional output of an OM-doubling construction is apparently in no way different from a non-OM-doubling construction: they are both true in exactly the same situations (i.e. both answers in (25) are true in the case that Leonell ate the ugali). Of course, OM-doubling and non-doubling are not *felicitous* in exactly the same discourse contexts, as has already been seen and we will continue to demonstrate as we move along. This is precisely parallel to familiar verum patterns and other use-conditional constructions, as we will discuss more below (Gutzmann and Castroviejo Miró 2011, Gutzmann 2013, Hartmann 2013).

3.1.2   Addressing listener doubt and putting the issue to rest

Following on the same line of questioning as in (1), note that if the response that 'Leonell ate the rice' (Continuation 1 in (1)) is brought into doubt by further discussion, it is possible to OM-double the object in the response:

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[32] This form of the subject agreement morpheme is an anti-agreement effect that occurs in cases of subject extraction (see Diercks 2010 for a discussion of the Lubukusu patterns).

27) a. *lionéeli*   *a-l-iilé*   *kú-mú-tʃéele*   *kwéeli?*
     1Leonell   1S-eat-PFV   3-3-rice   really
     'Did Leonell really eat the rice?'

   b. *lionéeli*   *a-**kú**-l-iile*   *kú-mú-tʃéele*
     1Leonell   1S-3O-eat-PFV   3-3-rice
     'Leonell DID eat the rice.'

This suggests that in order for OM-doubling to be licit, the proposition denoted in an OM-doubling sentence has to already have been in the common ground, and perhaps also must be brought into question in the discourse. Speakers often report intuitions that OM-doubling is useful "if someone is doubting." We will see below that this notion of "addressing doubt" is not the *only* context that provides a sufficient condition to generate OM-doubling, but it is perhaps the most prominent interpretive context that speakers intuitively recognize. What we will see as we proceed is that the notion of a proposition being part of the "question under discussion" (discussed below) will be central to what licenses OM-doubling.

      To this point we have considered whether focused elements, topical elements, or contrastive elements are responsible for licensing, since all are potentially in play given our initial illustrative *book vs. magazine* example in (22). What we have seen, though, is that none of these information structure concepts isolate the conditions that license OM-doubling. The example in (27) begins to point us in the right direction, however, which is that the proposition uttered in an OM-doubling context must 1) be in the common ground, and 2) be at issue or under discussion. What this suggests, then, is that the initial book/magazine instance is not acceptable because it is contrastive, but instead because both propositions (*he read the book*, *he read the magazine*) are in the common ground. In this mini-discourse, interlocutors enter the exchange with an expectation that one of them is true, but this expectation has been raised to the level of being the main issue under discussion. OM-doubling then serves to resolve the issue at hand.

      This sense of confirmation, or eliminating all doubt, is even more clear in the example below, a Lubukusu retelling of the biblical story of Peter denying Jesus. In this story Jesus is being arrested and the mob is trying to root out anyone who is associated with him, and the mob identifies Peter as an associate of Jesus and begins to harass him, but Peter repeatedly denies any association with Jesus. In this story, Peter is questioned three times and denies knowing Jesus three distinct times.

28) Q1:   *βá-βáá-ndú* *β-á-reeβ-a*   *pétero,* *"o-mány-ile*   *ó-muu-ndu* *yu-no?"*
          2-2-people 2S-REM.PST-ask-FV 1Peter   2sgS-know-PFV 1-1-person   1-DEM
          'So people asked Peter, 'Do you know this person?''

   A1a: *pétero* *k-á-tʃiiβ-a,*   *"see-**mú**-many-ile*   *tá."*
          1Peter   1S-REM.PST-answer-FV   NEG.1sgS-1O-know-PFV   NEG
          'Peter answered, 'I don't know him.''

   A1b: #*"see-**mú**-many-ile*   *ó-muu-nd'*   *u-yú*   *tá"*   **OM-doubling infelicitous**
           NEG.1sgS-1O-know-PFV   1-1-person   1-DEM   NEG
          'I DON'T know this person.'

Q2: *β-á-mu-réeβ-a*   *luundi,* *"o-mány-ile*   *ó-muu-ndu*   *yu-no?"*
2S-REM.PST-1O-ask-FV   again   2sgS-know-PFV   1-1-person   1-DEM
'They asked him again, 'Do you know this person?''

A2a: *pétero*   *k-á-tʃìiβ-a,*   *"see-**mú**-many-ile*   *tá."*
1Peter   1S-REM.PST-answer-FV   NEG.1sgS-1O-know-PFV   NEG
'Peter answered, 'I don't know him.''

A2b: #*"see-**mú**-many-ile*   *ó-muu-nd'*   *u-yú*   *tá"*   **OM-doubling infelicitous**
     NEG.1sgS-1O-know-PFV   1-1-person   1-DEM   NEG
'I DON'T know this person.'

Q3: *β-á-mu-réeβ-a*   *lw-á*   *xáátaru,* *"o-mány-ile*   *ó-muu-ndu*   *yu-no?"*
2S-REM.PST-1O-ask-FV   11-assoc   three   2sgS-know-PFV   1-1-person   1-DEM
'They asked him a third time, 'Do you know this person?''

A3a: *pétero* *k-a-tʃìiβ-a,*   *"see-**mú**-many-ile*   *tá."*
1Peter 1S-PST-answer-FV   NEG.1sgS-1O-know-PFV   NEG
'Peter answered, "I don't know him.'

A3b: *"see-**mú**-many-ile*   *ó-muu-nd'*   *u-yú*   *tá."*   **OM-doubling licit**
     NEG.1sgS-1O-know-PFV   1-1-person   1-DEM   NEG
'I DON'T know this person.'

The intuition of speakers here is that the OM-doubling in the third round of questioning ensures that questioners don't come back to Peter with another inquiry, in essence saying 'this response is final, don't ask again.' Note here that in this context, even on a second round of questions OM-doubling is infelicitous. This is because of the entire discourse context, however. If there were no third round of questioning, it would be perfectly acceptable to OM-double after the second round of questions. But if Peter had OM-doubled the object after the second round of questions, it would have then been very strange for the inquisitors to insist on asking the question a third time, because the issue would have already been clearly resolved. OM-doubling an object essentially settles the issue.

This notion of 'settling the issue' is in fact precisely the proposal of G&CM (2011: 159ff) for the core interpretive contribution of verum to an utterance. They claim that "VERUM is an instruction of the speaker, who wants to downdate *?p* [a questioned proposition] from the Question Under Discussion." They describe the QUD as an ordered set of questions that organizes interlocutors' intentions in a conversation, serving to model the common goal(s) of conversational participants: to resolve questions in the QUD (G&CM 160). Following Engdahl (2006: 95), G&CM assume that downdating the QUD consists of removing any questions that have been resolved, essentially an instruction from the speaker that the issue being discussed is settled, done and over with.[33]

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[33] G&CM in fact derive many of the other properties of verum from this basic instruction, which we discuss briefly in this section, though the semantic analysis of verum itself is beyond the scope of this paper.

While the Lubukusu paraphrase of the biblical narrative is a clear illustration of these issues, there are many additional examples of OM-doubling where a proposition being uttered is already in the common ground and is being called into question, which is settled by the OM-doubling conversational move. If someone expresses doubt or surprise about a circumstance in an interrogative exchange, the responder can OM-double in their response, the key being that a question has been raised that is then being put to rest by the OM-doubling construction.

29) Q: *w-aá-l-iilé*　　　*ßúu-sumá*　　　(*kwéelí*)*?!?*
　　　2sgS-PST-eat-PFV　　14.14-ugali　　(really)
　　　'You ate ugali?!?'
　　　(question assumes this is unexpected in some way)

　　A: *n-aá-**ßu**-l-iilé*　　　*ßúu-suma.*
　　　1sgS-PST-14O-eat-PFV　　14.14-ugali
　　　'I DID eat ugali.'

Note, however, that the Lubukusu question in (29) has the same discourse constraints as the English translation – it can only be asked in the case that we have some evidence that you did in fact eat the ugali, and perhaps that it runs counter to our expectation in the situation (perhaps we know that the addressee doesn't like ugali at all). And in fact, OM-doubling is acceptable within a yes/no question itself in this same context, where the questioner finds the information being questioned surprising/unexpected (essentially the echo question/incredulity context in English):

30) a. *w-aá-**ßu**-l-ííle*　　　*ßúu-sumá?!?*
　　　2sgS-PST-14O-eat-PFV　　14.14-ugali
　　　'You ate ugali?!?' (not 'Did you eat ugali?')

　　b. *lionéeli　　k-aa-**ku**-lííle　　kúmú-tʃéele　　kwéelí?*
　　　1Leonell　1S-PST-3O-eat-PFV　3-3-rice　　　really
　　　'Leonell *really* ate the rice?!?' (not 'Did Leonell eat the rice?')

Again, this reveals both that the questioner has some information that the proposition in question is true, but also that they have previous expectations that bring the truth of that proposition into question. Note, however, that if an interlocutor poses a canonical yes/no information-seeking question, OM-doubling is infelicitous in both the question and the response:

31) Q: *w-aa-l-ííle*　　　*ßúu-suma?*
　　　2sgS-PST-eat-PFV　　14.14-ugali
　　　'Did you eat ugali?'

　　A1: *n-aa-l-ííle*　　　*ßúu-suma.*
　　　1sgS-PST-eat-PFV　　14.14-ugali
　　　'I ate ugali.'

A2: *#n-aa-**βu**-l-ííle*   *βúu-suma.*
    1sgS-PST-14O-eat-PFV   14.14-ugali
    'I DID eat ugali.'

OM-doubling in the response in (31)A2 is interpreted as putting unnecessary emphasis in the sentence, since the questioner wasn't doubting the issue, but was simply asking for information.[34] The persistent questioner of Peter in the biblical retelling in (28), in contrast, appears on the face of it to be seeking information, but the repeated questioning betrays to a listening audience that that the questioner already has strong suspicions and expectations that Peter was in fact with Jesus and knew him. And in fact, the interrogators in that story themselves could have OM-doubled their question, which would in effect strengthen the accusation, as a confirmation of their suspicions (cf. English *You **do** know this man, don't you?*).

It appears, then, that OM-doubling is licit when the proposition denoted by the sentence is already in the common ground and it is being called into question to some extent (whether having been explicitly added to the common ground via the discourse, or treated by the interlocutors as pre-existing in the common ground). A mere information question such as the one in (31) is insufficient to license OM-doubling. If OM-doubling is a verum construction and verum is necessarily an instruction to downdate $?p$ from the QUD, this instruction presupposes that $?p$ is the highest ranked issue in the QUD.

As we will see in the next section, doubt itself on the part of conversational participants is not a necessary precondition for OM-doubling, rather, doubt and confirmation are simply prominent examples of the more general conditions that a proposition be in the common ground and closely connected to the question under discussion.

3.1.3   OM-doubling as an expression of speaker confidence

As we can see in the examples that follow that are two-person exchanges, it is possible to deny another's assertion via OM-doubling.

32) A: *wéékésá*   *se-k-aa-nyw-ééle*   *ká-ma-lwá* *tá.*
      1Wekesa   NEG-1S-PST-drink-PFV   6-6-beer   NEG
      'Wekesa didn't drink the beer.'

   B: *wéékésá*   *k-aa-**ka**-nyw-ééle*   *ká-ma-lwa!*
      1Wekesa   1S-PST-6O-drink-PFV   6-6-beer
      'Wekesa DID drink the beer!'

The reverse situation is also acceptable, if A were to make the affirmative assertion that is then denied with a negated OM-doubling construction. It is not just denials that can license OM-doubling, however. As the examples below show, expressions of agreement with a preceding assertion also license OM-doubling (this is again true whether the agreement is with an affirmative or a negated clause, we illustrate with a negated clause here).

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[34] Speakers report that OM-doubling in response to a simple yes/no-question like this sounds like the respondent is being unnecessarily argumentative, and even sounds like they have a guilty conscience and are hiding something, since they are over-reacting to a simple question: protesting too much, as it were. This is similar to answering a yes/no question with emphatic *do* in mainstream American English, which likewise sounds unnecessarily argumentative.

33) A: *wéékésá   se-k-aa-nyw-ééle   ká-ma-lwá   tá*
      1Wekesa   NEG-1S-PST-drink-PFV   6-6-beer   NEG
      'Wekesa didn't drink the beer.'

  B: *yée,   wéékésá   se-k-aa-**ká**-nyw-ééle   ká-ma-lwá tá.*
      yes,   1Wekesa   NEG-1S-PST-6O-drink-PFV   6-6-beer   NEG
      (In agreement) 'Yes, Wekesa didn't drink the beer.'

The B speaker (who utilizes OM-doubling) is emphasizing their agreement with the A speaker, adding certainty. It is not just straightforward agreement then, but a sense of emphasis, that this is confirmed beyond any reasonable doubt (because B either has evidence to give a confirmation, or because B has pre-existing expectations that confirm the assertion).

     It seems, however, that the OM-doubled object has to be discourse-familiar, so a novel object introduced in the same denial context is insufficient to license OM-doubling.

34) A: *lionéeli   k-á-ly-a   βúu-suma.*
      1Leonell   1S-REM.PST-eat-FV   14.14-ugali
      'Leonell ate the ugali.'

  B: *#táawé, lionéeli   k-á-**ku**-ly-a   kú-mú-tʃéele,*
     no   1Leonell   1S-REM.PST-3O-eat-FV   3-3-rice

    se-k-á-ly-a   βúu-sumá   tá.[35]
    NEG-1S-REM.PST-eat-FV   14.14-ugali   NEG
    'No, Leonell DID eat the rice, he didn't eat the ugali.'

But when the object is familiar from the immediate context (again, with no other previous discussion or expectations in play here), the denials can occur with OM-doubling, as seen in B's extended denial in (35), and in the denial in (36).

35) A: *lionéeli   k-á-ly-a   βúu-suma.*
      1Leonell   1S-REM.PST-eat-FV   14.14-ugali
      'Leonell ate the ugali.'

  B: *táawé, lionéeli   k-á-ly-a   kúmú-tʃéele,*
     no   1Leonell   1S-REM.PST-eat-FV   3-3-rice

    *se-k-á-**βu**-ly-a   βúu-sumá   tá.*
    NEG-1S-REM.PST-14O-eat-FV   14.14-ugali   NEG
    'No, Leonell ate the rice, he didn't eat the ugali.'

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[35] This sentence does not sound natural without some prior mention of the rice.

36) A: *lionéeli k-á-ly-a βúu-suma.*
    1Leonell 1S-REM.PST-eat-FV 14.14-ugali
    'Leonell ate the ugali.'

  B: *táawé, se-k-á-**βu**-ly-a βúu-sumá tá.*
    no NEG-1S-REM.PST-14O-eat-FV 14.14-ugali NEG
    'No, he DIDN'T eat the ugali.'

It is clear, then, that the specific proposition denoted by the sentence in which OM-doubling occurs does not have to be repeated again in order for OM-doubling to be licensed (for example, an affirmative statement can be used to deny a negative, and vice versa). But at least the object has to be familiar in the context for doubling to be licensed (more on this below). What we see shared in all of these contexts, then—responding to listener doubt, denials, or affirmations—is that OM-doubling communicates a sense of confidence on the part of the speaker that their assertion is accurate, that OM-doubling relies on the assertion being closely related to information that is already in the common ground and is part of the QUD, and that OM-doubling is a conversational move to downdate the QUD (i.e. to put a matter to rest).

3.1.4 Existing Expectations/Common Ground is Crucial to license OM-doubling

In this section we briefly revisit the initial example from above to clarify some issues regarding the nature of speaker expectations in licensing OM-doubling. As can be seen in the exchanges in (37) below, the basic question 'did he read the book or the magazine?' is not on its own sufficient to license OM-doubling:

37) Q: *k-á-som-a síi-taβú namwé líi-kazéeti?*
    1S-REM.PST-read-FV 7.7-book or 5.5-magazine
    'Did he read the book or the magazine?'

  A1: *k-á-som-a líi-kazéeti.*
    1S-REM.PST-read-FV 5.5-magazine
    'He read the magazine.'

  A2: *#k-á-**li**-som-a líikazéeti.*
    1S-REM.PST-5O-read-FV 5.5-magazine
    'He DID read the magazine.'

But recall the full context that we introduced above:

> *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 <u>we both expect he will read the magazine</u>. So when we arrive, his mother asks, 'Did he read the book or the magazine?''*

The crucial element in this context is underlined above - that the parents enter with an expectation of what the child will do, so there is common ground that exists (the issue is already in question, or under discussion). It is this added common ground that then licenses an answer like (37)A2.

We see a similar kind of pattern in the example below, where relevant common ground is sufficient to license an OM-doubling construction:

38) Q: | *wéékésá* | *k-á-nyw-a* | | *káma-lwá* | *namwé* | *k-á-kusy-a* | | *tʃí-máito?* |
|---|---|---|---|---|---|---|---|
| 1Wekesa | 1S-REM.PST-drink-FV | | 6-6-beer | or | 1S-REM.PST-sell-FV | | 10-peanuts |

Did Wekesa drink beer or sell the peanuts?

A: | *#wéékésá* | *k-á-**ka**-nyw-a* | | *káma-lwa.* |
|---|---|---|---|
| 1Wekesa | 1S-REM.PST-6O-drink-FV | | 6-6-beer |

Wekesa DRANK the beer. / Wekesa DID drink the beer.
This response is felicitous in the context described below.

With no additional context, the exchange in (38) sounds anomalous and would be better answered without OM-doubling. But if the situation is that Wekesa is supposed to sell peanuts, but we know he likes drinking beer and relaxing instead of working, then the response in (38) is perfectly appropriate, as confirmation of the speaker's expectations. With these expectations, the question in (38) leaves the realm of a simple information question; the existing expectations mean that the question of whether or not Wekesa did in fact drink the beer has already been raised to maximal in the QUD by the mere asking of (38)Q, because our expectations in that regard raise the stakes of that aspect of the information question.

In both of these instances, therefore, we can see that it is not mere repetition of specific discourse material that licenses OM-doubling. Rather, this fits firmly in the framework of a verum analysis, where an existing proposition that is high on the list of issues considered relevant by interlocutors is put to rest by a sentence formed with an OM-doubling construction.

3.1.5 License OM-doubling by foregrounding VP/VP-constituents

There is an intuitive sense among speakers that the object is being emphasized in OM-doubling contexts, but the evidence suggests that the requirement is in fact VP-centric, so some component of the VP has to be specifically at issue in the exchange. The results in this section are provisional, as it's not clear to us precisely which pragmatic concepts appropriately capture the patterns we show here. At present, however, we rely on the (informal) notion of foregrounding vs. backgrounding to represent the ways in which the role of drawing participant's attention to particular constituents in a sentence affects the felicity of OM-doubling. For our purposes here, we take a backgrounded element to be one which is taken for granted, and a foregrounded element one which is not taken for granted. What we show here is that an object being familiar is not sufficient to license OM-doubling; rather, an object must also be foregrounded, clearly at issue in the exchange, in order for OM-doubling to be licit.

Our first set of examples here shows that if the subject of a clause is foregrounded, such that "who is the one that did X" is the foregrounded at-issue content. OM-doubling is degraded, even if the other conditions on OM-doubling are met.

Context: The ugali is gone, and we know that Wekesa is the one who loves ugali and Leonell rarely eats ugali.

39) Q: *lionéeli*   *k-á-ly-a*   *βúu-sumá,*
        1Leonell   1S-REM.PST-eat-FV   14.14-ugali

         namwé   *wéékésá*   *k-á-ly-a*   *βúu-suma?*
         or   1Wekesa   1S-REM.PST-eat-FV   14.14-ugali
         'Did Leonell eat the ugali, or did Wekesa eat the ugali?'

40) A1: *wéékésá*   *k-á-ly-a*   *βúu-suma.*
         1Wekesa   1S-REM.PST-eat-FV   14.14-ugali
         'Wekesa ate the ugali.'

   A2: *#wéékésá* *k-á-**βu**-ly-a*   *βúu-suma.*
         1Wekesa   1S-REM.PST-14O-eat-FV   14.14-ugali
         'Wekesa DID eat the ugali.'

This context serves to isolate alternative subjects of identical VPs in the different sentences as a contrast that is in question, to the exclusion of the VP (which is taken for granted here). What we see, then, is that while the VP must be in the Common Ground to license OM-doubling, it must also be foregrounded in the Common Ground as part of the question under discussion– OM-doubling becomes infelicitous if the VP is backgrounded and something else treated as the element that is at issue (here, *who* is it that ate the ugali). A similar pattern occurs when we can unambiguously target an entire proposition as the foregrounded question, backgrounding distinctions between particular sub-constituents within the clause:

Context: Lavendah usually reads with Leonell unless she (Lavendah) falls asleep early (and Leonell needs her to read to him, because he's young). The expectation between A and B is that Lavendah will fall asleep early, because she just got home from a trip today and is tired.

41) A: *lionéeli*   *k-á-som-á,*   *namwé*   *lavéenda*   *k-á-kon-a?*
        1Leonell   1S-REM.PST-read-FV   or   1Lavendah   1S-REM.PST-sleep-FV
        'Did Leonell read, or did Lavendah fall asleep?'

   B1: *lavéenda*   *k-á-kon-a*   *líi-lo.*
         1Lavendah   1S-REM.PST-sleep-FV   5.5-sleep
         'Lavendah slept a sleep.'

   B2: *#lavéenda*   *k-á-**li**-kón-a*   *líi-lo.*
         1Lavendah   1S-REM.PST-5O-sleep-FV   5.5-sleep
         'Lavendah DID sleep a sleep.'

Here we see that if we are raising a question that compares two whole clauses, OM-doubling

is ruled out. It appears, then, that OM-doubling in some way needs to distinguish between constituents within a clause. So if the exchange is continued by a third party:

If the exchange continues:

   C: *lavéenda*   *k-á-**li**-kón-a*   *líi-ló?!?*
         1Lavendah   1S-REM.PST-5O-sleep-FV   5.5-sleep
         'Lavendah slept a sleep?!?'

   B: *ee,*   *lavéenda*   *k-á-**li**-kón-a*   *líi-lo.*
         yes, 1Lavendah   1S-REM.PST-5O-sleep-FV 5.5-sleep
         'Yeah, Lavendah slept a sleep.'

C's comment (as a third participant in the interaction here) essentially serves to promote the VP itself as a prominent (foregrounded) aspect of the question under discussion, whereas previously the question under discussion was two contrasting propositions, with the VP itself not sufficiently foregrounded to allow for OM-doubling (as shown in B2). As we have seen before, OM-doubling downdates the (maximal) question under discussion; what we see here is that if the VP itself is not foregrounded, OM-doubling is anomalous.

    If the content of the VP itself is foregrounded as the at-issue content, OM-doubling is completely natural.[37]

42) A: *wéékésá*   *k-á-som-a*   *síi-taβu.*
       1Wekesa 1S-REM.PST-read-FV   7.7-book
      'Wekesa read the book.'

   B: *see-n-dí*   *ne*   *βuu-ŋálí*   *ne-k-á-xol'*   *áá-ryó*   *tá.*
        NEG-1sgS-be with   14.14-certainty   if-1s-REM.PST-do 1-thus   NEG
        'I'm not sure whether he did so.'

   A: *yee,* *wéékésá*   *k-á-**si**-sóm-a*   *síi-taβu.*
        yes, 1Wekesa   1S-REM.PST-7O-read-FV 7.7-book
        'Yes, Wekesa DID read the book.

As we can see from the examples below, OM-doubling is licit even with distinct tense-marking in the triggering context and in the OM-doubling context, suggesting that tense itself is not crucially part of what must be foregrounded in the QUD to license OM-doubling:

43) A: *wéékésá*   *se-k-á-som-a*   *síi-taβú*   *tá.*
       1Wekesa NEG-1S-REM.PST-read-FV   7.7-book   NEG
      'Wekesa didn't read the book.'

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[37] A reviewer asks if verb focus generates OM-doubling: it does not. Contrastive focus on the verb alone, for example, requires prosodic stress on the verb (it appears to be specifically on the macrostem, though that requires further investigation).

B: *wéékésá   a-xá-**si**-sóm-é   síi-taβu.*
1Wekesa   1S-FUT-7O-read-FV   7.7-book
'But he WILL read the book!'
(Gives a clear sense of assurance that he will read it.)

What we see from these patterns, then, is that it is not sufficient that the content of a VP (or an object itself) simply be in the common ground for OM-doubling to be licit – the VP must also be directly and clearly treated as at-issue content. But it is also clear from this evidence that the VP or the object itself must be foregrounded in order for OM-doubling to be licensed: contexts that unambiguously foreground the subject or the entire proposition as the maximal QUD do not license OM-doubling. It is not clear to us how precisely to formalize this notion of "foregrounded" vs. "backgrounded" constituents, especially in the context of a proposition necessarily in the common ground, so at present we will have to let the empirical facts stand for themselves on this particular issue, leaving a precise formalization to future research.

3.2   Intermediate Summary: The Conditions on Lubukusu OM-doubling

Given all of this preceding discussion, we have arrived at the generalizations in (44) regarding the distribution of OM-doubling in Lubukusu:

44)   Conditions on Lubukusu OM-doubling
    i.   The proposition uttered is relevant to the question under discussion (QUD).
        i.   Specifically, some component of the verb phrase is foregrounded,
        ii.   Evidenced by the fact that OM-doubling is infelicitous if the foregrounded material is unambiguously a whole clause or the subject.
    ii.   The verb phrase described is in the common ground, though not necessary the entire proposition, because:
        i.   OM-doubling is independent of negation
        ii.   OM-doubling is independent of tense
    iii. OM-doubling asserts a speaker's certainty that the proposition should be added to the common ground
        i.   In a denial of a proposition
        ii.   Addressing doubt about an issue under discussion
        iii. In agreeing with a preceding assertion
    iv.   OM-doubling is a conversational move to put the issue to rest, to end the discussion on the matter.[38]

The next step, of course, is to reconsider what this means for a syntactic analysis of Lubukusu object marking, and offer a solution. Before we do that, however, we want to briefly look at some cross-linguistic parallels to consider the relative novelty of the data patterns described here and to clarify the analytical puzzle that they pose.

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[38]Intuitively speaking, in the context of a debate the person defending themselves or a point is the one putting an issue to rest; an 'accuser' can use OM-doubling to strengthen their accusation (as with the verum focus *do* in English: *You DID eat my carrots, didn't you?!*). This is an instance of confirming previous expectations/suspicions, as mentioned in the discussion above.

3.3 Use-Conditional Items and Lubukusu OM-doubling as VERUM

There are in fact a wide variety of phenomena like this Lubukusu case: grammaticized constructions whose interpretations directly bear on maintenance of common ground in some way. These are items or constructions generally considered to contribute meaning in a domain distinct from truth-conditional meaning, often referred to as either expressive meaning, non-truth-conditional meaning, use-conditional meaning, or referred to as meaning that is "not at issue" (cf. Potts 2012, Gutzmann and Castroviejo Miró 2011, Gutzmann 2013): we will follow Gutzmann 2013 in referring to these lexical items and constructions as *use-conditional items* (UCIs). Familiar examples of UCIs include discourse particles (e.g. German *ja*, *wohl*), expressive epithets (*that damn cat*), and appositives, among others. As discussed throughout the preceding sections, of the many sorts of expressives that contribute "not at issue" meanings, the closest parallel to the Lubukusu case is verum.

While English encodes verum with the emphatic *do* auxiliary, it is realized in other ways cross-linguistically. Nupe (Benue-Congo, central Nigeria) offers two distinct strategies for re-assertions that are contingent on discourse context (which Kandybowicz 2013 refers to as *emphasis*). One is the peripheral particle *ne:* and the other is a verb-doubling strategy (Kandybowicz 2013: 52):

45)   Musa gí   kinkere ni:
        Musa eat scorpion ni:
        '(I assure you) Musa DID eat the scorpion.'

46)   Musa gí   kinkere   gí.
        Musa eat scorpion eat
        '(Apparently) Musa DID eat the scorpion.'

Kandybowicz demonstrates that the two constructions show distinct properties with respect to those scope of their emphasis, among other things, concluding that the verb doubling construction arises from verb movement to a low emphasis head located between T and *v*.

Hartmann (2013) shows that verb positions in South Marghi (central Chadic, spoken in northern Nigeria) vary based on the class of sentences that are capable of expressing verum. She also shows that this restriction correlates with similar patterns in other Chadic languages, where Hausa uses different auxiliary forms for the same classes of sentences, and an overt verum morpheme in Bura is restricted from occurring in those same sentences. The takeaway for our concerns here is that the expression of verum (and similar kinds of use-conditional interpretations) can take a variety of different morphosyntactic realizations crosslinguistically and is introduced by a range of syntactic restrictions as well.

Many researchers working on constructions like verum have concluded that a semantic operator in the syntactic structure carries the relevant interpretive content (Höhle 1992, Romero and Han 2004). However, G&CM (2011) point out that in verum sentences it is not possible to deny the speaker-certainty aspect of the verum interpretation, suggesting that the operator in question ought not be strictly semantic in nature. Therefore in the examples in (47)-(48) (reproduced from G&CM: 153), it is possible to deny the propositional content of a verum assertion but not the speaker-certainty portion.

47) **Denial of the assertion** *that p*
    A: Karl schreibt ein Buch.
      'Carl is writing a book.'
    B: NO, that's not true. (Carl is not writing a book)

48) **Denial of the verum-assertion** *that p*
    A: Karl SCHREIBT ein Buch.
      'Carl IS writing a book.'
    B: NO, that's not true.
      (Carl is not writing a book; #You are not sure that he is writing a book)

The point being, of course, that the speaker-certainty aspect of the meaning of verum is non-deniable, evidence that it is a non-propositional sort of meaning—not part of the assertion of the sentence. As can be seen in the example below, this same pattern is true of Lubukusu: in an argument you can contest the propositional content, but the certainty of the speaker that is evident via OM-doubling cannot be felicitously denied:

49) A. *wéékésá*   *k-á-**si**-sóm-a*   *síi-taβu!*
     1Wekesa   1S-REM.PST-7O-read-FV   7.7-book
     'Wekesa DID read the book!'
     (in an appropriate context)

   B: *se-βú-lí*   *βúú-ŋálí*   *tá!*
     NEG-14S-be   14-14-truth   NEG
     'That's not true!'
        ✓It's not true that Wekesa read the book.
        # It's not true that you are certain of that.

We continue to see, then, that the properties of Lubukusu OM-doubling pattern with familiar verum patterns: OM-doubling is infelicitous in what we referred to previously as neutral discourse contexts (instead requiring specific sorts of material to be familiar in the discourse context), OM-doubling downdates the QUD, it reinforces a speaker's confidence that a proposition belongs in the common ground, and as seen here its interpretive component is non-truth-conditional, as it cannot be felicitously denied.

    G&CM conclude that verum is in fact multi-dimensional, a conversational operator that explicitly interfaces between the propositional content of a clause and the felicity conditions of the conversation where it is uttered. They propose that the verum operator essentially consists of an instruction by the speaker to downdate the QUD (as discussed above). As for the empirical properties of verum beyond the use-conditional discourse content and the QUD-downdate themselves (e.g. dependence on familiarity from context and the sense that verum denotes a speaker's confidence that a proposition be added to the common ground), G&CM derive these from basic conversational logic deriving from the components of the multi-dimensional operator with QUD-downdate semantics.[39]

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[39]We refer the reader to G&CM for details, as a full derivation of interpretive effects and the theoretical consequences of this approach to use-conditional meaning are not at issue in this particular paper.

Hartmann (2013) and Kandybowicz (2013) both assume a conversational operator along the lines of the one described above. We will assume a similar kind of approach, as it captures well the pattern of Lubukusu facts. If we assume something similar to the verum operator proposed by G&CM, the main analytical problems are to identify the precise felicity conditions on Lubukusu OM-doubling (as we have already done in (44)) and to establish how this operator is introduced in the syntax such that it produces OM-doubling, which we do in the following section (we will claim in what follows that this verum operator is introduced in an Emphasis head in the syntax, which triggers OM-doubling). OM-doubling in Lubukusu shows much the same distribution as verum in related languages (cf. Hartmann 2013, Kandybowicz 2013, Gutzmann 2013). Despite the parallels, however, the Lubukusu OM-doubling patterns described here are a novel verum phenomenon (to our knowledge) where verum is marked by a clitic-doubling operation inside the verb phrase.[40]

To restate what should be obvious by this point, many of the constraints on Lubukusu OM-doubling should best be analyzed as *pragmatic* in nature: use-conditions introduced by the verum operator rather than explained by any syntactic restrictions. Therefore the distribution of Lubukusu OM-doubling is a mix of pragmatic and syntactic patterns. We expect that future research on the pragmatics of Lubukusu OM-doubling will serve to further clarify, expand, and refine the analysis of the felicity conditions we presented above, but at the very least the broad strokes of an analysis are clear.

3.4 Two analytical options for Lubukusu

There still remains the syntactic question of how precisely the OM-doubling constructions are generated in the syntax. What connection is there between the interpretive effects of OM-doubling and the syntactic mechanisms that generate it? Or, put another way, what about the presence of the verum conversational operator triggers OM-doubling?

There are (at least) two distinct analytical options for solving the puzzle of Lubukusu OM-doubling. The first is that the felicity conditions on uttering an OM-doubling sentence are represented directly in the syntax, in some way triggering OM-doubling. This is the account we have already begun to argue for, and will argue for below. It's worthwhile to briefly entertain an alternative approach, and to discuss its shortcomings; in doing so the role for a syntax-based explanation is clarified.

The prominent alternative approach is that the felicity conditions regarding OM-doubling are entirely post-syntactic—on this account OM-doubling is discourse-constrained, but is not in fact syntactically constrained. From this perspective, OM-doubling would be recognized by some metric as a more marked form, and therefore would acquire particular interpretations based on the long-familiar process of conversational implicature (Grice 1975). The most critical reason to move toward the first (syntax-based) option and away from the post-syntactic Gricean analysis, however, is that conversational implicatures are well known to generate a range of interpretations based on specific context. So saying 'it's cold in here!' means something different if you walk with a friend into a restaurant that over-uses their air-conditioning , as opposed to if your roommate opens a window in January. The former situation is simply an observation of fact (and perhaps a move to elicit sympathetic feelings from a friend), whereas in the latter case, it is quite straightforwardly an instruction to the roommate to close the window.[41]

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[40] Ongoing work by Diercks suggests that some varieties of Lutirichi (also known as Tiriki; a related Luyia Bantu language) have a similar sort of pattern of OM-doubling-as-verum.
[41] Our thanks to Jesse Harris for his thoughts on these analytical options.

This kind of variability in the speaker's meaning based on context (rather than denotational meaning of an utterance) is not uncommon with conversational implicatures, but does not seem consistent with the kinds of pragmatic meanings available in Lubukusu object marking. Rather, OM-doubling appears to have a very restricted set of interpretations, those described in what precedes. It is of course impossible to prove the absence of such kinds of variable implicatures, but we have no evidence that using OM-doubling in a different physical or social context shifts the nature of its interpretation (see Gutzmann 2013 for a similar sort of argumentation about other use-conditional items).[42]

This nonetheless leaves us with the puzzle in Lubukusu of how to distinguish non-doubling object marking from doubling object marking. If a specific syntactic structure is responsible for the doubling of an OM and an object (and, in doing so, generates the verum-like interpretations) this would predict that the two kinds of OMs (doubling and non-doubling) should be non-identical in their syntactic properties (because whatever the doubling-triggering syntactic structures are, they must *not* be present in non-doubling contexts). In the next section we lay out explicitly our proposals regarding the generation of doubling and non-doubling OMs, and give evidence that doubling OMs are syntactically distinguishable from non-doubling OMs.

4 Syntactic Analysis: Two OMs in Lubukusu (and some supporting evidence)

Recall the empirical conclusions we've arrived at to this point: OM-doubling is ruled out in neutral discourse contexts (including declaratives, object questions and object clefts, and object relative clauses). The major exception to this pattern is that OM-doubling is possible in verum contexts, distinguished by the set of felicity conditions laid out in (44). Here we will propose and defend the analysis that the pragmatics of OM-doubling constructions are in fact represented syntactically via a syntactically-represented verum operator, and that this generates OM-doubling contexts via an Agree relation. This is distinct from our proposal for non-doubling OMs, which is a pronoun movement/incorporation operation. This analysis results in syntactically-distinct OMs in Lubukusu (doubling vs. non-doubling), and we show that these OMs do in fact show distinct properties with respect to the number of OMs available and symmetry effects in multiple object constructions.

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[42] We have thought of one example that could challenge this claim. Consider this contrast:

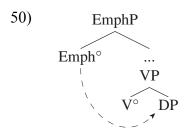| i. *O-many-ile*	*o-mu-khasi yu-no*?!	vs	ii. *O-**mu**-many-ile*	*o-mu-khasi yu-no?!*
2sgS-know-PFV	1-1-woman 1-DEM		2sgS-1O-know-PFV	1-1-woman 1-DEM
'Do you know this woman?!'			'Do you know this woman?!'	

Whereas (i) only seeks for information (perhaps with a bit of surprise that you may not know her), (ii) is only ok if it implies that the speaker knows something about the woman that is out of the ordinary- whatever it is will be determined by the context in which the question is uttered; at a political rally, it may be referring to an unexpected connection between you and a famous person; in a college, it may imply that the woman is a great scholar. We assume this is amenable to our current claims on the assumption that OM-doubling requires common ground, and a presumption of common ground by a speaker can itself establish a line of pragmatic reasoning by a fellow interlocutor to establish what the presumed common ground must be. That is to say, pragmatic implicatures are not necessarily ruled out in OM-doubling constructions, but that the canonical use of the construction is more restricted than a conversational implicature is expected to be.

4.1   The syntax of Lubukusu object marking

We follow Kandybowicz (2013) in assuming an emphasis head low in the clause structure that houses the verum operator in Lubukusu.[43] This projection is where the verum operator enters the syntax as well: at present, we simply assume that the Emph head itself is the verum operator, but the operator could just as well be assumed to enter the syntax merged as a phrasal category with EmphP. With regard to the syntax of the Emphasis head, we claim that it bears unvalued phi features in Lubukusu, and when the Emphasis head is merged in a sentence those phi features probe their c-command domain looking for a goal (a canonical Agree relation, see Chomsky 2001 and much following work). The resulting Agree relation results in the realization of an object marker that is incorporated into the verb when the verb raises past this position.[44]

50)

We assume that the agreed-with DP then raises to Spec, EmphP, in accordance with broad observations that agreement co-occurs with movement in Lubukusu and many other Bantu languages (Baker 2008, Carstens 2005, Collins 2004).[45] Overall, then, our analysis of OM-doubling is quite familiar—agreement between a functional projection and a noun phrase, triggered by unvalued features on the functional projection. The only distinguishing factor in this instance is that the functional head in question is a verum operator that triggers the pragmatic effects that heavily constrain the availability of the agreement relationship in actual everyday conversation. We will argue that this Emphasis head is syntactically low, below vP, but reserve that discussion until the relevant evidence is encountered below.
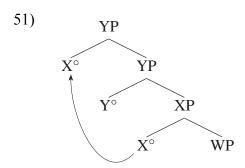
On the other hand, when an emphasis head is not present, OM-doubling is not possible (with the empirical correlate being the lack of OM-doubling in non-verum contexts). We propose that this is the case because v does not bear unvalued phi-features in Lubukusu, and therefore does not probe nor be valued for the phi-features of an object. Instead, OMs are weak, unstressed pronouns that raise to the edge of vP and undergo an m-merger process to become a complex head together with v.[46]

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[43] Kandybowicz (2013) draws a clear link between the emphatic constructions in Nupe and verum phenomena more broadly, while pointing out that at least some of the Nupe constructions do not *necessarily* trigger verum interpretations.
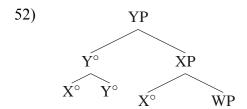
[44] Diercks (2011a) argues that verbs raise in Lubukusu, accounting for a subset of locative inversion constructions.

[45] This movement linked with agreement also helps resolve a particular issue with the loss of symmetry effects that we address below.

[46] Given this explanation, the crucial set of assumptions that controls the presence or absence of OM-doubling is simply "Emph bears phi-features, and v does not." In one sense, this is a bald stipulation that is not terribly informative on its own. But this is in fact a very familiar situation within the world of Bantu syntax, where some languages (Lubukusu, Chokwe) have agreeing complementizers where others (Swahili, Lutirichi) do not, or where some languages show agreement on manner wh-phrases (Lubukusu, Idakho) where others (Swahili, Lutirichi) do not. At least at this point, there does not seem to be a systematic theory of why some sorts of functional projections bear phi-features when others do not, and it may be that such a theory never arises if there is no deeper explanation other than historical accident.

For this process, our analysis here will build on the work of Kramer (2014) and Harizanov (2014) to provide a mechanism for deriving the 'pronoun incorporation' sort of object marking that occurs in Lubukusu.[47] Harizanov and Kramer both offer analyses of clitic doubling that critically rely on Matushansky's (2006) proposals for deriving head movement. Matushansky proposes that head movement is not a primitive of UG, and is instead derived by movement of a head to a specifier position, as shown in (51) (schematics borrowed from Matushansky 2006, Kramer 2014):

51)

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.
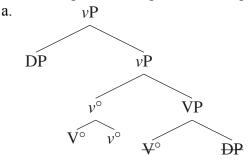
52)

Matushansky (2006) suggests in a short discussion that clitics may well be dealt with in this manner, 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 raises to Spec,TP and undergoes m-merger to form a complex head at T (made possible by the assumption that a clitic is simultaneously a minimal and maximal projection, DP/D, capable of phrasal movement but also m-merger).
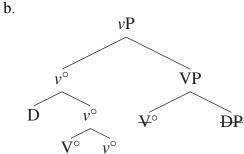
Both Harizanov and Kramer take advantage of this m-merger mechanism, but claim not only that clitics may undergo movement and then m-merger, but also that clitic doubling occurs when the entire DP object moves to Spec, vP, followed by m-merger of that DP with v. The new proposal in this regard is that phrasal elements, not simply minimal categories, are capable of undergoing m-merger.

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

53) Clitic doubling via m-merger of DP in Spec, *v*P (Kramer 2014: 22)

a.
```
                vP
          _____|_____
         DP           vP
                 _____|_____
                v°           VP
              __|__      ____|____
             V°   v°    V°       D̶P̶
```

b.
```
                  vP
            _____|_____
           v°           VP
        ___|___      ___|___
       D      v°    V°     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 m-merged with *v* (see Nunes 2004).[48] 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).
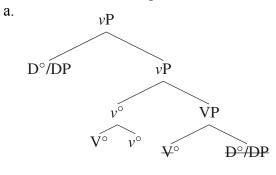
Implicit in both Kramer's and Harizanov's accounts is that the approach to clitic doubling schematized in (53) is reliant not just on m-merger, but also on a mechanism capable of reducing the DP to a truncated structure (D) that is capable of forming a complex head, whether this reduction operation occurs preceding or simultaneously with m-merger (Kramer, personal communication). Recent work by Baker and Kramer (2016) explicitly articulates this as the *Reduce* operation, which they specifically claim reduces a copy of an XP to only its head X, a pronoun (with the pronoun being dependent in interpretation on the XP).[50] Our claim is that the cliticization mechanism for non-doubling OMs in Lubukusu is essentially the same as proposed by Harizanov and Kramer and outlined in (53) above, with the critical exception being that Lubukusu lacks Reduce, the mechanism for converting a full DP to a reduced form so that it can undergo m-merger with *v* (similar to Matushansky's proposal for Romance clitics at T). Indeed, Baker and Kramer (2016) and Baker (2016) claim (in part based on the Lubukusu facts reported here) that the Reduce operation is not available in every language. The result, then, is that full DPs are incapable of undergoing cliticization in Lubukusu, as they are incapable of being
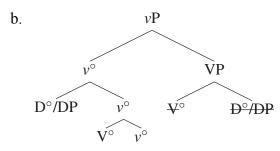
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[48] Note that this is the same story given for these facts and for doubling of a reflexive marker and an object anaphor by Sikuku (2012).

[50] We cite this specific manuscript of this work, as later versions of Baker and Kramer's paper removed discussion of *Reduce*; we retain the discussion here because of its value making assumptions explicit that are implicit in Kramer's (2014) and Harizanov's (2014) work (and which are, quite clearly, central to the analysis of Lubukusu).

reduced to an element that can form a complex head. Only categories that are simultaneously minimal and maximal categories (small pronouns) may do so.

54) Derivation of non-doubling OMs in Lubukusu

a.

```
                    vP
              _____|_____
             |             |
           D°/DP           vP
                       ____|____
                      |         |
                     v°         VP
                   __|__      __|__
                  |     |    |     |
                 V°    v°   V°    D°/DP
```

b.

```
                         vP
                    _____|_____
                   |           |
                  v°           VP
              ____|____      __|____
             |         |    |       |
           D°/DP      v°   V°      D°/DP
                    __|__
                   |     |
                  V°    v°
```

In (54)a we see the process familiar from above: the D/DP object marker is first merged in argument position, and as the derivation proceeds, it raises to the edge of the *v*P phase (the D head here being simultaneously a maximal and minimal category, following Matushansky 2006). At this point m-merger applies, and (54)b shows the result, where D/DP has become a complex head with *v*, cliticized onto the verb. In principle, then, these 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 *Reduce*, the operation to reduce a higher copy of the object to a smaller form that can undergo m-merger. Lubukusu does not reduce a full DP to D in the process of undergoing m-merger, and therefore clitic doubling is ruled out for this object marking mechanism.

Both Kramer and Harizanov assume that an Agree relation precedes A-movement of the object DP to the edge of *v*P (and the resultant m-merger). We assume, however, that little *v* lacks phi-features and does not undergo an Agree relation, largely because we regularly see phi-feature agreement on a wide range of functional projections in Lubukusu (and Bantu languages more generally), but given the lack of OM-doubling in neutral contexts in Lubukusu, it would be difficult to explain how little *v* is lacking phi-features just in instances where there is a lexical DP object. Rather, we assume that little *v* always lacks phi features.[51]

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[51] See Hiraiwa (2001) for a proposal on the dissociation of movement and agreement. It is notable, however, that we propose a dissociation of Agree and movement at the *v*P level when a clear association of movement and Agree is a hallmark of many Bantu languages, as discussed above (with Lubukusu sharing the relevant properties that motivated such proposals). We are not particularly troubled given that the behavior of object clitics is very different than all of the subject-oriented agreement patterns that motivated the previous Agree-theoretic work. That said, it does raise questions for the viability of a macro-parametric approach to such issues. Even so, proposing movement purely for EPP reasons does not actually contradict the approaches of Baker (2008), Carstens (2005), or Collins (2004) which proposed properties of Agree, rather than properties of EPP.

Why, then, does the OM pronoun raise to the edge of vP? We assume that as a weak pronoun necessarily exits the vP, similar to the obligatory object shift of weak pronouns in Germanic languages, where weak pronouns and specific objects undergo a short movement exiting the verbal domain to a low position in the inflectional structure (Diesing 1992; Vikner 1994, 2006; among many others).[52] There are many different ways this could be formalized: EPP on v, some featural requirement of pronouns, or various other approaches. Our research so far does not give a clear indication preferring a specific account, so at present we simply assume it is an object shift operation similar to those in many languages, leaving the details to be formalized in the future. To the best of our understanding, any proposal that locates an object-shifted pronoun at the edge of vP would explain our proposals here.

What we find, then, is that this analysis is not entirely dissimilar from a traditional head movement analysis of pronoun incorporation (where the complement of V head-moves into V, see Baker 1988b, Travis 1984), but on a more nuanced view where head movement is derived by phrasal 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. First, the m-merger approach to incorporation addresses the data that will be seen in the next section where an undoubled object marker on a Lubukusu verb may come from postverbal arguments in a variety of positions, not simply from the complement of the verb (i.e. the symmetry of object marking where either object in a ditransitive may be OMed). 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 of vP followed by m-merger in fact predicts that any argument within vP could in principle 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 strict locality that the head-complement relationship is.[55]

Taking a step back, we see that these two mechanisms for generating an OM in Lubukusu means that doubled OMs and non-doubled OMs are not identical sorts of syntactic elements— doubled OMs arise via agreement on the Emph head, and non-doubled OMs arise via movement of an OM (a weak pronoun/clitic) to the edge of vP, followed by m-merger.[56] This distinction is

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[52] The correlations between free pronouns and OMs are discussed in more depth in section 4.4 below.

[55] 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 Baker et al (2013) for a discussion of symmetricality in Lubukusu. See also Schneider-Zioga (2014) and Richards (2010) on linkers (also discussed in what follows) as these offer additional relevant approaches to symmetricality. None of these approaches, however, escape the core criticism of a traditional head-movement analysis of OM-incorporation, which critically depends on a head-complement relation that—given prevailing current assumptions—is only available to one argument.

[56] A reviewer raises some important morphological questions: First, are there any morphological differences between the two OMs? To our knowledge, there are none, which raises a second question: how are two different feature bundles (phi features on Emph, and phi features on a D head) realized as the same morphological form? We assume a post-syntactic insertion of morphological forms, and that OMs are underspecified, consisting only of phi features defined contextually – that is to say, when a phi feature bundle is morphologically attaching to a verbal stem (VP/vP), it will be spelled out as an object marker. For reference, the Vocabulary Item in a Distributed Morphology formalism would look something like this: [class 1] ↔ /m-/ / {vP/VP}. The context dependency of cliticizing to the verbal stem would be what would distinguish phi-features from subjects and phi-features from objects, at least in a system where Case-licensing does not do so (cf. Diercks 2012).

useful because it explains why doubling only appears in verum contexts, as it only appears when the Emph head is present. But it also predicts that there ought to be syntactic differences between the two sorts of OMs. Given the restricted range of contexts that each sort of OM occurs in, there are not a wide range of diagnostics available to distinguish them, but as we will see in the following sections there are nonetheless clear differences in the syntactic properties of doubled and non-doubled OMs.[57]

4.2 Constraints on the number of OMs

4.2.1 Restrictions to a Single OM

In Lubukusu only a single OM can occur on the verb in most instances, demonstrated in (56) below with examples from the preceding benefactive DOC:

55)   *wéékésá*   *k-á-teex-el-a*   *náánd ʒálá*   *ßy-áxúlya.*
   1Wekesa   1S-REM.PST-cook-AP-FV   1Nanjala   8-food
   'Wekesa cooked Nanjala food.'

56) a. **wéékésá*   *k-á-ßi-mu-teex-el-a*
    1Wekesa   1S-REM.PST-8O-1O-cook-AP-FV
    Intended: 'Wekesa cooked her it.'

   b. ***wéékésá*   *k-á-mu-ßi-teex-el-a*[58]
    1Wekesa   1S-REM.PST-1O-8O-cook-AP-FV
    Intended: 'Wekesa cooked her it.'

This kind of restriction varies cross-linguistically within the Bantu family; languages like Kuria, Sambaa, and Kinyarwanda readily allow multiple OMs to appear on the verb, but other languages like Lutirichi and Llogoori regularly restrict their verbal forms to a single OM (Diercks et al 2014, Riedel 2009a, see Marlo 2014, 2015a, b).

   This single OM restriction is mitigated, however, by OM-doubling. Specifically, when an object is doubled, the presence of two OMs on the verb is much improved, albeit still somewhat marginal.

57)   *?wéékésá*   *k-á-ßi-mu-teex-el-a*   *naaŋdʒala*
   1Wekesa   1S-REM.PST-8O-1O-cook-AP-FV   1Nanjala
   'Wekesa DID cook it (food) for Nanjala.'

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[57] Baker and Kramer (2016) specifically propose that clitics are distinguished from agreement operations by virtue of being generated by their Reduce operation, and that clitics and agreement affixes ought primarily be distinguished by their (in)ability to occur in doubling contexts with particular kinds of objects (clitic doubling is ruled out with particular sorts of quantified phrases, object anaphors, wh-objects, and non-specific/indefinite objects). Having encountered their work very late in this paper's publication process (and with this paper sufficiently long as is) we have not tested these predictions for the two OM derivations we propose here, but (presuming their proposals are correct) this predicts that OM-doubling with verum focus ought to be possible in the contexts listed above, as that is a characteristic of object agreement by their metric. We leave this as an avenue for future research.
[58] Examples annotated with two asterisks (**) are judged to be especially bad. We don't know what (if any) significance there is to this at present.

It is clear that there is still some kind of general constraint restricting the number of preverbal OMs, as two OMs in this context is not completely natural. But what is notable for us here is that there is a very notable improvement in acceptability with two OMs on the verb when one of them is doubled. Significantly, doubling both OMs brings back the strong unacceptability.

58) *wéékésá k-á-βi-mu-teex-el-a   náándʒálá βy-áxúlya
   1Wekesa 1S-REM.PST-8O-1O-cook-AP-FV 1Nanjala 8-food

We interpret this as our initial evidence that there is in fact a syntactic distinction between doubled OMs and non-doubled OMs, which is strongly suggestive that there is some syntactic mechanism that enables OM-doubling in a separate manner from non-doubling object marking. This difference is explained readily if there are two different cliticization sites for the doubling OM and the non-doubling OM. The non-doubling OM incorporates at little v, and the doubling OM arises at the Emph head where there the conversational operator resides that triggers the particular discourse interpretations that OM-doubling triggers. Thus two non-doubling OMs are strongly ruled out due to basic complementary distribution, and likewise for two doubling OMs.[59] The next two subsections show that this pattern is in fact replicated in other instances in Lubukusu, where marking objects on the verb is possible just in case they arise at different positions.

4.2.2   A Parallel situation: the interaction of OM and RFM

Sikuku (2011, 2012) points out that it is possible for an object marker and a reflexive marker (RFM) to co-occur in Lubukusu, but only under certain circumstances. Standard reflexive predicates in Lubukusu are marked with an object-marker-like verbal prefix [*i-*][60], which occurs in the same position as object markers, and which is generally in complementary distribution with object markers, as illustrated in (59).

59) a. *w-ee-síing-aang-a*   (*wá-mw-eene)*
    2sgS-RFM-wash-IPFV-FV (2sg-1-self)
    'You wash yourself.'

  b. **o-xw-ee-siing-aang-a*
    2sgS-2sgO-RFM-wash-IPFV-FV
    'You wash yourself.'

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. Sikuku (2012) also shows that OMs and RFMs share the characteristic of appearing in nominalizations.

  Given these similarities, among others, we follow Sikuku (2012) in analyzing the RFM as an incorporated pronominal form derived by cliticization mechanisms similar to what we

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[59] This line of argumentation is tempered by the fact that two preverbal OMs are still somewhat marginal (which we are forced to assume is due to some basic morphological/templatic restrictions), but the intuitions are very clear that these sentences are much improved if one of the OMs is doubled.
[60] The RFM also surfaces as [*e-*], in a phonologically-conditioned alternation.

proposed above. 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 the OM and the RFM could in fact co-occur, if a context could be constructed where the RFM and the OM did not originate from identical positions. As it turns out, this is in fact the case.

The complementarity in distribution is only present if a verb is a simple 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.

60)   *k-á-β-e-ir-isy-a*
        /a-a-ba-e-ir-isy-a/
        1S-REM.PST-2O-RFM-kill-CAUS-FV
        'He made them$_k$ kill themselves$_k$.'

61)   *wéékésá   k-á-mw-ii-siim-isy-a*
        1Wekesa   1S-REM.PST-1O-RFM-like-CAUS-FV
        'Wekesa$_i$ 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 continues to be ruled out.

62)   **k-á-βa-mw-ir-isy-a*
        1S-REM.PST-2O-1O-kill-CAUS-FV
        'He made them kill him.'

63)   **wéékésá   k-á-mu-βa-siim-isy-a*
        1Wekesa   1S-PST-1O-2O-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 (60) and (61). 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, of which there remains a single head even in causative constructions, meaning that only a single OM may occur (we assume this head to be *v* in this paper).

4.2.3   Another Parallel: Locative objects

Another instance of different syntactic positions generating multiple object clitics comes from locative clitics. In Lubukusu locative phrases are not pronominalized by a pre-stem object marker, rather by the postverbal clitic. In fact, any non-subject pronominalization of a locative object is realized as the postverbal locative clitic. This gives rise to an interesting asymmetry regarding multiple object marking, illustrated below with the verb *–ekesya* 'show'. As

demonstrated in (64), either object of the verb –*ekesya* may be OMed, both the benefactive applied object *Lioneeli* (b) and the direct object *lusimu* 'phone' (c).

64) a. *n-éekesy-a*　　　　　　*lionéeli*　　　*lúú-síimu.*
　　　1sgS-rem.PST-show-FV　　1Leonell　　11.11-phone
　　　'I showed Leonell the phone.'

　　 b. *n-á-mw-eekesy-a*　　　　*lúú-síimu.*
　　　1sgS-REM.PST-1O-show-FV　　11.11-phone
　　　'I showed him the phone.'

　　 c. *n-á-lw-eekesy-a*　　　　*lionéeli.*
　　　1sgS-REM.PST-11O-show-FV　1Leonell
　　　'I showed it to Leonell.'

As shown in (65), however, it is impossible to object-mark both objects – either order of the two preverbal OMs from (64) is ungrammatical. This is the expected result, given the generalizations established thus far.

65) a. **n-á-mu-lw-eekesy-a*
　　　　1sgS-PST-1O-11O-show-FV

　　 b. ***n-á-lu-mw-eekesy-a*
　　　　1sgS-PST-11O-1O-show-FV

The critical data come from when the direct object of the verb *-ekesya* is a locative phrase. As shown in (66)c the locative phrase is object-marked by a postverbal locative clitic.

66) a. *n-ékesy-a*　　　　　　*lionéeli*　　　*múu-n-ju.*
　　　1sgS.REM.PST-show-FV　1Leonell　　18-9-house
　　　'I showed Leonell the inside of the house.'

　　 b. *n-á-mw-eekesy-a*　　　　*múnju.*
　　　1sgS-REM.PST-1O-show-FV　18-9-house
　　　'I showed him the inside of the house.'

　　 c. *n-ékesy-á-mó*　　　　　*lionéeli.*
　　　1sgS.REM.PST-show-FV-18L　1Leonell
　　　'I showed Leonell it/there.'

When both arguments are pronominalized, as opposed to the examples in (65), the result is acceptable, as shown in (67).

67)   *n-á-mw-ekesy-á-mo.*
      1sgS-REM.PST-1O-show-FV-18L
      'I showed him it/there.'

Following the conclusions of Diercks (2011a, 2011b) and Carstens and Diercks (2013), we assume that the locative clitic arises on a locative-specific functional head (AgrL) that contains only locative phi-features and therefore is only capable of agreeing with locative phrases. Like the preceding examples, this is consistent with an approach where marking multiple objects on the verb is possible, as long as these object markers originate on a distinct syntactic head. We conclude from both the reflexives and the locative clitics, therefore, that multiple verbal clitics are possible when there are distinct adjunction sites, and therefore that the strong ungrammaticality with multiple pre-stem OMs has something to do with multiple clitics being adjoined at the same syntactic position. We therefore attribute the much more acceptable possibility of two pre-stem OMs when one of them co-occurs with its associated postverbal lexical object to the analysis of the two OMs originating in different syntactic positions.

4.3   Object Symmetry Effects

4.3.1   Loss of Symmetry Effects in Lubukusu OM-Doubling

A second distinction between doubling and non-doubling OMs in Lubukusu comes from object symmetry effects. 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 (68), for example, the two objects of the ditransitive 'give' can occur in either order in Lubukusu:

68) a. *n-á-a*   *wéékésá*   *síi-taβu.*
       1sgS-REM.PST-give.FV   1Wekesa   7.7-book
       'I gave Wekesa the book.'

    b. *n-á-a*   *síi-taβu*   *weekesa.*
       1sgS-REM.PST-give.FV   7.7-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, without any shifts in interpretation.

69) a. *n-á-mu-a*   *síi-taβu*
       1sgS-REM.PST-1O-give.FV   7.7-book
       'I gave him the book.'

    b. *n-á-si-a*   *weekesa*
       1sgS-REM.PST-7O-give.FV   1Wekesa
       'I gave it to Wekesa'

But to come back to the issue at hand, our main concern here is to establish whether there are syntactic distinctions between the doubling OM and the non-doubling OM. As the examples below show, OM-doubling does not apply equally to objects in ditransitives: only structurally higher objects can be naturally doubled (all of these examples assume appropriate licensing contexts for OM-doubling).

70) a. *n-á-**mu**-a*   **wéékésá**   *ká-ma-lwa.*
        1sgS-REM.PST-1O-give.FV   1Wekesa   6-6-beer
        'I DID give Wekesa the beer.' (in appropriate contexts)

    b. **?n-á-**mu**-a*   *ká-ma-lwa*   **weekesa**.
         1sgS-REM.PST-1O-give.FV   6-6-beer   1Wekesa

    c. *??n-á-<u>ka</u>-a*   *ká-ma-lwa*   **weekesa**.
        1sgS-REM.PST-6O-give.FV   6-6-beer   1Wekesa

    d. **n-á-<u>ka</u>-a*   **wéékésá**   *ká-ma-lwa.*
        1sgS-REM.PST-6O-give.FV   1Wekesa   6-6-beer

As the collection of examples in (70) shows, only the recipient and not the theme may be OM-doubled. Furthermore and quite significantly, when OM-doubling is present word order symmetry effects are lost as well: only recipient-theme word order is natural in OM-doubling contexts. In short, the assumed underlying hierarchy of objects is crystallized when OM-doubling occurs, and the symmetricality of word order and object marking demonstrated in (68) and (69) is lost in these contexts.

    This is illustrated as well with an instrumental applicative: crucially, instrumental objects are assumed to be structurally lower than themes (Marantz 1984; Baker 1988a,1997). Instrumental double object constructions show symmetrical word order and object marking in neutral contexts, just like other ditransitives.

71) <u>Symmetrical word order for instrumental applicatives</u>
    a. *n-áasaak-il-a*   *tʃíi-xú*   *é-yaaywa.*
        1sgS.REM.PST-chop-AP-FV   10.10-firewood   9-axe
        'I chopped the wood with the axe.'

    b. *n-áasaak-il-a*   *é-yaaywá*   *tʃíi-xu*
        1sgS.REM.PST-chop-AP-FV   9-axe   10.10-firewood
        'I chopped the wood with the axe.'

72) <u>Symmetrical object marking for instrumental applicatives</u>
    a. *n-á-tʃ-aasaak-il-a*   *é-yaaywa.*
        1sgS-REM.PST-10O-chop-AP-FV   9axe
        'I chopped it with the axe.'

b. *n-á-ky-aasaak-il-a* *tʃii-xu.*
   1sgS-REM.PST-9O-chop-AP-FV   10-firewood
   'I chopped the wood with it.'

As above, OM-doubling the structurally higher object (here the theme) eliminates word order symmetry, and OM-doubling the lower object (the instrument) is much degraded: these are the same patterns that we saw above, with the distinction that the structurally higher argument is now the theme.

73) a. *n-á-**tʃ**-aasaak-il-a*   **tʃii-xú**   *é-yaaywa*
    1sgS-REM.PST-10O-chop-AP-FV   10-firewood 9axe
    'I DID chop the wood with the axe.' (in appropriate contexts, see above)

   b. **?n-á-**tʃ**-aasaak-il-a*   *é-yaaywá*   **tʃii-xu**
      1sgS-REM.PST-10O-chop-AP-FV 9axe   10-firewood

   c. *??n-á-<u>ky</u>-asaak-il-a*   **tʃii-xú**   <u>*éyaaywa*</u>[62]
      1sgS-REM.PST-9O-chop-AP-FV   10-firewood 9axe

   d. **n-á-<u>ky</u>-aasaak-il-a*   <u>*é-yaaywa*</u>   **tʃii-xu**
      1sgS-REM.PST-9O-chop-AP-FV   9axe   10-firewood

So what we see from both of these sorts of double object constructions is that two sorts of symmetry are lost in OM-doubling contexts: the symmetry of object marking in which either object may be OMed on the verb, but also symmetry of word order of postverbal objects. The broad conclusion that can be taken from this is that doubling OMs and non-doubling OMs clearly have distinct syntactic properties, supporting our approach to Lubukusu object marking where doubling and non-doubling OMs have distinct syntactic mechanisms.[63] Of course, this does not *explain* the lack of symmetry effects in doubling contexts; a full analysis of object symmetry is well beyond the scope of the current investigation, but we will give a brief discussion of a direction of analysis based on recent work on linker phrases.

4.3.2   Toward explaining the loss of symmetry in OM-doubling

     One prominent approach to symmetry effects in double object constructions is based on Linker phrases: linkers are morphemes that appear between two objects, which have been documented for a variety of African languages.[64]

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[62] Both example (b) and (c) here are somewhat readily acceptable with the right-most object dislocated, with an afterthought reading. This is not the intended reading here, however.

[63] Baker et al (2012a) discuss another instance of a loss of symmetry effects in Lubukusu double object constructions involving 1st and 2nd person objects, which is an independent issue from what is discussed here.

[64] The full distribution of facts is of course more complicated; we cite the archetypal patterns here, but refer the reader to the cited work for a full discussion of both the empirical facts and theoretical work on the matter.

74)   Kambale   a-seng-er-a   omwami **y'-**   ehi langa   [Kinande]
       1Kambale 1SA/T-pack-APPL-FV   1chief   1.Lk   19peanuts
       'Kambale packed peanuts for the chief.' (Baker & Collins 2006: 312).

Crucially, objects in Kinande may appear in either order, and the linker agrees with whichever object precedes it. Baker and Collins (2006) suggest, therefore, that linker phrases are able to raise phrases to their specifiers regardless of structural locality (see also den Dikken 2006 for discussion of functional heads like this that may facilitate inversions). We assume that in standard cases, a (null) linker head in Lubukusu generates the symmetry effects we have noted, by raising either object to its specifier.

Schneider-Zioga (2014) puts forward an analysis of symmetry effects and linkers in Kinande that focuses on symmetry-breaking, noting that "linkers occur where there is a point of symmetry in a minimalist syntax where there is Merge without projection." She proposes that the agreeing linker in Kinande is a means of breaking the symmetry of the phrase structure at that point in the derivation. This builds on Chomsky's (2013) proposal that the endocentric characteristic of phrase structure (the notion heads project and label their phrase: basic X'-syntax notions) is an unexplained stipulation under minimalist assumptions, and labeling of phrase structures should instead follow from a general labeling algorithm (LA) that proceeds based on minimal search (a long-familiar operation in the Minimalist Program, e.g. Chomsky 2001). This LA labels a phrase based on what the most prominent element in a structure is—when a head merges with a phrasal projection, this is easily identified as the head, but when two phrasal categories merge (for example, when a DP object is merged in the specifier of an ApplP) it is not clear what the most prominent element is (i.e. which phrase ought to project). The role that movement of an object to the specifier of a linker phrase plays, then, is to dynamically (i.e. via the syntactic derivation) create anti-symmetrical hiercharchy between DP objects: if an object has moved out of a symmetrical structure to raise higher in the phrase structure this disambiguates the symmetrical structure (allowing the labeling algorithm to proceed). In short, then, symmetry between object DPs poses a derivational problem that is solved by breaking that symmetry: linkers serve this role by raising an object DP out of a symmetrical structure (and agreeing with it, in Kinande), creating clear structural hierarchies between the relevant object DPs.[65]

A full explanation of the mechanics of Chomsky's LA and Schneider-Zioga's application of the ideas to linkers is beyond the scope of this paper, but the core ideas apply here. Let us assume that a null linker head is responsible for creating symmetry effects in Lubukusu (following Baker and Collins 2006 and Collins 2014), with the theoretical explanation for these linkers lying in the need to break symmetry between two DP objects for the purposes of labeling (and with the added assumption that linkers, like copulas, allow inversion in ways that other functional heads do not: see Schneider-Zioga 2014, den Dikken 2006).

Crucially, this predicts that if the symmetry of two objects was already broken (i.e. objects were already hierarchically distinguished in the course of a derivation) that merging a linker in that structure would be superfluous. This is exactly what we propose happens in instance of OM-doubling in a double object construction in Lubukusu, as in (70) and (73). Merging an Emphasis head results in an Agree relation where the phi features on the Emph head probe and are valued by the structurally closest goal, and that DP raises to the specifier of

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[65] Somewhat ironically, the "object symmetry" effects generated by linkers are part of a process of "symmetry-breaking" at a more abstract level on this level, a convergence of terminologies from two different traditions.

EmphP (the process by which OM-doubling occurs). The result, however, is that any relevant labeling paradox has already been resolved without merging a linker, meaning that there is no reason to merge a linker in the structure. In effect, the Emph head supplants the role of the linker in symmetry-breaking, and the result is that a linker is never merged. Since the linker is the mechanism that generates surface-symmetry between objects (where objects can appear in either order, and either object can be OMed), these surface-symmetry effects cannot surface in instances of OM-doubling in Lubukusu.

This particular solution could potentially present a look-ahead paradox for an analysis built direction on Kandybowicz's emphasis head, however – if emphasis heads were generated *v*P-externally (and linkers *v*P-internally) and derivations are built bottom-up, at the point where a linker *would* be generated (presuming they are generating in the course of the derivation in that manner) the syntax would not yet know whether or not an Emphasis head would be merged at a later point. As a solution to this we propose that the Emphasis head in Lubukusu is lower than *v*P (merged directly on top of the objects), essentially replacing the function of a the linker head with respect to symmetry-breaking. Critically, though, the Emphasis head simply has phi-features that probe for the closest object, finding the structurally higher object, and does not have the inversion-inducing properties of a linker head (cf. den Dikken 2006, Schneider-Zioga 2014, Richards 2010). This follows from Schneider-Zioga's (2014) account, which claims that the linker (in this context) is a last-resort mechanism to break symmetry that is only available if symmetry is not broken by some other means. All that is required from the linker is that some participant constituent in the symmetrical structure creating the labeling paradox be moved; it is not critical here that it be the structurally higher object, explaining the inversion properties of linkers, and critically for our purposes, explaining why they don't appear with the straightforward Agree operation from the phi probe on the Emph head in Lubukusu. And in fact, Schneider-Zioga explicitly predicts that in instances where symmetry is broken in other means, linkers should not appear (e.g. passives or object wh-questons), and we simply claim that Lubukusu OM-doubling is one of those instances.

4.4   An exceptional instance of doubling

It is relevant in this context to consider one instance of exceptional OM-doubling. As can be seen in (75), it is possible to OM-double independent pronouns in Lubukusu, and in fact is preferred to a free pronoun on its own.

75)   *n-á-**xu**-βon'*   *eewe*
       1sgS-REM.PST-2sgO-see   you(sg)
       'I saw you (sg).' (not 'I DID see you.')

This is a familiar exception to OM-doubling generalizations, for example occurring in Kuria (Diercks et al 2014) and Chaga (Bresnan and Moshi 1990). The lack of prosodic break in the preceding examples suggests that the free pronouns here are not dislocated, as does the pattern in (76)a: OM-doubled pronouns may occur to the left of a temporal adverb, inside the *v*P, in contrast to full DP objects.[66]

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[66] Analogous patterns for reflexive and reciprocal pronouns are reported by Sikuku (2011) and Baker et al (2013).

76) a. *n-á-**xu**-ßon'*   *eewe*   *lukolooßa*
     1sgS-REM.PST-2sgO-see   you(sg)   yesterday
     'I saw you (sg) yesterday.'

    b. *n-á-**xu**-ßon-a*   *lúkólóóßá,*   *ewe*[67]
     1sgS-REM.PST-2sgO-see-FV   yesterday   you(sg)
     'I saw you (sg) yesterday.'

Given the analysis sketched in the preceding sections, however, this is not altogether unexpected. If OMs are generated by movement of a D/DP to the edge of *v*P 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 pronouns can be doubled, since they themselves are arguably only a D head, which is capable of undergoing m-merger with a head. In this instance we assume that weak, unstressed pronouns undergo the normal sort of movement out of the *v*P for such items (cf. Diesing 1992). Therefore the object pronoun is copied and re-merged in Spec, *v*P, at which point it undergoes 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).
     Doubling is preferred to non-doubling for first and second person object pronouns:

77)   *n-á-ßon'*   *eewe*
     1sgS-REM.PST-see   2sg
     'I saw YOU (sg) (not someone else).'

In neutral contexts, the construction in (77) is infelicitous, as it triggers a contrastive focus reading of the pronoun. The doubling construction (or, just an OM with no free pronoun) is preferred in neutral contexts. When the free pronoun is interpreted contrastively such as in (77), we assume it remains low (perhaps moved to a low focus position, or that a focus feature makes the pronoun non-weak, restraining it from moving out of the *v*P). As such, it does not raise out of *v*P or undergo m-merger to be realized as a doubling object marker (so, focus prevents the Move+m-merger process from occurring).[68],[69]

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[67] The afterthought pronoun throws a H tone onto the preceding time adverb: cf. vocatives, which don't receive a H from the right.

[68] This approach does predict that a weak, unfocused pronoun ought to be preferably doubled in whatever context it arises. Like English, Lubukusu allows a pronoun to co-occur with a lexical noun phrase in a phrase like *us linguists* or *you students*.
    i.   enywe   baa-limi
       2pl   2.2-farmer
       'you farmers'
When these pronoun+noun constructions occur in object position, as with the free pronouns, it is much preferred to have the free pronoun doubled by an OM on the verb (which notably here, like above, does not generate the interpretive effects of OM-doubling a full lexical DP object).
    ii.   a.   *n-á-mu-ßon'*   *eeŋwé*   *ßáá-límí*
          1sgS-PST-2plO-see   2pl   2-farmer
          'I saw you farmers.' (not 'I DID see you farmers.')

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4.5 Some speculative comments on intransitive verbs

A reviewer notes that the proposal advanced here makes interesting predictions with respect to intransitive verbs, motivated by examples like the one from (41), repeated here:

78) *ee, lavéenda   k-á-**li**-kón-a   líi-lo.*
    yes, 1Lavendah   1S-REM.PST-5O-sleep-FV   5.5-sleep
    'Yeah, Lavendah slept a sleep.'

Here an intransitive verb *–kona* 'sleep' occurs with a cognate object *liilo* 'sleep,' with the verum reading invoked by OM-doubling that cognate object. If an Emph head with phi features is responsible for OM-doubling as licit in verum contexts, we expect that intransitive verbs ought to require OM-doubled cognate objects as in (78), as the Emph head must Agree with a DP object given that it bears phi-features. The facts bear this out somewhat, with some complications. The prediction is straightforwardly met with unergative predicates, which are very natural with cognate objects and OM-doubling to generate verum focus.

79) a. *Násyóómbé (k)á-**lw**-iimb-a   lú-lw-iimbo*
       1Nasiombe 1S.REM.PST-11O-sing-FV   11-11-song
       'Nasiombe DID sing a song.'

   b. *Násyóómbé (k)á-**tʃi**-tʃex-a   tʃii-ndʒexo*
       1Nasiombe 1S.REM.PST-10O-laugh-FV   10.10-laugh
       '1Nasiombe DID laugh laughs.'

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   b. **n-á-βon'   éénwé   βáá-límí*
       1sgS-PST-see   2pl   2-farmer

We assume, then, that weak pronouns are driven for interpretive reasons to raise out of *v*P (following a long line of work on that topic, see Diesing 1992), and at that point undergo m-merger to be realized as OMs. This pattern of facts is in fact problematic in some details for the m-merger account of object marking. Kramer and Harizanov rely on the maximal nature of the doubled DPs to allow for phrasal movement to the edge of *v*P, and Matushansky (2006) assumes that clitics are simultaneously minimal and maximal categories in only consisting of a D head. As such, if the pronouns in the examples above are simply D heads of a complex DP structure, they ought not be capable of the phrasal movement that feeds the object marking analysis we have adopted here. We therefore assume that the pronouns in these constructions are not in fact D heads of the larger DP; instead, they are still simultaneous minimal/maximal D/DP categories that are in the specifier of DP. Given the limited space, however, we leave a defense of this explanation (and a full investigation of these facts) to future research.

[69] A reviewer notes that our account predicts that verum focus in a sentence with a free pronoun object should produce an OM-doubling sentence with two (identical) OMs on the verb: one the multiple copy pronunciation, one agreement on the Emph head. This prediction is not upheld, as such sentences are unacceptable. We assume here some version of what Carstens (2005) termed *Kinyalolo's Constraint*, a proposal from Kinyalolo (1991) that prohibits a single morphological adjoined head from bearing agreement morphemes arising from multiple distinct syntactic heads that agree with the same DP (see Baker and Kramer 2016 for a similar approach to a similar problem of prohibited expected but unattested multiple exponence). The existence of repeated agreement locative inversion constructions in Lubukusu complicates this somewhat (Diercks 2011a), so we must leave it for future work to determine why some forms of multiple exponence are acceptable and others are not.

Some predicates don't occur as naturally with (clearly nominal) cognate objects, however, which tend to be unaccusatives from what we have observed.[71] Generating verum with these predicates still requires what might be conceived of as a cognate complement, but in class 15, a class that tends to have less nominal properties than other noun classes (Baker et al 2012b).

80) a. *Waafulá   (k)áa-kw-a   xúu-kw-a*
       1Wafula   1S.REM.PST-fall-FV   15.15-fall-FV
       'Wafula DID fall.' (literally "Wafula fell to fall")

   b. **Waafulá   (k)á-**xu**-kwa   xúu-kw-a*
       1Wafula   1S.REM.PST-15O-fall-FV   15.15-fall-FV

81) a. *Kú-mú-píira   kw-á-piriingix-a   xúu-piriingix-a*
       3-3-ball   3S-REM.PST-fall-FV   15.15-roll-FV
       The ball DID roll (literally "the ball rolled to roll.")

   b. **Kúmúpíira   kw-á-**xu**-piriingix-a   xúu-piriingix-a*
       3-3-ball   3S-REM.PST-15O-fall-FV   15.15-roll-FV

To our knowledge there is no class 15 object marker in Lubukusu, and therefore it is not surprising that it is not possible to OM-double the object here. For the examples in (80) and (81), there is no non-class 15 cognate object to be used like for the examples above, so the only verum strategy is this class 15 cognate object strategy shown above (without OM-doubling).

   In fact, the unergative predicates listed above may also use this class 15 cognate strategy, in which case OM-doubling is impossible, just like above. `

82) *Násyóómbé   (k)éemb-a   xú-xw-iimba*
     1Nasiombe   1S.REM.PST.sing-FV   15-15-sing
     'Nasiombe DID sing.' (lit. "Nasiombe sang to sing.")

83) *Násyóómbé   (k)á-tʃex-a   xuu-tʃexa*
     1Nasiombe   1S.REM.PST-laugh-FV   15.15-laugh
      'Nasiombe DID laugh.' (lit. "Nasiombe laughed to laugh.")

Therefore the prediction for intransitives is at least partly fulfilled – where a nominal cognate object is available, OM-doubling that cognate object produces verum readings. But an alternative strategy is also employed, utilizing a class 15 complement. Class 15 often occurs in infinitival contexts, but is often used in nominal contexts (similar to a gerund); Baker et al (2012b) analyze null subject infinitives (class 15 forms) as structurally ambiguous, having a nominal form and a verbal form.

   It is not clear in the examples above what the appropriate analysis of the class 15 cognate complements is (nominal vs. verbal). Furthermore, it is not clear whether the required use of the class 15 complement for verum is related directly to argument structure or whether it is the result

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[71] It's not clear to us whether this is the lack of a lexical item to serve as a cognate object, or a structural fact more closely related to syntax of unaccusatives. We are inclined to think the latter, but the presence of a cognate object with a verb like "sleep" gives us some pause.

of a lexical gap (perhaps simply because there are not cognate objects for these verbs as there are in (79)). It is clear that the verum requirement to OM-double cognate objects accords with the predictions of our analysis, but given the open questions it must be left for future work to analyze the class 15 complement constructions and evaluate their relevance for the analysis proposed here.[72]

4.6   Explaining the Remaining Syntactic Patterns

At this point we have in many ways wandered far from the traditional line of argumentation that we began with, which (in the existing literature) focused on whether OMs are incorporated pronouns or agreement markers. In one sense, the answer for Lubukusu is "*both*," and the longer answer points out that different OMs in Lubukusu can have distinct properties, and therefore that different sorts of OMs are created by the distinct syntactic mechanisms. If the discussion is restricted to what we have referred to as neutral pragmatic contexts, for example, we find that co-occurrence of an OM with a corresponding *in situ* object is in fact ruled out across the board – the precise predictions of the pronominal incorporation account. And we have given an analysis based on recent proposals regarding cliticization and clitic-doubling: movement together with m-merger, with the added note that languages displaying so-called "pronominal incorporation" must necessarily lack the operation *Reduce* which converts a full DP to a D head alone. So, there is an OM in Lubukusu that is an incorporated pronoun, but it is not the only sort of OM.

When the range of pragmatic contexts is expanded, it is evident that OM-doubling is licensed in verum contexts. We analyzed this as a syntactically-distinct OM (relying on evidence from multiple object constructions to show that doubling and non-doubling OMs are non-identical in their syntactic properties). The doubling OM is generated by a canonical Agree relation initiated by unvalued phi-features on an Emphasis head, a head which introduces a verum operator that is responsible for the use-conditions that apply to OM-doubling.

Moving back to some of the original object marking patterns from section 2, recall that it is impossible in Lubukusu to OM an object in an object cleft, an object relative clause, or an object question. We have not discussed to this point whether these restrictions are in fact a syntactic restriction (as the original line of argumentation regarding pronominal incorporation might suggest), or whether this is in fact a different sort of restriction, on the Emph head and the verum conversational operator. When you consider all of these contexts, what stands out is that these are all contexts where the truth of the clause is presupposed (relative clauses, the complement clause in clefts). If the felicity conditions for an OM-doubling utterance are that the proposition must be in the common ground and be (relevant to) the question under discussion, it follows that the verum operator would be ruled out: it is impossible to presuppose a proposition that is simultaneously under debate. That is to say, an interlocutor in a debate may (somewhat uncooperatively) seek to presuppose aspects of a question being discussed, but an individual, or an individual syntactic construction, cannot simultaneously presuppose something and treat it as an issue under discussion, as these two things are (by definition) incompatible. This fundamental incompatibility leads to unacceptability of OM-doubling in presuppositional contexts like relative clauses and the complement clause in clefts, as verum is semantically/pragmatically

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[72] One possibility is to treat these as verb-doubling constructions (pronouncing multiple copies of the verb) similar to Kandybowicz's (2013) treatment of verb-doubling in Nupe.

impossible in these contexts, so an Emph head with a verum operator (triggering OM-doubling) would generate unacceptability.[73]

This is seen perhaps more clearly in a non-object cleft; even in the case that a subject is being clefted, it is still unacceptable to OM-double the object.

84) *In the context that someone doubts that it was the addressee who ate the ugali, it is brought into question: It was you that ate ugali??*

    A1: *niisé*   *w-áa-l-iilé*   *βúu-suma.*
           be.1sg   1S-PST-eat-PFV   14.14-ugali
           'Yes, it was me who ate ugali.'

    A2: **niisé*   *w-áa-βu-l-ííle*   *βúu-suma.*
           be-1sg   1S-PST-14O-eat-PFV   14.14-ugali
           Intended: 'It was in fact me who ate the ugali.'

This suggests that the critical restriction here is against the presence of OM-doubling in a presuppositional environment of the complement clause in a cleft, rather than a syntactic restriction specifically ruling out doubling in an object relative clause or cleft. The syntax of agreement with a functional projection like the Emphasis head should in principle be (syntactically) available whether a clause is presupposed or not, leading us to presume this is ruled out on pragmatic grounds (a clash of information being treated both as presupposed and at issue at the same time).[74] The only other available object marking mechanism is the movement+m-merger mechanism, which we've shown is incapable of creating OM-doubling, and therefore cannot create OM-doubling on object relative clauses or clefts. The end result is that neither of the Lubukusu object marking mechanisms is capable of generating an OM in object relative clauses or object clefts.

4.7   Against Alternative Syntactic Accounts

The first possible alternative to our approach is that instead of doubling OMs and non-doubling OMs being generated in different positions, that perhaps these OMs are generated in the same position, but by slightly different mechanisms – for example, perhaps object marking is linked to object shift of the DP object (as suggested to us by an anonymous reviewer). In this case one could propose that object shift occurs and triggers doubling, but when there is no object shift, there is no OM-doubling. While this is a simpler analysis and therefore more desirable in some ways (being directly related to the accounts of Kramer 2014 and Harizanov 2014), it does raise problems with respect to the kinds of pragmatic interpretations that are generated by OM-doubling. That is to say, the interpretations triggered by doubling seem to be too specific to be triggered by a strictly syntactic feature triggering movement. Object shift crosslinguistically has been linked with a restricted range of interpretive differences, but these generally are something akin to familiarity, or specificity, not the specific discourse-specific felicity conditions linked to

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[73] The prediction of this account is that the unacceptability of OM-doubling in clefts and relative clauses is semantic/pragmatic in nature, not syntactic.

[74] This proposal would benefit from additional diagnostic support, for example, from an investigation of the presupposed complement clauses of verbs. We leave this investigation to future work.

the state of the common ground that seem to be at play here. Furthermore, this would leave unexplained the syntactic differences between doubling and non-doubling OMs that we discussed above.

Another approach that is at least plausible is a Big DP analysis where a Big DP triggers particular interpretations, and Big DPs result in OM-doubling (cf. Uriagereka 1995, Cechetto 2000, Roberts 2010, Bax and Diercks 2012). As with the previous alternative, this predicts that doubling OMs and non-doubling OMs should have the same syntactic structure, leaving unexplained the patterns in sections 4.2.1 and 4.3.1. Additionally, this would rely on a fairly arbitrary connection between a Big DP structure and pragmatic felicity conditions. Bax and Diercks (2012) argued that a Big DP in Manyika Shona resulted in topicality (i.e. non-focus interpretations) of an object, but the pragmatic restrictions on Lubukusu OM-doubling are too specific with respect to the state of the common ground to be plausible as solely syntactic features (whereas many syntacticians are somewhat comfortable with the idea of 'topic' features in the syntax). It could perhaps be argued that somehow a Big DP includes the kind of conversational operator that we've been discussing here, but while there is precedent from the other languages for those structures to be incorporated into clausal structure (Hartmann 2013, Kandybowicz 2013), there is no clear precedent for doing so internal to DP structure. It could be, perhaps, that this additional structure is simply recognized as marked and triggers conversational implicatures, but as we noted above, the interpretive effect of OM-doubling in Lubukusu is more narrowly specific and predictable than is characteristic of implicatures.

Even if we were to consider Baker and Kramer's (2016) proposals about the *Reduce* operation as generating the Lubukusu object marking distinctions (i.e. without distinct syntactic derivations for the two OMs), we would have to posit that application of *Reduce* (i.e. generating clitic doubling) generates *verum* readings, whereas the non-application of *Reduce* is otherwise discourse-neutral (used in all other contexts). While this can account for the facts as readily as our approach, it again doesn't predict syntactic differences between the two OMs of the sort that we report. Furthermore, it is not clear how to link the implementation (or not) of a syntactic operation like *Reduce* with a verum interpretation. We could simply stipulate the link, but in doing so we are essentially adopting a constructionist-style account where the interpretation is effectively linked rather directly with the construction that is generated. Their proposals very intentionally posit particular interpretations as resulting from clitic doubling via *Reduce* (specificity, binding/quantificational properties), but do not generate the verum interpretations we encounter in Lubukusu.

Therefore, the two overarching arguments against these kinds of alternative configurations are that 1) the set of interpretations that license OM-doubling are too idiosyncratic to be plausible as elements that are grammaticized as syntactic features (or the product of conversational implicature), and 2) the presence of syntactic distinctions between doubling and non-doubling OMs suggest a distinct syntax for each. These two main issues instead point back to the claims we have made here, that a conversational operator on a specific head in the syntax triggers OM-doubling, and this head is a distinct head from where non-doubling object marking occurs.

5   Conclusions and Comparative Theoretical Consequences

5.1   Comments on Pragmatics in the Syntax

One long-standing question comes to our attention at this point: just how much of a particular empirical pattern can be explained syntactically? For our concerns here, the intersection of pragmatic content with syntactic patterns is especially relevant. Some degree of pragmatic interpretation can be grammaticized in the syntax: this is clear from languages that have morphosyntactic focus marking, for example left peripheral focus marking in Gungbe languages of West Africa (Aboh 2004) or the preverbal focus markers that appear in some northeastern Bantu languages (see Ranero Echeverría 2014 for Kuria, Abels and Muriungi 2008 for Tharaka, Schwarz 2007 for Kikuyu). And even for languages that don't have overt morphology marking such distinctions, there are good reasons to think that there are syntactic positions specified with pragmatic functions like topic or focus, as proposed by Rizzi (1997).

There is clearly a large range of meaningful interpretational processes in language (like conversational implicature) that we have no reason to presume are encoded in syntax, and in fact would be poorly analyzed if they were – all context-specificity of language does not deserve to be encoded in the syntax. At the same time, there are syntactic patterns like the Lubukusu one here that seem to encode pragmatic distinctions directly in a particular syntactic construction. We have argued here that the best analysis does in fact include specific syntactic encoding of the relevant conversational operator, but that this operator itself is lexically specified with felicity conditions. In a way, then, this is a balanced approach that still places the specific management of the common ground in pragmatic formalisms and calculated extra-syntactically, but represented directly in syntactic structure in a way that allows for an explanation of the syntactic effects.

It is worth pointing out that there appear to be a range of patterns in Lubukusu and elsewhere that suggest that syntactic constructions triggering these kinds of use-conditional interpretations may be relatively widespread. For one, object marking is not the only instance in Lubukusu that can trigger these kinds of exceptional readings. Safir and Sikuku (2011) note that co-occurrence of the reflexive marker (RFM) and an overt anaphoric element (AGR-*eene* below) creates particular interpretation they refer to as "affirmative":

85)   *βáa-xasí*   *β-ée-fumy-a*   *βá-β-eene.*
       2.2-woman   2S-REM.PST.RFM-praise-FV   2-2-own
       'The women praised themselves.'   (Sikuku 2014: ID 1534)
       (by our translations in this paper: 'The women DID praise themselves.')

Safir and Sikuku report the following: "Although there are many contexts where the RFM is sufficient to form a reflexive reading and the presence of AGR-*eene* associated with it is completely optional, there is at least one context where AGR-*eene* appears to be required. Suppose there is a situation in which the women in question are supposed to speak the praises of others, but the questioner knows these women are so vain that they cannot help themselves, and so the questioner asks, 'They didn't end up praising themselves, did they?' The answer to this question after 'yes' would be [(85)]," even though the RFM regularly occurs on its own otherwise (Safir and Sikuku 2011: 34). The same pattern occurs with reciprocal markers (RCM) as well, where co-occurrence of the RCM on the verb with the reciprocal phrase (bracketed below) results in the same "affirmative" reading:

86) *βáa-xasí*   *β-á-fumy-**an**-a*   [*βáβeene*   *xú*   *βeene.*]
      2.2-woman   2S-REM.PST-praise-RCM-FV   2-2-own   17   2-own
      'The women praised each other.'   (Sikuku 2014: ID 5143)
      (by our translations in this paper: 'The women DID praise each other.')

It is clear that these co-occurrences play a similar pragmatic role as the doubling of OMs that we tackle in this paper – occurring in a context that is a quintessential 'verum' context. Assuming that these are in fact verum constructions, if our analysis of the OM holds up (and if we want a unified analysis of the OM, RCM, and RFM doubling), this would predict that the RFM and the RCM in doubling contexts are generated via Agree relations (see Storoshenko 2014 for a proposal that Shona RFMs are generated by precisely this process). We would therefore expect that doubling RFMs and RCMs would show slightly different syntactic properties from non-doubling RFMs and RCMs in double object constructions, and other syntactic differences might be discernable as well. It is beyond the scope of this paper to pursue these predictions, but clearly more work is necessary.

      Furthermore, similar patterns appear in related languages. Ongoing research in Lutirichi, a closely related Bantu language of the Luyia sub-group, shows a similar pattern to the Lubukusu pattern where OM-doubling triggers a verum-like reading of the clause for at least some speakers. And, in fact, other languages show similar verum-patterns in wholly unrelated constructions. For example, Ranero Echeverría (2014) reports that otherwise-unacceptable focus-clefting of VPs in Kuria is acceptable just in case the clause receives a verum reading, and Hyman and Watters (1984) note that there is a class of auxiliaries in some Western Bantu languages (as well as unrelated African languages) that are used in verum focus contexts. Kipsigis complementizers agree with matrix subjects in neutral contexts, and may also (exceptionally) agree with matrix objects in verum focus contexts (Diercks and Rao 2017); in Lutirichi the use of an overt expletive (which is normally null) with various perception verbs also triggers verum focus readings (Diercks and Hernandez 2017). It is not clear how exactly these structures would be generated, but it does appear that in at least several other contexts, otherwise-unacceptable structures of apparently unrelated sorts of grammatical constructions are acceptable on a verum (focus) reading.

      It does look as if verum—in addition to having assigned morphology in some languages– also frequently co-opts existing grammatical mechanisms in different languages to trigger verum readings in what would otherwise be ungrammatical uses of those constructions. In English this is do-support, verb positions in Marghi, verb doubling in Nupe, OM-doubling in Lubukusu and Lutirichi, focus-marking VPs in Kuria. Whether this tendency to co-opt existing constructions for verum ends says something particular about verum or is just an accident of history, we do not know. But we do suspect that verum constructions may be under-reported more generally on account of this tendency.

5.2   Summary of Conclusions

This paper engages with a long-standing empirical and theoretical question in a new language: what are the available patterns of object marking (or object cliticization) and what does this say about our theories of syntax? The traditional lines of investigation have been concerned with whether object markers or object clitics are moved/incorporated pronouns, or the products of agreement relations (both in the literature on Indo-European clitics and Bantu object markers), as in general these are the analytical mechanisms our theories makes available to us.

We demonstrated in this paper that in neutral pragmatic contexts, OM-doubling is impossible in Lubukusu, which suggests a pronoun-incorporation analysis of OMs. That said, OM-doubling *can* occur in instances where a verum reading of the clause is available (e.g. *Charlie DID rip my sweater*). We document the various felicity conditions on OM-doubling in Lubukusu and show that this is consistent with existing analyses of verum (focus), which have been proposed by various researchers to be generated by a use-conditional operator in the syntax. We propose the same for Lubukusu: an Emphasis head introduces the relevant use-conditional operator, and that this Emphasis head bears phi-features and Agrees with the object of a clause. In this way, Lubukusu object marking is generated by two distinct mechanisms – a movement (incorporation) mechanism in non-verum instances, and an Agree mechanism for verum instances.[76] The conclusions here support the conclusion that OMs within a single language can be generated by distinct mechanisms (see also Woolford 2001, Diercks et al 2014). While this is consistent with Riedel's (2009a) approach that different object markers in Sambaa are generated on different Agr heads, it goes farther in proposing that different mechanisms (incorporation vs. Agree) can explain different sorts of OMs in the same language.

This also raises important questions for the analysis of object marking across Bantu languages, however. To what extent are the morphosyntactic restrictions noted in the syntactic and typological literature wholly syntactic, or to what extent have 'exceptional' sorts of interpretations been missed, and/or may the restrictions reported as syntactic in fact be attributable to non-syntactic constraints? Clearly, our understanding of the syntax of object marking patterns is incomplete without understanding their discourse properties (though these can be difficult to establish with clarity, especially in preliminary studies on understudied languages). We ought not be discouraged by the open questions, of course, but inspired to fill in gaps and discover new patterns. But clearly our theoretical work depends on thorough empirical documentation of these issues.

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[76] One question a reviewer points out concerns the intersection of the predictions of a pronoun incorporation analysis of object marking (even a relatively modern one like this) and other sorts of incorporation phenomena, like compounding or noun incorporation. We have no evidence of noun incorporation processes at the verbal level, and have no reason to believe it occurs, and compounding is not well-researched in Lubukusu yet. This is a worthwhile area of investigation in the future.

identified the empirical generalizations, developed the analysis, and developed the argumentation in the paper. The second author took primary responsibility for putting these conclusions into written form. The third author mainly contributed morphophonological analysis, tonal analysis, and transcriptions. Pronunciations and additional acceptability judgments were provided by Maurice Sifuna.

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