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#### Abstract

This paper builds on Letsholo (2013), documenting additional properties of object marking and object marker doubling in Ikalanga (Bantu, Botswana and Zimbabwe). We show that the availability of OM-doubling is highly constrained by pragmatic context. OM-doubling constructions are linked with corrective focus readings and mirative focus readings, along with verum focus readings (as first noticed by Letsholo 2013). We also detail some persistent analytical puzzles regarding the focus interpretations associated with OM-doubling in Ikalanga.

## 1 Introduction

Object marking is a linguistic phenomenon that is frequently used to refer to discourse-familiar objects, similar to English pronominalization. Across Bantu languages, the object marker appears as a prefix within the verb form, typically affixing before the verb stem and after the tense morpheme. (1b) below illustrates object marking in Ikalanga, a Bantu language spoken in Botswana and Zimbabwe: the object marker *-i-* affixes to the verb and replaces the noun *buka* 'book'.<sup>1</sup>

- a. Joni w-aka-bal-a buka
   1.John 1sм-psт-read-гv 9.book
   'John read the book.'
  - b. Joni w-aka-(i-) bal-a 1.John 1sm-pst-90m-read-fv 'John read it.'

Ikalanga

Cinyungwe

There is a broad range of previous work on object marking (OMing) in Bantu languages (Bresnan & Mchombo, 1987; Riedel, 2009; Zeller, 2012, 2015; Van der Wal, 2015; van der Wal, 2020, 2022). A prime area of investigation (as is the case for object markers / object clitics cross-linguistically) is whether the object marker may co-occur with the *in situ* lexical object that it refers to, a mechanism called OM-doubling. Interestingly, as past research on OM-doubling in Bantu languages has shown, the acceptability of OM-doubling is heavily dependent on discourse contexts. Consider the Cinyungwe examples (2) and (3) below, in which the same doubled sentence yields different judgments in different contexts:

(2) Out of the blue:

#Baba a-da-(ci-) phik-a (ci-mbamba) 1.father 1sm-pst-70m-cook-FV 7-beans

Intd. 'Father really/certainly cooked the beans.' (Lippard et al. (2022): 10)

(3) Context: As you know, my father doesn't know how to cook beans. When we left school, I ran home to cook, but do you know what? I found out that he had really cooked them nicely!

Baba a-da-ci- phik-a ci-mbamba 1.father 15M-PST-70M-cook-FV 7-beans

'Father really/certainly cooked the beans.' (Langa da Câmara et al. (to appear): xxi)

<sup>&</sup>lt;sup>1</sup>All uncited data points are provided by the first author.

Understanding the difference in judgments of the above sentences requires an understanding of the focal and emphatic effects that OM-doubling has in Bantu languages. Recent work in Lubukusu (Sikuku et al. 2018; Sikuku & Diercks 2022), Tiriki (Liu, 2022), Wanga (Kuzmik, 2022), and Cinyungwe (Langa da Câmara et al. to appear; Lippard et al. 2022) has investigated this interface of syntax and pragmatics, delving into the exact discourse conditions that license doubling. In this paper, we will draw upon their work while examining the patterns of object markers in Ikalanga, expanding on earlier work on Ikalanga object marking (Letsholo, 2013). Specifically, we investigate how Ikalanga OM-doubling interacts with focus, and what emphatic interpretations arise from a doubled sentence. We summarize basic Ikalanga morphology and parameters of object marking in §2, and key generalizations of Ikalanga OM-doubling in §3 as background. §4 discusses doubling in verum contexts, and §5 explores the interaction between doubling and focus within vP. In §6 we show that doubling is also associated with a mirative reading. §7 outlines areas for future research, and §8 concludes.

# 2 OMing basics in Ikalanga

## 2.1 Morphology of OMs

Like most Bantu languages, Ikalanga has a rich noun class system. Nouns are organized into one of 17 classes, each distinguished by their own prefix. Ikalanga's noun class system also dictates the morphological forms of object markers: each OM agrees in noun class with its co-referent. Table 1 below shows the prefixes for each noun class, as well as the corresponding object marker in Ikalanga.

Class	Noun prefix	Noun example	Object marker	OM example	Gloss
1st sg	n-	-	ndi-	banonditola	'They'll take me.'
1st pl	ba-	-	ti-	banotitola	'They'll take us.'
2nd sg	n-	-	ku-	bano <u>ku</u> tola	'They'll take you.'
2nd pl	ba-	-	mu-	banomutola	'They'll take you (pl).'
3rd sg/1	n-	nthu 'person'	n-	banontola	'They'll take him/her.'
1a	-	mme 'mother'	ba-	banobatola	'They'll take him/her.'
2	ba-	bathu 'people'	ba-	banobatola	'They'll take them.'
3	n-	nti 'tree'	u-	banoutola	'They'll take it.'
4	mi-	miti 'tree'	i-	banoitola	'They'll take them.'
5	-	zhani 'leaf'	li-	banolitola	'They'll take it.'
6	ma-	mazhani 'leaves'	a-	banoatola	'They'll take them.'
7	chi-/i-	chibululu 'lizard'	chi-	banochitola	'They'll take it.'
8	zwi-	zwibululu 'lizards'	zwi-	banozwitola	'They'll take them.'
9	N-	mbga 'dog'	i-	banoitola	'They'll take it.'
10	N-/dzi-	mbga 'dogs'	dzi-	bano <u>dzi</u> tola	'They'll take them.'

Table 1: Partial listing of Ikalanga noun class and object marker morphology (adapted from Letsholo (2002))

### 2.2 Basic parameters of Ikalanga OMs

Typological descriptions of Bantu OMs have often been categorized along the following parameters (as delineated in van der Wal (2020)):

- (4) Typologies of Bantu object markers (van der Wal, 2020):
  - Position of object markers Is it a pre-stem affix or an enclitic?
  - Types of objects marked Does animacy, definiteness, or other factors influence whether an object can be OMed?
  - Number of object markers How many OMs can a verb stem take?
  - Behavior in ditransitives Can either object in a ditranstive be OMed?
  - Nature of object markers Are they a form of agreement morphology (and thus allow doubling), or are they pronominal enclitics (and thus cannot double)?

Regarding the first typological parameter, Ikalanga OMs are classified as pre-stem affixes. As Letsholo (2013) shows, the OM affixes immediately before the verbal stem (5a); attempting to place the OM elsewhere, like before an auxiliary, is ungrammatical (5b).

(5) a. Nchidzi u-nga-m-bon-a 1.Nchidzi 1sm-Aux-1om-see-Fv 'Nchidzi can see him/her.'
b. \*Nchidzi u-m-nga-bon-a 1.Nchidzi 1sm-10m-Aux-see-Fv

Intd. 'Nchidzi can see him/her.' (Letsholo (2013): 8)

The second typology asks whether certain types of objects are unable to be object marked. In Ikalanga, animacy does not seem to influence an object's ability to be OMed:

- (6) a. Bana b-aka-yi-bon-a (#mbga)
   2.child 2sm-pst-9om-see-fv (#9.dog)
   'The children saw it (the dog).'
  - b. Joni w-aka-i-bal-a (#buka)
    1.John 1sm-pst-90m-read-FV (#9.book)
    'John read it (the book).'

Third, Ikalanga generally allows just one object marker on a verbal stem. Attempts to add two OMs on either a lexical ditransitive or benefactive applicative verb both result in ungrammaticality<sup>2</sup>:

- (7) \*Nchidzi w-aka-ba-)i-pa
  1.Nchidzi 1sм-pst-20м-90м-give
  Intd. 'Nchidzi gave it (the toy) to them (the children).'
- (8) \*Ludo w-aka-[zwi-] (m-] bik-il-a
   1.Ludo 1SM-PST-8OM-1OM-cook-APPL-FV
   Intd. 'Ludo cooked it (food) for him.'

Fourth, in double object constructions, either object can be object marked in Ikalanga – that is, it displays object marking symmetry.

- (9) a. Ludo w-aka-(m-) bik-il-a nyama 1.Ludo 1sm-pst-10m-cook-APPL-FV 9.meat 'Ludo cooked meat for him.'
  - b. Ludo w-aka-i- bik-il-a Nchidzi
    1.Ludo 1sm-pst-90m-cook-APPL-FV 1.Nchidzi
    'Ludo cooked it for Nchidzi.'

The final typological parameter seeks to classify the OM as either agreement morphology or a pronominal enclitic. One key diagnostic for this classification is whether the OM is allowed to co-occur with (i.e. double) its

Nchidzi w-aka-ba-dzi-seng-es-a
 Nchidzi 1SM-PST-2OM-100M-carry-CAUS-FV
 'Nchidzi made them (the children) carry it (the firewood).'

Not all instances of causative constructions, however, naturally take multiple OMs; further research is needed to establish when this is possible.

<sup>&</sup>lt;sup>2</sup>Causatives seem to be a possible exception to this generalization. For example:

lexical object DP within the same syntactic phrase. If the OM is an incorporated pronoun/clitic, theta criteria should disallow the OM and object from co-occurring. Meanwhile, if the OM is an agreement morpheme, doubling ought to be allowed.

Letsholo (2013) argues for a pronominal incorporation analysis of Ikalanga OMs, using OM-doubling patterns as evidence, among other lines of reasoning. Namely, while an OM can co-occur with a lexical object, the object cannot remain within the verb phrase. In (10) below, the doubled object is obligatorily offset by a prosodic break, suggesting it has been dislocated to a different syntactic phrase. (§3.2 will discuss in more detail the evidence for dislocation of the doubled object.)

(10) Nchidzi w-a-gu-ngw-a \*(,) busukwa 1.Nchidzi 1sm-pst-140m-drink-Fv 14.beer 'Nchidzi DID drink the beer.'

(10) also provides evidence against an analysis of the OM as agreement morphology, per Letsholo (2013); agreement morphemes ought to be grammatically obligatory and should not alter the sentence's meaning in any way. As the translation in (10) suggests, OM-doubling in this sentence creates an emphatic reading.<sup>3</sup> Removing the OM is not only grammatical, but also removes this emphatic effect:

 (11) Nchidzi w-a-ngw-a busukwa 1.Nchidzi 1sm-pst-drink-fv 14.beer
 'Nchidzi drank the beer.'

Letsholo (2013) thus argues that because Ikalanga OM-doubling results in object dislocation, is optional, and introduces an emphatic reading, Ikalanga OMs are best analyzed as pronominal clitics rather than agreement morphemes.

A summary of the basic aspects of Ikalanga OMing according to the parameters outlined above in (4) follows:

#### (12) Typologies of Ikalanga OMs:

- Position of OMs: pre-stem affix
- Types of objects marked: not influenced by animacy
- Number of OMs: one per verb stem
- Behavior in ditransitives: symmetrical OMing
- Nature of OMs: pronominal enclitics, per Letsholo (2013)

# **3** OM-doubling basics

§4, §5, and §6 will cover OM-doubling in more depth, as well as its interpretations, but here we present two core generalizations about Ikalanga OM-doubling as a baseline introduction: OM-doubling is unnatural in discourse-neutral contexts, and OM-doubling and object dislocation are obligatorily linked.

### 3.1 OM-doubling is unnatural in discourse-neutral contexts

In discourse-neutral contexts, such as out-of-the-blue situations where no prior knowledge is assumed between interlocutors, OM-doubling is infelicitous:

<sup>&</sup>lt;sup>3</sup>The specific emphatic interpretation generated here will be further discussed in §4.

(13) Out of the blue:

#Nchidzi w-a-(gu-) ngw-a , (busukwa) 1.Nchidzi 15M-PST-140M-drink-FV 14.beer

'Nchidzi DID drink the beer.'

As noted in the translation, OM-doubling in (13) creates an emphatic, insistent reading (discussed more indepth in §4). In an out-of-the-blue context, however, there is no one doubting the speaker; the emphatic reading introduced by doubling therefore sounds unnatural, perhaps akin to an English speaker walking into a room of strangers and announcing, 'Peter DID eat the cookies!'

The unacceptability of doubling in discourse-neutral contexts is seen in the related languages Cinyungwe and Lubukusu as well:

(14) Out of the blue:

a.	#Baba a-da-ci- phik-a ci-mbamba 1.father 1sм-pst-7ом-cook-Fv 7-beans	Cinyungwe
	'Father really/certainly cooked the beans.' (Lippard et al. (2022): 10)	
b.	#N-a-βa-) βon-a βaa-soomi 1SM.SG-REM.PST-2OM-see-FV 2.2-students	Lubukusu
	'I saw the students.' (Sikuku et al. (2018): 366)	

#### 3.2 OM-doubling requires dislocation

A second key generalization about Ikalanga OM-doubling is its obligatory association with object dislocation; that is, OM-doubling and right-dislocation of the object cannot occur independently of each other. This generalization is very similar to previous research on Zulu object marking (Zeller (2015)), so we first offer a brief overview of the Zulu facts as a foundation for the Ikalanga data.

#### 3.2.1 Relevant case study: Zulu OM-doubling

First, Zeller (2015) shows that in the Southern Bantu language Zulu, OM-doubling and object dislocation are obligatorily linked. (15) below shows the canonical word order, with the manner adverb right-adjoined to vP and thus following the object. (This is consistent with the generalization across languages that 'low' adverbs mark the edge of vP).

(15) Si-bon-a i-n-kosi kahle 1PL-see-FV AUG-9-chief well
'We are seeing the chief well.' (Zeller (2015): 20)

In the data below, we see that when an object is OM-doubled, it obligatorily moves to the right, past the adverb and presumably outside of vP (16a). Leaving the doubled object *in situ* as in (16b) is ungrammatical, as is moving the object without doubling (16c).

(16) a. Si-(yi-) bon-a kahle (i-n-kosi) 1PL-9OM-see-FV well AUG-9-chief
We are seeing him well, the chief.'
b. \*Si-(yi-) bon-a (i-n-kosi) kahle 1PL-9OM-see-FV AUG-9-chief well
Intd. 'We are seeing him well, the chief.'

Zulu

No doubling, dislocation

 c. \*Si-bon-a kahle i-n-kosi 1PL-see-FV well AUG-9-chief
 Intd. 'We are seeing the chief well.' (Zeller (2015): 20)

Also imperative to Zeller's analysis of Zulu is the patterns of (a)symmetry in double right dislocation constructions. Unlike Ikalanga, Zulu verbs show a conjoint/disjoint alternation, where the disjoint form effectively marks the edge of the vP; that is, elements following a disjoint verb are outside the vP.

In double object constructions where the verb is in its conjoint form, a doubled benefactive object is obligatorily dislocated to the right of the theme object, as we might expect (17b). Leaving the doubled object in its canonical position is ungrammatical (17c). The word order of objects is therefore asymmetrical when the verb is in its conjoint form.

(17) Zulu OM-doubling: conjoint verb forms (Zeller (2015): 21)

- a. Ngi-theng-el-a u-Sipho u-bisi No doubling, IO-DO order 1sM-buy-APPL-FV AUG-1a.Sipho AUG-11.milk
  b. Ngi-m- theng-el-a u-bisi u-Sipho
  b. Ngi-m- theng-el-a u-bisi u-Sipho
  c. \*?Ngi-m- theng-el-a u-Sipho u-bisi Doubled IO, IO-DO order
- c. \*?Ngi-[m-] theng-el-a [u-Sipho] u-bisi 1sm-1om-buy-APPL-FV AUG-1a.Sipho AUG-11.milk Intd. 'I'm buying him milk, Sipho.'

The word order asymmetry of objects disappears, however, when the verb takes on its disjoint form, indicated by the *-ile* affix below. That is, while the two objects were restricted in their order in (17), using the verb's disjoint form allows the two objects to occur in *either* order:

(18)	Zulu OM-doubling: disjoint verb forms (Zeller (2015): 23)			
	a. U-John u-(ba-) nik-ile (a-ba-ntwana) i-mali	Doubled IO, IO-DO order		
	AUG-1a.John 1sm-2om-give-past.dj AUG-2-child AUG-9.money			
	'John did give the children the money.'			
	b. U-John u-ba-) nik-ile i-mali (a-ba-ntwana)	Doubled IO, DO-IO order		
	AUG-1a.John 1sм-2ом-give-past.dj AUG-9.money AUG-2-child			
	'John <i>did</i> give the children the money.'			

Zeller (2015) analyzes these Zulu constructions where both objects can follow the disjoint verb form in either order as 'double right dislocation' constructions – that is, both object DPs are dislocated out of the vP. Per Zeller, the two dislocated objects become right-adjoined to a higher maximal projection as adjuncts, and it is this adjunct classification that accounts for the flexible word order.

To summarize, Zulu OM-doubling patterns are characterized by an obligatory association between object doubling and dislocation, and by double right dislocation constructions: while word order of objects is asymmetrical when the verb is in its conjoint form, a verb in its disjoint form requires both objects to be right-dislocated as adjuncts, allowing for word order symmetry. We will see that the Ikalanga data follows these Zulu patterns closely.

#### 3.2.2 Ikalanga: similarities to Zulu

Just as in Zulu, Ikalanga requires that OM-doubled objects be dislocated outside vP, and disallows object doubling and dislocation to occur independently from each other. (19) below establishes a context that facilitates doubling (corrective focus on an adverb, discussed in §5.2), and offers four attempted responses:

(19)	a.	W-aka-bon-a bana ibabaje be ikwele tshipi ya-ka pinda? 1sм-рsт-see-ғv 2.child 2.deм Assc 7.school last week	
		'Did you see those students last week?'	
	b.	A, nd-aka-bon-a bana ibabaje <b>madekwe</b> No 1sg.sм-pst-see-fv 2.child 2.DEM yesterday	No doubling, no dislocation
		'No, I saw those children yesterday.'	
	c.	*A, nd-aka-bon-a <b>madekwe</b> , bana ibabaje No 1sg.sм-pst-see-fv yesterday 2.child 2.DEM	No doubling, dislocation
		Intd. 'No, I saw those children yesterday.'	
	d.	*A, nd-aka-ba-bon-a bana ibabaje madekwe No 1sg.sm-pst-see-fv 2.child 2.dem yesterday	Doubling, no dislocation
		Intd. 'No, I saw those children yesterday.'	
	e.	A, nd-aka-ba-bon-a <b>madekwe</b> , bana ibabaje No 1sg.sm-pst-see-fv yesterday 2.child 2.Dem	Doubling, dislocation
		'No, I saw those children vesterday.'	

(19b) shows the canonical word order in a monotransitive sentence, with the object to the left of the temporal adverb. Dislocating the object outside of vP – indicated by the prosodic break preceding the object, and its position to the right of the adverb is ungrammatical (independent of doubling, as in (19c)), as is doubling the object independent of dislocation (19d). (19e), which both doubles and dislocates the object, is a grammatical and natural response.<sup>4</sup> We see then that, similar to the Zulu patterns, Ikalanga OM-doubling requires object dislocation, and object dislocation requires OM-doubling.

We see further similarities to Zulu in Ikalanga's flexible word order when both the adverb and object are dislocated. Above, when just the object DP was dislocated, the word order was obligatorily Adv O (19e). However, just as dislocating both objects in Zulu allows for word order symmetry, dislocating both the adverb and doubled object in Ikalanga allows for the otherwise unacceptable order of O Adv. In (20), both the adverb *madekwe* 'yesterday' and doubled object DP *bana ibabaje* 'those children' are offset by a prosodic break (indicated by a comma), suggesting both elements have been dislocated outside of *v*P. In this case of double dislocation, with OM-doubling, the word order can either be O Adv *or* Adv O.

(20) a. Did you really see those children yester
--

b. Nd-aka-(ba-) bon-a , (bana ibabaje) madekwe 1sm.sg-pst-2om-see-Fv 2.child 2.DEM yesterday	O Adv
'I did see those children yesterday!' <sup>6</sup>	
c. Nd-aka-ba- bon-a , madekwe bana ibabaje 1sm.sg-pst-20m-see-Fv yesterday 2.child 2.DEM	Adv O
'I did see those children yesterday!'	

This pattern of flexibility when both elements are dislocated is consistent with the Zulu patterns of double right dislocation constructions, and also with Letsholo (2013)'s analysis of OM-doubled objects as adjuncts outside of vP: if the dislocated object is assumed to be an adjunct along with the temporal adverb, it follows logically that the two adjuncts would have flexible word order relative to each other.

With these two key generalizations about OM-doubling – its unacceptability in discourse-neutral contexts, and its obligatory association with object dislocation – we are now equipped to delve into the particular pragmatic contexts that allow for OM-doubling.

 $<sup>^{4}</sup>$ Though both (19b) and (19e) are acceptable responses to (19a), there is a slight interpretive difference between the two, with the doubling in (19e) implying there is something noteworthy and important about the statement. §6 will discuss this interpretation further.

<sup>&</sup>lt;sup>5</sup>The context provided here that facilitates OM-doubling in the response will be explored in detail in §5.2.

<sup>&</sup>lt;sup>6</sup>Though this is still an acceptable response to the given question, it is slightly less natural compared to (20c).

# 4 Verum focus facilitates doubling

Letsholo (2013) first observed that OM-doubling has an emphatic bearing on a sentence.

- (21) a. Nchídzí wá-ka-téngá lórí íyé:yi
   1.Nchidzi 1sм-рsт-buy 9.car this
   'Nchidzi bought this car.'
  - b. Nchídzí wá-ka-i- té:ngá , lórí íyeyi 1.Nchidzi 1sм-pst-90м-buy 9.car this 'Nchidzi did buy this car.' (adapted from Letsholo (2013): 123)

Here, we expand on her observation, classifying this emphatic effect as a verum reading. Verum readings are licit when the proposition at hand is being doubted, and the speaker is attempting to assert their confidence and settle the issue, similar to the use of English emphatic *do* (Gutzmann & Castroviejo Miró, 2011; Gutzmann et al., 2020). Natural contexts for verum interpretations include addressing listener denial or doubt, affirmation of a preceding assertion, and opposite polarity contexts.

Notably, in both Lubukusu and Cinyungwe, the most regularly acceptable context for OM-doubling is situations that license a verum reading. In Ikalanga, we can see that – as in Lubukusu and Cinyungwe – verum interpretations facilitate OM-doubling. That is, verum contexts provide an appropriate context where doubling sounds natural: the examples below show that OM-doubling can be appropriately used to address listener doubt (22) and listener denial (23).

- (22) A: Did Nchidzi really drink the beer?? (doubting that it happened)
  - B: Nchidzi w-a-gu-ngw-a , busukwa ! 1.Nchidzi 1sm-pst-140m-drink-Fv 14.beer 'Nchidzi DID drink the beer!'
- (23) A: Nchidzi didn't drink the beer quickly.
  - B: Nchidzi w-a-gu-) ngw-a kabunako , busukwa) ! 1.Nchidzi 1<sub>SM-PST</sub>-14<sub>OM</sub>-drink-Fv quickly 14.beer 'Nchidzi DID drink the beer quickly!'

Another key property of verum constructions that we can apply to Ikalanga is their non-deniability; that is, the speaker-certainty portion of the meaning ought to be considered non-propositional. Gutzmann & Castroviejo Miró (2011) analyze verum as a multidimensional conversational operator, whose propositional content is separable from its verum dimension. Building on a diagnostic from Gutzmann & Castroviejo Miró (2011), we see that this is true for the verum interpretation created by OM-doubling in Ikalanga: denying the propositional content of an utterance does not simultaneously deny the speaker's certainty.

- (24) A: Nchidzi w-a-gu-ngw-a , busukwa 1.Nchidzi 1sm-pst-140M-drink-Fv 14.beer
  'Nchidzi DID drink the beer.' (in an appropriate context)
  B: Ate malebeswa! NEG truth
  'That's not true!'
  OK: It's not true that Nchidzi drank the beer.
  - #It's not true that you are certain of that.

We see, then, that Ikalanga OM-doubling displays patterns that are hallmarks of verum interpretations: namely, OM-doubling introduces a sense of speaker confidence that is separable from the sentence's propositional

content, and is thus appropriate in classic verum contexts such as addressing listener doubt and denial. The emphatic effect of OM-doubling first noted by Letsholo (2013) is thus well-analyzed as verum, and we can classify verum contexts as sufficient licensing conditions for doubling.

# 5 Focus on vP-internal constituents facilitate doubling

Apart from verum contexts, OM-doubling in Ikalanga can also be facilitated by certain types of focus on a vPinternal constituent: specifically, doubling is natural when corrective or exhaustive focus falls on a structurally low adverb or on a distinct object. New information focus, however, has no such effect<sup>7</sup>. Meanwhile, focus on a vPexternal constituent also fails to facilitate doubling. The discussion that follows is wholly based on and guided by the Lubukusu observations made in Sikuku & Diercks (2022), so first we provide a brief summary of the Lubukusu facts to show that this effect of vP-internal focus on doubling has previously been substantiated.

## 5.1 Relevant background: Focus within vP in Lubukusu

Sikuku & Diercks (2022) present robust evidence for the effect that focus on *vP*-internal elements has on OM-doubling – they show that new information focus, 'only' (exhaustive) focus, and contrastive focus on a distinct *vP*-internal constituent facilitates doubling, a pattern that persists across monotransitives and ditransitives alike. The select examples below illustrate this generalization: (25) establishes new information focus on a temporal adverb; (26) places exhaustive focus on the (non-doubled) theme object; and (27) contrastively focuses a manner adverb. In each case, OM-doubling is licit.<sup>8</sup>

(25)	Q: Ba-ba-ana ba-a-ka- kes-a ka-ma-indi liina? 2-2-children 2 <sub>SM</sub> - <sub>PST</sub> -6 <sub>OM</sub> -harvest- <sub>FV</sub> 6-6-maize when	New information focus
	'When did the children harvest the maize?'	
	A: Ba-ba-ana ba-ka-kes-ile ka-ma-indi <b>likolooba</b> 2-2-children 2 <sub>SM</sub> -6 <sub>OM</sub> -harvest-PFV 6-6-maize yesterday	
	'The children harvested the maize YESTERDAY.' (Sikuku & Diercks, 2021)	
(26)	Ba-ba-ana ba-a-ba-) rer-er-a (ba-b-ebusi) <b>ka-m-echi k-ong'ene</b> 2-2-children 2 <sub>SM-PST</sub> -2 <sub>OM</sub> -bring-APPL-FV 2-2-parents 6-6-water 6-only	Exhaustive focus
	'The children brought their parents ONLY WATER.' (Sikuku & Diercks, 2021)	
(27)	Ba-ba-ana ba-a-bu-) ly-a bu-suma bwangu, se-li kalaa ta 2-2-children 2sm-pst-140m-eat-fv 14-ugali quickly NEG-be slowly NEG	Contrastive focus
	'The children ate the ugali quicкix, not slowly.' (Sikuku & Diercks, 2021)	

### 5.2 Corrective focus facilitates OM-doubling

A number of the patterns seen in Lubukusu are similar to those in Ikalanga – for one, we see that corrective focus<sup>9</sup> on a *v*P-internal element facilitates OM-doubling in Ikalanga. (28) establishes a context where corrective focus falls on the temporal adverb *madekwe* 'yesterday'; in turn, the object *bana ibabaje* 'those children' is naturally doubled. Notably, a verum reading is not necessary here.

<sup>&</sup>lt;sup>7</sup>These patterns align with the hierarchy of degrees of contrast proposed in Cruschina (2021).

<sup>&</sup>lt;sup>8</sup>For more examples and a detailed explanation of this paradigm, see Sikuku & Diercks (2022). Notably for Lubukusu as for Ikalanga, the emphatic effect goes beyond focus itself.

 $<sup>^{9}</sup>$ For the purposes of this paper, we assume corrective and contrastive focus to be functionally equivalent.

- (28) Q: W-aka-bon-a bana ibabaje be ikwele tshipi ya-ka pinda? 1SM-PST-see-FV 2.child 2.DEM ASSC 7.school last week
   'Did you see those students last week?'
  - A: A, nd-aka-ba-bon-a madekwe, bana ibabaje
     No 1sg.sm-pst-see-fv yesterday
     2.child 2.DEM
     'No, I saw those children yesterday.'

Ditransitive constructions follow a similar pattern: in a lexical ditransitive, corrective focus on the recipient object facilitates doubling of the theme object, as in (29A1). Consistent with our previous observations of doubling and dislocation, we see the doubled object *shangu* 'shoes' right-dislocated outside the verb phrase. The focused recipient object *Ludo* remains within  $\nu$ P.

Notably, (29A2) shows that the object cannot be both doubled and correctively focused; that is, focus and doubling must be done on *different* objects, and dislocating the focused object is infelicitous.<sup>10</sup>

- (29) Q: A Nkadzi w-aka-p-a Shatho shangu? Q 1.Nkadzi 1sm-pst-give-fv 1.Shatho 10.shoes 'Did Nkadzi give Shatho shoes?'
  - A1: A, Nkadzi w-aka-(dzi-) p-a Ludo , (shangu) No 1.Nkadzi 1sм-рsт-10ом-give-Fv 1.Ludo 10.shoes 'No, Nkadzi gave Ludo shoes.'<sup>11</sup>
  - A2: #A, Nkadzi w-aka-m-p-a shangu , Ludo No 1.Nkadzi 15M-PST-10M-give-FV 10.shoes 1.Ludo Intd. 'No, Nkadzi gave Ludo shoes.'

Corrective focus can also fall on the theme object, in which case it facilitates doubling of the recipient object:

- Q: A Nchidzi w-aka-p-a Ludo burukhwi? 
   д 1.Nchidzi 1sм-pst-give-Fv 1.Ludo trousers
   'Did Nchidzi give Ludo trousers?'
  - A: A, Nchidzi w-aka-(m-) p-a **shangu** , (Ludo) No 1.Nchidzi 1<sub>SM-PST</sub>-1<sub>OM</sub>-give-Fv 10.shoes 1.Ludo 'No, Nchidzi gave Ludo shoes.'

Benefactive applicatives follow the same pattern: in (31), corrective focus on the benefactive object facilitates doubling of the theme object. And again, we see that doubling the same object that is correctively focused is unnatural.

(31) Q: A Ludo w-aka-bik-il-a Mpaphi nyama? Q 1.Ludo 1SM-PST-cook-APPL-FV 1.Mpaphi 9.meat 'Did Ludo cook meat for Mpaphi?' A1: A, Ludo w-aka-(i-) bik-il-a Nchidzi , nyama No 1.Ludo 1SM-PST-90M-cook-APPL-FV 1.Nchidzi 9.meat 'No, Ludo cooked meat for NCHIDZI.'<sup>12</sup>

 $<sup>^{10}</sup>$ These facts are strongly reminiscent of Zulu, where it has been analyzed that vP is a focal domain (Cheng & Downing (2012) and Zeller (2015), among others); focused material remains within vP, while non-focused material moves outside vP.

 $<sup>^{11}</sup>$ There seem to be multiple interpretive layers to this sentence beyond the corrective focus aspect. This sentence is emphasizing the fact that without a doubt, Nkadzi gave the shoes, and not anything else, to Ludo. It seems that the doubled object 'shoes' is perhaps receiving some exhaustive emphasis, but a verum reading of certainty is also seemingly intertwined here.

<sup>&</sup>lt;sup>12</sup>Again, here we get an interesting multi-layered interpretation: this sentence is "emphasizing the fact that without a doubt, Ludo cooked the meat, and not anything else, for Ludo."

A2: #A, Ludo w-aka-m- bik-il-a nyama , Nchidzi No 1.Ludo 1sm-pst-10m-cook-AppL-FV 9.meat 1.Nchidzi Intd. 'No, Ludo cooked meat for NCHIDZI.'

#### 5.3 Exhaustive focus facilitates OM-doubling

Exhaustive focus shows the same general effect as the patterns outlined above: when a vP-internal constituent is exhaustively focused, OM-doubling is natural. (32) demonstrates this with a temporal adverb:

(32) Nd-aka-ba-bon-a madekwe koga, bana ibabaje
1sm.sg-pst-2om-see-Fv yesterday only 2.child 2.dem
'I saw those children ONLY YESTERDAY.' (*i.e. not any other day*)

Additionally, in ditransitive constructions, exhaustively focusing one object facilitates doubling of the other:

(33) a. Nchidzi w-aka-(m-) p-a shangu koga , (Ludo) 1.Nchidzi 1SM-PST-1OM-give-FV 10.shoes only 1.Ludo 'Nchidzi gave ONLY SHOES to Ludo.'
b. Nchidzi w-aka-(dzi-) p-a Ludo koga , (shangu) 1.Nchidzi 1SM-PST-100M-give-FV 1.Ludo only 10.shoes 'Nchidzi gave ONLY LUDO shoes.'<sup>13</sup>

Unlike the patterns shown for contrastive focus, however, an exhaustively focused object can also be doubled, but only when both the adverb and object have been dislocated. Further research is needed to discern the reason for this difference.

(34) a. Nd-aka-ba-bon-a , bana ibabaje koga madekwe 1sm.sG-PST-2OM-see-FV 2.child 2.DEM only yesterday
'I saw ONLY THOSE CHILDREN yesterday.' (*i.e. not any other children*)
b. #Nd-aka-ba-bon-a madekwe , bana ibabaje koga 1sm.sG-PST-2OM-see-FV yesterday 2.child 2.DEM only Intd. 'I saw ONLY THOSE CHILDREN yesterday.' (*i.e. not any other children*)

#### 5.4 New information focus does not facilitate OM-doubling

While corrective and exhaustive focus on a *v*P-internal constituent allow for doubling, new information focus fails to do so on its own, regardless of whether it falls on an adverb (35), direct object (36), or indirect object  $(37)^{14}$ :

- (35) Q: How did the children eat the okra?
  - A: #Bana b-aka-[li-] j-a **ngebunya** , delele 2.child 2sm-pst-50m-eat-fv slowly 5.okra Intd. 'The children ate the okra sLOWLY.'
- (36) Q: What did Nchidzi give Ludo?
  - A: #Nchidzi w-aka-m- p-a shangu , Ludo) 1.Nchidzi 15M-PST-10M-give-FV 10.shoes 1.Ludo Intd. 'Nchidzi gave Ludo shoes.'

<sup>&</sup>lt;sup>13</sup>For both these examples, they seem to require a context of doubt to be entirely natural; both would sound natural when there is doubt about what was given, though further investigation into this is required.

 $<sup>^{14}</sup>$ (36) and (37) are unnatural responses to the question because they seem to overemphasize the doubled object. For example, (36) sounds unnatural because though the question seeks emphasis on *shangu* 'shoes', doubling *Ludo* has the effect of overemphasizing it over *shangu*.

- (37) Q: Who did Nchidzi give shoes to?
  - A: #Nchidzi w-aka-(dzi-) p-a **Ludo** , shangu 1.Nchidzi 1sm-pst-10m-give-Fv 1.Ludo 10.shoes Intd. 'Nchidzi gave LuDo shoes.'

### 5.5 vP-external focus does not facilitate OM-doubling

We have been careful to note thus far that the focus types discussed facilitate doubling when applied to an element *within the verb phrase* (namely, low adverbs and objects). This is an important specification to make, as focus on a *v*P-external constituent fails to facilitate doubling. For example, (38) below shows that corrective focus on a subject does not allow the object to be doubled.

- (38) Q: A Ludo w-aka-bon-a bana ibabaje be ikwele madekwe? Q 1.Ludo 1SM-PST-see-Fv 2.child 2.DEM ASSC 7.school yesterday 'Did Ludo see those children yesterday?'
  - A: #A, **Nchidzi** w-aka-(ba-) bon-a madekwe , (bana ibabaje) No 1.Nchidzi 15M-PST-20M-see-FV yesterday 2.child 2.DEM Intd. 'No, NCHIDZI saw those children yesterday.'

The overall generalization from this section remains clear: focus on vP-internal constituents serves as another licensing condition for OM-doubling. Specifically, we have seen that corrective and exhaustive focus on low adverbs and distinct (non-doubled) objects facilitate doubling, while new information focus on the same elements does not, nor does focus on a vP-external subject. This connection to vP-internal focus enabling OMing is familiar from Lubukusu (Sikuku & Diercks, 2021, 2022), Tiriki (Liu, 2022), Wanga (Kuzmik, 2022), Cinyungwe (Langa da Câmara et al., to appear), Zulu (Zeller, 2015), and others.

# 6 Mirative focus facilitates doubling

The previous section explored how focus on a particular constituent can facilitate doubling; however, it is also possible for an emphatic interpretation to arise on the entire OM-doubled sentence as a whole, generating an expressive reading. Specifically, OM-doubling in Ikalanga is licit if there is something unexpected and/or surprising within the construction, an interpretation that we analyze as mirative focus constructions (following Sikuku & Diercks 2022 and Lippard et al. 2022). Here, we lay out the relevant background for mirativity, substantiate its relation with OM-doubling in Ikalanga, and show it can be further classified as a conventional implicature.

### 6.1 Relevant background: Mirativity in Lubukusu and Cinyungwe

Recent research by Sikuku & Diercks (2022), Langa da Câmara et al. (to appear), and Lippard et al. (2022) has analyzed mirativity as one of the emphatic interpretations generated by OM-doubling across various Bantu languages. The most recognizable mirative context, perhaps, is one that makes all or part of a sentence surprising, unexpected, or shocking. Consequently, mirative interpretations are highly context-dependent. In Lubukusu and Cinyungwe, OM-doubling is entirely acceptable in mirative contexts. For example, given the below contexts, OM-doubling follows naturally to convey the surprise of (39) and (40).

(39) Context: Ugali is a hugely culturally important food; throwing it out is therefore a surprising act.

Wafula a-bu-) mwat-a (bu-suma) 1.Wafula 1sm-140m-throw.out-Fv 14-ugali

'Wafula threw out the ugali.' (Sikuku & Diercks (2022): 264) Lubukusu

(40) Context: As you know, my father doesn't know how to cook beans. When we left school I ran home to cook, but do you know what?! I found out that he had really cooked them nicely!

Baba a-da-(ci-) phik-a (ci-mbamba) ! 1.father 1SM-PST-7OM-cook-FV 7-beans

Cinyungwe

'Father actually cooked the beans!' (Langa da Câmara et al. (to appear): xxi)

In Lubukusu, OM-doubling is also licit in mirative contexts where the utterance is highly informative. Within the provided context, (41) is particularly informative in that it offers important information explaining Wafula's condition, and this high degree of informativity facilitates OM-doubling.

(41) Context: Wafula is lying on the couch, clearly bloated with a bulging belly, napping somewhat uncomfortably. On seeing the scene someone could ask, "what's going on with him?" which could be answered:

Wafula a-bu-ly-a bu-suma 1.Wafula 1sm-140m-eat-FV 14-ugali Lubukusu

'Wafula ate ugali.' (carries some sense of 'Wafula shouldn't have eaten, because look at what it's gotten him, but here we are!') (Sikuku & Diercks (2022): 263)

A final characteristic noted by Sikuku & Diercks (2022) regarding OM-doubling and mirativity is that – just as discourse context can create the licensing conditions for OM-doubling – context can just as well 'undo' them. That is, if an utterance that was once surprising and thus naturally OM-doubled becomes expected and unsurprising in a different context, OM-doubling is no longer natural. In the Cinyungwe example (42), OM-doubling might have previously been natural when Siriza first began eating a shocking amount of bananas. Now that it is expected, however, OM-doubling is infelicitous.

(42) Context: Every time Siriza visits her grandmother, she eats many, many bananas, and always gets a stomachache from eating so much. The most recent time this happened, someone said:

Tani mu-n'dziw-a kale Siriza a-da-((#ma-)) dy-a pomwe (ma-figu) (ma-zinji) **Cinyungwe** as you-know-Fv already 1.Siriza 1sG-PERF-6OM-eat-Fv again 6-bananas 6-many

'As you already know, Siriza ate many bananas again.' (Lippard et al. (2022): 13)

Together with Cruschina (2019)'s work, the recent research on mirativity in Lubukusu and Cinyungwe lay the foundation needed to address the mirative interpretation of Ikalanga OM-doubling.

## 6.2 Mirativity in Ikalanga

Returning to Ikalanga, we see that – just as in Lubukusu and Cinyungwe – OM-doubling can be associated with a mirative interpretation, and is facilitated in mirative contexts. When an utterance is especially surprising or unexpected, doubling is licit, as in (43a):

- (43) Context: The children love beans, and every time they are served beans, they eat them incredibly quickly because they like them so much. This time, however, when they sit down to eat, they eat the beans very slowly, which is quite unusual for them. In response, someone could say:
  - a. Bana b-aka-(dzi-) j-a ngebunya , (nyemba) 2.child 2<sub>SM</sub>-<sub>PST</sub>-10<sub>OM</sub>-eat-<sub>FV</sub> slowly 10.beans 'The children ate the beans slowly.'<sup>15</sup>

<sup>&</sup>lt;sup>15</sup>As we might expect, a double-dislocation construction is also possible here (notably, with two prosodic breaks): Bana b-aka-dzi-j-a, nyemba, ngebunya.

Bana b-aka-j-a nyemba ngebunya
 child 2sм-рsт-eat-fv 10.beans slowly
 'The children ate the beans slowly.'

Notably, the canonical non-doubled sentence in (43b) is unnatural in the given context: though the context makes the utterance unexpected, without OM-doubling, there is no surprise conveyed – a non-doubled sentence is thus less natural.

(44) below (a context adapted from Sikuku & Diercks (2022)) serves as another example of a mirative context of surprise/unexpectedness facilitating OM-doubling in Ikalanga. Again, a non-doubled sentence is less natural in this context because it incorrectly implies that there is nothing remarkable about cooking the beans:

- (44) Context: The beans were very tough and dry, and were clearly going to require a lot of cooking to be edible.
  - a. Nd-a-(dzi-) bid-is-a kabunako , (nyemba) 15M.SG-PST-10OM-cook-CAUS-FV quickly 10.bean 'I cooked the beans quickly.'
  - b. #Nd-a-bid-is-a nyemba kabunako 1sm.sg-pst-cook-caus-fv 10.beans quickly
     'I cooked the beans quickly.'

The contexts in (43) and (44) establish that a particular constituent, *ngebunya* 'slowly' and *kabunako* 'quickly' respectively, is the surprising element; however, the mirative emphasis can also fall on the entire sentence, indicating the whole event is shocking:

(45) Context: Nchidzi is known to not get along with Ludo; he is always very rude to her. But one day, he presents Ludo with a gift, and everyone is shocked.

Nchidzi w-aka-m-p-a shangu , Ludo 1.Nchidzi 1sm-pst-10m-give-fv 10.shoes 1.Ludo

'Nchidzi gave Ludo shoes.'<sup>16</sup>

In addition to being licit in mirative contexts where a sentence is surprising and unexpected, OM-doubling in Ikalanga is also licit when an utterance is highly informative, similar to Lubukusu:

(46) Context: You arrive home to find that Nchidzi is acting very strangely and stumbling around. You ask someone what has happened to him. They respond:

Nchidzi w-a-gu-ngw-a , busukwa) 1.Nchidzi 15M-PST-140M-drink-FV 14.beer

'Nchidzi drank beer.'

Here, the statement is particularly informative in that it offers an explanation to Nchidzi's behavior; OM-doubling is thus acceptable.

Sentences can also be informative because of the sense of importance or gravity that they carry. In the example below, the speaker's use of OM-doubling conveys the seriousness and newsworthiness of the situation; that is, it indicates there is something notable and important about having seen the children:

<sup>&</sup>lt;sup>16</sup>Interestingly, doubling the theme object rather than the recipient is less natural in this context:

a. ?Nchidzi w-aka-dzi-p-a Ludo , shangu

<sup>1.</sup>Nchidzi 1SM-PST-10OM-give-FV 1.Ludo 10.shoes

<sup>&#</sup>x27;Nchidzi gave Ludo shoes.'

This sentence implies that the "doubting" interpretation is directed at the object that was given, that is, the shoes, and not on who was given the shoes. It therefore seems that the doubled object is receiving some sort of focus that is incompatible with the context, an observation that will be further detailed in §7.1. However, this pattern in ditransitives of it being more natural to double the structurally higher object (here, the recipient) in certain contexts is not unheard of: it is also seen in Cinyungwe (Langa da Câmara et al. (to appear)) and Zulu (Zeller (2015)).

(47) Context: Last week, a group of children were being naughty, playing with a water tap and wasting water, which is a rare commodity in their town.

W-aka-(ba-) bon-a (bana ibabaje) be ikwele tshipi ya-ka pinda? 1SM-PST-2OM-see-FV 2.child 2.DEM ASSC 7.school last week

'Did you see those students last week?'

Again consistent with Lubukusu (Sikuku & Diercks, 2022), we can see that if a mirative interpretation is 'undone', OM-doubling is no longer licit. The sentence in (48a) is surprising in the given context, and doubling is therefore natural (and preferred to a non-doubled sentence). When the same utterance becomes expected and no longer surprising in (49), however, doubling ceases to be acceptable, and the most appropriate response is a non-doubled sentence.

- (48) Context: The children hate eating beans, and never want to eat them. But one day, they do eat the beans. Someone says, very surprised:
  - a. Bana b-aka-(dzi-)j-a , (nyemba) 2.child 2sm-pst-10om-eat-fv 10.beans 'The children ate the beans!'
  - b. Bana b-aka-j-a nyemba
    2.child 2sm-pst-eat-fv 10.beans
    'The children ate the beans!' (Less felicitous than (48a))
- (49) Context: After that one miraculous day, the children realize that they actually do like beans, and so now they eat them everyday. One evening, someone asks what happened at dinnertime. You could say:
  - a. #Bana b-aka-dzi-j-a , nyemba 2.child 2sm-psr-10om-eat-fv 10.beans 'The children ate the beans.'
  - b. Bana b-aka-j-a nyemba
     2.child 2sm-pst-eat-fv 10.beans
     'The children ate the beans.'

Following analysis of Romance focus fronting constructions (Bianchi et al., 2016; Cruschina, 2021, 2019), Sikuku & Diercks (2022) and Lippard et al. (2022) analyze the emphatic readings in OM-doubling constructions as conventional implicatures, situated in a distinct tier of meaning from at-issue truth-conditional meaning. We can see that Ikalanga OM-doubling in mirative contexts displays the expected characteristics of a conventional implicature. Specifically, the mirative 'surprise' aspect of an utterance is separable from the propositional content:

(50) A: Bana b-aka-dzi- j-a ngebunya, nyemba ! 2.child 2sm-pst-10om-eat-Fv slowly 10.beans
'The children ate the beans slowly!' (In an appropriate surprising context)
B: A-kuto-chenamisa! NEG-PRS-surprise
'It's not surprising!'

Here, Speaker B denies that the event is surprising, but does so without denying the fact that the children ate the beans slowly. It is therefore evident that the not-at-issue (mirative) content and at-issue (propositional) content occupy different dimensions and are independent from the other, as is typical of a conventional implicature.<sup>17</sup>

<sup>&</sup>lt;sup>17</sup>A second diagnostic for conventional implicatures behaves unexpectedly in Ikalanga. Because conventional implicatures are non-cancellable, we would expect that a speaker who says a sentence with mirative focus *cannot* then deny that the sentence is surprising. That is, they must remain committed to the implicature that the utterance is surprising. However, this does not seem to be the case in Ikalanga; it seems to be

In this section, we have seen that mirative contexts provide sufficient licensing conditions for OM-doubling in Ikalanga, much as they do in Lubukusu and Cinyungwe. An utterance deemed as surprising, shocking, or highly informative in the provided context facilitates doubling and creates an expressive mirative interpretation. If a oncesurprising event later becomes expected, this mirative interpretation is undone, and doubling is no longer natural. The interpretive effects created by OM-doubling in mirative contexts are consistent with those of a conventional implicature, where the mirative content is independent from the propositional content of an utterance. The association between OM-doubling and a mirative interpretation is further evidence of the extensive pragmatic effects of doubling in Ikalanga.

# 7 Unsolved puzzles: Areas for future research

## 7.1 Focused and doubled objects

The most notable area for future research – hinted at in footnotes throughout this paper – is the pattern of doubled objects sometimes seemingly being focused, and sometimes not. §5 presented numerous pieces of data that substantiated the generalization that an object can be OM-doubled if *some other vP*-internal constituent was focused. This observation is consistent with the Lubukusu data as well (Sikuku & Diercks (2022)). Though there is robust evidence for this pattern, there also remain a number of data points that complicate, if not contradict, it – that is, at times, the doubled and dislocated object seems to be the element receiving emphasis or focus, rather than some distinct element remaining in *vP*. As an initial foray into this puzzle, consider this (previously seen) example:

(51) Q: Bana b-aka-j-a delele chini?
2.child 2sm-Pst-eat-Fv 5.okra how
'How did the children eat the okra?'
A: #Bana b-aka-[li-] j-a ngebunya, delele
2.child 2sm-Pst-5om-eat-Fv slowly 5.okra
Intd. 'The children ate the okra slowly.'

Cruschina (2021) argues that different types of emphatic focus may be distinguished by the degrees of contrastive interpretation that they create. The low degree of contrast that new information focus carries can potentially explain why OM-doubling is unacceptable in (51). However, there seem to be reasons beyond just this—the response in (51) is infelicitous because though the question searches for focus on the adverb *ngebunya* 'slowly', the doubled object *delele* 'okra' seems to be receiving unnecessary emphasis; the sentence is emphasizing that it is the *delele* that they ate, to the first author's ear.

This appears to contradict the interpretation of the same sentence in the corrective focal contexts noted above:

- (52) Q: Did the children eat the okra quickly?
  - A: A, bana b-aka-li-j-a ngebunya , delele No 2.child 2sm-pst-5om-eat-fv slowly 5.okra 'No, the children ate the okra slowly.'

possible for the speaker to deny their own surprise.

- (1) a. Bana b-aka-(dzi-)j-a ngebunya, nyemba...
  2.child 2<sub>SM-PST-10OM</sub>-eat-FV slowly 10.bean
  'The children ate the beans slowly!' (*In an appropriate surprising context*)
  b. ... Ngono akuna chino chenamisa ipapo.
  - but NEG that surprise there
    - '...but there is nothing surprising there.'

Further research is needed to clarify this data point.

In (52), the doubled sentence sounds natural in response to the given question, and focus falls on the adverb as intended, rather than the doubled object. Yet the unexpected emphasis on the doubled object appears in a different contrastive focus context:

- (53) Q: A Nchidzi w-aka-p-a Ludo burukhwi? Q 1.Nchidzi 1SM-PST-give-FV 1.Ludo trousers 'Did Nchidzi give Ludo trousers?'
  - A: A, Nchidzi w-aka-(m-) p-a shangu , (Ludo) No 1.Nchidzi 1<sub>SM</sub>-<sub>PST</sub>-1<sub>OM</sub>-give-<sub>FV</sub> 10.shoes 1.Ludo 'No, Nchidzi gave Ludo shoes.'

Though the response in (53) is appropriate, and contrastive focus falls on *shangu* 'shoes' as expected, deeper investigation into the interpretation of the sentence elucidates the puzzle at hand: the doubled object *Ludo* does indeed feel emphasized here. Because OM-doubling is not obligatory (leaving *Ludo* out of the response would be a felicitous answer), it seems as if the speaker is including *Ludo* for some significant reason. In the intuitions of the first author, whatever has been doubled feels like information that can be left out, and so by deliberately including the doubled object, the speaker is emphasizing *Ludo*.

Exhaustive focus contexts also illustrate this puzzle – an object can be both doubled and exhaustively focused, which diverges from the patterns seen with corrective focus in §5.2:

- (54) a. Nchidzi w-aka-(m-) p-a shangu , (Ludo koga) 1.Nchidzi 1sm-pst-10m-give-Fv 10.shoes 1.Ludo only 'Nchidzi gave only Ludo shoes (no one else).'
  - b. Nchidzi w-aka-dzi-p-a Ludo , (shangu koga)
    1.Nchidzi 1sm-pst-10om-give-Fv 1.Ludo 10.shoes only
    'Nchidzi gave Ludo only shoes (nothing else).'

Clearly, in both example above, the doubled object is also focused – yet, if we are to assume again here that doubled objects are 'extra' information that can optionally be left out, it is unclear how a doubled object could also be focused and carry key information. It is also unclear why the non-doubled objects remaining in vP (above, *shangu* and *Ludo*, respectively) do not appear to be receiving any emphasis or focus. This is a clear divergence from the generalization that focusing one object facilitates doubling of the other.

Although exhaustive focus fell on the doubled objects above, it is still possible to focus and double distinct objects. (55) below follows the expected pattern:

(55) Nchidzi w-aka-m-p-a shangu koga, Ludo
 1.Nchidzi 1SM-PST-10M-give-FV 10.shoes only 1.Ludo
 'Nchidzi gave Ludo only shoes (nothing else).'

We are thus presented with a puzzle in which a doubled object is sometimes simultaneously focused, and sometimes not; still other times, the doubled object seems to receive some type of emphasis by virtue of being included in the utterance. Future research is needed to, first, more precisely delineate the empirical facts of these patterns, and ultimately analyze it from a theoretical standpoint.

### 7.2 Overlapping interpretive readings

Though in this paper we present verum, vP-internal focus, and mirative interpretations as distinct phenomena, there are multiple instances in which various readings seem to be intertwined. Lippard et al. (2022) broach the idea that various emphatic interpretations (such as mirativity, reprimand readings, verum, and exhaustivity) may be related to others. Indeed, in Ikalanga, it is difficult at times to disentangle different readings.

A verum reading<sup>18</sup> seems to arise in a variety of contexts where it might not be expected. (56), for example, exhaustively focuses a temporal adverb, yet also has a verum interpretation:

(56) Nd-aka-(ba-) bon-a , (bana ibabaje) madekwe koga 1sm.sg-pst-2om-see-Fv 2.child 2.DEM yesterday only 'I DID see those children only yesterday!'

Though an exhaustive reading is still available in (56), the verum reading of insistence is more salient. The non-doubled version of (56) without the OM, however, has only the exhaustive reading.

As another example of possibly overlapping interpretations, consider (57), replicated from §5.2:

- - A: A, Ludo w-aka-(i-) bik-il-a Nchidzi , nyama No 1.Ludo 15M-PST-90M-cook-APPL-FV 1.Nchidzi 9.meat 'No, Ludo cooked meat for NCHIDZI.'

The response in (57) is emphasizing the fact that, without a doubt, Ludo cooked the meat and not anything else for Nchidzi. There are multiple layers to this comment. First, because the response is licit in the established corrective focus context, we know the recipient object *Nchidzi* is being correctively focused. Yet the meaning extends beyond this focus: there also seems to be a verum reading, since the sentence is uttered "without a doubt". Furthermore, the interpretation that Ludo cooked meat "and not anything else" suggests an exhaustive reading is also present. The question therefore arises of whether some of these various readings are related, or if they are all indeed distinct phenomena. If the latter is true, it must then also be determined in which situations they all arise.

### 7.3 Ikalanga object marking in cross-Linguistic context

Ikalanga OMing replicates a number of patterns documented for other Bantu languages. First, it generates emphatic interpretations: as illustrated in §4 and §6 OM-doubling can have a verum interpretation and a mirative interpretation of surprise, similar to Cinyungwe and Lubukusu (Lippard et al. (2022), Lippard et al. (this conference), Sikuku & Diercks (2022)). There is also an association between doubling and dislocation: similar to Zulu, OM-doubling and right-dislocation of the object are linked and cannot occur independently of each other. There is also an association between doubling and focus: in Cinyungwe and Lubukusu, when an object is doubled, focus naturally falls on *some other* element. This is *sometimes* also the case in Ikalanga, in particular with corrective focus and exhaustive focus

- (58) Q: Did the children eat the okra quickly?
  - A: A, bana b-aka-(li-) j-a ngebunya , (delele) No 2.child 2sm-pst-50m-eat-fv slowly 5.okra 'No, the children ate the okra slowly.'

But there are also cross-linguistic patterns that Ikalanga appears to complicate. While there are many examples of doubling an object and focusing *some other* constituent, there are also a number of examples where the doubled and dislocated object seems to be the element receiving emphasis or focus. This diverges from the Zulu patterns, where focused objects cannot be dislocated.

(59) Q: Bana b-aka-j-a delele chini? 2.child 25M-PST-eat-FV 5.okra how

 $<sup>^{18}</sup>$ We classify instances where the first author translates a sentence with English emphatic *do* as verum; however, it is also possible that English emphatic *do* has a narrower semantic range than these apparent verum interpretations in Bantu langauges, as suggested in Lippard et al. (2022). We must not neglect the possibility that the English emphatic *do* may not overlap entirely with verum contexts in Ikalanga, and must not rely too heavily on the English translation to discern interpretations.

'How did the children eat the okra?'

A: #Bana b-aka-(li-) j-a ngebunya , (delele) 2.child 25M-PST-50M-eat-FV slowly 5.okra Intd. 'The children ate the okra slowly.'

The response in (59) is infelicitous because though the question searches for focus on the adverb, the doubled object *delele* 'okra' seems to be receiving unnecessary emphasis. The sentence is emphasizing that it is the *delele* that they ate. This appears to contradict the interpretation of (58) from above, which uses the same sentence but in a different focal context. In (58), corrective focus naturally falls on the adverb as intended, rather than the doubled object. Yet, in a different corrective focus context, the unexpected emphasis on the doubled object appears:

- (60) Q: A Nchidzi w-aka-p-a Ludo burukhwi?
   Q 1.Nchidzi 1sm-pst-give-Fv 1.Ludo trousers
   'Did Nchidzi give Ludo trousers?'
  - A: A, Nchidzi w-aka-m-p-a shangu , Ludo No 1.Nchidzi 1sm-pst-10m-give-Fv 10.shoes 1.Ludo 'No, Nchidzi gave Ludo shoes.'

Though the response in (60) is appropriate and corrective focus falls on *shangu* 'shoes' as expected, the doubled object *Ludo* also feels emphasized. Whatever has been doubled feels like information that can be left out (in the intuitions of the first author) – so by deliberately including the doubled object, the speaker is consequently emphasizing *Ludo*. It is unclear to us why this emphasis on the doubled object by virtue of it being included appears to be more salient in some contexts, and less salient (perhaps even absent) in others.

Exhaustive focus contexts also illustrate this puzzle – we saw above in (55) that it is possible to exhaustively focus and double distinct objects. Yet in other examples, an object can be both doubled and exhaustively focused:

- (61) a. Nchidzi w-aka-m-p-a shangu , Ludo koga 1.Nchidzi 1sm-pst-10m-give-Fv 10.shoes 1.Ludo only 'Nchidzi gave only Ludo shoes (no one else).'
  b. Nchidzi w-aka-dzi-p-a Ludo , shangu koga
  - 1.Nchidzi 1sm-pst-10om-give-Fv 1.Ludo 10.shoes only

'Nchidzi gave Ludo only shoes (nothing else).'

Again, we see a clear divergence from the generalization that focusing one object facilitates doubling of the other. It is unclear why the non-doubled objects remaining in vP (above, *shangu* and *Ludo*, respectively) do not appear to be receiving any emphasis or focus. It is also unclear how it is possible for a doubled and dislocated object to be simultaneously focused. If doubled objects are 'extra' information that can optionally be left out, why can they also be focused and carry key information? There are clearly many puzzles remaining with Ikalanga OMing.

## 8 Conclusions

From the empirical facts presented in this paper, it is abundantly clear that the focal and emphatic effects that OM-doubling has in Ikalanga are wide-ranging. Though OM-doubling is infelicitous in discourse-neutral situations, specific pragmatic contexts can make doubling entirely natural – specifically, doubling can create a verum reading, licit in verum contexts where the speaker intends to assert their confidence and address listener denial or doubt, similar to English emphatic *do*. Doubling is also associated with a mirative reading of surprise: when context makes all or part of an utterance shocking, newsworthy, or highly informative, OM-doubling is acceptable. We have also seen that doubling is facilitated by certain focus environments. When a *v*P-internal constituent is focused with corrective or exhaustive focus, doubling is licit; new information focus on a *v*P-internal constituent or focus on a *v*P-external element, however, are insufficient licensing conditions. In all cases of OM-doubling, we saw that the

doubled object is obligatorily dislocated, and that doubling and dislocation cannot occur independent of each other. The Ikalanga facts here are significant in that they corroborate and overlap with ongoing work in other related Bantu languages, yet also offer new and distinct patterns that further enrich the current research on Bantu OM-doubling.

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