

# Object Marking in Cinyungwe

Crisofia Langa da Camara (Universidade Eduardo Mondlane), Michael Diercks, Madelyn Colantes, Brendan Ly, Jackson Kuzmik, and Siva Zhou (Pomona College)  
ACAL 52 “@” University of Florida

## 1 Introduction to Cinyungwe Object Marking (OMing)

- This presentation addresses object markers (OMs) in Cinyungwe, a Bantu language (N43) spoken in Mozambique.<sup>1</sup>

- (1) a. baba a-da-phik-a ci-mbaba  
1father 1SM-PST-cook-FV 7-beans  
'Father cooked beans.'  
b. baba a-da-(ci-) phik-a  
1father 1SM-PST-7OM-cook-FV  
'Father cooked them (beans).'

- Previous work on OMs in Bantu languages focuses on:
  - whether they can co-occur with (i.e. **double**) overt objects (and, if so, under what conditions),
  - how they come to occur in the positions that they occur in, and therefore
  - whether OMs are pronominal forms, or agreement markers, or fall under some nuanced designation
  - these alternatives center on a core diagnostic of whether or not the OM is in complementary distribution with an overt *in situ* lexical object
- OM-doubling is possible in Cinyungwe, but there is a prosodic break between the OMed object and verb:

- (2) baba a-da-(ci-) phik-a , (ci-mbaba) “,” = **prosodic break**  
1.father 1SM-PST-7OM-cook-FV 7-beans  
'Father cooked beans.'

- Patterns like this have commonly been analyzed as instances of OMed objects moving out of the verb phrase, an analysis which we will adopt for examples like (2).<sup>2</sup>

- (3) Proposal for structure of (2):  
baba a-da-(ci-) phik-a ei-mbaba ]<sub>vP</sub> (ci-mbaba)  
1.father 1SM-PST-7OM-cook-FV 7-beans  
'Father cooked beans.'

- To the extent that we have observed thus far:
  - Animacy does not influence an object's ability to be OMed (examples throughout).
  - OMing is never obligatory in main clauses in Cinyungwe, to the best of our knowledge.<sup>3</sup>
  - Cinyungwe only allows a single OM on the verb (evidence in §9.2).

### • Goals in this talk:

1. Document the core empirical patterns of Cinyungwe object marking
  - OMing triggers obligatory focal effects on vP (§2)
  - OMing naturally (but non-obligatorily) co-occurs with object movement (§2)
2. Outline our current working hypothesis
  - Object movement dissociated from OM-triggering Agree (§4)
  - The head bearing the OM-generating  $\varphi$ -features also bears a focus operator (§4)
  - Object movement can shift locality for the OM probe, resulting in “symmetrical” object marking

<sup>1</sup>All data in this presentation represent the linguistic intuitions of the first author.

<sup>2</sup>Zulu is a prominent model, discussed below in §3.

<sup>3</sup>One possible exception is with locative objects, see §9.1 in the Appendix.

## 2 Cinyungwe OMing interacts with focus

### 2.1 Non-doubling OMs, focused and not

#### 2.1.1 Non-doubling OMs: pragmatically neutral contexts

- In non-doubling contexts, it is natural to OM the structurally higher object (benefactive), but marginal to OM the structurally lower object (theme).

(4) Kapenu a-ndza-(wa)-gas-ir-a moto  
Kapenu 1SM-FUT-2OM-start.fire-APPL-FV 3fire  
'Kapenu will start fire for them (women).'

(5) #Kapenu a-ndza-(wu)-gas-ir-a a-kazi  
Kapenu 1SM-FUT-3OM-start.fire-APPL-FV 2-women  
'Kapenu will start it (fire) for the women.'

#### 2.1.2 Non-doubling OMs: focused contexts

- The sentence in (5) becomes completely natural, however, when the recipient object is focused.

(6) Q&A Congruence: focus in bold

Q: Kapenu a-ndza-gas-ir-a **yani** moto?  
1Kapenu 1SM-FUT-start.fire-APPL-FV 1who 3fire  
'Who will Kapenu start fire for?'

A: Kapenu a-ndza-(wu)-gas-ir-a **a-kazi**  
1Kapenu 1SM-FUT-3OM-start.fire-APPL-FV 2-women  
'Kapenu will start it (fire) for THE WOMEN.'

### 2.2 OM-doubling always generates focus interpretations

- The canonical word order has low adverbs following objects inside the verb phrase: S V O Adv.
- Objects can appear to the right of low adverbs, however, which is very natural in OM-doubling contexts.<sup>4</sup>

(7) Temporal adverb

a. baba a-da-phik-a ci-mbaba dzulo  
1father 1SM-PST-cook-FV 7-beans yesterday  
'The father cooked the beans yesterday.'

b. baba a-da-(ci)-phik-a (ci-mbaba) dzulo  
1father 1SM-PST-7OM-cook-FV 7-beans yesterday  
\*'The father cooked the beans yesterday.'  
OK as 'The father really/certainly COOKED THE BEANS YESTERDAY.'

c. baba a-da-(ci)-phik-a dzulo, (ci-mbaba)  
1father 1SM-PST-7OM-cook-FV yesterday 7-beans  
'Father cooked the beans YESTERDAY.'

- Note in (7) that in both instances of OM-doubling involve an emphatic interpretation.
- In instances of OM-doubling with movement of the doubled object to the right, the emphasis naturally falls on the material to the left of that object.

<sup>4</sup>This kind of right-dislocation is a well-documented property of object marking in some Bantu languages, e.g. Chichewa (Bresnan & Mchombo, 1987), Zulu (Zeller, 2012, 2015), Haya (see Riedel 2009 for an overview), Ikalanga (Letsholo, 2013), and Tswana (Creissels, 1996), just to name a few.

- (8) Doubling + Movement = Focus on manner adverb  
 baba a-da-(ci-) phik-a **bwino**, (ci-)mbamba  
 1father 1SM-PST-7OM-cook-FV well 7-beans  
 ‘Father cooked the beans WELL.’  
*Natural contexts include:*
- answers to manner questions
  - corrections about manner

- In instances where the OM-doubled object is *in situ*, there is (what we will refer to as) a predicate focus reading, that we are currently translating with the English adverbial *really/certainly*.<sup>5</sup>

- (9) *in situ* OM-doubling = Predicate Focus  
 baba a-da-(ci-) **phik-a** (ci-)mbamba **bwino**  
 1father 1SM-PST-7OM-cook-FV 7-beans well  
 ‘Father really/certainly cooked the beans well.’  
*Natural contexts include:*
- disagreements about whether this event happened
  - clarification of a previous assertion

### 3 Relevant case study: Zulu OMed

- There is a long history of research on Zulu object marking; here we rely mainly on Zeller (2012, 2014, 2015).<sup>6</sup>
- OMed objects in Zulu are right-dislocated, moving out of the verb phrase.
- (10) demonstrates OMed objects (obligatorily) moving to the right of manner adverbs.

- (10) a. Si-bon-a i-n-kosi kahle. [Zulu]  
 1SG.SM-see-FV AUG-9-chief well  
 ‘We are seeing the chief well.’
- b. \*Si-(yi-) bon-a (i-n-kosi) kahle.  
 1SG.SM-9OM-see-FV AUG-9-chief well
- c. \*Si-bon-a kahle i-n-kosi.  
 1SG.SM-see-FV well AUG-9-chief
- d. Si-(yi-) -bon-a kahle (i-n-kosi).  
 1SG.SM-9OM-see-FV well AUG-9-chief  
 ‘We are seeing him well, the chief.’ (Zeller, 2015, 20)

- Conjoint/disjoint verbal forms are linked with the content of *vP* (see Halpert 2016, 2017; Zeller 2015, among others).
  - Conjoint forms of verbs can only appear if *vP* contains an overt syntactic constituent.
  - Disjoint forms of verbs can only appear when there is nothing overtly in *vP*.
- When a transitive verb has an overt *in situ* object DP, the verb appears in a conjoint form, as in (11a).
- When the object is OM-doubled, in contrast, the verb appears in a disjoint form, as in (11b).

- (11) Zulu (Zeller, 2012, 222)
- a. Ngi-theng-a le moto.  
 1SG.SM-buy-FV 9DEM 9.car  
 ‘I’m buying this car.’ (unmarked verb = conjoint form)

<sup>5</sup>This is reminiscent of Bukusu OM-doubling contexts, where OM-doubling is linked with an emphatic interpretation of the sentence. Sikuku et al. (2018) analyzed this reading as *verum focus*, readily translated with English emphatic *do*. In more recent (ongoing) work, Sikuku & Diercks (2020) argue that this is better analyzed as an instance of mirative focus on the predicate.

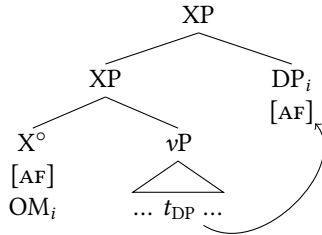
<sup>6</sup>Among others, see Adams (2010); Buell (2005, 2006); Cheng & Downing (2009); Halpert (2012); Van der Spuy (1993); Zeller (2012, 2014, 2015).

- b. Ngi-\*(ya)-(yi)-theng-a le (moto) .  
 1SG.SM-DJ-OM9-buy-FV 9DEM 9.car  
 'I'm buying (it) this car.' (disjoint verb form)

- The evidence collectively suggests that OMing in Zulu is necessarily linked with movement of the OMed object to the right edge of vP.

(12) Structure of (10d) (Zeller, 2015, 20)  
 . . .siyibona kahle]<sub>vP</sub> . . . inkosi

(13) Zeller's analysis of Zulu object marking (based on Zeller 2015, (65))  
 [AF] = anti-focus



- It is well established that vP is a focus domain in Zulu.<sup>7</sup>
- Zeller's analysis posits that OM-doubling creates focus-background structure in the postverbal domain.

## 4 Cinyungwe: dissociations between movement and OMing

### 4.1 Rightward movement of objects for focus-background purposes

- In non-doubling contexts, objects may be *in situ* or moved to the right edge of the sentence.

(14) No Doubling (no movement, basic transitive sentence)

baba a-da-phik-a ci-mbamba mwakankulumize  
 1father 1SM-PST-cook-FV 7-beans quickly  
 'Father cooked the beans quickly.'

- *Pragmatically neutral sentence*
- *Canonical word order*

(15) No Doubling (theme moved to the right)

baba a-da-phik-a mwakankulumize , ci-mbamba  
 1father 1SM-PST-cook-FV quickly 7-beans  
 'Father cooked the beans QUICKLY.'

- *Attention is being brought to the manner of cooking.*
- *No particular emphasis is being placed on the manner, however.*
- *There is a sense that what is being talked about is the manner of cooking.*

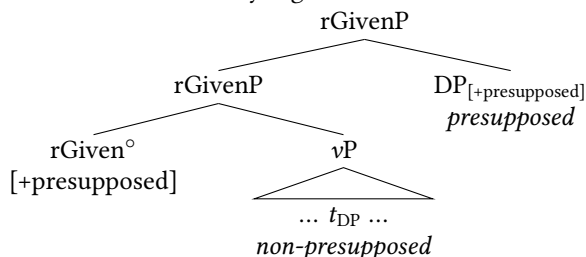
- The interpretive shift appears to be more of a 'lightweight' focus: it doesn't create a strong sense of emphasis, but instead a redirection of the addressee's attention onto the remaining vP-internal elements.<sup>8</sup>

<sup>7</sup>See, among others, Sabel & Zeller (2006); Cheng & Downing (2009, 2012); Halpert (2016).

<sup>8</sup>Kiss (1998) proposes a distinction between identificational focus vs. informational focus (new information, non-presupposed information) based on a range of crosslinguistic evidence. É. Kiss (2012) argues that focus constructions in Hungarian can be created for the purposes of backgrounding information (marking it as [+presupposed]), rather than created for the purposes of focusing information. Cruschina (2021) argues that there are different degrees/types of contrastive focus. Cruschina considers "information focus" to contain the weakest degree of contrast. Various notions of highlighting recur in the semantics literature: i.e. making a particular meaning or constituent particularly salient (distinct from focus) (Roelofsen & van Gool, 2010; AnderBois, 2013; Coppock & Brochagen, 2013; Roelofsen & Farkas, 2015; Roelofsen, 2016; Bossi & Diercks, 2019)

- Currently we are thinking of this as an interpretive distinction between presupposed material (moved to the right edge) from non-presupposed material (remaining in vP) (following Kiss 1998; É. Kiss 2012).
- Let us assume that a functional projection at the edge of vP can bear a [+presupposed] feature, which
  - Attracts presupposed material to its edge;
  - Marks its complement as non-presupposed.
- This operation marks **relational givenness** in the sense of Gundel & Fretheim (2004): the presupposed elements are given/presupposed with respect to the non-presupposed elements.<sup>9</sup>

(16) Schematic Tree of Cinyungwe movement for relational givenness



## 4.2 OM-doubling for emphatic focus (i.e. contrast)

(17) Doubling + Movement = Focus on manner adverb

baba a-da-ci- phik-a **mwakankulumize** , ci-mbamba  
 1.father 1SM-PST-7OM-cook-FV quickly 7-beans

‘Father cooked the beans QUICKLY.’

- Acceptable in manner focus contexts, such as:
  - an answer to a manner question
  - a clarification about the manner in which beans were cooked

(18) *in situ* OM-doubling = Predicate Focus

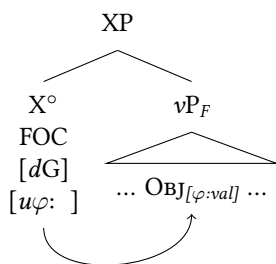
baba a-da-ci- **phik-a** ci-**mbaba** **mwakankulumize**.  
 1father 1SM-PST-7OM-cook-FV 7-beans quickly

‘Father really/certainly COOKED THE BEANS QUICKLY.’

- Acceptable in contexts where the entire predicate is focused, such as:
  - there is a disagreement about whether the event occurred
  - the speaker wants to emphasize that this is in fact what happened
- Unacceptable in the manner-focus contexts noted above for (17)

- We follow Zeller (2015) in assuming that OMs arise via  $\varphi$ -features on a functional head at the edge of vP.
- Crucially, these  $\varphi$ -features are on a head that bears a focus operator (FOC).
- The focus operator marks its complement as focused (bearing an F-mark).

(19) Structure of OM-doubling in Cinyungwe



<sup>9</sup>Gundel & Fretheim (2004) distinguish relational givenness from what they call *referential givenness*, i.e. whether a referent is discourse-familiar, or discourse-new. To make the terms more accessible/distinct, we will refer to them as relational/relative givenness, on the one hand, and discourse-givenness on the other.

- You will notice the presence of a [*dG*] feature on  $X^\circ$  in (19): this marks a phrase as *discourse-given*, i.e. discourse-familiar.
- We modify the more familiar “G-feature” here with a *d* in order to distinguish it from the relational givenness associated with movement of *vP* material to the right.<sup>10</sup>
- In Cinyungwe, OM-doubled objects are obligatorily familiar/specific:
  - The bare noun *munthu* ‘person’ can be naturally used in negative contexts to mean “anyone,” as in (20a).
  - When the same construction contains OM-doubling in (20b), however, the object must receive a specific interpretation (*a particular person*).<sup>11</sup>

(20) OM-doubled objects are specific

- a. Kapenu a-libe ku-won-a mu-nthu dzulo  
 1Kapenu 1SM.PST-NEG 15SM-see-FV 1-person yesterday  
 ‘Kapenu didn’t see anyone yesterday.’
- b. Kapenu a-libe ku-**mu-**won-a **mu-nthu** dzulo  
 1Kapenu 1SM.PST-NEG 15SM-1OM-see-FV 1-person yesterday  
 ‘Kapenu really/certainly didn’t see a particular person yesterday’  
 NOT: ‘Kapenu really/certainly didn’t see anyone yesterday.’

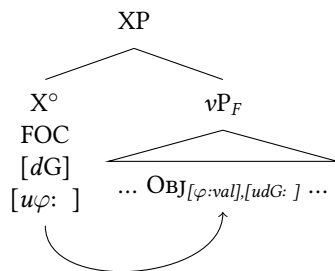
- Conclusion: OM-doubled objects are obligatorily interpreted as discourse-given, i.e. specific and identifiable.

## 5 Analysis of Cinyungwe Object Marking

### 5.1 Mechanics of Current Working Hypothesis

- The  $\varphi$ -probe on  $X^\circ$  values an object as [*dG*].
- The FOC operator on  $X^\circ$  marks its complement as focused.

(21) OM-doubling: undifferentiated predicate focus (focus on *vP*)

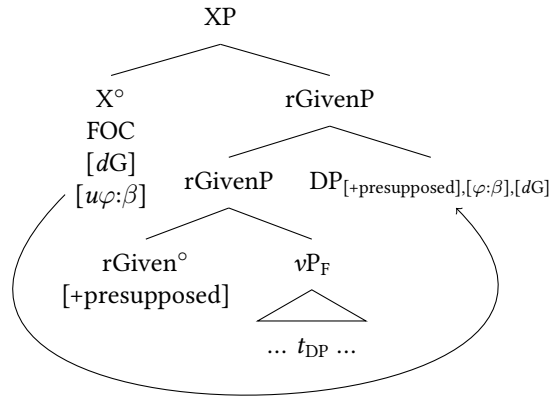


- Right-dislocation (movement for relational givenness / grammatical attention) feeds OM-doubling.
  - Any presupposed element may move to the edge of rGivenP.
  - From that position, a dislocated object DP will be the target of Agree by  $u\varphi$  on  $X^\circ$ .
  - Assuming that presupposed content is incompatible with focus, the focus simply falls on non-presupposed content in *vP*.

<sup>10</sup>See Büring (2016) and especially Kratzer & Selkirk (2020) for discussion of the grammar of G-features marking givenness.

<sup>11</sup>Additional NPI evidence is given in the Appendix in §9.4.

(22) OM-doubling with object movement: focus on  $vP$



## 5.2 Testing analytical predictions

### 5.2.1 Asymmetry in predicate focus

- For undifferentiated focus on the predicate (which we are translating as ‘really/certainly’)
  - We predict that only the highest object can be OM-doubled.
  - This is because ‘symmetrical’ object marking of lower objects is fed by the (low) right-dislocation of presupposed objects, which creates an information structure bifurcation amongst the  $vP$  content.
- This is confirmed in (23): when putting emphatic focus on the entire predicate, OM-doubling is only natural on the higher object.

- (23) a. Kapenu a-ndza-**wa-**gas-ir-a **a-kazi** moto mwakankulumize  
 1Kapenu 1SM-FUT-2OM-start.fire-APPL-FV 2-women 3fire quickly  
 ‘Kapenu will really/certainly start the fire for the women quickly.’
- b. \*?Kapenu a-ndza-**wu-**gas-ir-a **a-kazi** **moto** mwakankulumize  
 1Kapenu 1SM-FUT-3OM-start.fire-APPL-FV 2-women 3fire quickly  
 Attempted: ‘Kapenu really/certainly started the fire for the women quickly.’

### 5.2.2 Dislocated (presupposed) objects intervene in OM-doubling

- (24) demonstrates what we’ve seen throughout: OM-doubling of a right-dislocated object is very natural.

- (24) a. Kapenu a-ndza-gas-ir-a a-kazi moto mwakankulumize  
 1Kapenu SM-FUT-start.fire-APPL-FV 2-women 3fire quickly  
 ‘Kapenu will start the fire for the women quickly.’
- b. Kapenu a-ndza-**wa-**gas-ir-a moto mwakankulumize, **a-kazi**  
 1Kapenu 1SM-FUT-2OM-start.fire-APPL-FV 3fire quickly 2-women  
 ‘Kapenu will start the fire for the women quickly.’
- c. Kapenu a-ndza-**wu-**gas-ir-a a-kazi mwakankulumize, **moto**  
 1Kapenu 1SM-FUT-3OM-start.fire-APPL-FV 2-women quickly 3fire  
 ‘Kapenu will start the fire for the women quickly.’

- We propose that right-dislocation of presupposed objects feeds OM-doubling by moving a Goal object into a (more) local relationship with the  $u\phi$  probe on  $X^\circ$ .

- This suggests that the OM probe should be unable to target  $vP$ -internal material when an object is right-dislocated.
  - The prediction is upheld: it is quite unnatural to OM-double a non-presupposed (*in situ*) object when another object has been moved to the right edge as a presupposed object.
  - In the context of a right-dislocated recipient, OM-doubling the *in situ* theme is unacceptable (25a).
  - And the converse in (25b) is also unacceptable: right-dislocation of the theme disrupts OM-doubling of the *in situ* recipient.

- (25) a. \*?Kapenu a-ndza-wu- gas-ir-a moto mwakankulumize , a-kazi  
 1Kapenu 1SM-FUT-3OM-start.fire-APPL-FV 3fire quickly 2-women  
 ‘Kapenu will start the fire for the women quickly.’
- b. \*?Kapenu a-ndza-wa- gas-ir-a a-kazi mwakankulumize , moto  
 1Kapenu 1SM-FUT-2OM-start.fire-APPL-FV 2-women quickly 3fire  
 ‘Kapenu will start the fire for the women quickly.’

- This follows from our analysis: dislocated objects are structurally closest to the  $\varphi$  probe on  $X^\circ$ .

## 6 Conclusions

### 6.1 Empirical findings

- Almost all object marking (doubling and not) is linked with focal effects in the verb phrase ( $vP$ ).
- Object marking places focus on the verb phrase ( $vP$ ).
- Whether the focus is undifferentiated predicate focus, or interpreted as more narrow focus on a particular constituent, depends on whether *other* backgrounded constituents have moved out of the verb phrase. (Cheng & Downing, 2012)
- There are clear empirical differences (both in interpretation and grammatical mechanisms) between marking of relational givenness and emphatic/contrastive focus/givenness.
  - Movement out of the  $vP$  to the right edge distinguishes presupposed postverbal content (moved) from non-presupposed content (remaining in  $vP$ ). This redirects addressee attention, but does not emphasize.
  - Emphatic/contrastive focus is created by object marking.
  - Object-marked objects must be discourse-familiar / specific.

### 6.2 Analytical proposals

- Movement to the right edge is driven by relational givenness (a [+presupposed] feature) on  $rGiven^\circ$ .
- OMing is generated by  $\varphi$ -features on a head at the edge of the  $vP$  ( $X^\circ$ )
- $X^\circ$  also bears a focus operator that marks the  $vP$  as focused.

### 6.3 Selected theoretical implications

- Ongoing question in work on focus and givenness whether those two sides of the same coin (i.e. components of a single phenomenon), or whether they are conceptually and formally distinct (see the discussion in Büring 2016, for example).
  - In a similar kind of question, it has been proposed that there are distinct kinds of givenness (Gundel & Fretheim, 2004)
  - OM-doubling is linked with the discourse-givenness (referential givenness) of OM-doubled objects.
  - But right-dislocation of objects is tied to a different notion of givenness, **relational givenness**.
- Cinyungwe suggests that all three are dissociated.
  - relational givenness (distinguishing presupposed from non-presupposed material) is correlated with movement to the right edge of the verb phrase.
  - OM-doubling marks a  $vP$  as focused (contrastive/emphatic focus).
  - OM-doubling values the doubled object as discourse-given.



## 7 Acknowledgements

This presentation arose out of an advanced syntax seminar taught (virtually) at Pomona College in Fall 2020; all of the authors were participants in that seminar. To acknowledge our internal distribution of labor: all Cinyungwe data examples and analytical insights are provided by the first author. The first and the second author were the lead authors in terms of data collection and analysis. All the authors collectively organized the data, constructed arguments for the analysis, evaluated the analysis, and wrote the handout. The second author played lead role in finalizing the handout.

Diercks would especially like to thank Justine Sikuku for his collaboration on Bukusu object marking, which has heavily influenced this Cinyungwe investigation. Through comments on that Bukusu work, Diercks' contributions to this project have been heavily influenced by a range of people, including: Rose-Marie Déchaine, Mark Baker, Vicki Carstens, Ruth Kramer, Rodrigo Ranero, Kristina Riedel, Ken Safir, Jenneke van der Wal, and Jochen Zeller. The Bukusu research was funded from a Doctoral Dissertation Research Improvement Grant (BCS-0843868), a Hirsch Research Initiation Grant from Pomona College, and a NSF Collaborative Research Grant (Structure and Tone in Luyia: BCS-1355749), the NSF-funded Afranaph project (BCS-1324404) and ongoing research support from Pomona College including from the Paul and Susan Efron fund and the Robert Efron Lectureship in Cognitive Science.

## 8 References

- Adams, Nikki. 2010. The Zulu ditransitive verb phrase: University of Chicago dissertation.
- AnderBois, Scott. 2013. Alternative unconditionals in yucatec maya. Handout from talk at 2013 SSILA Annual Meeting, Boston, MA, January 3-6, 2013.
- Bossi, Madeline & Michael Diercks. 2019. V1 in Kipsigis: Head movement and discourse-based scrambling. Glossa: A Journal of General Linguistics 4(1). 65.
- Bresnan, Joan & Sam Mchombo. 1987. Topic, pronoun, and agreement in Chichewa. Language 63. 741–782.
- Buell, Leston. 2005. Issues in Zulu morphosyntax. Los Angeles, CA: UCLA dissertation.
- Buell, Leston. 2006. The Zulu conjoint/disjoint verb alternation: focus or constituency? ZAS Papers in Linguistics 43. 9–30.
- Büring, Daniel. 2016. Intonation and meaning Surveys in Semantics and Pragmatics. Oxford: Oxford University Press.
- Cheng, Lisa & Laura Downing. 2012. Against FocusP: Arguments from Zulu. In Ivona Kucerova & Ad Neeleman (eds.), Contrasts and positions in information structure. Cambridge University Press.
- Cheng, Lisa Lai-Shen & Laura J. Downing. 2009. Where's the topic in Zulu? The Linguistic Review 26. 207–238.
- Coppock, Elizabeth & Thomas Brochhagen. 2013. Diagnosing truth, interactive sincerity, and depictive sincerity. In Todd Snider (ed.), Proceedings of the 23rd semantics and linguistic theory conference. 358–375. Linguistics Society of America.
- Creissels, Denis. 1996. Conjunctive and disjunctive verb forms in Tswana. South African Journal of African Languages 16. 109–115.
- Cruschina, Silvio. 2021. The greater the contrast, the greater the potential: On the effects of focus in syntax. Glossa: a journal of general linguistics 6(1). 3. 1–30. DOI: [https://doi.org/10.5334/g\\_jgl.1100](https://doi.org/10.5334/g_jgl.1100).
- É. Kiss, Katalin. 2012. Grammaticalized backgrounding. In Johan Brandtler, David Håkansson, Stefan Huber & Eva Klingvall (eds.), Discourse & grammar: A festschrift in honor of valéria molnár. 193–214. Lund: Lund University.
- Gundel, Janet & Torsten Fretheim. 2004. Topic and focus. In Laurence Horn & Gregory Ward (eds.), Handbook of pragmatic theory. 175–196. Oxford: Blackwell.
- Halpert, Claire. 2012. Argument licensing and agreement in Zulu: MIT dissertation.
- Halpert, Claire. 2016. Argument licensing and agreement. New York: Oxford University Press.
- Halpert, Claire. 2017. Prosody-syntax mismatches in the Zulu conjoint/disjoint alternation. In Jenneke van der Wal & Larry M. Hyman (eds.), The conjoint/disjoint alternation in Bantu. 329–349. de Gruyter.
- Kiss, Katalin É. 1998. Identificational focus versus information focus. Language 74(2). 245–273.
- Kratzer, Angelika & Elisabeth Selkirk. 2020. Deconstructing information structure. Glossa: a journal of general linguistics 5(1). 113. 1–53. DOI: <https://doi.org/10.5334/gjgl.968>.
- Letsholo, Rose. 2013. Object markers in Ikalanga. Linguistic Discovery 11(1). 105–128.
- Riedel, Kristina. 2009. The syntax of object marking in Smbaa: A comparative Bantu perspective. Leiden, The Netherlands: Universiteit Leiden dissertation.
- Roelofsen, Floris. 2016. Highlighting in discourse and grammar. Handout from talk at XPrag workshop on Questions, Answers, and Negation, January 26, 2016; [http://www.xprag.de/wp-content/uploads/2015/08/QAN2016\\_Roelofsen.pdf](http://www.xprag.de/wp-content/uploads/2015/08/QAN2016_Roelofsen.pdf).
- Roelofsen, Floris & Donka Farkas. 2015. Polarity particle responses as a window onto the interpretation of questions and assertions. Language 91(2). 359–414.

- Roelofsen, Floris & Sam van Gool. 2010. Disjunctive questions, intonation, and highlighting. In Maria Aloni, Harald Bastiaanse, Tikitou de Jager & Katrin Shulz (eds.), *Logic, language and meaning: 17th amsterdam colloquium, amsterdam, the netherlands, december 16-18, 2009*, vol. 6042 Lecture Notes in Artificial Intelligence. 384–394. Berlin: Springer.
- Sabel, Joachim & Jochen Zeller. 2006. *wh*-question formation in Nguni. In John Mugane (ed.), *Selected proceedings of the 35th Annual Conference on African Linguistics*. 271–283.
- Sikuku, Justine & Michael Diercks. 2020. Object marking in Bukusu: At the interface of pragmatics and syntax. Ms, Moi University and Pomona College.
- Sikuku, Justine, Michael Diercks & Michael Marlo. 2018. Pragmatic effects of clitic doubling: Two kinds of object markers in Lubukusu. *Linguistic Variation* 18(2). 359–429.
- Van der Spuy, Andrew. 1993. Dislocated noun phrases in Nguni. *Lingua* 90(4). 335–355.
- Zeller, Jochen. 2012. Object marking in Zulu. *Southern African Linguistics and Applied Language Studies* 30. 219–325.
- Zeller, Jochen. 2014. Three types of object marking in Bantu. *Linguistische Berichte* 239. 347–367.
- Zeller, Jochen. 2015. Argument prominence and agreement: Explaining an unexpected object asymmetry in Zulu. *Lingua* 156. 17–39.

## 9 Appendix

### 9.1 Exceptional instances of obligatory OMs

- In general, it appears that Oming an extracted object is possible, as in relative clauses and clefts; we have not yet identified instances where it is ungrammatical.

OMing an extracted object:

- (26) Siriza a-wereng-a livu l-omwe n-a-(li-) gul-a dzulo  
 Siriza 1SM.PST-read-FV 5.book 5-COMP 1SG.SM-PST-(5OM)-buy-FV yesterday  
 ‘Siriza read it (the book) which I bought yesterday.’

- Although we have not seen instances where an extracted object must not be OMed, there are certain predicates where OMs are obligatory in object relative clauses. For other predicates, the OM is optional.
- As shown below, the verb “to see” requires an OM in a relative clause, but for the verb “to read”, the OM is optional.

- (27) a. livu lomwe ni-da-\*(li)-won-a  
 5.book 5.that 1SG-PST-5OM-see-FV  
 ‘the book that I saw’  
 b. livu lomwe nda-(li)-wereng-a  
 5.book 5.that 1SG.PST-5OM-read-FV  
 ‘the book that I read’

- It seems that the predicate “to know” requires an OM for locative objects, though we are unsure if other predicates act similarly in locative sentences.

- (28) ni-da-\*(pa)-dziw-a pa-muyi  
 1SG-PST-16OM-know-FV 16-home  
 ‘I knew it (house/home)’

- Summarized below are the predicates we have seen whose relative clause objects are obligatorily OMed, and optionally OMed:

Optional OM	Obligatory OM
<i>kuwerenga</i> ‘to read’	<i>kuwona</i> ‘to see’
<i>kunemba</i> ‘to write’	<i>kuthotha</i> ‘to expel’
<i>kugula</i> ‘to buy’	<i>kudziwa</i> ‘to know’ (for locative objects)
<i>kudya</i> ‘to eat’	
<i>kuphika</i> ‘to cook’	
<i>kubzala</i> ‘to sow’	

- In addition, in ditransitives it appears that it is obligatory to OM-double extracted indirect objects (“children” in a. below), whereas it is optional to OM-double an extracted direct object (“books” in b.).

- (29) a. wa-na omwe u-ndza-\*(wa)-pas-a ma-livu a-fik-a  
 2-children 2.that 2SG-DIST.FUT-\*(2OM)-give-FV 6-book 2.REC.PST-arrive-FV  
 ‘the children that you will give the books to arrived’
- b. ma-livu yomwe u-ndza-(ma)-pas-a wa-na a-fik-a  
 6-book 6.that 2SG-DIST.FUT-(6OM)-give-FV 2-children 2.REC.PST-arrive-FV  
 ‘the books that you will give the children arrived’

- It remains unclear to us what differentiates the verbs requiring OMs in relative clauses from those with optional OMs, and how the Oming of extracted objects fits in with our analysis.

## 9.2 Cinyungwe only allows a single OM on the verb

- (30) a. mw-ana w-a-pas-a ma-kaka yavu  
 1child 1SM-PST-give-FV 6-cucumbers 1-grandmother  
 ‘The child gave cucumbers to grandmother.’
- b. \*mw-ana w-a-(ma)-(mu)-pas-a  
 1child 1SM-PST-6OM-1OM-give-FV  
 Intended: ‘The child gave them (cucumbers) to her (grandmother).’
- c. \*mw-ana w-a-(mu)-(ma)-pas-a  
 1child 1SM-PST-1OM-6OM-give-FV  
 Intended: ‘The child gave them (cucumbers) to her (grandmother).’

## 9.3 Additional paradigms of OM-doubling, for reference

- Given space constraints, the number of examples we offer above are extremely limited. Some additional examples are included here for reference.

- (31) Benefactive ditransitive
- a. Kapenu a-ndza-gas-ir-a akazi moto  
 Kapenu SM-FUT-start.fire-APPL-FV 2-women 3fire  
 ‘Kapenu will start fire for the women.’
- b. a-ndza-(wa)-gas-ir-a (a-kazi) moto  
 Kapenu SM-FUT-2OM-start.fire-APPL-FV 2-women 3fire  
 \*‘Kapenu will start fire for the women.’  
 OK: ‘Kapenu really/certainly will start the fire for the women.’ (more on this below)
- c. Kapenu a-ndza-(wa)-gas-ir-a moto, (a-kazi)  
 Kapenu SM-FUT-2OM-start.fire-APPL-FV 3fire 2-women  
 ‘Kapenu will start THE FIRE for the women.’
- d. Kapenu a-ndza-(wu)-gas-ir-a a-kazi, (moto)  
 Kapenu SM-FUT-3OM-start.fire-APPL-FV 2-women 3fire  
 ‘Kapenu will start the fire FOR THE WOMEN.’

(32) Lexical ditransitive

- a. yavu a-ku-pas-a ma-luwa mw-ana  
1grandmum 1SM-FUT-6OM-give-FV 6-flowers 1-child  
'Grandmum is giving flowers to the child.'
- b. yavu a-ku-(ma-) pas-a mw-ana, (ma-luwa)  
1grandmum 1SM-FUT-6OM-give-FV 1-child, 6-flowers  
'Grandmum is giving the flowers TO THE CHILD.'
- c. yavu a-ku-(mu-) pas-a ma-luwa, (mw-ana)  
1grandmum 1SM-FUT-6OM-give-FV 6-flowers 1-child  
'Grandmum is giving the child FLOWERS.'

## 9.4 Additional NPI evidence

- In addition to the bare nominal in an NPI-like usage, Cinyungwe allows *munthu* to be more explicitly constructed as an NPI with the additional morphology “*na- -yo*”: *na-munthu-yo* ‘anyone at all.’
- This strict NPI object cannot be OM-doubled.

- (33) Kapenu a-libe ku-(<sup>\*</sup>?mu-) -won-a (na-munthu-yo) dzulo  
1Kapenu 1SM.PST-NEG 15SM-1OM-see-FV NPI-1-person-NPI yesterday  
'Kapenu (<sup>\*</sup>?really/certainly) didn't see anyone at all.'