

Counterexpectations: The multifunctionality of particle *-o* in Rukiga

Abstract

This paper discusses a morphological particle *-o* found in Rukiga (Bantu JE14, Uganda), aiming to establish its origin and function. At first sight, the particle appears as an independent pronoun agreeing in noun class, reported in previous studies as an emphatic pronoun. Based on the extensive analysis of the particle, we argue that the particle, through grammaticalisation, has developed from a medial demonstrative via the independent pronoun to become a contrastive topic marker. This analysis is supported by various topic and focus tests carried out, which indicate that it combines with topics and is incompatible with focalised referents. We further discovered that the particle also functions as an exclamative/mirative marker, expressing (a degree of) unexpectedness and surprise. Our findings indicate that independent morphological topic markers are present in East-African languages too, and that exclamatives and miratives, which are extremely understudied for Bantu languages, can be realised by a morphological particle.

1. Introduction

West African languages are known to have dedicated topic or focus particles in their grammar e.g., the topic marker *lá* in Ewe (Ameka 1991) as illustrated in (1); the focus marker *wè* in Gungbe (Aboh & Dyakonova 2009), or the Akan focus marker *na* (Titov 2019, Ofori 2011), among others.^{1,2}

Ewe (Ameka 1991:145)

- (1) $\text{\textcircled{D}ev\acute{I}-\acute{a}-w\acute{o} \text{\textcircled{L}á} \quad \eta\acute{u}tsu \quad m\acute{a} \quad \phi o \quad w\acute{o}.$
child-DEF-PL TOP man DEM beat 3PL
'The children, that man beat them.'

Such topic and focus particles are not common in the eastern and southern Bantu languages. However, Rukiga,³ a Bantu (JE14)⁴ language of Uganda, has a morphological particle *-o* that seems to behave in a way comparable to that of West-African topic and focus particles. As

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¹ Numbers refer to noun classes, unless followed by *sg* or *pl*, in which case they refer to 1st or 2nd person. High tones are marked by an acute accent; low tones remain unmarked.

² APPL, applicative; AUG, augment; CAUS, causative; CM, contrastive marker; COP, copula; DEM, demonstrative; DM, discourse marker; COP, copula; DEF, definite; DEM, demonstrative; DM, discourse marker; F.PST, far past; FV, final vowel; DEM, demonstrative; MED, medial (demonstrative); N.FUT, near future tense; N.PST, near past tense; NEG, negative; OM, object marker; PFV, perfective; PL, plural; PRO, pronoun; PROG, progressive; PROX, proximal (demonstrative); PST, past; REL, relative; RM, relative marker; REL.PRO, relative pronoun; SBJV, subjunctive; SG, singular; SM, subject marker; STAT, stative; TOP, topic.

³ Rukiga closely relates to Runyankore (JE13) (Simons & Fenning 2017) and the two are often times clustered to form Runyankore-Rukiga. Unless otherwise indicated, the data come from fieldwork in Kabale, January 2019, and introspection.

⁴ Bantu classification is according to Maho (2009).

illustrated in (2), its presence in a phrase triggers an interpretational difference: the clause with the particle in (2b) (as compared to (2a)), results in a contrastive interpretation such that among all relevant referents that could potentially have been seen, I saw the moon (not the sun or stars, for example).

Rukiga (Asimwe & van der Wal 2019 database)

(2) a. O-kw-éézi n-áá-kú-reeb-a.
AUG-15-moon 1SG.SM-N.PST-15OM-see-FV
'I have seen the moon.'

b. O-kw-éézi kw-ó n-áá-kú-reeb-a.
AUG-15-moon 15-CM 1SG.SM-N.PST-15OM-see-FV
'The moon I have seen (the sun and/or the stars maybe I have not seen).'

In Taylor's (1985, 127-131) grammar of the language, the particle is said to encode 'contrastiveness or mere emphasis'. Taylor adds that the particle is optional and is not used in non-emphatic environments. A similar particle is attested in other Bantu languages such as Luganda [JE15] and according to Ashton et al. (1954), just as Taylor (1985) observes for (Runyankore-)Rukiga, in Luganda it is used for emphasis (3).

Luganda (JE15, Ashton et al. 1954, 44]

(3) E-bi-tabo **by-ó** bí-buz-e.
AUG-8-book 8-CM 8.SM-lose-PFV
'As for the books, they are lost.'

Asimwe (2014) also discusses the Rukiga particle *-o* and argues that it triggers a contrastive reading in a sentence. She adds that it has an inherent semantic feature of definiteness, that is, there is a particular referent the speaker has in mind that s/he assumes to be familiar to the hearer (which, at the same time is contrasted to another familiar referent). The notions of topic and definiteness are different but may also be seen to relate.

Both thus highlight the contrastive meaning this particle brings about. In this paper, we want to establish the precise function and interpretation of the particle *-o*, specifically targeting the following questions:

- A. Is the particle in this use an underspecified marker of contrast, combining with both topics and foci? If not, what is its function?
- B. Considering its original use as a pronoun, is the particle synchronically a dedicated discourse marker (which warrants an analysis as homophonous morphemes), or does it still function only as a pronoun (arguing for an analysis of polysemy)?
- C. What is the particle's function if it is not used as a contrastive marker?

In order to answer these questions, we first describe the morphosyntactic properties of the particle in section 2. We then show that the particle relates to topics but not focus elements in sections 4 and 3, respectively, coming to the hypothesis that the particle *-o* is a contrastive topic marker, that is, it triggers an alternative topic. The alternative topic may be overtly stated or implied. The precise interpretation is investigated in more detail in section 5. In order to establish the origin of the particle, in section 6 we unravel the grammaticalisation path and argue that the

particle developed from an independent pronoun; the pronoun in turn has its source in the medial demonstrative. In section 7, we show how the particle can function on the pragmatic level, covering a mirative and exclamative interpretation, as illustrated in (4).

- (4) E-n-júra **y-ó** y-ââ-gw-a.
 AUG-9-rain 9-CM 9SM-N.PST-fall-FV
 ‘It has really rained (heavily/or for a long time, more than expected).’

2. The morphosyntax of the particle

Like other Bantu languages, Rukiga divides its nouns into noun classes, visible through a prefix on the noun and concord and agreement in the phrase and clause. The particle occurs as a free-standing morpheme and takes an agreeing prefix, as shown in table 1.⁵

<i>noun class + prefix</i>	<i>example noun</i>	<i>gloss</i>	<i>particle</i>
1 -mu-	omuhara	girl	we
2 -ba-	abahara	girls	bo
3 -mu-	omuyembe	mango	gwo/gwe
4 -mi-	emiyembe	mangoes	yo
5 -ri-/i-	eihuri	egg	ryo
6 -ma-	amahuri	eggs	go
7 -ki-	ekihumi	granary	kyo
8 -bi-	ebihumi	granaries	byo
9 -n-	ente	cow	yo
10 -n-	ente	cows	zo
11 -ru-	orushare	calabash	rwo/rwe
12 -ka-	akatare	market	ko
13 -tu-	oturo	sleep	two/twe
14 -bu-	obumanzi	bravery	bwo/bwe
15 -ku-	okuguru	leg	kwo/kwe
16 -ha-	aheeru	outside	ho
17 -ku-	okuzimu	hell	yo
18 -mu-	omwiguru	in heaven	yo/ho/mwo

Table 1: Morphological structure of the particle *-o*, adapted from Asiimwe (2014: 236)

Syntactically, the particle typically follows the noun it refers to (5a) but can assume the prenominal position (5b) as well. It can also be separated from the noun and follow the verb and still show concord with the noun in the preverbal position that it refers to (5c). In addition, the particle can be used as an independent pronoun (5d); and it generally bears a high tone. The examples also illustrate that the particle occurs with both subject and non-subject constituents.

- (5) a. E-n-té **z-ó** Ámós n-aa-zá ku-zi-ríis-a. [Post-N]
 AUG-10.cows 10-CM 1.Amos PROG-1SM-go 15-10OM-feed-FV
 ‘For the sake of cows, Amos will graze them.’

⁵ For nouns in class 1, the shape of the particle is *-e*. For nouns in classes 3, 11, 13, 14 and 15, the particle takes the shape of either *-o* or *-e* depending on the language variety one speaks.

- b. ...kónka **z-ó** e-n-taama z-áá-nyw-a. [Pre-N]
 but 10-CM AUG-10-sheep 10SM-N.PST-drink-FV
 ‘...but as for the sheep, they drank’
- c. E-n-té ni-n-zá ku-zi-ríis-a **z-o**. [Post-V]
 AUG-10-cow PROG-1SG.SM-go 15-10OM-feed-FV 10-CM
 ‘I will graze the cows.’
- d. **Z-ó** ni-n-zá ku-zi-ríis-a. [pronominal]
 10-CM PROG-1SG.SM-go 15-10OM-feed-FV
 ‘As for them, I will graze them.’

A restriction on the position of the particle, however, is that a phrase with *-o* can only occur with preverbal NPs like the fronted object as in (6)a), and cannot modify postverbal NPs, as the ungrammaticality of (6)b) shows.

- (6) a. O-mu-ceeri **gw-e** n-aa-gu-teek-a.
 AUG-3-rice 3-CM 1SG.SBJ-N.PST-3OM-cook-FV
 ‘As for the rice, I have cooked it.’
- b. N-aa-teek-a o-mu-ceeri (***gwe**).
 1SG.SBJ-N.PST-cook-FV AUG-3-rice 3-CM
 ‘I cooked (the) rice.’

Interesting to note also is that one referent can occur with two particles, one in the pronominal position and another in the postnominal position. Doubling of the particle is possible with pronominal (7)a) and full NPs (7)b). We will return to this example and the exclamative interpretation in section 7.

- (7) Situation: Mother is amazed by the love and special care her two-year-old twins show each other.
- a. Mbwénu **b-ó** a-bo **b-o**...!
 DM 2-CM DEM-2.MED 2-CM
 ‘As for those ones...!’
- b. Mbwénu **b-ó** a-barongo **b-ó**...!
 DM 2-CM AUG-2-twin 2-CM
 ‘As for the twins...!’

In conjoined clauses expressing a contrast, as in (8), the particle is inserted either in the first clause or the second clause, with or without a conjunction ‘and’ or ‘but’, but rarely in both clauses.

- (8) Omushíjǎ akwasir' ékigíikó, (kándí) (wé) omukázi akwasiré omúsyo.⁶
 o-mu-sháijǎ a-kwat-iré e-ki-gíikó | kándí w-é o-mu-kázi
 AUG-1-man 1SM-hold-PFV AUG-7-spoon | and 1-CM AUG-1-woman
 a-kwat-iré o-mú-syo
 1SM-hold-PFV AUG-3-knife
 'The man is holding a spoon and as for the woman, she is holding a knife.'

The particle not only occurs with arguments but with adjuncts as well. As shown in (9), the noun *obwire* 'time/season/weather/period' is a class 14 noun and means 'yesterday' when used adverbially.

- (9) Nyómwébazó **bwé** nyizíre.
 nyomwebazo bu-e n-ij-ire
 14.yesterday 14-CM 1SG.SM-come-PFV
 'Yesterday I came (other days I did not come).'

Now that we have seen the main formal and distributional properties of the particle, we will turn to the interpretation. We start by examining whether the particle is compatible with focus strategies in section 3, and then examine contrastive topics in sections 4 and 5.

3. The particle is incompatible with focus strategies

me with Repp (201), Krifka (2006), Umbach (2001) among others, that contrast is a distinct notion of information structure which combines with both topic and focus. If *-o* is a mere marker of contrast, as suggested in Taylor's (1985) description, it is predicted to combine with both topic and focus (see also Neeleman et al. 2009). If, on the other hand, *-o* is a topic marker, as suggested by Asiimwe's (2014) analysis in terms of definiteness, it is expected that the particle would turn out unacceptable in a focus construction. For current purposes, we take a definition of focus as presupposed or new information. The particle is tested in commonly known environments or strategies in which focus is expressed (following Van der Wal 2016).

A first focus diagnostic are *wh* questions, which are inherently focused. As shown in the examples in (10), the particle is incompatible with *wh* questions, whether in a cleft (10)a or in situ (10)b.

- (10) a. N' ó-ha (*w-é) o-raa-sháshúr-ir-e e-byókúnywa?
 COP 1-who 1-CM 1SM.REL-N.FUT-pay-APPL-SBJV AUG-8.drink
 'Who will pay for the drinks?'
 b. Sauda y-aa-teek-á ki (*ky-o)?
 1.Sauda 1SM.SG-N.PST-cook-FV what 7-CM
 'What has Sauda cooked?'

The particle is equally infelicitous in a constituent containing an answer to a *wh* question, as shown in (11). An answer to a *wh* question contains new information and is therefore in focus –

⁶ When the underlying morphology is obscured by surface phonological processes, we have added a fourth line in the example.

instead, the presence of the particle *we* in (11) would suggest that the referent *omwana* is identifiable.

- (11) Situation: Who broke the cup?
 Omwáná (#wé) akyasíre.
 o-mw-ana **w-e** a-ki-at-ire
 AUG-1-child 1-CM 1SM.SG-7OM-break-PFV
 ‘The child broke it.’

The focus-sensitive particles ‘only’, ‘even’ and ‘also’ (see Krifka 2006; Beaver & Clark 2008; Van der Wal 2016) similarly do not combine with the particle *-o*, as the following examples in (12) show. These focus-sensitive particles associate with the focus on the noun phrase they modify, and *-o* cannot be added to such a focused phrase.

- (12) a. Abakúru bónka (*bó) bagiir' ómu rurêmbó. [exclusive *-onka*]
 a-ba-kuru b-onka **b-o** ba-z-ire o-mu ru-rembo
 AUG-2-big 2-only 2-CM 2SM-go-PFV AUG-18 11-town
 ‘Only the elders went to town.’
- b. N' ákaro (*kó) Jéin yáátéeka. [scalar/additive *na*]
 na a-ka-ro **k-o** Jane a-aa-teek-a
 and AUG-12-millet.bread 12-CM 1.Jane 1SM-N.PST-cook-FV
 ‘As for even/also karo, Jane prepared it.’
- c. Omushomésa ná ábáána (*bó) ábahiir' ékarámu. [scalar/additive *na*]
 o-mu-shomesa na a-ba-ana **b-o** a-ba-h-iire e-karamu
 AUG-1-teacher and AUG-2-children 2-CM 1SM-2OM-give-PFV AUG-10.pencil
 ‘The teacher, even the children as for them, he gave them pencils.’

There is one environment in which at first sight the particle occurs with a focused constituent, illustrated in (13). However, there is reason to believe that this construction is best analysed as a regular cleft with a left-dislocated DP, and not a reverse pseudocleft of sorts (‘Jane is the one who cooked posho’). Example (13) is better translated as ‘As for Jane, it is HER who cooked posho’. What is in focus, then, is the pronoun *wé* following the copula; as the pronoun refers to the same referent as the left-dislocated ‘Jane’, however, it is easy to mistake the first DP as the focused phrase.^{7,8}

- (13) Context: There is an argument about who cooked posho. Some doubt it is Jane who cooked it.

⁷ Alternatively, the structure could be analysed as taking the initial independent pronoun *we* as the focus expression, with Jane being left-dislocated, equivalent to ‘Jane, SHE is the one who cooked posho’. Further prosodic and syntactic evidence is needed to corroborate either analysis.

⁸ Additionally, we see the pronoun *-o* used as an enclitic to the copula in the reverse pseudocleft. Although the four types of copular constructions involving (free) relative clauses require further investigation, for the moment we assume that the *-o* in the reverse pseudocleft functions as a pronoun: ‘X is he/she who cooked posho’.

Jeini w-é ni-w-é y-aa-teek' á-ka-húnga
 1.Jane 1-CM COP-1-REL.PRO 1SM-N.PST-cook AUG-12-posho
 'It is Jane who cooked posho (nobody else).'

Hence, on the basis of the data presented in this section, we can conclude that the particle *-o* is infelicitous in focus environments. In the next section, we show that the particle does occur with topic referents.

4. The particle *-o* combines with topics

In this section, we show that the particle combines with topics, specifically that the particle agrees with a constituent that forms the topic of the sentence. A topic is taken to be what the sentence is about (Reinhart 1981), which is typically information the speaker assumes to be accessible in the mind of the hearer (Chafe 1976, Lambrecht 1994). In Rukiga, topics predominantly occupy the clausal-initial position. In the SVO sentence in (14)a, the particle agrees with the sentence-initial subject 'Jane'. Topical objects are typically left-dislocated and cross-referenced on the verb by an obligatory object marker, as in (14)b where the particle *ko* modifies the left-dislocated object *akahunga*.

- (14) a. Jéin w-é y-aa-teek-á á-ká-hunga.
 1.Jane 1-CM 1SM-N.PST-cook-FV AUG-12-posho
 'As for Jane, she has cooked posho.'
- b. A-ká-hunga k-ó Jéin y-áá-ka-téék-a.
 AUG-12-posho 12-CM 1.Jane 1SM-N.PST-12OM-cook-FV
 'As for the posho, Jane has cooked it.'

To further illustrate the association with topics, consider the locative inversion construction in (15)a). Here, the locative phrase in the preverbal position agrees with the verb and constitutes the topic of the construction. The postverbal logical subject is presented as non-topical or focal information (see Marten and Van der Wal 2014 for a cross-Bantu overview of subject inversion properties). The particle in this construction agrees with the locative phrase which occupies the sentence initial position. The examples in (15)b) and (c) are ungrammatical because the particle applies to the postverbal phrase that presents new information.

- (15) a. Omu rufúnjo mwó hamezirey' ébihîmba.
 o-mu ru-funjo mu-o ha-mer-ire=yo e-bi-himba
 AUG-18 11-swamp 18-CM 16-sprout-PFV=23 AUG-8-bean
 'As for the swamp, there have germinated beans.'
- b. Ebihimba bimezir' ómu rufúnjo (*mwo).
 e-bi-himba bi-mer-ire o-mu ru-funjo mu-o
 AUG-8-bean 8-sprout-PFV AUG-18 11-swamp 18-CM
 'Beans have germinated in the swamp.'
- c. Omu rufúnjo hamezirey' ébihîmba (*byo).

o-mu ru-funjo ha-mer-ire=yo e-bi-himba **bi-o**
 AUG-18 11-swamp 16-sprout-PFV=23 AUG-8-bean 8-CM
 ‘In the swamp have germinated beans.’

Similarly, *-o* is infelicitous in existential constructions (16). Existential constructions present a referent in a postverbal position as a non-topic, new to the situation.

- (16) Hiin’ ómuntu (#wé) owaayéshongora.
 ha-ine o-mu-ntu **w-e** o-u-a-éshongor-a
 16SM-have AUG-1-person 1-CM AUG-1SG.SM.REL-N.PST-sing-FV
 ‘There is a person who sang.’
 ‘There is somebody who sang’

Topic referents are highly accessible and therefore are typically expressed with less material (Gundel et al. 1993, Ariel 2001). Rukiga being a pro-drop language, a topic can therefore be expressed with only a subject marker or object marker on the verb, and the particle *-o* can be used ‘pronominally’ with just these markers, as in (17). The referents that the particle and the subject or object marker refer to are highly accessible from the immediate preceding discourse.

- (17) a. Bó baateek’ ómucéeri [CM + SM]
ba-o ba-aa-teek-a o-mu-ceeri
 2-CM 2SM-N.PST-cook-FV AUG-3-rice
 ‘As for them (the women), they have cooked rice.’
- b. Gw’ ábakázi báágutééka [CM + OM]
gu-e a-ba-kazi ba-aa-gu-teek-a
 3-CM AUG-2-woman 2SM-N.PST-3OM-cook-FV
 ‘As for it (the rice) the women have cooked it.’

Although topics typically occupy the preverbal position, a topic expression can also occur in a postverbal position. When a construction contains two topics, a primary topic and a secondary topic (which refers to given information but which the sentence is not about, Dalrymple & Nikolaeva 2011), the primary topic occurs sentence-initially, and a secondary topic is right dislocated. To illustrate, in (18)a), *amaizi* ‘water’ is right-dislocated, as can be deduced from the pronominal object marker *-ga-* on the verb, as well as the prosodic break preceding the NP. When the particle *-o* follows the noun it refers to, the object NP is optional as long as the agreement prefix is present, as in (18)b), which entails that the NP is presented as an afterthought. The construction is rendered ungrammatical when the particle is present but the object marker is absent, as in (18)c). This is further evidence in support of the claim that the particle relates to topics. For completeness, we mention that the particle referring to a secondary (object marked) topic can occupy a preverbal position (as shown in (17)b) above), while the same referent is resumed in an afterthought, like *amaizi* ‘water’ in (18)d). In all the grammatical examples in (18), the NP referring to the secondary topic can be omitted.

- (18) Context: The cows were expected to drink water and eat food (both water and food are provided for them in their kraal). They drank the water but they did not eat food.

- a. Ente záágányw' ámíizi go.
 e-n-te zi-a-**ga**-nyw-a a-ma-izi **g-o**
 AUG-10-cow 10.SM-N.PST-6OM-drink-FV AUG-6-water 6-CM
- b. Ente záaganywa gó (, ámíizi).
 e-n-te zi-a-**ga**-nyw-a **g-o** a-ma-izi
 AUG-10-cow 10.SM.SG-N.PST-6OM-drink-FV 6-CM AUG-6-water
 ‘As for the cows, they have drunk it, the water that is’
- c. *Ente záanywa g' ámíizi.
 e-n-te zi-a-nyw-a **g-o** a-ma-izi
 AUG-10-cow 10.SM.SG-N.PST-drink-FV 6-CM AUG-6-water
- d. Ente gó záágánywa, (ámíizi).
 e-n-te **g-o** zi-a-**ga**-nyw-a a-ma-izi
 AUG-10-cow 6-CM 10.SM.SG-N.PST-6OM-drink-FV AUG-6-water
 ‘The cows, as for the water, they have drunk it.

We have seen that the particle *-o* cannot mark focused elements, and does accompany topic expressions. However, it does not combine with all kinds of topics: it is incompatible with aboutness topics. Aboutness topics identify a referent, and then allow the speaker to add information to them, and these can be tested in Reinhart’s (1981) “tell me about x”-questions. In a “tell me about x” topichood test, the question instructs the hearer to continue and provide information about the topic introduced. Hence, aboutness topics do not induce alternatives. In (19), Amos is the topic introduced in A’s utterance, seeking for information about Amos. In B’s response, the particle *we* is infelicitous when used with this aboutness topic.

- (19) A: Ngambír' ebiríkukwát' áhari Ámos.
 N-gamb-ir-a e-bi-riku-kwat-a a-hari Ámos
 1SG.OM-tell-APPL-IMP AUG-8-PROG-concern-FV AUG-about 1.Amos
 ‘Tell me about Amos.’
- B: Amos (#wé) naakundá kureeb' ómupíira.
 Ámos **w-e** ni-a-kund-a ku-reeb-a o-mu-piira
 1.Amos 1-CM PROG-1SM-like-FV 15-see-FV AUG-3-ball
 ‘(As for) Amos, he likes to watch football.’

Considering the clear contrastive interpretation given in earlier literature and the incompatibility with simple aboutness topics, our hypothesis is then that the particle *-o* is not just a topic marker, but a *contrastive* topic marker. The next section provides further evidence for this hypothesis.

5. The particle *-o* as a contrastive topic marker

The concept of contrastive topic according to Repp (2014) applies when a clause contains a topic that is understood to contrast with an element contained in a second clause, which serves as an alternative to the element in the first clause. Relatedly, Vermeulen (2011) observes that there is at least one member of a set of relevant alternatives that is selected. In English, the contrast may

be indicated by a connector e.g., ‘but’ (Umbach 2001; Repp 201), although this is not necessary. The example in (20) illustrates a contrastive topic in English. The topic ‘Mary’ in the second clause is contrasted to ‘John’, the topic in the first clause, and this contrastive topic is marked by a sentence-initial position and a prosodic topic accent (indicated as capitals).

English (Givón 2001: 263)

(20) I saw John there. **MARY** I never saw.

In Rukiga, such contrastive topics are thus hypothesised to be marked by the particle *-o*. The alternative referent that the particle triggers is accessible, either from the previous discourse or the hearer is assumed to have knowledge of it. In addition, the alternative topic may be explicitly or implicitly stated. We illustrate this in a number of different environments.

The particle was naturally used with explicitly mentioned alternatives when describing a picture adapted from the Questionnaire on Information Structure (QUIS, Skopeteas et al. 2006). The stimulus picture is of a woman eating an apple and a man eating a banana, and the question introduced the woman and the man as active topics. The speakers would use the particle in either the first or the second clause, as in (21).⁹

(21) Context: What is the woman eating and what is the man eating?

a. Omukázi arikuryá ápo, kándi wé omushíjja arikuryá omunekye.
 o-mu-kazi a-riku-ri-a apo kandi **w-e** o-mu-shaija
 AUG-1-woman 1SM-PROG-eat-FV 9.apple and 1-CM AUG-1-man
 a-riku-ri-a o-mu-nekye
 1SM-PROG-eat-FV AUG-3-banana
 ‘The woman is eating an apple while the man is eating a banana.’

b. Omukázi wé naaryá ápo, omushíjja naary' ómúnékye.
 o-mu-kazi **w-e** ni-a-ri-a apo o-mu-shaija ni-a-ri-a
 AUG-1-woman 1-CM PROG-1SM-eat-FV 9.apple AUG-1-man PROG-1SM-eat-FV
 o-mu-nekye
 AUG-3-banana
 ‘The woman is eating an apple, the man is eating a yellow banana.’

Implicit alternatives are illustrated in (22), which comes with the clear implication that they have not weeded for example the beans.

(22) Orutookye rwó báárubágara.
 o-ru-tookye **ru-o** ba-aa-ru-bagar-a
 AUG-11-banana.plantation 11-CM 1SM-N.PST-11OM-weed-FV
 ‘As for the banana plantation, they have weeded it.’

As predicted, the particle is infelicitous in a context where no alternative referents are expected, as in (23). Here, the presence of *zo* would imply that there are other animals which did not drink water. Without the particle *zo*, the utterance does not presuppose the existence of other relevant referents to which the proposition would also apply.

⁹ There seems to be no difference in terms of interpretation whether the particle is in the first or second clause.

- (23) Context: You only have sheep and perhaps you have come back from shepherding.
 Entaamá (#zó) zaanyw' ámíízi.
 e-n-taama **z-o** zi-a-nyw-a a-ma-izi
 AUG-10-sheep 10-CM 10SM-N.PST-drink-FV AUG-6-water
 ‘The sheep drank water.’

What is also characteristic of contrastive topics is their use in situations where only a subset is mentioned. The question in (24a) is about food, generally. In the response, the speaker indicates that it is not the case that all the food expected to be served is ready; some food (sauce) is ready but what to eat with the sauce, *endiiso* (e.g., plantain, rice, potatoes etc.) is not ready. The particle therefore appropriately contrasts relevant members within a given set of food.

- (24) a. Ebyókuryá byáhiire?
 e-byokurya bi-a-sy-ire
 AUG-8.food 8-PST-burn-PFV
 ‘Is food ready?’
- b. Emboga zó zááhiire konk' éndíiso nihó twagit' áha mahéga.
 e-m-boga **z-o** zi-a-sy-ire konka e-n-ri-is-o
 AUG-10-sauce 10-CM 10SM-PST-burn-PFV but AUG-9-eat-CAUS-NMLZ
 ni-ho tw-a-git-a a-ha ma-hega
 COP-16.REL.PRO 1PL.SM-N.PST-put-FV AUG-16 6-cooking.stone
 ‘The sauce is ready but we have just put on fire what to eat the sauce with.’

The same subset reading also holds in (25), where the referent *ebitookye* is a member in a set of food stuffs. Here, the alternative relevant referents are not mentioned by name but simply referred to as ‘the rest, the others’. Note that for contrastive topics, it is not necessary that the alternatives are negated or excluded (as is the case for exhaustive focus), as the speaker can choose to say ‘others I don’t know’.

- (25) Ebitookye byó yáábitéeka ebíndi tíyaabiteeka / ebíndi tíndikumanya
 e-bi-tookye **bi-o** a-a-bi-teek-a
 AUG-8-plantains 8-CM 1SM-N.PST-8OM-cook-FV
- e-bi-ndi ti-a-aa-bi-teek-a
 AUG-8-other NEG-1SM-N.PST-8OM-cook-FV
- / e-bi-ndi ti-n-riku-many-a
 AUG-8-other NEG-1SG.SM-PROG-know-FV
 ‘As for the plantains, she has cooked them, the rest she has not/I do not know.’

Idioms are another diagnostic for testing information-structural categories. Since parts of idioms are not referential but form part of the idiomatic reading, they are predicted to lose their idiomatic reading when functioning as a topic. Furthermore, parts of idioms cannot be contrasted in their idiomatic reading because the alternatives are only triggered for the literal meaning. As contrastive topics require alternative topics, we predict the idiomatic reading to be lost if the particle *-o* is added. Indeed, in (26) the idiomatic reading is lost after the particle *yo* has been

inserted. The presence of *yo* in the clause means that there are alternatives to the referent *enjoka* ‘snake’. Without the particle, the idiom phrase is used when one’s stomach makes a rumbling sound, for example, when one is hungry.

- (26) E-n-joka **y-ó** y-áá-gon-a.
 AUG-9-snake 9-CM 9SM-N.PST-snore-FV
 ‘A/the snake has snored.’
 *‘You’re hungry.’

The universal quantifier *-ona* ‘all’ (27) and the indefinite quantifier *-ngi* ‘many’ (28) are equally incompatible with the particle. These quantifiers do not refer to identifiable referents and neither referent allows for alternatives to be generated.

- (27) Abashomésa bóôna (*bó) baayet’ ábéegi.
 a-ba-shomesa ba-ona **ba-o** ba-a-et-a a-ba-egi
 AUG-2-teacher 2-all 2-CM 2SM-N.PST-call-FV AUG-2-student
 ‘All the teachers, as for them, they have called the students.’

- (28) Enjw’ ényîngi (*zó) zitiir’ érángi.¹⁰
 e-n-ju e-n-ingi **z-o** zi-teer-ire e-rangi
 AUG-10-house AUG-10-many 10-CM 10SM-beat-PFV AUG-colour
 ‘The majority of the houses, as for them, they are painted.’

The particle is also seen to mark shift topics. A shift topic is a topic whose referent is different from the topic referent of the previous sentence (van der Wal & Skopeteas 2019). The particle enables the speaker to switch to a new topic in discourse. This particular use of the topic has been observed both in Luganda and Runyankore-Rukiga news anchoring on television. When the news anchor is to begin a new a story, the particle is at times used to indicate the shift to a different news item, particularly when there is no interruption from advertisements. It is also observed that for this particular use, the particle occurs in the prenominal position. The example in (28) was recorded on TV West which broadcasts exclusively in Runyankore-Rukiga. The use of *bo* is to show a shift to a different news story.

Recorded on TV West 08-05-2020 from the 8pm news

- (29) Bó abanyamakúru omurí Mbarara baatung’ óbuhwezi bw’óbuhúnga...
b-o a-ba-nya-makuru o-mu-ri Mbarara ba-a-tung-a
 2-CM AUG-2-NMLZ-news AUG-18 23.Mbarara 2SM-N.PST-get-FV
 o-bu-hwezi bw-a o-bu-hunga...
 AUG-14-help 14-CONN AUG-14-posho
 ‘Journalists in Mabarara have received assistance in form of *posho*...’

Similarly, in response to the question in (30)a), B does not continue the topic introduced in the question but shifts to a new topic. This new topic is accompanied by the particle. We assume a context where the mother to Amos and Peter assigns each of the boys a specific job to do: Amos

¹⁰ The reading ‘majority’ is due to the presence of the augment.

is to graze animals and Peter to dig. On return, the mother asks whether Amos has grazed the cows; perhaps, he appeared he would not do the job. In the response, the speaker does not seem to have any knowledge as to whether Amos did the job assigned to him, but s/he has information about Peter. Note that (30)B') is infelicitous as a response to (30)a) because it does not assume an alternative referent (similar to (19) above).

- (30) A: Ngambíra yáába Ámosi yaarfísa.
 n-gamb-ir-a yaaba Amos a-a-riis-a
 1SG.OM-talk-APPL-IMP if 1.Amos 1SM-N.PST-feed-FV
 'Tell me whether Amos has grazed.'
- B: Ámos, tindíkumanya kwonká wé Píta yááhínga.
 Amos ti-n-riku-manya kwonka **w-e** Pita a-a-hing-a
 1.Amos NEG-1SG.SM-PROG-know but 1-CM 1.Peter 1SM-N.PST-dig-FV
 Well, Amos, I do not know, but as for Peter, he dug.
- B' #Amos we yaariisa.

We further note that the particle can be used in predicate doubling constructions. In predicate doubling, two predicates co-occur, one in a non-finite form and the second one in a finite form. The phenomenon of predicate doubling is well attested in various Bantu languages as expressing predicate centered focus (specifically truth focus, state of affairs focus and TAM focus, Fiedler and Güldemann to appear). In Rukiga predicate doubling, the infinitive form functions as the topic, with the resulting basic interpretation being one of truth focus, as in situation 1 in (31). At the same time, predicate doubling constructions can be interpreted as contrastive, as in situation 2.

- (31) O-ku-hínga tu-hing-íre.
 AUG-15-dig 1PL.SM-dig-PFV
- situation 1: Did you really plough?
 'We actually ploughed.' [truth]
- situation 2: We were expected to dig and feed the animals
 'Digging we did (but we didn't feed the animals).' [contrast]

Adding the *-o* particle here brings out the contrastive reading on the predicate more explicitly, as indicated in the continuation sentence in (32).

- (32) a. Okuhínga kwé nimpínga.
 o-ku-hinga **kw-e** ni-n-hing-a
 AUG-15-dig 15-CM PROG-1SG.SM-dig-FV
 'For the case of digging, I can dig.'/'Digging I can do...'
- b. Okuríísá kó Ámós naazá kuríisa.
 o-ku-ri-isa **kw-o** Amos n-a-za ku-riis-a
 AUG-15-eat-cause 15-CM 1.Amos PROG-1SM-go 15-eat-feed-FV
 'For the case of grazing, Amos will do it.'

In this section, we have provided evidence that the particle combines with topics and that it induces a contrastive topic reading. Nevertheless, in order to conclude that *-o* is a dedicated contrastive topic marker, we need to examine where else we find *-o* in the language. In order to do that, in the next section, we will examine the possible source of this particle tracing it back to the demonstrative via the independent pronoun through grammaticalisation.

6. Possible origin of the contrastive topic marker

The *-o* “particle” is currently also used as an independent pronoun, as seen for example after the preposition *na*, as in (33).¹¹

- (33) a. A-ka-zin-a ná-**we**.
 1SM-F.PST-dance-FV with-1.PRO
 ‘She danced with him.’
- b. Tu-gyend-é ná-**bo**
 1PL.SM-go-SBJV with-2.PRO
 ‘Let us go with them.’

The same pronominal form in *-o* is found in the class 16 locative enclitic =*ho* on the verb, as in (34).

- (34) N-aa-bon-a=**ho** ó-mu-terere.
 1SG.SM-N.PST-find-FV=16 AUG-3-mongoose
 ‘I found there a mongoose.’

These independent pronouns in turn have their source in demonstratives, which is a well-known grammaticalisation path (Lehmann 2002). In Rukiga, the medial demonstrative is the most likely source of the pronoun, considering its similarity in form, as shown in Table 2.

Noun class and prefixes	Example noun	gloss	(contrastive) particle ‘as for him/her/it/them’	Medial demonstrative ‘that’
1 -mu-	omuhara	girl	we	ogwo/ogwe
2 -ba-	abahara	girls	bo	abo
3 -mu-	omuyembe	mango	gwo/gwe	ogwo/ogwe
4 -mi-	emiyembe	mangoes	yo	egyo
5 -ri-/-i-	eihuri	egg	ryo	eryo
6 -ma-	amahuri	eggs	go	ago
7 -ki-	ekihumi	granary	kyo	ekyo
8 -bi-	ebihumi	granaries	byo	ebyo
9 -n-	ente	cow	yo	egyo
10 -n-	ente	cows	zo	ezo

¹¹ Rukiga does not feature any other prepositions, and being a pro-drop language, it does not generally use independent pronouns in other environments.

11 -ru-	orushare	calabash	rwo/rwe	orwo/orwe
12 -ka-	akatare	market	ko	ako
13 -tu-	oturo	sleep	two/twe	otwo/otwe
14 -bu-	obumanzi	bravery	bwo/bwe	obwo/obwe
15 -ku-	okuguru	leg	kwo/kwe	okwo/okwe
16 -ha-	aheeru	outside	ho	aho
17 -ku-	okuzimu	hell	yo ¹²	okwo/okwe
18 -mu-	omwiguru	in heaven	mwo	omwo/omwe

Table 2: Similarity between the particle and the medial demonstrative

Demonstratives are easily used pronominally, as in (35), and especially the medial one is used anaphorically as well in Rukiga (Asiimwe to appear). This provides a clear first step on the grammaticalisation path.

- (35) E-kyo n-ookimánya?
E-ki-o ni-o-ki-mány-a
DEM-7-MED PROG-2SG.SM-7OM-know-FV
‘Do you know that one?’

Furthermore, the contrastive particle can occupy either the pronominal or the postnominal position (36), just like the demonstrative (37). This again shows the connection between the two, but they are currently two independent forms, as can be seen in the fact that the (pronominal) demonstrative and the particle synchronically can co-occur (38).

- (36) a. e-ki-humi ky-ó
AUG-7-granary 7-CM

- b. ky-ó (e)-ki-humi
7-CM AUG-7-granary
(both) ‘as for the granary’

- (37) a. e-ki-hum’ ékyó
AUG-7-granary DEM.7.MED

- b. ekyo (e-)ki-humi
DEM.7.MED AUG-7-granary
(both) ‘that granary’

- (38) e-ky-o ky-o
DEM-7-MED 7-CM
‘as for that one’

The grammaticalisation path discussed so far is the following:

¹² The regular form would be *k(w)o*; the form *yo* is likely to have originated in class 23 form, which is also a locative class but it no longer exists in Rukiga.

medial demonstrative > independent pronoun > contrastive topic marker

The step from demonstrative to pronouns is well-understood; the step from independent pronoun to contrastive topic marker might be motivated by the following bridging context. We know that topic expressions are typically placed in the left periphery, and that often these are resumed by a pronoun in the clause. This was illustrated as one of the characteristics of topics in Italian (as opposed to focus) by Rizzi (1997); in (39) the resumptive clitic *lo* cannot be omitted.

Italian (Rizzi 1997: 289, 290)

- (39) Il tu-o libro, *(lo) ho comprato.
ART POSS.2SG-M book.M M.SG.pro 1SG.have buy.PP
'Your book, I bought it.'

In Bantu languages, a subject or object DP in the left periphery refers to a topical referent that is also picked up by a subject or object marker, respectively. As mentioned, the Bantu languages being pro-drop languages (similar to Italian), independent pronouns are rarely used, apart from after prepositions, and when contrasting and emphasising referents. And contrast is precisely the difference between a left-peripheral NP with a simple subject marker or object marker, and one with an additional independent pronoun, as in (40). An English equivalent could be the difference between 'Your book, I bought it' and 'Your book, *that* I have bought (but hers I haven't)'.¹³

- (40) Ezo sénte zó tizíriho.
e-z-o sénte z-ó ti-zí-rí=ho
DEM-10-MED 10.money 10-CM NEG-10SM-be=16
'That money, (it) is not there.'

While we have proposed that this is a bridging context in which the pronoun can be reinterpreted as a contrastive topic marker, we may ask whether the current *-o* has two functions (as a pronoun and a dedicated contrastive topic marker), or simply an independent pronoun still – the topic interpretation would then solely be due to the initial position of the DP, and the contrastive interpretation would come about pragmatically (and not be encoded in the marker). There is one argument we can put forward in favour of analysing *-o* in its left-peripheral position as a functional marker of contrastive topic is the lack of a clear prosodic boundary between the left-peripheral DP and the *-o* particle. If *-o* functioned as a pronoun in these constructions, we would expect a prosodic break between the DP and the pronoun, considering that they refer to the same referent and cannot both function as arguments in the same domain.

We thus tentatively establish two current functions of *-o* as an independent pronoun and as a contrastive topic marker, thereby answering our second research question, and drawing the preliminary conclusion that this is a case of homophony. We are now in the position to consider a further use of the particle, which seems to be neither a pronoun nor a contrastive topic marker.

¹³ In a cartographic analysis one could posit the topical NP as an Aboutness topic and the pronoun in a Contrastive topic position (see Frascarelli & Hinterhölzl 2007).

7. Multifunctionality: exclamative

In the same positions and still showing the same concord as the contrastive marker, but in quite different contexts, we find the particle expressing that the speaker is surprised by (one part of) the event, this typically being beyond expectation in scale or intensity. This extends over both the mirative interpretation (what is surprising or unexpected for the speaker, see e.g. Aikhenvald 2012), as well as an exclamative: “exclamatives are defined as a sentence type that conveys surprise with respect to a scalar extent that has surpassed the current expectations (e.g. How beautiful you are!)” (Garcia 2016: vii, referring to Michaelis 2001).

To illustrate, the particle *bo* in (41) contributes the sense of surprise by the higher-than-expected turnout. Note that the same construction could receive a contrastive reading if it is the case that humans turned up but non-humans did not.

- (41) Context: Someone has a function or has organised an event and sends out invitations. For one reason or another, s/he does not expect many guests to turn up. Many guests turn up to the surprise of the host.
Abantu bó bíja.
a-ba-ntu **ba-o** ba-ij-a
AUG-2-person 2-CM 2SM.N.PST-come-FV
‘People really came (many people turned up, more than those expected)’

In this function, the particle can occur with indefinites (which is impossible for the contrastive marker), as in (42). The presence of the particle here conveys the meaning that someone (otherwise unidentified) sang well beyond expectation.

- (42) O-mu-ntu **w-é** y-áá-yeshongor-a.
AUG-1-person 1-CM 1SM-N.PST-sing-FV
‘The person has indeed sung very well.’

Now recall the example in (7), repeated here as (43). Here, the mother of the twins is surprised and at the same time she expresses that the love her twins have for each other is beyond expectation.

- (43) Context: Mother is amazed by the love and special care her two-year-old twins show each other.
Mbwénu **b-ó** a-ba **b-o...!**
DM 2-CM DEM-2.PROX 2-CM
‘As for those ones...!’

An exclamative reading can also be observed when the particle is used in pseudoclefts, which consist of a topical free relative and a copula, followed by a focused DP. If the particle would function as a contrastive topic marker here, we would expect it to show concord with the (head noun of the) free relative, as in (44)b agreeing in class 7. This is not the case, as shown in (44)a – the particle instead shows concord with the focused referent (in class 6), and the interpretation is exclamative.

- (44) a. Eki twanywíre gó n' ámúzi.

e-ki tu-a-nyw-ire g-o ni a-ma-izi
 AUG-7RM 1PL.SM-F.PST-drink-PFV 6-CM COP AUG-6-water
 ‘We really drank water / We drank much water.’
 lit. ‘What we drank is water.’

- b. *Ekitwanywíre kyó n' ámízi.
 e-ki tu-a-nyw-ire ki-o ni a-ma-izi
 AUG-7RM 1PL.SM-N.PST-drink-PFV 7-CM COP AUG-6-water
 int. ‘What we drank is (much) water.’

When used in a question, like in (45), the interpretation can get an ironic flavour. In a conversation between two football fans; one says that a foreign (African) team has vowed to beat the Uganda national football team, moreover to beat them on Ugandan soil, in the African Nations Championship qualifiers. The other interlocutor wonders as in (45). The presence of the particle *bo* in this context may be to cast doubt on the possibility of what is contained in the proposition, feigning surprise. However, if the context allows, a contrastive reading is still attainable contrasting one group of people to another identifiable group.

- (45) Bo baizire baitu?
 ba-o ba-ij-ire baitu?
 2-CM 2SM-come-PFV DM
 ‘Have they even arrived (in the country)?’

In (46), the interpretation is not so much that of an exclamative (going beyond an expected degree), but more of a mirative. Although the referent *engagi* ‘gorillas’ in (46) is the topic of the construction, the particle *zo* does not contribute a contrastive interpretation of the referent in this context. If the referent *engagi* were to be interpreted contrastively, it would mean that there are other referents who were expected to sing for example, baboons, monkeys (animals in the same set as gorillas), who did not sing. This is not the case, and instead, its use is licensed by the mirative effect (after all, it is indeed surprising if gorillas sing for you). Note also that the construction ends in a high tone, an indication of surprise on the side of the speaker as well.

- (46) Context: Is it true that the gorillas sang for you?
 Engagi zó záátwéshongorerá!
 e-n-gagi z-o zi-aa-tu-eshongor-er-a
 AUG-10-gorilla 10-CM 10SM-N.PST-1PL.OM-sing-APPL-FV
 ‘(It is true) They have indeed sung for us!’

In summary, the independent pronoun in *-o* has developed not only to a contrastive topic marker, but also an exclamative marker (related to mirativity, intensity, or surpassing an expectation).

The next question is of course how this exclamative use relates to the other occurrences of the *-o* particle – a question which, rather unsatisfactorily, we cannot answer. At present, we see no direct semantic-pragmatic overlap with either the pronoun function or the contrastive topic marker, nor can we propose a plausible diachronic connection. Crosslinguistically, exclamatives are typically expressed by “information-question forms and anaphoric degree adverbs” according to Michaelis (2001, 1049), and independent pronouns are not mentioned as a

source of exclamative marking. An alternative analysis of the particle *-o* as an underspecified marker of counterexpectation would cover the mirative, exclamative and contrastive topic functions, but also wrongly predicts it to be compatible with foci. Further research into this function is necessary, for example testing whether it can be embedded (cf. Rett 2011), and the interpretations it yields when it combines with discourse particles like *baitu* (46a) and *nangwa* (46b). Preliminary observations seem to indicate that *baitu* and *nangwa* intensify the unexpectedness meaning introduced by the particle *-o*. However, *baitu* seems to convey a higher degree of intensity than *nangwa*. More research is needed to determine the precise interpretations when the particle combines with such discourse markers.

- (46) a. 'E-n-júra y-ó **baitu** y-ââ-gw-a.
 AUG-9-rain 9-CM DM 9SM-N.PST-fall-FV
 'It has really rained (heavily/or for a long time).'
- b. E-n-júra y-ó **nangwa** y-ââ-gw-a.
 AUG-9-rain 9-CM DM 9SM-N.PST-fall-FV
 'It has really rained (heavily/or for a long time).'

8. Conclusion

The aim of this paper was to establish the precise function and interpretation of the particle *-o* in Rukiga. We have proposed that, having developed from the pronominal use of the medial demonstrative, it currently functions as an independent pronoun, a contrastive topic marker, and an exclamative or mirative marker (indicating an unexpected situation or degree). At this point in time, we do not see a way to unify these uses under a single analysis of the particle with underspecified semantics and polysemous usage.

Our findings are relevant in the broader picture in at least two respects. First, we have shown that independent morphological topic markers are present in East-Africa too. The Bantu languages are known for their extensive agglutinative morphology, but comparable to the West-African languages mentioned in the introduction, Rukiga possesses an independent contrastive topic marker. Second, we have added to the description of the expression of mirative and exclamative marking, which is a vastly underdescribed linguistic area for Bantu languages (cf. Marten and Mous 2017 who touch on applicatives and expectations).

Further research could compare the position and function of the particle in Rukiga and related Bantu languages where the particle exists, such as Luganda, and Luwanga (Diercks to appear). We already observed in Luganda that the particle is commonly placed before the noun when introducing a new topic, as observed in the Luganda news anchoring, and in Luwanga the pronoun can double the subject to trigger a discourse-familiar interpretation. The comparison may in turn provide evidence for the syntactic status of the pronoun and the underlying sentence structure.

References

- Aboh, Enoch O. and Marina Dyakonova. 2009. "Predicate doubling and Parallel Chains." *Lingua* 119: 1035–1065.
- Aikhenvald, Alexandra Y. 2012. "The essence of mirativity". *Linguistic Typology* 16, no. 3: 435–485.

- Ariel, Mira. 2001. "Accessibility theory: An overview". In *Text representation: Linguistic and Psycholinguistic aspects*, edited by Ted Sanders, Joost Schilperoord, & Wilbert Spooren, 29-87. Amsterdam: John Benjamins.
- Ashton, Ethel O., Enock M.K, Mulira, Ndawula, E.G.M and Tucker, Norman, Archibald. 1954. *A Luganda Grammar*. London: Longmans, Green & Co.
- Asimwe (to appear). "The distribution and function of demonstratives in Runyankore-Rukiga". In *Morphosyntactic variation in East African Bantu languages*, edited by Hannah Gibson, Rozenn Guérois, Gastor Mapunda and Lutz Marten: Contemporary African Linguistics series. Language Science Press.
- Asimwe, Allen. 2014. Definiteness and specificity in Runyankore-Rukiga. PhD Diss., Stellenbosch University.
- Beaver, David and Brady Clark. 2008. *Sense and Sensitivity*. Oxford: Blackwell
- Chafe, Wallace. 1976. "Givenness, contrastiveness, definiteness, subjects, topics and point of view". In *Subject and topic*, edited by Charles. N. Li, 25-55. New York: Academic Press.
- Dalrymple, Mary and Irina Nikolaeva. 2011. *Objects and information Structure*. Cambridge: Cambridge University Press.
- Diercks, Michael and Christopher R. Green. 2018. "Clarifying the Position of Preverbal Subjects: Subject Pronoun Doubling in Wanga." [draft date June 2018]. Available online at: <http://pages.pomona.edu/~mjd14747/Diercks-Green-WangaSPD.6.30.2018.pdf>.
- Güldemann, Tom, and Ines Fiedler. To appear. "Predicate-centered focus in Bantu: verb doubling, predicate clefts, and co." In *On Reconstructing Proto-Bantu Grammar*, edited by Bostoen, Koen: Language Science Press.
- Frascarelli, Mara, and Roland Hinterhölzl. 2007. "Types of topics in German and Italian". In *On information structure, meaning and form*, edited by Susanne Winkler & Kerstin Schwabe, 87–116. Amsterdam/ Philadelphia: John Benjamins.
- Givón, Talmy. 2001. *Syntax II. An introduction. Volume II*. Amsterdam/Philadelphia: John Benjamins.
- Gundel, Jeanette K., Nancy Hedberg, and Ron Zacharski. 1993. "Cognitive status and the form of referring expressions in discourse". *Language* 69, no. 2: 274–307.
- Krifka, Manfred. 2006. "Basic notions of information structure". *Working Papers of the SFB 632, Interdisciplinary Studies on Information Structure*, edited by C. Fery, G. Fanselow & M. Krifka, 13-55. Potsdam: Universitätsverlag Potsdam.
- Lambrecht, Knud. 1994. *Information structure and sentence form*. Cambridge: Cambridge University Press.
- Lehmann, Christian. 2002. *Thoughts on Grammaticalization*. 2nd, revised edition. Erfurt: Seminar für Sprachwissenschaft der Universität.
- Maho, Jouni F. 2009. NUGL Online: The online version of the new updated Guthrie list, a referential classification of the Bantu languages. Available online at: goto.glocalnet.net/mahopapers/nuglonline.pdf.
- Marten, Lutz, and Maarten Mous. 2017. "Valency and expectation in Bantu applicatives". *Linguistics Vanguard*. <https://doi.org/10.1515/lingvan-2016-0078>.
- Marten, Lutz. 2014. "The preverbal position(s) in Bantu inversion constructions Theoretical and comparative considerations". *ZAS Papers in Linguistics* 57: 136–159.
- Marten, Lutz and Jenneke, van der Wal. 2014. "A typology of Bantu subject inversion". *Linguistic Variation* 14: 318-368.

- Michaelis, Laura A. 2001. “Exclamative constructions” in *Language Typology and Language Universals*, edited by Haspelmath, Martin; König, Ekkehard, Oesterreicher, Wulf and Wolfgang Raible, 1038-1050. Berlin: Mouton de Gruyter.
- Neeleman, Ad, Elena Titov, Hans van de Koot, and Reiko Vermeulen. 2009. “A Syntactic Typology of Topic, Focus and Contrast.” In *Studies in Generative Linguistics*, edited by Jeroen van Craenenbroeck, 100:15–51. Berlin: Mouton de Gruyter.
- Reinhart, Tanya. 1981. “Pragmatics and linguistics: An analysis of sentence topics”. *Philosophica* 27: 53-94.
- Repp, Sophie. 2016. “Contrast: Dissecting an elusive information-structural notion and its role in grammar”. In *Oxford Handbook of Information Structure* edited by Caroline Fry & Shinichiro Ishihara, 270-289. Oxford: Oxford University Press.
- Rett, Jessica. 2011. “Exclamatives, degrees and speech acts”. *Linguist and Philos* 34: 411–442
- Rizzi, Luigi. 1997. The fine structure of the left periphery. In Liliane Haegeman (ed.), *Elements of Grammar: Handbook in Generative Syntax*, 281–337. Dordrecht: Kluwer Academic Publishers.
- Simons, Gary F. and Charles D. Fennig (eds.). 2017. *Ethnologue: Languages of the World*. 20th edition. Dallas, Tex.: SIL International. Available online at www.ethnologue.com.
- Skopeteas, Stavros, Ines Fiedler, Sam Hellmuth, Anne Schwarz, Ruben Stoel, Gisbert Fanselow, Caroline Fery & Manfred Krifka. 2006. Questionnaire on Information Structure (QUIS). Working Papers of the SFB632 (ISIS) 4.
- Taylor, Charles. 1985. *Nkore-Kiga*. London: Croom Helm.
- Titov, Elena. 2019. Morphosyntactic encoding of information structure in Akan. *Glossa: A Journal of General Linguistics* 4, no.1, 27: 1-36.
- Umbach, Carla. 2004. “On the notion of contrast in information structure and discourse structure”. *Journal of Semantics*, 21: 155–175.
- Van der Wal, Jenneke and Stavros Skopeteas. 2019. Information Structure Glossary. Available at: <https://bantusyntaxinformationstructure.files.wordpress.com/2019/11/glossary-of-information-structure-basis.pdf>.
- Van der Wal, Jenneke. 2019. The BaSIS basics of information structure (draft).
- Van der Wal, Jenneke and Stavros Skopeteas. 2019. Information Structure Glossary. Available online at: <https://bantusyntaxinformationstructure.files.wordpress.com/2019/11/glossary-of-information-structure-basis.pdf>.
- Van der Wal, Jenneke. 2016. Diagnosing focus. *Studies in Language* 40, no. 2: 259–301.
- Vermeulen, Reiko. 2011. “The syntax of topic, contrast and contrastive topic”. *MIT Working Papers in Linguistics* 58.