# Chapter 19

# The interaction of two focus marking strategies in Luganda

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The Bantu language Luganda (Uganda, JE15) has three morphosyntactic strategies to express focus on a nominal referent. This paper examines the detailed interpretational properties of two of these strategies: the preverbal focus construction and augmentless nouns. Based on various focus tests and effects of the combination of the two strategies, we propose that they express identificational focus and exclusive focus, respectively. This detailed and systematic testing refines our understanding of the expression of focus in Luganda and focus types in general.

## 1 Introduction: Bantu basics and focus

Luganda is one of approximately 500 Bantu languages (Nurse & Philippson 2003: 4), spoken as a native language and lingua franca in Uganda. As is common in Bantu, the canonical word order is SVO, the language has extensive verbal morphology including subject and object indexing, and nouns are divided into noun classes based on their prefixes and their concord forms and agreement patterns in the phrase and clause. In Luganda, noun stems are preceded by a noun class prefix as well as an augment or initial vowel: in (1), the noun *omusota* 'snake' is in class 3 and has the prefix *mu* plus the augment *o*.

- (1) O-mu-sóta gw-áá-kútte e-mmése. 3A-3PX-snake 3SM-PAST-catch.PERF 9A-9.rat 'A/The snake caught a/the rat.'
- $^{\rm 1}$  Data come from joint fieldwork by the authors in August 2014 in Mpigi, Masaka and Kampala, unless otherwise indicated.

Noun classes are indicated in glosses by numbers; see further the abbreviations section at the end of the paper.



The augment is important in the expression of focus, which is the subject of this paper. Specifically, we address three research questions: (i) the morphosyntactic strategies used in Luganda to express focus; (ii) the type of focus that these strategies express; and (iii) how different types of focus can be identified in elicitation.

In the field of information structure, many different terms have been used to refer to *focus* and many subtypes of focus have been proposed.<sup>3</sup> When we refer to *focus* in this paper, we take a by now widely accepted semantic definition of focus proposed in Rooth's (1985; 1992; 1996) Alternative Semantics. This states that focus "indicates the presence of alternatives that are relevant for the interpretation of linguistic expressions" (Krifka 2007: 6). A set of alternatives for the object 'rat' in (1) could be, for example, {owl, rabbit, fish,....}. The triggering of a set of alternatives is a unified core function of focus, and the various types of focus can be seen as the outcomes of additional pragmatic and semantic factors (Zimmermann & Onea 2011). Focus can thus be underspecified in its exact interpretation, the only semantically consistent part being the presence of a set of alternatives. The precise interpretation of the focus can differ, however, depending on the context in which it occurs, allowing *completive*, *replacing*, *selecting* etc. interpretations, which differ in their "communicative point" (Dik 1997: 281). Such potential interpretations are not the core point of the current paper, as we first want to establish the semantic type of focus of the Luganda focus strategies.

Semantic types of focus not only trigger a set of alternatives, but also operate on that set of alternatives. This can result in a scalar, exhaustive or exclusive reading, and can have a truth-conditional effect. Exhaustive and exclusive readings are important for the current paper. Exclusive focus means that there is at least *some* referent in the set of alternatives to which the predicate does not apply, e.g. the snake caught a rat but not a fish (and potentially not other prey either but we do not know). Exhaustive focus means that for *all* alternative referents the predicate does not hold, i.e. the predicate is true only for the focused referent, e.g. the snake caught a rat and nothing else. These semantic types of focus can thus be said to be more specific than merely triggering alternatives.

A separate type of focus is associated with a presupposition (for example of existence or exhaustivity). An example is the English *it*-cleft, where the relative clause forms the presupposition and the focus identifies the referent for which the proposition is true. This is what we mean by identificational focus, but it is crucially not necessarily exhaustive, contra to what É. Kiss (1998) claims (see also Onea & Beaver 2011; Byram Washburn 2013; Destruel et al. 2015). For further discussion of semantic and pragmatic types of focus, we refer the reader to Bazalgette (2015) and van der Wal (2016).

The rest of the paper is structured as follows. We briefly introduce the Immediate After Verb (IAV) effect in §2, before discussing the two main focus constructions under study: the Preverbal Focus Construction (PFC, §3) and the absence of the augment (§4). §5 shows the possible interpretations in the combination of the PFC and augmentless nouns. §6 concludes the paper.

<sup>&</sup>lt;sup>3</sup> We do not consider the scope or size of focus in this paper (e.g. Lambrecht's 1994 distinction between argument vs. predicate vs. sentence focus).

# 2 Immediate After Verb focus position

Like some other Bantu languages (Aghem: Watters 1979; Zulu: Buell 2009; Makhuwa: van der Wal 2006; 2009; Matengo: Yoneda 2011), Luganda has a dedicated linear position for focus, the Immediate After Verb (IAV) position. Although the IAV position is not the primary concern of this paper, it is important to mention its effects here. The focus effect of the IAV position can be seen in restrictions on the placement of inherently focused content question words in (2) and (3), which need to be in IAV position (2b,3b): it is ungrammatical for a content question word like *ani* 'who' or *ki* 'what' to occur in other postverbal positions (2c,3c). When postverbal, focused arguments as well as adverbs must occur in the IAV position.

- (2) a. A-fúmb-íir-á á-b-áana e-m-mére. 1SM-cook-APPL-FS 2A-2PX-children 9A-9PX-food 'She cooks food for the children.'
  - b. A-fúmb-ír-á ání e-m-mére? 1sm-cook-APPL-FS who 9A-9PX-food 'Who does she cook the food for?'
  - c. \*A-fúmb-ír-á é-m-mére aní? 1sm-cook-appl-fs 9a-9px-food who ('Who does she cook the food for?')
- (3) a. O-mu-sómésa y-a-wá á-b-áanà e-m-mére. 1A-1PX-teacher 1SM-PAST-give 2A-2PX-children 9A-9PX-food 'The teacher gave the children food.'
  - b. O-mu-sómésa y-a-wá kí á-b-áanà?
     1A-1PX-teacher 1SM-PAST-give what 2A-2PX-children
     'What did the teacher give the children?'
  - c. \*O-mu-sómésa ya-wá à-b-áana kí? 1A-1PX-teacher 1SM.PAST-give 2A-2PX-children what ('What did the teacher give the children?')

Answers to content questions are also found in IAV position, with potential intervening non-focal elements in dislocated position, as in (4d). All examples (4b-d) are felicitous answers to (4a).

- (4) a. A-fúmbyé á-tyá e-m-púúta? 1sm-cook.perf 1-how 9A-9px-Nile.perch 'How has she cooked the Nile perch?'
  - b. Bulúngi. 'Well.'

- c. A-gi-fúmbyé búlúngi. 1sm-90m-cook.perf well
  - 'She has cooked it well.'
- d. (E-m-púúta) a-gi-fúmbyé búlúngi. 9A-9PX-Nile.perch 1SM-9OM-cook.PERF well '(The Nile perch) She has cooked it well.'

As shown by Hyman & Katamba (1993), a Luganda noun without an augment [A] in an affirmative clause is in focus (see §4). If a [A] noun occurs postverbally, it can only appear in IAV, as shown in (5): it is grammatical as the first noun after the verb (5b) but not as the second after an augmented [+A] noun (5c).<sup>4</sup>

- (5) Hyman & Katamba (1993: 228-229)
  - a. Y-a-gúl-ir-a a-b-áana e-bí-tábó. [+A, +A] 1SM-PAST-buy-APPL 2A-2PX-children 8A-8PX-books

'He bought the children books.'

b. Yagúlírá \_\_-báana ebitábó. [-A, +A]

'He bought the CHILDREN books.'

c. \*Yagúlira a-báana \_\_bitábó. [+A, -A]

('He bought the children воокs.')

d. Yagúlírá \_\_-báana \_\_-bitábó. [-A, -A]

'He bought the children books.'

For completeness we note that when both postverbal objects are [-A], as in (5d), the interpretation is VP focus, including the verb and both objects. This is visible in the appropriate situation for (6), which contrasts the action with a whole other action of doing something else, and the inappropriateness of the contrast with just one object rather than the whole action in (7).

- (6) Y-á-gúlíddé \_\_-m-mótoka \_\_-mu-píira. [-A, -A]
  1SM-PAST-buy.PERF 9PX-car 3PX-tyre

  'He bought a tyre for the car.' (i.e. this was the only work he did)
- (7) #Y-á-gúl-íddé \_\_-m-mótoka \_\_-mu-píira, sí picipici. [-A, -A] 1SM-PAST-buy.PERF 9PX-car 3PX-tyre NEG.COP motorbike 'He bought a tyre for the car, not for the motorcycle.'

<sup>&</sup>lt;sup>4</sup> In examples (5–7) only, the absence of the augment is indicated by an underscore placed before the noun, and small caps in the translation indicate focus. [+A] indicates that the noun has the augment, while [-A] indicates it does not. The first linear [A] corresponds to the first linear noun in the clause and the second linear [A] to the second linear noun in the clause.

The interpretation of focus in IAV is not restricted to one type, but is underspecified: postverbal objects can be interpreted as exclusive focus or part of the comment (see §4), and in locative inversion the subject can occur in IAV too. In subject inversion, either the subject is in focus, as in the question in (8a) and the narrowly focused subject in (8b), or it is just detopicalised as part of a thetic sentence (said "out of the blue"), as in (9):

- (8) a. Mu-no mú-súlá-mú àni? 18-DEM 18SM-sleep-18LOC who 'Who sleeps in here?'
  - b. Mu-no mú-súlá-mú mu-lalû. 18-DEM 18SM-sleep-18LOC 1PX-crazy 'It's a mad person who sleeps here.'
- (9) Ku-kyalo kw-á-f-íír-á-kó o-mu-sájja. 17-7.village 17sm-past-die-appl-fs-17loc 1a-1px-man 'In the village died the man.'

## 3 The Preverbal Focus Construction

A second focus strategy, the Preverbal Focus Construction (PFC), places the focused referent in the preverbal domain with an agreeing morpheme  $-e^5$  preceding the verb. Both arguments and adverbs can be focused in the PFC. In (10a), the object *emmese* 'rat' precedes the subject *omusota* 'snake' and triggers class 9 agreement on *e*. In (10b) the subject *omusota* 'snake' is in focus and triggers class 3 agreement on *e*. In (11), the adverb *eggulo* 'yesterday' appears sentence-initially and *e* agrees with it in class 11.

- (10) a. E-m-mése o-mu-sóta gy-e gw-a-kuttê. 9A-9PX-rat 3A-3PX-snake 9-e 3SM-PAST-catch.PRF 'It's a/the rat that the snake caught.'
  - b. O-mu-sóta gw-e gw-á-lya e-m-mése. 3A-3PX-snake 3-e 3SM-PAST-eat 9A-9PX-rat 'It's a/the snake that ate the rat.'
- (11) E-ggulo lw-e y-a-limyé. 11A-yesterday 11-e 1SM-PAST-dig.PERF 'It's yesterday that he dug.'

Leaving aside questions concerning the syntactic structure of the PFC,<sup>6</sup> the main concern in this paper is what type of focus the PFC expresses. Our hypothesis is that the

<sup>&</sup>lt;sup>5</sup> In the examples, we gloss the morpheme -e as 'e', since it is as yet unclear whether it is a focus marker or a relative marker.

<sup>&</sup>lt;sup>6</sup> A specific question is how far the PFC has developed from a biclausal cleft to a monoclausal focus construction, since the PFC shows characteristics of both.

PFC expresses identificational focus. Identification is here taken to mean that there is a presupposition that a referent exists for which the proposition holds true, and that the speaker asserts that this referent is identified as corresponding to the focused element (possibly from among various alternatives). For example, in (10b) there is a presupposition that someone ate the rat, and the one who is identified as that someone is the snake. In what follows we test this hypothesised meaning of the Luganda PFC in four linguistic environments: content questions, indefinites, incomplete yes/no questions and with focus particles (see van der Wal 2016 for an overview of focus tests that we draw on).

## 3.1 Content questions

The identification reading is evident in the interpretation of content questions, such as 'who did you hit?' in (12) and (13). If there is a presupposition that somebody was hit, then the prediction is that the answer is drawn from a non-empty set, and hence that answering 'nobody' is not felicitous. This is true for the question formed with the PFC as in (12), confirming our hypothesis that the PFC contains a presupposition and expresses identificational focus.

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(12) Aní gw-e w-á-kúbyê?
who 1-e 2sg.sm-past-hit.perf
'Who is it that you hit?'
#Sí-rí-nâ. / Te-wá-lî.
NEG.1sg.sm-be-with NEG-16sm-be
'Nobody.'
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By comparison, an object content question in SVO order (13) can felicitously be answered by 'nobody', since there is no presupposition that anyone in fact was hit.

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(13) W-á-kúbyé ání?
2sg.sm-past-hit.perf who
'Who did you hit?'
Sí-rí-nâ. / Te-wá-lî.
NEG.1sg.sm-be-with NEG-16sm-be
'Nobody.'
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#### 3.2 Indefinites

If the PFC contains a presupposition that some referent was involved in the event expressed by the verb, then the identification of that referent should add information and be specific. For example, it is odd to say 'who he hit was someone or other', because we already know from the presupposition contained in 'who he hit' that someone was hit. A non-specific interpretation is thus predicted to be infelicitous for the focused referent in the PFC. This is easily tested with the word *omuntu* 'person', which can receive an indefinite, non-specific interpretation ('anyone') in SVO order, as in (14a) and (15a), but

as predicted not in the PFC (14b, 15b). Instead, *omuntu* must be interpreted as a specific entity or the type named by the noun (as opposed to an entity of some other type) in (14b) and (15b).

- (14) a. Y-á-kúbyé o-mu-ntu. 1SM-PAST-hit.PERF 1A-1PX-person 'He hit someone.'
  - b. O-mu-ntu gw-e y-a-kubyê.
    1A-1PX-person 1-e 1SM-PAST-hit.PERF
    'It's a person he hit.'
    #'He hit someone.' / #'It is someone (non-specific) that he hit.'
- (15) a. O-mu-ntu a-gudde.
  1A-1PX-person 1sM-fall.PERF

  '(A certain) Someone fell.'
  b. O-mu-ntu y' aa-gudde.
  1A-1PX-person 1.e 1sM-fall.PERF

  'It's a human being who fell.'
  #'Someone fell.' / #'It is someone (non-specific) that fell.'

## 3.3 Incomplete 'yes/no' questions

A further test involves incomplete 'yes/no' questions. These are questions that ask about a subset of the referents for which the sentence is true. Concretely, the test involves showing participants a picture of Thomas with a cat and a rabbit, and asking a 'yes/no' question on a subset of 'cat and rabbit', namely whether Thomas has a cat. Incomplete 'yes/no' questions and their answers can reveal focus effects in two ways: the choice of the answering particle ('yes' or 'no') and the choice of conjunction ('and' or 'but').

With regard to the answering particle, only the answer 'yes' is predicted to appear in an answer to an SVO question, since it is true that Thomas has a cat, regardless of whether he has other animals too. By contrast, the answer to the corresponding question in the PFC can relate not just to the content, but also to the unique identification: the answer 'no' here negates not that Thomas has a cat, but that Thomas has only a cat. The answer 'no' is thus predicted to be possible for the PFC question but not for the SVO question. This is precisely what we found: an incomplete 'yes/no' question in the PFC (16a) is corrected by answering 'no' (16b), whereas for an SVO question (17a), the answer is either a simple 'yes' (17b), or a 'yes but/and' (17c), but not a straight 'no'.

<sup>&</sup>lt;sup>7</sup> This test is modified from the Questionnaire on Information Structure (Skopeteas et al. 2006); see Onea & Beaver (2011) for an experimental application of this test for Hungarian, and Destruel et al. (2015) for further crosslinguistic testing of it-clefts.

- (16) PFC question (picture is shown of Thomas having a cat and a rabbit)
  - a. Kkápa Thomas gy-e a-li-nâ?9.cat 1.Thomas 9-e 1sm-be-with'Is it a cat that Thomas has?'
  - b. Nédda, sí y-okkâ, Thomas a-li-ná n' á-ká-myû. no NEG.COP 9-only 1.Thomas 1sm-be-with and 12A-12PX-rabbit 'No, not only, Thomas also has a rabbit.'
- (17) SVO question (picture is shown of Thomas having a cat and a rabbit)
  - a. Thomas a-li-ná kkápâ? 1.Thomas 1sm-be-with 9.cat 'Does Thomas have a cat?'
  - b. Yee, Thomas a-li-ná kkápa. yes 1.Thomas 1sм-be-with 9.cat 'Yes. Thomas has a cat.'
  - c. Yee, Thomas a-li-ná kkápa, nayé a-li-ná ne á-ká-myû. yes 1.Thomas 1sm-be-with 9.cat but 1sm-be-with and 12A-12px-rabbit 'Yes, Thomas has a cat, but he has a rabbit too.'

When the answer to the PFC question is not a straight negation as in (16b), the prediction is that the PFC strongly prefers 'yes but' over 'yes and'. This is because the identificational focus associated with the PFC suggests an exclusion of and contrast to alternative referents, whereas the 'yes and' answer is explicitly non-exclusive and non-contrastive. The conjunction 'but' is required here to highlight the identification associated with the PFC and to express the contrast with possible alternatives, as is confirmed by the data in (18). In (18a) the yes/no question is formed by a PFC, and the answer 'yes but' in (18b) is acceptable, but the answer 'yes and' in (18c) is not. The explicit contrast induced by 'but' is not necessary for the SVO counterpart in (19), since no exclusion or contrast is expected for SVO: both answers 'yes but' and 'yes and' are fine (19b-c).

- (18) PFC question (picture is shown of Maria with a red and a yellow pepper)
  - a. Kikáámuláli e-ki-myúfu Maria ky-e a-li-ná?
     7.pepper 7A-7PX-red 1.Maria 7-e 1sM-be-with
     'Is it a red pepper that Maria has?'
  - b. Ye, kyokka/naye a-li-ná ne e-ky-á ky-énvu. yes only/but 1sm-be-with also 7-7-conn 7-yellow 'Yes, only/but she also has a yellow one.'
  - c. #Era/ate a-li-ná ne e-ky-á ky-énvu. and/and.even 1sm-be-with also 7-7-conn 7-yellow 'And she also has a yellow one.'

- (19) SVO question (picture is shown of Maria with a red and a yellow pepper)
  - a. Maria a-li-ná kikáámuláli e-ki-myúfu?
     1.Maria 1sm-be-with 7.pepper 7A-7PX-red
     'Does Maria have a red pepper?'
  - b. Ye, era/ate a-li-ná ne e-ky-á ky-énvu. yes and/and.even 1sm-be-with also 7-7-conn 7-yellow 'Yes, and she has also/even a yellow one.'

The first part of this test ('yes/no') suggests that the PFC is associated not just with identification but with exhaustivity, that is, the exclusion and negation of all possible alternatives to the set expressed by the focused phrase ('only a cat and nothing else'). This is because a 'no' answer negates that Thomas *exhaustively* has a cat. A question is whether this is an inherent semantic part of the PFC or rather a pragmatically implied part of meaning. A suggestive answer is found in the second test ('and/but'). Specifically, if the PFC has an inherently exhaustive interpretation, we would predict 'no' to be the only appropriate answer. Instead, the fact that 'yes, but' is also compatible with the PFC suggests that the exhaustive interpretation is implied but not encoded. More specifically, it seems that there is a presupposition of contrast and an implicature of exhaustivity (cf. Byram Washburn 2013). This is why there is a need for a contrasting conjunction 'but', but there is no truth-conditional exhaustive meaning inherently present in the PFC.

## 3.4 Focus particles 'only' and 'even'

Focus particles also reveal the identificational nature of the PFC. The particle 'only' shows a subset of identification, namely exhaustive identification. 'Only' is compatible with the PFC for objects, as in (20), and the PFC is in fact required for subjects modified by 'only', as shown by the ungrammaticality of (21b) where the subject 'only the house' is not in the PFC. Note that 'only' requires the augmentless form of the noun, as further discussed in §4.

- (20) Ka-wûnga k-okká k-e y-a-lyâ. 12px-ugali 12-only 12-e 1sm-past-eat 'It is only ugali that he ate.'<sup>8</sup>
- (21) a. Nnyúmba y-okká y-e y-a-yér-ebw-a. 9.house 9-only 9-e 9sm-past-sweep-pass-fs 'Only the house was swept.'
  - b. \*Nnyúmba y-okká y-a-yér-ebw-a.
    9.house 9-only 9sm-past-sweep-pass-fs
    ('Only the house was swept.')

<sup>&</sup>lt;sup>8</sup> *Ugali*, a stiff porridge made from maize flour, is the staple food in East Africa.

The particle *ne* 'even, also', however, is not compatible with the PFC, as shown in (22b) and (23b). For comparison, it *is* grammatical in a preposed topic position (22a).

- (22) a. Ne á-ká-wûngá y-a-ká-lya. even 12A-12PX-ugali 1sm-PAST-12OM-eat 'He ate even ugali.'
  - b. \*Ne akawûnga k-e y-a-lyâ.
     even 12A-12PX-ugali 12-e 1SM-PAST-eat
     ('It's even ugali that he ate.')
- (23) a. Né énnyúmba y-a-yér-ebw-a. even 9.house 9sm-past-sweep-pass-fs 'Even the house was swept.'
  - b. \*Né énnyúmba y-e y-a-yér-ebw-a.
     even 9.house 9-e 9sm-past-sweep-pass-fs
     ('It is even the house that was swept.')

The opposite distribution of 'only' and 'even' in the PFC can be explained by the incompatibility between 'even' and exclusivity: 'even' includes all alternatives up to the furthest end of a scale of possibilities, thus excluding none of the alternatives. This suggests that the PFC is associated with exclusive focus, not just identification. This is also how Walusimbi (1996: 52) characterizes the PFC: as expressing the existence of a presupposition and simultaneously an exclusive set that satisfies a missing variable in the presupposition. Alternatively, however, exclusivity may not be inherent to the PFC (as suggested in §3.3 above), but instead be due to the pragmatic incompatibility between scalarity and identification of a referent. To illustrate, if one would want to identify 'who ate ugali' the scalarity-related answer?' Even John ate ugali' does not seem appropriate.

In conclusion, the incompatibility of the PFC with the scalar particle 'even' is not directly expected if the PFC expresses just identificational (not inherently exclusive) focus. Further tests exploring the combination of the PFC with augmentless nouns can further elucidate our hypothesis that the PFC expresses identificational focus. We turn to these in §4 and §5.

# 4 The augment

Apart from the IAV position and the PFC, a third linguistic strategy related to focus is the presence or absence of the augment on nouns. Hyman & Katamba (1990) and Hyman & Katamba (1993) analyse the presence ([+A]: <code>o-mu-sota</code>) or absence ([-A]: <code>\_\_-mu-sota</code>) of the augment as related to two licensers: negation and focus. They show that any NP following a negative verb must be [-A], as shown in (24a) and the ungrammaticality of (24b-d); this is a purely syntactic restriction and has no influence on information structure.

- (24) Hyman & Katamba (1993: 224)
  - a. Te-bá-á-w-a \_\_\_-b-áana \_\_\_-bi-tábó. NEG-2SM-PAST-give-FS 2PX-children 8PX-books 'They didn't give the children books.'
  - b. \*Tebááwa abáana ebitábó.
  - c. \*Tebááwa abáana -bi-tábó.
  - d. \*Tebááwa —-báana ebitábó.

They also identify focus as a licenser of augmentless nouns: an augmentless object in an affirmative clause receives a focus reading, as shown in the difference between (25a) and (25b).

- (25) Hyman & Katamba (1993: 228)
  - a. Y-a-gúla e-bí-tábó.
     1SM-PAST-buy 8A-8PX-books
     'He bought books.'
  - b. Y-a-gúla \_\_-bi-tábó. 1sm-past-buy 8px-books 'He bought воокs.'

We generally accept their analysis of the augment in Luganda, and extend it by studying what the precise interpretation of this focus strategy is. Our proposal is that the focus expressed by the absence of the augment is exclusive. As explained before in §1, by *exclusive* we mean that the focused referent triggers a set of alternatives and excludes at least some of those alternatives. For example, in a sentence 'it's matooke that she ate', 9 the focused item *matooke* triggers the existence of a set of alternative things that she may have eaten, like rice, beans, porridge, and conveys that the action of eating is true for *matooke*, but not true for some (and potentially all) of the alternatives. This exclusive focus can be shown in five tests: alternative questions, correction, indefinites, focus particles, and answers to content questions.

# 4.1 Alternative questions

In answers to alternative questions, a selection needs to be made between alternatives. This means that one or more alternatives are excluded. The data show that in this case the [-A] form is obligatorily used in both the question (26a) and the answer (26c), which can also just be a one word fragment (26d). Example (26b) shows that nouns with the augment in object position lead to ungrammaticality of the question.

(26) a. O-yágálá mágí obá nnyamá? 2sg.sm-want 6.eggs or 9.meat 'Do you want eggs or meat?'

<sup>&</sup>lt;sup>9</sup> Matooke is a green plantain which is traditionally steamed in banana leaves and mashed for eating.

- b. \*O-yágálá a-mágí obá e-nnyama? 2sg.sm-want 6A-6.eggs or 9A-9.meat ('Do you want eggs or meat?')
- c. N-jágálá nnyámá / #é-nnyámá. 1sg.sm-want 9.meat / 9A-9.meat 'It's meat that I want'. 'I want MEAT.'
- d. Nnyámá. 9.meat 'Meat'

#### 4.2 Overt contrast/correction

A second test for exclusivity involves adding an overt contrast or correction to a statement. The overt contrast or correction phrase excludes the mentioned alternative(s), and thus requires the [-A] form of the object  $nny\acute{u}mba$  'house' in the correction in (27), and the object  $ss\acute{u}\acute{u}k\acute{a}$  'bedsheets' in the contrast in (28).

- (27) a. Y-a-yéra o-lú-ggya. 1SM-PAST-Sweep 11A-11PX-yard 'She swept the yard.'
  - b. Nédda, y-a-yérá nnyúmba / #e-nnyúmba.
     no 1sm-past-sweep 9.house
     'No, she swept the house.'
- (28) Máaka a-b-áana y-a-bá-gúl-ír-á ssúúká / #e-ssúúká, sí
  1.Mark 2A-2PX-children 1sm-past-2om-buy-appl-fs 10.bedsheets Neg.cop
  bulangíti.
  blankets

'Mark bought the children bedsheets, not blankets.'

Crucially, the [+A] form is judged as felicitous if the contrasting clause is absent, as in (29).

(29) Máaka a-b-áaná y-a-bá-gúl-ír-a e-ssúúkâ. 1.Mark 2A-2PX-children 1sM-PAST-2OM-buy-APPL-FS 10A-10.bedsheets 'Mark bought the children bedsheets.'

<sup>&</sup>lt;sup>10</sup> This particular example has a preverbal topical benefactive object (resumed by an object marker on the verb), which allows the theme object to be contrasted in IAV position.

#### 4.3 Indefinites

A third test showing exclusivity involves the indefinite noun (o)muntu 'person'. This can be interpreted as non-specific in its [+A] form, as in (30a); but refers to a type of entity when in its [-A] form and when the scope of focus is the object, as in (30b). This is because non-specific indefinites do not allow for the exclusion of alternatives ('anyone' includes everyone), whereas types do allow for exclusion, as indicated in the following contrastive clause ('not a cat').

- (30) a. N-á-kúbyé o-mu-ntu. 1sg.sm-past-hit.perf 1a-1px.person 'I beat someone.'
  - b. N-á-kúbyé mu-ntú, si kkapa. 1sg.sm-past-hit.perf 1px-person neg.cop 9.cat 'I beat a person, not a cat.'

## 4.4 Focus particles 'only' and 'even'

The exhaustive focus particle *-okka* 'only' requires the noun it modifies to be [-A], which is expected considering that an exhaustive reading excludes all alternative referents.

(31) Y-a-yérá nnyúmba / \*e-nnyúmba y-okká, sí ki-yûngu. 1SM-PAST-sweep 9.house / 9A-9.house 9-only NEG.COP 7PX-kitchen 'She swept only the house, not the kitchen.'

Equally expected is the finding that the focus particle 'even/also' cannot modify a [A] noun, as shown in (32).<sup>11</sup>

- (32) a. Y-a-lyá n' á-ká-wûnga. 1sm-past-eat even 12a-12px-ugali 'He ate even ugali.'
  - b. \*Y-a-lyá né ká-wûnga.1SM-PAST-eat even 12PX-ugali('He ate even ugali.')

- (i) a. Te-y-a-lyá n' ákáwûnga.

  NEG-ISM-PAST-eat even 12A-12PX-ugali

  'He didn't even eat ugali.' (though it's his favourite dish)

  b. \*Te-y-a-lyá ná káwûnga
  - b. \*Te-y-a-lyá né káwûnga.
     NEG-1SM-PAST-eat even 12PX-ugali
     ('He didn't even eat ugali.' (though it's his favourite dish))

<sup>&</sup>lt;sup>11</sup> Interestingly, negation (which normally licenses a [-A] object) does not affect this constraint:

If [-A] indeed encodes exclusivity, the ungrammatical status of (32b) is explained by the fact that né 'even, also, with' includes all the less likely alternatives (not excluding any alternatives), and thus is incompatible with the exclusive meaning of the absence of the augment on the noun. This ungrammaticality would not be expected if the absence of the augment merely encodes focus (cf. Hyman & Katamba 1993), since 'even ugali' is indeed the new information focus in this clause.

## 4.5 Restricted interpretation of answers to content questions

A fifth test involves the interpretation of answers to content questions. Either form of the object [+A/- A] is grammatical here, but whereas the [+A] answer is described as "neutral" (33b), a contrast is spontaneously indicated by our consultants for the [A] form (33c).

- (33) a. O-mu-nyá gu-kutte ki? 3A-3PX-gecko 3SM-catch.PERF what 'What has the gecko caught?'
  - b. Gú-kutte e-nsirî.
     3sm-catch.perf 9A-9mosquito
     'It caught a mosquito.'
  - c. Gú-kútté nsírî.
    3sm-catch.perf 9mosquito
    'It caught a mosquito.'
    Situation: "not something else"

# 4.6 A note on the [-A] subject

Just as a subject modified by 'only' is required to appear in the PFC (see §3.4), the subject cannot be [-A] in its canonical preverbal position (34b), that is, the PFC is a precondition for [-A] subjects (34a). For comparison, the [+A] subject is grammatical in the PFC (34c) as well as in SVO order (34d).

- (34) a. Mu-sómésa y-e y-a-mú-laba.

  1px-teacher 1-e 1sm-past-1om-see

  'It's the teacher that saw him.'
  - b. \*Mu-sómésa y-a-mú-laba.
     1PX-teacher 1SM-PAST-1OM-see
     ('It's the teacher that saw him.')
  - c. O-mu-sómésa y-e y-a-mú-laba. 1A-1PX-teacher 1-e 1sM-PAST-10M-see 'The teacher saw him'

d. O-mu-sómésa y-a-mú-laba.
 1A-1PX-teacher 1SM-PAST-1OM-see
 'The teacher saw him'

The logical subject can, however, be [-A] in locative inversion. Locative inversion is a construction in which the logical subject appears in a linearly postverbal position while the preverbal position is filled by a locative expression like *muno* 'here' in (35) or *mukatale* 'in the market' in (36) and (37). The function of this inversion is to detopicalise the subject, which results in a thetic interpretation when the subject is [+A] (see example 9 above), and an exclusive interpretation when it is [-A]. This exclusive interpretation can be seen in the contrast in (35), the modification by 'only' in (36), and the generic or type interpretation of the indefinite in (37).

- (35) Mu-no mú-súlá-mú mu-lalû. 18-DEM 18SM-sleep-18LOC 1PX-crazy 'It's a mad person who sleeps here.' (nobody else)
- (36) Mu-katále mw-áá-báddé-mú báána b-okká. 18-market 18sm-past-be.perf-loc18 2.children 2-only 'In the market were only children.'
- (37) Mu-katále mw-áá-báddé-mú baantú, si mbwa. 18-market 185M-PAST-be.PERF-LOC18 2.people NEG.COP 10.dogs 'In the market were people, not dogs.'

For completeness we mention that the agent NP in a passive can be [-A] as well, and as expected it triggers the exclusive interpretation (38). The agent does not need a preposition 'by' in Luganda (see Pak 2008).

(38) E-m-mése y-a-l-ííbw-á mú-sótâ. 9A-9PX-rat 9SM-PAST-eat-PASS-FS 3PX-snake 'The rat was eaten by a snake.' (implying 'not by a cat')

The syntactic licensing of augmentless nouns seems to be restricted to a vP-internal position (also depending on the analysis of the PFC as a cleft or not); cf. Halpert (2012; 2013) for this proposal for Zulu [-A] nouns, and Carstens & Mletshe (2015; 2016) on Xhosa. The syntactic structure will be left to one side here, since our main aim is to unravel the precise interpretation of focus strategies.

In conclusion, the absence of the augment encodes a focus interpretation that is more specific than Hyman & Katamba's (1993) underspecified focus, which the five tests in this section diagnose as exclusive focus. The next question is what happens when the identificational focus of the PFC and the exclusive focus of the augmentless nouns are combined.

# 5 Combination of PFC and [-A]

Identification and exclusion are very close to one another but are not identical, and the two focus marking strategies encoding them in Luganda can be combined. On the basis of our analysis in the previous sections, we predict the following combinations, as also represented in Table 1 below:

- a postverbal [-A] object triggers an exclusive focus reading, excluding at least some
  of the alternatives;
- a preverbal [+A] subject or object in the PFC is identified as the referent for which the otherwise presupposed predication is true;
- a preverbal [-A] subject or object in the PFC marks the predicate as part of the presupposition AND excludes alternatives for the focused referent.

=		SVO	PFC
-	[-A] [+A]	exclusive neutral/new info	exclusive identification identification

Table 1: Predicted combinations of two focus strategies for Luganda objects

We demonstrate the various combinations of the focus strategies and their interpretations in three example cases.

First, we show the difference in interpretation between the [+A] and [-A] form of the subject in the PFC. As an answer to the subject question in (39), the PFC will be used. Since it concerns subject focus, the PFC *must* be used, 12 and this allows us to test the influence of [-A]. Since the only difference is the presence or absence of the augment, the difference in interpretation shows that exclusivity is *only* linked to [A], not to the PFC. In both answers, there is a presupposition that there exists someone who is reading. The difference is found in the explanation that consultants provide for felicitous use of each example. When the answer has a [+A] noun in subject position (39a), this simply identifies the one reading as a/the child, whereas when the answer has a [A] noun in subject position (39b), this implies that there are others in the room and the child is identified to the exclusion of these alternatives.

- (39) Sketched situation: I want to know who is reading in the room next door.
  - O: 'Who is reading?'
  - a. O-mw-ána y-e a-somâ. 1A-1px-child 1-e 1sm-read

'It's a/the child that is reading.'

Situation: There is only one person in the room.

<sup>&</sup>lt;sup>12</sup> Locative inversion would be an alternative for subject focus, but only if there is indeed a topical locative. The point here is that the subject cannot occur in its canonical preverbal position if it is focused.

b. Mw-ána y-e a-somâ.
 1px-child 1-e 1sm-read

'It's the child that is reading.'

Situation: There are other people in the room.

Second, the difference in interpretation between the two focus strategies is also detected in a focus test that É. Kiss (2009) applies for Hungarian. Numerals are normally interpreted as a lower boundary 'at least this amount' (Horn 1972; Levinson 2000), but in exclusive focus they refer to precisely that quantity. This is because alternative (higher) values are excluded. If the PFC is identificational but not inherently exclusive or exhaustive, we would not predict the PFC to result in the 'exact amount' reading. Indeed, the lower-bound reading of 'at least one million' is found in post-verbal position with a [+A] object, as in (40a), and crucially does not change in the PFC, as shown in (41a). When the object takes its [-A] form, the meaning narrows down to the precise the value given in the focused constituent: exactly one million. This is the case regardless of whether the object is in-situ after the verb (40b), or in the PFC (41b).

#### (40) a. SVO [+A]

Tw-étaaga a-ka-kadde ka-mú o-ku-mála é-nnyúmba. 1PL.SM-need 12A-12PX-million 12-one 15A-15PX-finish 9A-9.house 'We need (at least) one million to finish the house.'

b. SVO [-A]

Tw-é-taaga ka-kadde ka-mú o-ku-mála é-nnyúmba.

1PL.SM-need 12PX-million 12-one 15A-15PX-finish 9A-9.house

'We need (exactly) one million to finish the house.' (we've calculated)

#### (41) a. PFC [+A]

A-ka-kadde ka-mú k-e tw-etaagá o-ku-mála é-nnyúmba. 12A-12PX-million 12-one 12-e 1PL.SM-need 15A-15PX-finish 9A-9.house '(About) one million we need to finish the house.'

b. PFC [-A]

Ka-kadde ka-mú k-e tw-etaagá o-ku-mála é-nnyúmba. 12Px-million 12-one 12-e 1PL.SM-need 15A-15Px-finish 9A-9.house '(Exactly) one million we need to finish the house.'

These interpretations can be accounted for if the PFC merely presupposes that a certain amount of money is needed to finish the house, which is then identified to be one million (at least), while the absence of the augment encodes exclusivity, meaning that alternatives to the amount given are excluded, resulting in an exact reading.

A final example shows the same interpretations in the felicitous situations sketched for the different [+A/-A] forms provided by our consultants. The [-A] variant of the preverbal focused subject is interpreted as corrective or contrastive, i.e. excluding alter-

natives, as indicated for (42a). This is not the case for the [+A] variant that serves as an identificational answer in (42b).<sup>13</sup>

(42) a. Aní á-sula mu nnyúmba eyo? 1.who rel1sm-sleep 18 9.house 9.dem

'Who sleeps in this house?'

b. Mu-wála ye a-súlá-mû.

1рх-girl 1.e 1sм-sleep-18Loc

'A girl sleeps there.'

Situation 1: There are a boy and a girl. Which one sleeps here? (contrastive)

Situation 2: You expect a man to be sleeping there. (corrective)

c. O-mu-wála ye a-súlá-mû.

1A-1PX-girl 1.e 1SM-sleep-18LOC

'The girl sleeps there.'

Situation: You know the girl.

Testing the combination of the PFC and augmentless nouns reinforces our analysis of the precise focus interpretation of these strategies: the PFC triggers a presupposition and identificational focus, whereas [-A] has an exclusive focus effect.

## 6 Conclusion and further research

Our research questions for this paper were (i) What morphosyntactic strategies does Luganda use to express focus? (ii) What type of focus do these express? and (iii) How can different types of focus be identified in elicitation? We have shown that Luganda uses the Immediate After Verb position, the Preverbal Focus Construction and augmentless nouns to express focus, and that, while the IAV position expresses an underspecified type of focus (in the sense of merely triggering a set of alternatives), the PFC expresses identificational focus and the augmentless nouns encode exclusive focus (in affirmative clauses). As regards methodology, while we acknowledge the value and necessity of spontaneous speech and corpora (especially in the area of information structure) we have shown how specific diagnostics for focus are useful, and in fact indispensable, in elicitation if one aims to establish the precise semantic and pragmatic interpretation of a certain strategy that is associated with focus. The spontaneous and elicited data should ideally go hand in hand.

This narrow study of the interpretation of focus in Luganda triggers further questions, both for Luganda and for the study of information structure in general. We mention three of the issues that arise.

First, we need to clarify the syntactic status of the PFC and [-A] nouns, as indicated above. The PFC shows properties of both cleft and non-cleft constructions, suggesting

<sup>&</sup>lt;sup>13</sup> Note again that the subject cannot be focused in its canonical preverbal position.

it is halfway in the grammaticalisation path from a cleft to a monoclausal focus construction (cf. Heine & Reh 1983; Harris & Campbell 1995; van der Wal & Maniacky 2015). What should the synchronic syntactic analysis be? With respect to the augmentless nominals, their appearance seems to be restricted by position (vP-internal) and licensing by focus or negation. Could this be related to abstract Case licensing (cf. Halpert 2012; 2013; Carstens & Mletshe 2015; 2016)? Does the "size" of the nominal phrase play a role, with demonstratives also licensing [-A]?

Second, which features do we assume in the structural analysis of focus? Considering the relevance of exclusivity, more specific features than just an underspecified [focus] are clearly needed (cf. Neeleman et al. 2009). A further question concerns whether the morphosyntactic and interpretational effects are part of the syntax, or belong in (the interface of morphosyntax with) semantics and pragmatics.

This is related to a third point, which is the broader question of how we define focus and the pragmatic/semantic divide. The triggering of an alternative set, as proposed in Rooth's (1985; 1992; 1996) Alternative Semantics, can be seen as a unified core function of focus, and the various types of focus are then the outcomes of additional pragmatic and semantic factors (Zimmermann & Onea 2011). Rather than having a dichotomy between identificational vs. new information (É. Kiss 1998), or Kontrast vs. Rheme (Vallduví & Vilkuna 1998), Bazalgette (2015) suggests a four-way distinction between types of focus, according to their semantic complexity: simple focus (triggering alternatives under Roothian semantics of focus and nothing else), focus with an implicature (triggering alternatives, and pragmatically implying exclusion or scalarity), focus with a presupposition, and focus with truth-conditional effects (triggering alternatives and operating upon them). The usefulness of this distinction is illustrated in this paper by the different linguistic strategies for expressing focus in Luganda and their specific interpretation as identificational focus and exclusive focus.

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# Abbreviations and symbols

High tones are marked by an acute accent, falling by a circumflex. Numbers in glosses refer to noun classes, but to persons when followed by SG or PL.

*	ungrammatical	NEG	negation
#	infelicitous	OM	object marker
A	augment	PASS	passive
APPL	applicative	PAST	past tense
CAUS	causative	PERF	perfective
CONN	connective	PFC	preverbal focus construction
COP	copula	PX	noun class prefix
DEM	demonstrative	RED	reduplication
FS	final suffix	REL	relative
IAV	immediate after verb	SM	subject marker
LOC	locative		

## References

Bazalgette, Timothy. 2015. *Algorithmic acquisition of focus parameters*. Cambridge: Cambridge University (Doctoral dissertation.)

Byram Washburn, Mary. 2013. *Narrowing the focus: Experimental studies in exhaustivity and contrast.* Los Angeles: University of Southern California. (Doctoral dissertation.)

Carstens, Vicki & Loyiso Mletshe. 2015. Implications of Xhosa expletive constructions. *Linguistic Inquiry* 46(2). 187–242.

Carstens, Vicki & Loyiso Mletshe. 2016. Negative concord and nominal licensing in Xhosa and Zulu. *Natural Language and Linguistic Theory* 34. 761–804.

Destruel, Emilie, Daniel Velleman, Edgar Onea, Dylan Bumford, Jingyang Xue & David Beaver. 2015. A cross-linguistic study of the non-at-issueness of exhaustive inferences. In Florian Schwarz (ed.), *Experimental perspectives on presuppositions*, 135–156. Berlin: Springer.

Dik, Simon C. 1997. *The theory of Functional Grammar*. Berlin/New York: Mouton de Gruyter.

- É. Kiss, Katalin. 1998. Identificational focus versus information focus. *Language* 74(2). 245–273.
- É. Kiss, Katalin. 2009. Deriving the properties of structural focus. In Arndt Riester & Edgar Onea (eds.), *Focus at the Syntax-Semantics interface* (Working Papers of the SFB 732.3), 19–33. Stuttgart: University of Stuttgart.

Halpert, Claire. 2012. Argument licensing and agreement in Zulu. Cambridge, MA.

Halpert, Claire. 2013. Structural case and the nature of vP in Zulu. In Shayne Sloggett & Stefan Keine (eds.), *Proceedings of the 42nd Meeting of the North East Linguistic Society* (NELS 42), 209–222. Amherst, MA: Graduate Linguistics Student Association (GLSA), University of Massachusetts.

- Harris, Alice C. & Lyle Campbell. 1995. *Historical syntax in cross linguistic perspective*. Cambridge: Cambridge University Press.
- Heine, Bernd & Mechtild Reh. 1983. Diachronic observations on completive focus marking in some African languages. *Sprache und Geschichte in Afrika* 5. 7–44.
- Horn, Laurence R. 1972. *On the semantic properties of logical operators in English.* Los Angeles: University of California.
- Hyman, Larry M. & Francis X. Katamba. 1990. The augment in Luganda tonology. *Journal of African Languages and Linguistics* 12. 1–45.
- Hyman, Larry M. & Francis X. Katamba. 1993. The augment in Luganda: Syntax or pragmatics? In Sam Mchombo (ed.), *Theoretical aspects of Bantu grammar*, 209–256. Stanford: CLSI.
- Krifka, Manfred. 2007. Basic notions of information structure. In Caroline Féry, Gisbert Fanselow & Manfred Krifka (eds.), *Working papers of the SFB 632, interdisciplinary studies on information structure*, 13–55. Potsdam: Universitätsverlag Potsdam.
- Levinson, Stephen C. 2000. Presumptive meanings. Cambridge, MA: MIT Press.
- Neeleman, Ad, Elena Titov, Hans van de Koot & Reiko Vermeulen. 2009. A syntactic typology of topic, focus and contrast. In Jeroen Van Craenenbroeck (ed.), *Alternatives to Cartography*, 15–52. Berlin: Mouton de Gruyter.
- Nurse, Derek & Gérard Philippson. 2003. Introduction. In Derek Nurse & Gérard Philippson (eds.), *The Bantu languages*, 1–12. London: Routledge.
- Onea, Edgar & David Beaver. 2011. Hungarian focus is not exhausted. In Ed Cormany, Satoshi Ito & David Lutz (eds.), *Proceedings of semantics and linguistic theory (SALT)*, 342–359. eLanguage. Retrieved from: http://journals.linguisticsociety.org/proceedings/index.php/SALT/issue/view/90.
- Pak, Marjorie. 2008. *The postsyntactic derivation and its phonological reflexes*. Philadelphia: University of Pennsylvania. (Doctoral dissertation.)
- Rooth, Mats. 1985. *Association with focus*. Amherst, MA: University of Massachusetts. (Doctoral dissertation.)
- Rooth, Mats. 1992. A theory of focus interpretation. *Natural Language Semantics* 1(1). 75–116.
- Rooth, Mats. 1996. Focus. In Shalom Leppin (ed.), *The handbook of contemporary semantic theory*, 271–297. Oxford: Blackwell.
- Skopeteas, Stavros, Ines Fiedler, Samantha Hellmuth, Anne Schwarz, Ruben Stoel, Gisbert Fanselow, Caroline Féry & Manfred Krifka. 2006. *Questionnaire on information structure (QUIS)* (Interdisciplinary Studies on Information Structure 4). Potsdam: University of Potsdam.
- Vallduví, Enric & Maria Vilkuna. 1998. On rheme and kontrast. In Peter W. Culicover & Louise McNally (eds.), *The limits of syntax*, 79–106. New York: Academic Press.
- van der Wal, Jenneke. 2016. Diagnosing focus. Studies in Language 40(2). 259–301.
- van der Wal, Jenneke & Jacky Maniacky. 2015. How 'person' got into focus: Grammaticalisation of clefts in Lingala and Kikongo areas. *Linguistics* 53(1). 1–52.
- Walusimbi, Livingstone. 1996. *Relative clauses in Luganda*. Cologne: Rüdiger Köppe Verlag.

Jenneke van der Wal & Saudah Namyalo

Zimmermann, Malte & Edgar Onea. 2011. Focus marking and focus interpretation. Lingua 121(11). 1651–1670.