

The focus particle in Kĩtharaka

Klaus Abels

Universitetet i Tromsø– CASTL

Peter Muriungi

Universitetet i Tromsø– CASTL

In this paper we argue that Kĩtharaka *in situ* and *ex situ* object focus constructions are exhaustive. Sentences with a preverbal focus marker are argued to be non-exhaustive. Our conclusions are based on felicity in mention-some contexts, simple and multiple questions and entailment relations.

1 Introduction

This paper investigates the interpretation of focus constructions in Kĩtharaka (SVO, Bantu, E54, Kenyan). Kĩtharaka focus constructions come in two main forms: (i) forms with the focus marker and (ii) forms without the focus marker (*in situ*). The forms with the focus marker in turn divide into two: sentences with the focus marker as the first verbal prefix and sentences with the focus marker prefixed on a fronted constituent (*ex situ*). We claim forms with the verb-adjacent focus marker are interpreted non-exhaustively; the other forms are interpreted exhaustively.

This paper is organized as follows. In section 2, we provide the general distribution of the Kĩtharaka focus marker. Section 3 provides some preliminary data on interpretation of focus constructions in simple Question-Answer contexts. In section 4, we turn to a much more detailed investigation of the interpretation of Kĩtharaka focus constructions. We examine data on mention-some answers, single-pair and pair-list answers to multiple questions, and entailment relations. The last section summarizes our findings.

2 The distribution of the focus marker

2.1 Where *f* occurs

The Kîtharaka focus marker (to be referred to as *f*) occurs in a number of contexts. For example, it can appear procliticized to the verb or main predicate as in (1-a), (1-b), and (1-c). As can be seen, *f* has two allomorphs, *i* and *n*: *I* occurs preconsonantly and *n* prevocally.¹

- (1) a. Maria *n*- a- ra- ak- ir- e nyomba
 1Maria f- sm1- np- build- perf- fv 9house
 ‘Maria built a house’
 b. Kî- ûra *i*- kî- ra- rî- îr- e ma- tî
 7- frog f- sm7- pn- eat- perf- fv 6- leave
 ‘The frog ate leaves’
 c. Maria *n*- ûmû- ajie
 1Maria f- sm1- sick
 ‘Maria is sick’

The focus marker may also be procliticized to a preverbal major sentential constituent. This constituent may occur clause initially, (2-a), and (2-b) for subjects, and (3-a) and (3-b) for objects – or after the subject, (4-a) and (4-b). The same generalizations concerning positioning hold also in embedded clauses. For lack of space, we will give only one example here: (3-c).

- (2) a. *I*- Maria a- ra- ak- ir- e nyomba
 f- 1Maria sm1- pn- build- perf- fv 9house
 ‘Maria built a house’
 b. *N*- Andrew a- ra- gûr- ir- e î- ria
 f- Andrew sm1- pn- buy- perf- fv 5- milk
 ‘Andrew bought milk’
 (3) a. *I*- nyomba Maria a- ra- ak- ir- e
 f- 9house 1Maria sm1- pn- build- perf- fv
 ‘Maria built a house’

¹ Glosses are as follows: f (focus marker), om (object marker), sm (subject agreement), hab (habitual), pres (present), fut (future), pr (remote past), pn (near past), appl (applicative), perf (perfective), fv (final vowel). A numeral on the noun indicates the noun class, a numeral on sm, pronoun or nominal modifier indicates agreement with a noun of a particular class. ^ refers to the tense vowels. This is the orthographical style used in the Kîtharaka Bible and will be used in this paper. Diacritics on vowels do not indicate tone. In certain cases where the noun-class prefix is null or the morphological analysis is unclear, we do not gloss the two items individually, see, e.g., ‘Maria’ – 1Maria and ‘nyomba’ – 9house in example (1-a).

- b. *N- î- ria* Andrew a- gûr- ir- e
 f- 5- milk 1Andrew sm1- buy- perf- fv
 ‘Andrew bought milk’
- c. *Mfana a- ug- ir- e atî ka- arî ga- ka, n- î- buku*
 1Mfana sm1- say- perf- fv that 12- girl 12- this f- 5- book
Mûnene a- ka- nenk- e- er- e
 1Mûnene sm1- om12- give- appl- perf- fv
 ‘Mfana said that this girl, Mûnene gave her a book’
- (4) a. *Maria i- nyomba* a- ra- ak- ir- e
 1Maria f- 9house sm1- pn- build- perf- fv
 ‘Maria built a house’
- b. *Andrew n- î- ria* a- gûr- ir- e
 1Andrew f- 5- milk sm1- buy- perf- fv
 ‘Andrew bought milk’

In constructions with focus movement, the *n*-allomorph of *f* triggers lengthening of the initial vowel of the moved constituent (cf. Harford 1997).²

Muriungi (2005) claims that cases where a fronted object comes after the subject, (4-a) and (4-b) involve a combination of subject topicalization and object focalization. The same analysis can be extended to (3-c), where the indirect object is topicalized, the direct object focalized, and the subject remains in its canonical position. The order of topic before focus can never be switched. We conclude that in Kĩtharaka there is a topic projection which precedes the focus projection. Moved *wh*-phrases are marked with the same morpheme, *f*, and have the same positional possibilities as the foci discussed in this paper.

So far, we have looked at examples with focus movement only, but Kĩtharaka also allows foci (and *wh*-phrases) to remain in situ; thus, a focused object or *wh*-phrase may remain in situ, or be moved in front of the verb. The question-answer pairs in (5-a) and (5-b), and (6-a) and (6-b) provide some illustration.³

- (5) a. **Q:** *Maria a- ta- ir- e mbi*
 1Maria sm1- fetch- perf- fv what
 ‘What did Maria fetch?’
- b. **A:** *Maria a- ta- ir- e rû- jî*
 1Maria sm1- fetch- perf- fv 11- water
 ‘Maria fetched water’

² In prior studies *f* has been treated as predicative (Harford 1997) or as a copula with an auxiliary function (Mberia 1993). We claim that it is a focus marker (see Muriungi 2005 for independent justification).

³ In general, there is a preference for the structure of the answer to be similar to the structure of the question; *in-situ* focus for an *in-situ* question, moved focus after *wh*-movement.

- (6) a. **Q:** *I- mbi* Maria a- ta- ir- e
 f- what 1Maria sm1- fetch- perf- fv
 ‘What did Maria fetch?’
- b. **A:** *I- rû- jî* Maria a- ta- ir- e
 f- 11- water 1Maria sm1- fetch- perf- fv
 ‘Maria fetched water’

Moved foci (and *wh*-phrases) are obligatorily marked with *f*, in-situ foci (and in-situ *wh*-phrases) never take the focus marker. Again, the same is true in embedded sentences: A *wh*-phrase or focus may bear *f*, in which case it is moved, or it may occur in situ without *f*.

So far we have only looked at short focus movement and short *wh*-movement. Long focus movement (and long *wh*-movement) is also possible in Kîtharaka. The presence of the verbal pro-clitic focus marker interacts in interesting ways with *wh*- and focus movement. When the *wh*-phrase or focus is left in situ, there is no focus marking at all, (7-a). When the *wh*-phrase is moved, the focus marker appears on the verbs in all clauses that the *wh*-phrases has moved through. Since Kîtharaka allows partial *wh*-movement, it is easy to show the incremental pattern of focus marking as the *wh*-phrase moves up. (See (7-a) through (7-d) and Muriungi (2005) for discussion).

- (7) a. John (*n)- a- ug- ir- e Pat (*n)- a- ug- ir- e
 1John f- sm1- say- perf- fv 1Pat f- sm1- say- perf- fv
 Maria (*n)- a- gûr- ir- e *mbi*
 1Maria f- sm1- buy- perf- fv what
 ‘What did John say Pat said Maria bought?’
- b. John (*n)- a- ug- ir- e Pat (*n)- a- ug- ir- e *i-*
 1John f- sm1- say- perf- fv 1Pat f- sm1- say- perf- fv
mbi Maria (*n)- a- gûr- ir- e
 what 1Maria f- sm1- buy- perf- fv
 ‘What did John say Pat said Maria bought?’
- c. John (*n)- a- ug- ir- e *i- mbi* Pat (*n)- a- ug- ir-
 1John f- sm1- say- perf- fv f- what 1Pat f- sm1- say- perf-
 e Maria *n-* a- gûr- ir- e
 fv 1Maria f- sm1- buy- perf- fv
 ‘What did John say Pat said Maria bought?’
- d. *I- mbi* John (*n)- a- ug- ir- e Pat *n-* a- ug- ir- e
 f- what 1John f- sm1- say- perf- fv 1Pat f- sm1- say- perf- fv
 Maria *n-* a- gûr- ir- e
 1Maria f- sm1- buy- perf- fv
 ‘What did John say Pat said Maria bought?’

Muriungi (2005) argues that the *f* markers along the path of long movement are a reflex of the cyclic nature of the derivation, forced by checking of focus features in intermediate focus heads.⁴

2.2 Restrictions on the distribution of *f*

The flipside of the facts discussed in the previous section is the observation that *f* never occurs postverbally (but see footnote 4).

- (8) a. *Maria a- ra- ak- ir- e *i- nyomba*
 1Maria sm1- np- build- perf- fv *f- house*
 ‘Maria built a house’
 b. *Kî- ûra kî- ra- rî- îr- e *n- î- ria*
 7- frog sm7- pn- eat- perf- fv *f- 5- weed*
 ‘The frog ate the weed’

Since *f* occurs on moved foci and proclitic to verbs, one might wonder what kind of relationship holds between the two items. Are they one morpheme, as our terminology suggests? Or two? One indication that they are the same morpheme comes from the fact that they have the same allomorphs in the same phonological environments. We also saw an interaction between long movement and *f*-marking, again suggesting a unified analysis. Finally, there is no clause with two occurrences of *f*. Two foci cannot both be fronted and *f*-marked in a single clause, (9-a). Similarly, a focus-fronted phrase is incompatible with verbal proclitic *f* in the same clause, (9-b).

- (9) a. **I- nkû* **i- thaa inya* Gatundu a- tem- ir- e
f- firewood f- time four 1-Gatundu sm1- cut- perf- fv
 ‘It is firewood, it is four o’clock that Gatundu cut’

⁴ We should mention a morpheme that resembles the focus marker occurs pro-cliticized to the demoted agent in passives. Like *f*, this morpheme has two allomorphs, *n* prevocally and *i* preconsonantly. The *n*-allomorph again triggers lengthening of the following vowel, (i-b).

- (i) a. Maria n- a- gûr- î- îr- w- e î- buku *i- Mfana*
 1Maria f- sm1- buy- appl- perf- pass- fv 5- book (?) - Mfana
 ‘Maria was bought a book by Mfana’
 b. Maria n- a- gûr- î- îr- w- e î- buku *n- î- gûna*
 1Maria f- sm1- buy- appl- perf- pass- fv 5- book (?) - 5- monkey
 ‘Maria was bought a book by a monkey’

Possibly an indication that *f* in *by*-phrases also has a focusing function is the fact that *f*-marked *by*-phrases systematically resist *wh*-related extraction in Kĩtharaka. We do not discuss passives in this paper.

- b. **I- nkû* Gatundu **n- a- tem- ir- e rûkîîrî*
 f- firewood 1-Gatundu f- sm1- cut- perf- fv morning
 ‘Gatundu cut firewood in the morning?’

The patterns again suggest a unified analysis of the two uses of *f*, since it is hard to capture the complementarity between them otherwise, i.e., we might try to identify *f* with Rizzi’s (1997) focus head, which, crucially, occurs uniquely in the clause.^{5,6}

In the following sections, we delve into the interpretation of the presence and absence of *f* – especially on objects. The next section gives a first glimpse limited to simple question-answer (Q/A) contexts.

3 Interpretation: Simple Q/A contexts

This section investigates the felicity of sentences with and without the verbal proclitic *f* as answers to various *wh*-questions.

To probe for lack of exhaustivity, we make use of a construction in Kîîtharaka that explicitly asks for non-exhaustive information. The relevant question is introduced by class 17 expletive morphology (cf. (10)).

⁵ The focus marker, when proclitic to the verb never co-occurs with sentential negation, except when a question reading is forced by the insertion of the question particle *kana*. This is presumably Ladd’s (1981) outer negation. Observe that the focus marker precedes subject agreement, but negation follows subject agreement. The incompatibility of focus and negation cannot therefore be blamed on competition for the same verbal slot.

- (i) a. **Maria n- a- ti- ra- ak- a nyomba* * (kana)
 1Maria f- sm1- neg- pn- build- fv 9house Q
 ‘Maria didn’t build a house’
 ‘✓Does it mean Maria didn’t build a house?’
 b. ✓*Maria a- ti- ra- ak- a nyomba*
 1Maria f- sm1- neg- build- fv 9house
 ‘Maria didn’t build a house’

⁶ The focus marker never co-occurs with the future marker, except when the combination means *must*. Muriungi (2005) speculates that this failure of co-occurrence is lexically determined; in other words the failure of concurrence of *f* and the future is a gap resulting from the fact that *f* + future expresses a lexicalized ‘must’.

- (i) *Maria n- a- ga- ak- a nyomba*
 1Maria f- sm1- fut- build- fv 9house
 ‘*Maria will build a house’
 ‘✓Maria must build a house’

- (10) Kû- rî mû- ntû a- thi- ir- e thoko- ni
 sm17- be 1- person sm1- go- perf- fv market- loc
 ‘Is there anybody who went to the market?’

As an answer to (10), it is sufficient to mention just one person, even if other people went to the market as well. More complete answers are possible, too, of course, but no implicature of exhaustivity arises. In fact this type of question is incompatible with an explicitly exhaustive answer.

3.1 The verbal proclitic f

When proclitic to the verb, as in (11), the focus marker indicates sentence focus, VP-focus, non-exhaustive subject focus, non-exhaustive object focus, non-exhaustive adverb focus, or verum focus; it is incompatible with exhaustive object-focus, exhaustive subject-focus, or exhaustive adverb-focus. (11) is therefore felicitous as an answer to an all-new question, (12–i), VP question, (12–ii), a non-exhaustive object question, (12–iii), and a non-exhaustive subject question, (12–iv).

- (11) Maria *n-* a- ra- ak- ir- e nyomba
 1Maria f- sm1- np- build- perf- fv 9house
 ‘✓Maria built a house’
 ‘✓Did Maria build a house?’
- (12) **Q:** (i) ✓*I-* mbi î- rî na thîna
 f- what 9- be with 9problem
 ‘What is the problem?’
- (ii) ✓*N-* ata Maria a- ra- rûth- ir- e
 f- what 1Maria sm- pn- do- perf- fv
 ‘What did Maria do?’
- (iii) ✓Kû- rî gîntû Maria a- ra- k- ir- e
 sm17- be thing 1Maria sm1- pn- build- perf- fv
 ‘Is there anything that Maria built?’
- (iv) ✓Kû- rî mu- ntû a- ra- ak- ir- e nyomba
 17- be 3- person sm1- pn- build- perf- fv 9house
 ‘Is there anybody who built a house?’

However, (11) cannot be used as an answer to a narrow object question, (13-a) or a narrow subject question, (13-b).

- (13) a. #I- mbi Maria a- ra- k- ir- e
 f- what 1Maria sm1- pn- build- perf- fv
 ‘What did Maria build’
 b. #N- ûû a- ra- k- ir- e nyomba
 f- who sm1- pn- build- perf- fv 9house
 ‘Who built the house’

Example (15) with verbal proclitic *f* can be used for non-exhaustive adverb focus, (14-i), but not for narrow adverb focus, (14-ii) and (14-iii).

- (14) (i) ✓Kû- rî kagiita Maria a- ta- ir- e rû- jî anga
 sm17- be time 1Maria sm1- fetch- perf- fv 11- water Q
 ‘Is there some time when Maria fetched water?’
 (ii) #Maria a- ta- ir- e rû- jî rî
 1Maria sm1- fetch- perf- fv 11- water when
 ‘When did Maria fetch water?’
 (iii) #I- rî Maria a- ta- ir- e rû- jî
 f- when 1Maria sm1- fetch- perf- fv 11- water
 ‘When did Maria fetch water?’
- (15) A: Maria n- a- ta- ir- e rû- jî rûkîrî
 1Maria f- sm1- np- fetch- perf- fv water morning
 ‘Maria fetched water in the morning’

Clearly, when *f* occurs as verbal pro-clitic, it is non-exhaustive.

3.2 *f* on the subject

When *f* procliticizes to the subject, (17), either the whole sentence or the subject can be focused. (17) cannot be used for VP focus, non-exhaustive object focus, narrow object focus, or non-exhaustive subject focus.

- (16) Q: (i) ✓What is the problem?
 (ii) ✓Who built the house?
 (iii) #What did Maria do?
 (iv) #Is there anything that Maria built?
 (v) #What did Maria build?
 (vi) #Is there anybody who built a house?
- (17) A: I- Maria a- ra- ak- ir- e nyomba
 f- 1Maria sm1- np- build- perf- fv 9house
 ‘Maria built a/the house’

3.3 *f* on a fronted object

When *f* procliticizes to a fronted object, (19), only VP focus or narrow focus on the fronted constituent (or one of its parts) is possible. (19) cannot be used for non-exhaustive object focus, sentence focus, narrow subject focus or non-exhaustive subject focus. Another way of saying this (see Roberts (1998)) is that the non-focal part of the clause is presupposed.

- (18) **Q:** (i) ✓ What did Maria do?
 (ii) ✓ What did Maria build?
 (iii) ✓ Was it the white house that Maria built?, No, ..
 (iv) ✓ Was it the small house that Maria built? No, ...
 (v) ✓ Was it this house that Maria built? No, ..
 (vi) #Is there something that Maria built?
 (vii) #What is the problem?
 (viii) #Who built the house?
 (ix) #Is there anyone who built a house?
- (19) **A:** *I- nyomba î- ra nene ntune* Maria a- ra- ak- ir- e
 f- 9house 9- that 9big 9red 1Maria sm1- np- build- perf- fv
 ‘Maria built that big red house’

3.4 *No f* in the clause

When *f* is absent altogether, (21), narrow focus on some postverbal material is the result. For some speakers VP-focus is also an option when there is a postverbal object. (21) cannot be used for non-exhaustive object focus, sentence focus, narrow subject focus, or non-exhaustive subject focus. We investigate sentences like (19) and (21) in much more detail in the next section.

- (20) **Q:** (i) ✓ What did Maria build?
 (ii) %What did Maria do?
 (iii) #Is there something that Maria built?
 (iv) #What is the problem?
 (v) #Who built the house?
 (vi) #Is there anyone who built a house?
- (21) **A:** Maria a- ra- ak- ir- e nyomba
 1Maria sm1- np- build- perf- fv 9house
 ‘Maria built a house’

Summing up: We have so far examined the distribution and the interpretation of the Kĩtharaka focus marker, *f*. We have shown that *f* has three main contexts of occurrence: as a verbal proclitic, on moved foci and along the path of cyclic *wh*-movement. With respect to meaning, the verbal proclitic *f* has been shown to be the most liberal; it is non-exhaustive and allows focus projection from the verb to other constituents up to the sentence level. Subjects marked with *f* have been shown to be ambiguous between subject focus and whole sentence focus. *f* marked objects are ambiguous between VP and narrow focus. In situ objects (without *f*) indicate narrow object focus, and for some speakers, VP focus.

In the following sections we investigate the interpretation resulting from the presence and absence of *f* on focused objects in more detail.

4 Detailed distribution

We argue in this section in detail that *f*-marked and in situ focused objects are always interpreted exhaustively.⁷ We also strengthen our claim from above that the verb-adjacent *f*-marker is incompatible with exhaustivity.

4.1 Complex Question-Answer Pairs

We begin by considering how fronted *f*-marked objects, in-situ focused objects and verb adjacent *f*-marking behave in context. First we consider a few question-answer pairs, then we turn to entailment contexts. An initial set of data regarding question-answer congruence was given in the previous section.

4.1.1 Incomplete and Mention-Some Answers

As we will see, verb-adjacent *f*-marking is generally impossible in answers to narrow object or narrow subject questions. We can explain this if we assume that answers generally carry an implicature of exhaustivity. Since exhaustivity is incompatible with the verb-adjacent *f*-marker, the facts fall out readily. We can confirm this conjecture, by observing the behavior of the *f*-marker in answers that are explicitly marked as incomplete by the inclusion of *kwa ngerekano* - ‘for example’, (22). Here the verb-adjacent *f*-marker is not only possible, the other two focus strategies are impossible. This is a first indication that the other two focusing constructions necessarily give rise to exhaustive interpretations.

⁷ Essentially the same is true in the case of subjects. *f*-marked subjects are interpreted exhaustively, non-*f*-marked subjects are not necessarily exhaustive.

(22) **For example**

(Context: Some people come to the village and circumcise all the young boys there. One of the boys that they circumcise is Ntugi (but of course he is not the only one). Moments later, I want to convey the message that some people circumcised Ntugi among other boys.)

- a. ✓ I- ba- tan- ir- e Ntugi kwa ngerekano
f- sm2- circumcise- perf- fv 1Ntugi for example
'They circumcised Ntugi for example'
- b. *Ba- tan- ir- e Ntugi kwa ngerekano
sm2- circumcise- perf- fv 1Ntugi for example
'They circumcised Ntugi for example'
- c. *I- Ntugi ba- tan- ir- e kwa ngerekano
f- 1Ntugi sm2- circumcise- perf- fv for example
'It is Ntugi they circumcised for example'

The same result is reproducible with a mention-some question. We contextualize the examples with the question *is there some x which Maria VP-ed*. Though technically a polar question, such questions invite the interlocuter to provide a non-exhaustive answer to the implied question *Maria VP-ed what?* In such a context, the object cannot bear *f*, and *f* has to be a verbal proclitic. This context clearly suggests that sentences with preverbal *f* are non-exhaustive.

- (23) **Q:** Kû- rî gi- ntû Maria a- gûr- ir- e
sm17- be 7- person 1Maria sm1- buy- perf- fv
'Is there something which Maria bought?'
- A:** (i) ✓ {∅ | jiii,} Maria n- a- gûr- ir- e nderemende
yes, 1Maria f- sm1- buy- perf- fv 10sweet
'(Yes), Maria bought sweets'
- (ii) # {∅ | jiii,} Maria a- gûr- ir- e nderemende
yes 1Maria sm1- buy- perf- fv 10sweet
'Maria bought sweets'
- (iii) # {∅ | jiii,} I- nderemende Maria a- gûr- ir- e
yes f- 10sweet 1Maria sm1- buy- perf- fv
'Maria bought sweets'

4.2 Multiple wh-Questions

We turn now to multiple *wh*-questions. These are informative, because Kîtharaka allows both single-pair and pair-list answers to such questions, but both strategies differ markedly. Thus consider the question in (24).

- (24) **Q:** Ta- mb- îr- a n- ûû a- gûr- ir- e mbi
 just- om1- tell- fv f- who sm1- buy- perf- fv what
 ‘Tell me who bought what?’

There is only one way to give a single-pair answer to this type of request: that in (25-i). The focus marker on the subject is obligatory. The answer is interpreted exhaustively. Examples (25-ii-iii) are ungrammatical, because, as discussed above, there is only ever one focus marker per CP. The examples in (26) are not ungrammatical, but they are not possible answers to the question. The reason for the infelicity of these examples presumably resides in the marking of the subject. A preverbal subject in clauses without verb-adjacent *f*-marker can be interpreted either as a continuation topic or as a contrastive topic (see Buring (1995), Roberts (1998)), but neither of those interpretations is available here. The subject is not a continuation topic, because the previous context does not set up a topic: the subject was questioned. But there is also no contrast here, because only one subject-predicate pair serves as the answer to the question. Example (26-iv) is impossible, because verb adjacent *f*-marking is incompatible with exhaustive interpretations. If nothing else, this paradigm serves to show that objects that are focused in-situ get an exhaustive interpretation.

(25) **Single-Pair Answers with *f*-marked subject**

- A:** (i) I- Mûnene a- gûr- ir- e î- ria
 f- 1Mûnene sm- buy- perf- fv 5- milk
 ‘Munene bought milk’
- (ii) *N- îî- ria i- Mûnene a- gûr- ir- e
 f- 5- milk f- 1Mûnene sm- buy- perf- fv
 ‘Munene bought milk’
- (iii) *I- Mûnene n- a- gûr- ir- e î- ria
 f- 1Mûnene f- sm- buy- perf- fv 5- milk
 ‘Munene bought milk’

(26) **Single-Pair Answers without *f*-marked subject**

- A:** (i) #Mûnene a- gûr- ir- e î- ria
 1Mûnene sm- buy- perf- fv 5- milk
 ‘Mûnene bought milk’
- (ii) #N- îî- ria Mûnene a- gûr- ir- e
 f- 5- milk 1Mûnene sm- buy- perf- fv
 ‘Mûnene bought milk’
- (iii) #Mûnene n- îî- ria a- gûr- ir- e
 1Mûnene f- 5- milk sm- buy- perf- fv
 ‘Mûnene bought milk’

- (iv) #Mûnene n- a- gûr- ir- e î- ria
 1Mûnene f- sm- buy- perf- fv 5- milk
 ‘Mûnene bought milk’

Consider now examples (27) and (28) as answers to (24). In marked contrast to single-pair answers ((25-i) above), pair-list answers do not allow *f*-marking on the subject, (27). Again, this has to do with the fact that *f*-marking on the subject would imply exhaustivity, but none of the answers by itself is exhaustive.

We now turn to (28). When the subject is not *f*-marked, the object can either remain in-situ or it can move and be *f*-marked, but in this case it has to appear after the subject. We interpret these data as follows. Whether the object is focused in-situ or *f*-marked, it gets an exhaustive interpretation. This is possible only if exhaustivity is calculated relative to a particular subject: Munene bought only milk, Mfana bought only bread, ... For this to be possible, the subjects have to be interpreted as contrastive topics: There is a contrast between the subjects in the individual parts of the answer, but, relative to this topic, the answer is exhaustive. Example (28-iii) is infelicitous. This is so because the subject in a pair-list answer must be interpreted as a contrastive topic. Relative to each subject, the objects provide exhaustive foci, but verb adjacent *f*-marking is incompatible with exhaustivity by assumption.

(27) **Pair-List Answers with *f*-marked subject**

- A: (i) *I- Mûnene n- î- ria a- gûr- ir- e i- Mfana f- mû-
 f- 1Munene f- 5- milk sm1- buy- perf- fv f- 1Mfana f- 3-
 gaate a- gûr- ir- e
 bread sm1- buy- perf- fv
 ‘Mûnene bought milk, Mfana bought bread... ’
- (ii) #I- Mûnene a- gûr- ir- e î- ria i- Mfana a-
 f- 1Munene sm1- buy- perf- fv 5- milk f- 1Mfana sm1-
 gûr- ir- e mû- gaate
 buy- perf- fv 3- bread
 ‘Mûnene bought milk, Mfana bought bread... ’
- (iii) *I- Mûnene n- a- gûr- ir- e î- ria i- Mfana n-
 f- 1Munene f- sm1- buy- perf- fv 5- milk f- 1Mfana f-
 a- gûr- ir- e mû- gaate
 sm1- buy- perf- fv 3- bread
 ‘Mûnene bought milk, Mfana bought bread ... ’

(28) **Pair-List Answers without *f*-marked subject**

- A: (i) ✓ Mûnene n- î- ria a- gûr- ir- e Mfana i- mû-
 1Munene f- 5- milk sm1- buy- perf- fv 1Mfana f- 3-
 gaate a- gûr- ir- e
 bread sm1- buy- perf- fv
 ‘Mûnene bought milk, Mfana bought bread... ’
- (ii) ✓ Mûnene a- gûr- ir- e î- ria Mfana a- gûr-
 1Munene sm1- buy- perf- fv 5- milk 1Mfana sm1- buy-
 ir- e mû- gaate
 perf- fv 3- bread
 ‘Mûnene bought milk, Mfana bought bread ... ’
- (iii) #Mûnene n- a- gûr- ir- e î- ria Mfana n- a-
 1Munene f- sm1- buy- perf- fv 5- milk 1Mfana f- sm1-
 gûr- ir- e mû- gaate
 buy- perf- fv 3- bread
 ‘Mûnene bought milk, Mfana bought bread ... ’

The same general pattern can be observed with object *wh*-questions with a conjoint subject, (29). Single answers to such questions with a conjoint or plural subject behave like normal answers to *wh*-questions and allow both in-situ and moved object focus but not verb-adjacent focus marking, (30).⁸

- (29) Q: (i) Karîmi na Maria ba- rî- rug- a mbi
 Karîmi and Maria sm2- pres- cook- fv what
 ‘What are Karîmi and Maria cooking?’
- (ii) I- mbi Karîmi na Maria ba- kû- rug- a
 f- what Karimi and Maria sm2- pres- cook- fv
 ‘What are Karimi and Maria cooking?’

(30) **Single Answers to the same questions**

- a. ✓ Ba- rî- rug- a 10nkima
 sm2- pres- cook- fv food
 ‘They are cooking food’
- b. ✓ I- nkima ba- kû- rug- a
 f- 10food sm- pres- cook- fv
 ‘They are cooking food’
- c. #I- ba- kû- rug- a nkima
 f- sm2- pres- cook- fv 10food
 ‘They are cooking food’

When the two subject conjuncts receive separate answers, though, as in (31), the same pattern emerges that we saw for pair-list answers. The subject has to

⁸ Note that in these examples, the marking of present tense seems to vary depending on whether there is *wh*/focus in situ *rî*, or *wh*-movement, *kû*.

be interpreted as a contrastive topic, i.e., it has to move to the leftmost one of the two subject positions, the object can then be interpreted as exhaustive relative to the topic and move (31-b) or remain in situ (31-c).

(31) **Conjoint Answers**

- a. *I- nkima Karîmi a- kû- rug- a na i- nyama Maria a- f- food 1Karîmi sm1- pres- cook- fv and f- meat 1Maria sm1- kû- rug- a pres- cook- fv
'Karîmi is cooking food and Maria is cooking meat'
- b. ✓ Karîmi i- nkima a- kû- rug- a na Maria i- nyama a- 1Karîmi f- food sm1- pres- cook- fv and 1Maria f- meat sm1- kû- rug- a pres- cook- fv
'Karîmi is cooking food and Maria is cooking meat'⁹
- c. ✓ Karîmi a- rî- rug- a nkima na Maria a- rî- rug- 1Karîmi sm1- pres- cook- fv food and 1Maria sm- pres- cook- a nyama fv 9meat
'Karîmi is cooking food and Maria is cooking meat'
- d. #Karîmi n- a- kû- rug- a nkima na Maria n- a- kû- 1Karîmi f- sm1- pres- cook- fv food and 1Maria f- sm- pres- rug- a nyama cook- fv 9meat
'Karîmi is cooking food and Maria is cooking meat'

The question-answer facts thus seen to support our generalization that *f*-marked and in-situ focused objects are exhaustive while verb adjacent *f*-marking is incompatible with exhaustivity. Finally, subject out of focus can be interpreted either as continuation topics or as contrastive topics.

4.3 Coordination and Entailment

While the kind of data discussed in the previous subsection has, to the best of our knowledge, not been used to diagnose for exhaustivity, we now turn to tests that are found in the literature. Thus, Kiss (1998)¹⁰ claims that if a sentence with a coordination does not entail the same sentence with one of the coordinates dropped, then the original construction was exhaustive. This test diagnoses the English *it*-cleft as an exhaustive focusing device, since (32-a) does not entail

⁹ Note as an aside that the presence of *kû* in both clauses when there is *wh*-movement and *rî* in both clauses with *wh*-in situ provides overt evidence for ATB extraction in both conjuncts.

¹⁰ The test is attributed to Szabolcsi (1981).

(32-b), while regular new-information focus in English is not exhaustive, as the entailment from (33-a) to (33-b) is meant to illustrate. What is being diagnosed here is the exhaustive interpretation of the (b)-examples not the (a)-examples. Thus, (32-a) entails (33-b) and (33-a) does not entail (32-b).

- (32) a. It was **a hat and a coat** that Mary picked for herself.
 b. \nRightarrow It was **a hat** that Mary picked for herself.
- (33) a. Mary picked **a hat and a coat** for herself.
 b. \Rightarrow Mary picked **a hat** for herself. (Kiss, 1998, p. 250)

We now give three versions of the sentence “Ruth bought a book and a pen”: with an *f*-marked conjoined object, (34), with the conjoined object focused in-situ, (35), and with the verb adjacent *f*-marker, (36). We follow each of them with three versions of the sentence “Ruth bought a book” and test for entailment. Since the test diagnoses exhaustivity on the putative entailment, we expect all three tests to come out the same way. In particular, if moved *f*-marked objects and in-situ focused objects are interpreted exhaustively, none of the entailments should go through with these, but they should go through with the verb-adjacent focus marker. This expectation is fully borne out.

When the conjoined object is moved and *f*-marked, as in (34-a), it does not entail (34-i-ii), but it does entail the sentence with the verb-adjacent *f*-marker in (34-iii). This follows on the assumption that the *f*-marked and the in-situ objects are interpreted exhaustively. Under this assumption (34-i-ii) mean that Ruth bought only a book, which contradicts the initial sentence in (34). On the other hand (34-iii) is not interpreted exhaustively – in fact it is incompatible with exhaustivity – and is, therefore, entailed by the initial sentence in (34).

- (34) X+Y N- \hat{f} - buku na ka- ramu Ruth a- \hat{g} - ir- e
 f- 5- book and 12- pen 1Ruth sm1- buy- perf- fv
 ‘It is a book and a pen that Ruth bought’
- X (i) \nRightarrow N- \hat{f} - buku Ruth a- \hat{g} - ir- e
 f- 5- book 1Ruth sm1- buy- perf- fv
 ‘Ruth bought a book’
- (ii) \nRightarrow Ruth a- \hat{g} - ir- e \hat{f} - buku
 1Ruth sm- buy- perf- fv 5- book
 ‘Ruth bought a book’
- (iii) \Rightarrow Ruth \hat{f} - a- \hat{g} - ir- e \hat{f} - buku
 1Ruth \hat{f} - sm- buy- perf- fv 5- book
 ‘Ruth bought a book’

The same is true for the in-situ focused object in (35), where, like in the previous example, the object is interpreted as a non-specific indefinite. (35) does not entail (35-i-ii), but it does entail the sentence with the verb-adjacent *f*-marker in (35-iii). Again, this follows on the assumption we are defending that the *f*-marked and the in-situ objects are interpreted exhaustively. Under this assumption (35-i-ii) mean that Ruth bought only a book, which contradicts (35-a). On the other hand (35-iii) is not interpreted exhaustively – in fact it is incompatible with exhaustivity – and is, therefore, entailed by the initial sentence in (35).

- (35) X+Y Ruth a- gûr- ir- e î- buku na ka- ramu
1Ruth sm1- buy- perf- fv 5- book and 12- pen
'Ruth bought a book and a pen'
- X (i) \nRightarrow Ruth a- gûr- ir- e î- buku
1Ruth sm- buy- perf- fv 5- book
'Ruth bought a book'
- (ii) \nRightarrow N- î- buku Ruth a- gûr- ir- e
f- 5- book 1Ruth sm1- buy- perf- fv
'Ruth bought a book'
- (iii) \Rightarrow Ruth n- a- gûr- ir- e î- buku
1Ruth f- sm- buy- perf- fv 5- book
'Ruth bought a book'

Finally, the same holds for the last set of data ((36)).

- (36) X+Y Ruth n- a- gûr- ir- e î- buku na ka- ramu
1Ruth f- sm1- buy- perf- fv 5- book and 12- pen
'Ruth bought a book and a pen'
- X (i) \Rightarrow Ruth n- a- gûr- ir- e î- buku
1Ruth f- sm- buy- perf- fv 5- book
'Ruth bought a book'
- (ii) \nRightarrow Ruth a- gûr- ir- e î- buku
1Ruth sm- buy- perf- fv 5- book
'Ruth bought a book'
- (iii) \nRightarrow N- î- buku Ruth a- gûr- ir- e
f- 5- book 1Ruth sm1- buy- perf- fv
'Ruth bought a book'

A second test taken from the literature involves the interpretation of negation. This test involves negating exhaustivity. It is used in Kiss (1998) and attributed to Donka Farkas. In a dialogue, exhaustivity alone can be negated as in (37-b)

vs. (38-b). The crucial point is the interplay between rejection and the word *too*, which shows that the content of the first utterance, here Mary's picking a hat for herself, is not being negated. It's just the claim to exhaustivity that is negated here. This test tests for exhaustivity of the (a)-examples. The (b)-examples must not be exhaustive, seeing as they contain the word *also*.

- (37) a. It was a hat that Mary picked for herself
 b. No, she picked a coat, too. Kiss (1998, p. 251)
- (38) a. Mary picked a hat for herself
 b. #No, she picked a coat, too. Kiss (1998, p. 251)

The examples in (39) and (40) illustrate the results of this test for Kĩtharaka. *f*-marked objects never co-occur with the word *kinya*-‘also’, we therefore do not include such examples below. Furthermore, in-situ focused objects are always dubious with *kinya*, hence the degraded status of (39-b-ii) and (40-b-ii). The result of this test shows again that moved and in-situ foci behave exhaustively.

- (39) a. I- mpempe Maria a- and- ir- e
 f- 10maize 1Maria sm1- plant- perf- fv
 ‘Maria planted maize’
- b. (i) Arĩ n- a- and- ir- e kinya mũ- nya
 No f- sm1- plant- perf- fv also 3- sorghum
 ‘No, she planted sorghum also’
- (ii) ?Arĩ a- and- ir- e kinya mũ- nya
 No sm1- plant- perf- fv also 3- sorghum
 ‘No, she planted sorghum also’
- (40) a. Maria a- and- ir- e mpempe
 1Maria sm1- plant- perf- fv 10maize
 ‘Maria planted maize’
- b. (i) Arĩ n- a- and- ir- e kinya mũ- nya
 No f- sm1- plant- perf- fv also 3- sorghum
 ‘No, she planted sorghum also’
- (ii) ?Arĩ a- and- ir- e kinya mũ- nya
 No sm1- plant- perf- fv also 3- sorghum
 ‘No, she planted sorghum also’

The converse of this test is the following. If a particular construction is interpreted exhaustively, then it should be impossible to follow it up by agreeing and adding an item to the focus set. The workings of this test are illustrated for English *it*-clefts in (41). Notice that (41-b-c) are not totally impossible contin-

uations for all speakers, but they always require fairly arcane contexts.

- (41) a. It is a hat that Mary bought.
 b. #Yes, and she also bought a coat.
 c. #Yes, and it is also a coat that she bought.

The expectation for Kĩĩtharaka is that moved, *f*-marked and in-situ focused objects should be incompatible with agreement and addition of another element. Kĩĩtharaka does not conform with our expectations here since moved and in-situ object foci are compatible with a yes-and-also-continuation, (42) and (43).

To resolve this puzzle, remember from the first section that in-situ objects without any *f*-marking are – marginally – compatible with VP-focus ((21)). It turns out that (42) and (43) are only possible in contexts where (42-a) and (43-a) can be interpreted as having VP-focus. Notice also that this option is unavailable in the examples (39) and (40) above, because the sentence setting up the context prevents VP-focus on the follow-up. The problem posed by (42) and (43) for our generalization is therefore only apparent.

- (42) a. I- mpempe Maria a- and- ir- e
 f- 10maize 1Maria sm1- plant- perf- fv
 ‘Maria planted maize’
 b. (i) Yii na n- a- and- ir- e kinya mû- nya
 yes and f- sm1- plant- perf- fv also 3- sorghum
 ‘Yes, and she also planted sorghum’
 (ii) ??Yii na a- and- ir- e kinya mû- nya
 yes and sm1- plant- perf- fv also 3- sorghum
 ‘Yes, and she also planted sorghum’
- (43) a. Maria a- and- ir- e mpempe
 1Maria sm1- plant- perf- fv 10maize
 ‘Maria planted maize’
 b. (i) Yii na n- a- and- ir- e kinya mû- nya
 yes and f- sm1- plant- perf- fv also 3- sorghum
 ‘Yes, and she also planted sorghum’
 (ii) ??Yii na a- and- ir- e kinya mû- nya
 yes and sm1- plant- perf- fv also 3- sorghum
 ‘Yes, and she also planted sorghum’

The data from the various entailment tests again support our hypothesis that moved *f*-marked objects and in-situ focused objects are interpreted exhaustively, and the verb-adjacent *f*-marker non-exhaustively.

5 Summary

In this paper, we have used evidence from simple and mention-some questions, single-pair and pair-list answers to multiple questions, and entailments to argue that *in situ* focus and *ex situ* focus is exhaustive and that constructions with a preverbal focus marker are non-exhaustive. Considerations of space prevent us from exploring the interaction between universal quantification, association with focus particles such as *even*, *also*, *alone*, *only*, and the three focusing strategies in any detail. Preliminary results indicate that the three focusing strategies interact in non-trivial ways with these items in the manner predicted by our analysis. Space limitations also prevent us from going into details concerning the syntax of the focus marker. A crucial question, for example, is whether the focus marker that attaches to a fronted XP is part of the extended projection of that XP, or whether it is directly part of the clause. This question is particularly interesting because there are indications that the focus marker is always directly adjacent to a nominal agreement morpheme. Whatever the answer to this question turns out to be, it will give rise to another: how is it possible to capture the generalization that whenever *f* is verb adjacent, another *f* cannot occur on an XP in the same clause? We leave these issues for future research.

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