

A dedicated topic position in Kipsigis

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1 Introduction

Data from African languages have played an important role in the advancement of theories of information structure, with a number of West African languages displaying a variety of topic and focus markers (see Güldemann, Zerbian, and Zimmermann 2015 for an overview). Less attention has been given to East African languages, many of which lack such markers (but see Abels and Muriungi 2008 on a focus marker in Kikuyu and Asiimwe and van der Wal 2020 on a contrastive topic marker in Rukiga). In this paper, we provide an investigation of a dedicated topic position marked by the particle *ko* in Kipsigis (Nilotic; Kenya), illustrated in (1).¹ This is, to our knowledge, the first semantic study of topicalization in a Nilotic language.

- (1) Kìbê:t kó kà-ø-tʃó:r rabɪ:ník.
Kibeet TOP PST-3-steal money
'Kibeet stole the money.'

On the empirical side, the data show that topic markers might be more widespread in East African languages than previously thought (see also Asiimwe and van der Wal 2020). On the theoretical side, we argue that the Kipsigis data provide clear evidence *against* analyzing contrastive topics in terms of focus (Wagner, 2012), and point towards a unified analysis of contrastive and aboutness topics.

The remainder of the paper is structured as follows: in section 2, we provide brief background information on aboutness and contrastive topics. In section 3, we present the properties of the Kipsigis topic position. In section 4, we discuss the implications of the Kipsigis data for previous theories of topichood and we develop an account of the *ko* marker based on von Stechow's (1994) analysis. Finally, in section 5, we present preliminary data on the behavior of additive scalar particles in connection to the *ko*-position, and in section 6, we conclude.

¹We provide IPA transcriptions of the Kipsigis data. Tone is transcribed whenever possible, but certain transcriptions are incomplete due to sound difficulties over Skype. Glosses follow the Leipzig glossing rules, with the addition of IMP = impersonal.

2 Previous accounts of topichood

Roberts (2011) describes two notions of topics in the literature, one is the subject of a text and the other the subject-matter of the discussion. The former identifies the topic as the entity that the sentence is about, i.e., it indicates where the information given in the sentence should be stored in the *Common Ground* (Stalnaker, 1974). The latter attributes to the topic the task to signal the *Question Under Discussion* (Roberts, 1996), which is taken as a central organizing factor in discourse. Roberts (2011) provides a cross-linguistic overview suggesting that these two notions should not be conflated and must receive independent theoretical modeling, as they are expressed differently across languages. In this section, we briefly introduce each notion in turn.

2.1 Aboutness topics

An aboutness topic identifies the entity that the sentence is about. This is often viewed as a “file card” (Heim, 1982) onto which the information contained in the sentence is entered, also known as Vallduví’s LINK (Vallduví, 1992; Heycock, 1994; Heycock, 2008; Tomioka, 2007). In (2), we provide an illustration of the file card idea, where each indefinite phrase in the first sentence introduces a discourse referent and sets up a file card. Propositions will be added to each file card as the the discourse progresses. Topics must be referential in order to be associated with a file card.

- (2) [A woman]₁ found [a cat]₂. She₁ took [the cat that she₁ found]₂, home.

File card 1	File card 2
woman	cat
found 2	found by 1
...	...

The entity-based view can also be implemented without postulating an independent level of Information Structure: Portner and Yabushita (1998) propose that the Common Ground consists of a set of infinite sequences of pairs, where each pair consists of an entity (the LINK) and a set of possible worlds (the information entered with respect to that LINK).

Aboutness topics are unmarked in English. A common way of eliciting aboutness topics is the following (Reinhart, 1981):

- (3) **Context:** *Tell me about John!* (Neeleman et al., 2009, p. 31)
Well, [John]_{Topic} is a PhD student enrolled at the University of Lund.

In other languages, aboutness topics can receive morphological marking, e.g. Japanese *-wa* marking, as illustrated in (4).

- (4) **Context:** *Tell me about that dog!* (Neeleman et al., 2009, p. 31)
[Sono inu]_{Topic-wa} kinoo John-o kande-simatta.
that dog-TOP yesterday John-ACC bite-ended.up
‘The dog bit John yesterday.’ Japanese

Since aboutness topics are perceived as entity-denoting, certain types of arguments are predicted to not make good aboutness topics: Kiss (1993), for example, reports for Hungarian that only entity-denoting and not quantificational NPs can appear in the designated “topic position”. Moreover, Tomioka (2007) identifies a class of NPs in Japanese which cannot take the *-wa* marker. In (5), it is shown that universal and existential quantifiers as well as disjunctions resist *-wa* marking.

- (5) *Anti-topic items in Japanese* (Tomioka, 2007, p. 1576)
 *daremo-wa / *dareka-wa / *[John-ka Bill]-wa
 everyone/anyone-TOP / someone-TOP / John-or Bill-TOP

Since file cards are associated with a discourse antecedent, aboutness topics have to be referential, thus quantifiers are excluded. Disjunctions do not constitute topics because it is unclear to which file card the information provided with the sentence is added.

2.2 Contrastive topics

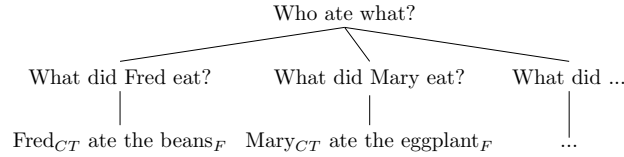
In contrast to aboutness topics, contrastive topics co-occur with another focus-marked argument in the sentence. Hence, contrastive topic accounts often build on Rooth’s (1992) alternative semantics for focus. A common way of eliciting contrastive topics is shown in (6).

- (6) **Context:** *Who ate what? What did Fred eat?* (Büring, 2003, p. 519)
 [FRED]_{Contrastive Topic} ate [the BEANS]_{Focus}.
 H* L-H% = fall rise contour

Whereas in English aboutness topics are distinguished from contrastive topics by a dedicated intonation contour, the so called *B-accent* (Jackendoff, 1972), Japanese *-wa* marking is compatible with both aboutness and contrastive readings. In (7), the topic *Erika* is interpreted contrastively and receives the same *-wa* marker as the aboutness topic in (4) above.

- (7) **Context:** *Who ate what?* (Tomioka, 2010, p. 123)
 [ERika]_{Contrastive Topic}-wa [MAME-o]_{Focus} tabe-ta (kedo)
 Erika-TOP beans-ACC eat-PST but
 ‘Erika ate beans (but) ...’ *Japanese*

Based on Roberts’ (1996) discourse model, which takes the properties of topics/focus to address the *Question Under Discussion* (QUD), Büring (2003) proposes that contrastive topics mark a discourse strategy: a contrastive topic indicates an answer to a sub-question within a strategy aimed at addressing some larger issue. This is illustrated in (8) with a discourse tree which maps the context in (6). The B-accent on *Fred* signals that there is a more general question in the context which needs to be addressed, other than the immediate question for which an answer is provided by F-marking the object *beans*.

(8) *Büring's d-trees*

Büring (2003) connects the fall rise contour of the contrastive topic argument to a dedicated CT-value which creates a semantic object that needs to be congruent with at least two sister subquestions in a d-tree (a set of a set of propositions). The CT-value of (6) is given in (9), derived from the d-tree in (8).

$$\begin{aligned}
 (9) \quad & \llbracket [\text{Fred}]_{CT} \text{ ate } [\text{the beans}]_F \rrbracket^{ct} \\
 &= \{ \text{What did Fred eat? What did Mary eat?, ... } \} \\
 &= \left\{ \begin{array}{l} \{ \text{Fred ate the beans, Fred ate the eggplant, ... } \} \\ \{ \text{Mary ate the beans, Mary ate the eggplant, ... } \} \end{array} \right\}
 \end{aligned}$$

Other accounts (Tomioka, 2010; Wagner, 2012; Constant, 2014) aim to derive similar semantic readings by making use of focus semantic values only. They will be discussed in more detail in section 4.

3 The *ko*-position

In this section, we discuss in 3.1 the basic syntactic properties of Kipsigis, focusing on those aspects that are relevant for information structure. In 3.2, we describe the properties of the *ko*-position in the language, concluding that it hosts topics (which can be either contrastive or aboutness topics).

3.1 Background on Kipsigis clausal syntax

Kipsigis is the major variety of Kalenjin, a cluster of dialects of the Southern Nilotic branch of Nilo-Saharan. It is spoken by approximately 2 million speakers in Kenya (Eberhard, Simons, and Fennig, 2020). Unless otherwise indicated, data in this paper come from original fieldwork with four native speakers.² As illustrated in the basic sentence in (10), the language is pro-drop, verb-initial and has a marked nominative case system: there is nominative - accusative alignment, but nominative is the morphologically marked form (Toweett, 1979; Kouneli, 2019).³ Case is expressed tonally (Kouneli and Nie, 2021), with a distinction made between an unmarked case (where tones are determined lexically) and a special nominative melody for subjects.⁴

²We are grateful to Enock Kirui, Wesley Kirui, Hillary Mosonik, and Philemon Ronoh for their valuable work as linguistic consultants. All four speakers (male; age range 24 -34) lived in Nairobi, Kenya, at the time of elicitation (February - April 2021). Both authors conducted a series of online elicitations with the speakers, while the second author had elicitations with three of the speakers during a field trip to Kenya.

³See König (2006), König (2008), and Handschuh (2014) for the typology of these systems and Baker (2015) and van Urk (2015) for generative analyses.

⁴In order to show that nominative is marked, one has to look at Kipsigis tonology in more detail. Since case is not important for the discussion in this paper, we do not present these data here, and we refer the interested reader to Toweett (1979) and Kouneli and Nie (2021) for a detailed investigation. We will always mark nominative inflection in our glosses.

- (10) Kò:-ø-tʃó:r (Kíbê:t) rabɪ:nɪk.
 PST-3-steal Kibeet.NOM money
 ‘Kibeet/(s)he stole the money.’

As can already be seen in (10), the default/pragmatically neutral word order is VSO. However, there is extensive scrambling post-verbally (Bossi and Diercks, 2019). Thus, we see in (11) that, as long as verb initiality is obeyed, a variety of word order permutations are allowed.

- (11) a. Kò:-ø-tʃó:r Kíbê:t rabɪ:nɪk ámùt. VSO-Adv
 PST-3-steal Kibeet.NOM money yesterday
 ‘Kibeet stole the money yesterday.’
 b. Kò:-ø-tʃó:r rabɪ:nɪk Kíbê:t ámùt. VOS-Adv
 PST-3-steal money Kibeet.NOM yesterday
 ‘Kibeet stole the money yesterday.’
 c. Kò:-ø-tʃó:r ámùt Kíbê:t rabɪ:nɪk. V-Adv-SO
 PST-3-steal yesterday Kibeet.NOM money
 ‘Kibeet stole the money yesterday.’

Bossi and Diercks (2019) argue that scrambling is discourse-based, with discourse-prominent elements occupying the immediately post-verbal position (IPP). On the syntax side, they identify the IPP as SpecTP, where elements with a discourse feature move due to an EPP feature. The verb then raises to a projection α (higher than T but lower than C) via head movement. On the semantics side, they show that focused items most naturally occupy the IPP. This is illustrated in the question - answer pair in (12), where both the wh-word and the answer to the question (bolded) appear in the IPP.

- (12) Q: Kà-ø-ám **nê:** Kíbê:t?
 PST-3-eat what Kibeet.NOM
 ‘What did Kibeet eat?’
 A: Kà-ø-ám **kímpé:t** Kíbê:t.
 PST-3-eat ugali Kibeet.NOM
 ‘Kibeet ate ugali.’

However, Bossi and Diercks (2019) argue that not only focused elements, but also (at least) aboutness topics can occupy the IPP. This is shown in (13) which features a ‘tell me about X’ test (Reinhart, 1981).⁵

- (13) Mwə-ən kiit agəbə baandeeek.
 tell-1SG.OBJ thing about maize
 ‘Tell me something about the maize.’
 a. #?Kii-Ø-min Kiproono baandeeek.
 PST-3SG-plant Kiproono maize
 ‘Kiproono planted the maize.’
 b. Kii-Ø-min **baandeeek** Kiproono.
 (Bossi and Diercks 2019: p. 11, emphasis ours)

Thus, they conclude that focus is not the relevant semantic factor driving scram-

⁵In (13), we have maintained the transcription and glosses in Bossi and Diercks (2019).

bling to the IPP, and opt for the more general ‘discourse prominence’ notion instead (see Bossi and Diercks 2019: Section 5 for detailed discussion). In what follows, we further investigate information structure in the language by discussing the properties of another position: the *ko*-position.

3.2 *Ko* marks topics

Even though Kipsigis is generally verb-initial, it possesses a pre-verbal position marked by the particle *ko*. The basic pattern is illustrated in (14): (14-a) shows the pragmatically neutral VSO word order; in (14-b) and (14-c), we see that either the subject or the object can appear before the verb, in which case they are followed by *ko*.

- (14) a. Kà-Ø-ám Kíbê:t kímpê:t.
PST-3-eat Kibeet.NOM ugali
‘Kibeet ate ugali.’
- b. Kíbê:t kó kà-Ø-ám kímpê:t.
Kibeet TOP PST-3-eat ugali
‘Kibeet ate ugali.’
- c. Kímpê:t kó kà-Ø-ám Kíbê:t.
ugali TOP PST-3-eat Kibeet.NOM
‘Kibeet ate ugali.’

An interesting syntactic property of this pre-verbal position is that it is restricted to nominals: as shown in (15) and (16), neither adverbs nor PPs can occupy the *ko*-position (see also Creider 1987 on the related dialect Nandi).⁶

- (15) *Mù:tjà kó Ø-kèt-é Kíbê:t.
slowly TOP 3-drive-IPFV Kibeet.NOM
‘Slowly, Kibeet drives.’
- (16) *Ak Kiplàngàt kó ka-Ø-tʃap-e Kíbê:t amitwa:gik.
with Kiplangat TOP PST-3-make-IPFV Kibeet.NOM food
‘With Kiplangat, Kibeet made food.’

Furthermore, there is a case alternation for subjects: they bear marked nominative post-verbally, but they are unmarked pre-verbally. Thus, while the subject is marked for nominative in (14-a) above, it is unmarked in (14-b). A question that arises then is whether *ko* could be a case marker. There are arguments against this analysis: first, *ko* does not attach to the noun, but it rather cliticizes on the verb in fast speech.⁷ Second, as has already been mentioned, case is generally marked tonally in the language.

A final syntactic property worth discussing is that the language displays a V2 effect when it comes to fronting of noun phrases: only one noun can ever precede the verb. This is illustrated in (17) below, where any attempt to place

⁶The language has few genuine prepositions. For PPs headed by the generic preposition *é:n* ‘at/to/for’, we got mixed results from our consultants: two speakers judged those PPs ungrammatical, but another two simply noted they were degraded.

⁷In this sense, the marker also differs from the Japanese topic marker *-wa*, which is clearly a suffix on the noun.

two noun phrases pre-verbally results in ungrammaticality, irrespective of the position of *ko* (see (17-a)-(17-b)) or the number of overt *ko* markers (see (17-c)).⁸

- (17) a. *Kibê:t kímpé:t kó kà-Ø-ám.
 Kibeet ugali TOP PST-3-eat
 ‘Kibeet ate ugali.’
- b. *Kibê:t kó kímpé:t kà-Ø-ám.
 Kibeet TOP ugali PST-3-eat
 ‘Kibeet ate ugali.’
- c. *Kibê:t kó kímpé:t kó kà-Ø-ám.
 Kibeet TOP ugali TOP PST-3-eat
 ‘Kibeet ate ugali.’

Moving on to the semantics of the *ko*-position, the most salient interpretation of noun phrases in this position is that of a contrastive topic. As shown in (18) and (19), we used a context involving the sub-question strategy discussed in Büring (2003), among others, to diagnose contrastive topics (see section 2.2). The noun phrases that answer the relevant sub-questions occur in the *ko*-position, which is shown for subjects in (18) and for objects in (19).

- (18) **Context:** *We were at an event with Kibeet, Cheebeet, and many other people attending, and multiple dishes were available. We want to ask who ate what? What did Kibeet eat? What did Cheebeet eat?*
- a. Kibê:t kó kà-Ø-ám ñé:ndé:k.
 Kibeet TOP PST-3-eat beans
 ‘Kibeet ate beans.’
- b. Tjê:bê:t kó kà-Ø-ám pè:ndá.
 Cheebeet TOP PST-3-eat meat
 ‘Cheebeet ate meat.’
- (19) **Context:** *We were at an event with many other people attending, and multiple dishes such as beans were available. Who ate what? Who ate beans? Who ate meat?*
- a. ñé:ndé:k kó kà-Ø-ám Kibê:t.
 beans TOP PST-3-eat Kibeet.NOM
 ‘Beans, Kibeet ate.’
- b. Pè:ndá kó kà-Ø-ám Tjê:bê:t.
 meat TOP PST-3-eat Cheebeet.NOM
 ‘Meat, Cheebeet ate.’

Constant (2014) discusses another two diagnostics for contrastive topics which can be applied to Kipsigis: contrastive topics should resist exhaustive answers, as well as answers to maximal element contexts. The former diagnostic is a direct consequence of the fact that contrastive topics constitute *partial* answers; a complete answer would address all of the issues under discussion. As for the latter diagnostic, Constant (2014, p. 51) writes: “*all* [a maximal element] fails as a contrastive topic because there is nothing it can contrast with to make the

⁸The V2 effect and the restriction of the *ko*-position to nominals is reminiscent of the properties of the pre-verbal position in Dinka, another Nilotic language (van Urk, 2015).

utterance non-resolving in the crucial way”.⁹ As can be seen in (20) and (21), the *ko*-position is not licensed in exhaustive answer contexts and cannot host maximal elements like the universal quantifier.

(20) *Exhaustive answer context*

Q: Kà-Ø-sí:ndàn ŋà: ŋwàê:k?
PST-3-win who.NOM race
‘Who won the race?’

A: #Kìbê:t kó kà-Ø-sí:ndàn ŋwàê:k.
Kibeet TOP PST-3-win race
‘Kibeet won the race.’

(21) *Maximal element context*

Q: Kà-Ø-bún kàrí:t-à:p má:t âjnó:n?
PST-3-take car-POSS fire which
‘Which train did they take?’

A: (Pí:k) àlák/ #túyòl kó kà-Ø-bún kàrí:t-à:p má:t né tà:j.
people some/ all TOP PST-3-take car-POSS fire REL.SG first
‘Some/all (people) took the first train.’

Summarizing, the *ko*-position displays all the properties usually associated with contrastive topics. Nevertheless, aboutness topics are also possible: all consultants offer the sentence in (22) as an answer to a ‘tell me about X’ question (Reinhart, 1981). We can therefore conclude that topichood is the relevant semantic notion for this position.

(22) **Context:** *We are talking, Samantha is mentioned, and I ask ‘Tell me about Samantha!’:*

Samantha kó Ø-mép-è Nairobi.
Samantha TOP 3-live-IPFV Nairobi
‘Samantha lives in Nairobi.’

At this point, the reader may recall example (13) from Bossi and Diercks (2019) where an aboutness topic is licensed in the IPP. However, we see in (23) that post-verbal orders (including the one where the aboutness topic is in the IPP - see (23-a)) were judged as infelicitous by the four speakers that we consulted; in other words, for the context in (22)/(23), the *ko*-position was obligatory for those speakers.

(23) **Context:** *We are talking, Samantha is mentioned, and I ask ‘Tell me about Samantha!’:*

a. #Ø-mép-è Samantha Nairobi.
3-live-IPFV Samantha Nairobi
‘Samantha lives in Nairobi.’

b. #Ø-mép-è Nairobi Samantha.
3-live-IPFV Nairobi Samantha
‘Samantha lives in Nairobi.’

⁹It is worth noting that maximal elements can be contrastive topics in downward-entailing contexts. See Constant (2014) for discussion and an analysis that can account for the pattern.

However, if the context is slightly changed as in (24), the *ko*-position was no longer licensed (for the same speakers). In this case, the topic was felicitous in the IPP instead (similar to example (13) from Bossi and Diercks 2019).

- (24) **Context:** *We both know Cheebeet and we've been talking about her. I know a secret about her and I want to share it with you. I'm going to tell you something about Cheebeet: Cheebeet stole Kibeet's money.*
- a. Kɔ:-ø-tʃɔ:r Tʃé:bê:t rabɪ:nɪk-à:p Kibê:t.
PST-3-steal Cheebeet.NOM money-POSS Kibeet
'Cheebeet stole Kibeet's money.'
- b. #Tʃé:bê:t ko kɔ:-ø-tʃɔ:r rabɪ:nɪk-à:p Kibê:t.
Cheebeet TOP PST-3-steal money-POSS Kibeet
'Cheebeet stole Kibeet's money.'

One consultant's comment regarding the above context was the following: "the problem here is that we both know Cheebeet and have been talking about her. This sentence does not give a description of her". This context thus seems different from our 'Tell me about X' context in (22)/(23).

The consultant's comments are reminiscent of the distinction in the literature between true aboutness topics in Japanese, which are always fronted, and anaphoric uses of *wa*-marked phrases, which appear in-situ (e.g. Vermeulen, 2007; Neeleman et al., 2009). These two types of topics are illustrated in (25) and (26), respectively.

- (25) sono inu-nituite osiete-kudasai
that dog-about tell-please
'Tell me about that dog.' (aboutness context)
- a. **sono inu-wa** kinoo kooen-de JOHN-O kande-simatta
that dog-WA yesterday park-at John-ACC bite-closed
- b. #JOHN_i-O **sono inu-wa** kinoo kooen-de t_i kande-simatta
John-ACC that dog-WA yesterday park-at bite-closed
'The dog bit John in the park yesterday.'
(Vermeulen 2007: 185, emphasis ours)
- (26) sono inu-ga dare-o kande-simatta no?
that dog-NOM who-ACC bite-closed Q
'Who did the dog bite?' (anaphoric context)
- a. **sono inu-wa** kinoo kooen-de JOHN-O kande-simatta
that dog-WA yesterday park-at John-ACC bite-closed
- b. JOHN_i-O **sono inu-wa** kinoo kooen-de t_i kande-simatta
John-ACC that dog-WA yesterday park-at bite-closed
'The dog bit John in the park yesterday.'
(Vermeulen 2007: 184, emphasis ours)

We hypothesize that the interpretation of noun phrases in examples like (24) (and possibly (13)) is anaphoric. If this hypothesis is on the right track, it means that only true (non-anaphoric) topics can occupy the *ko*-position.¹⁰ For com-

¹⁰This hypothesis would also be in line with the impressionistic observation that the *ko*-position is not frequently used in Kipsigis: if anaphoric uses of topics were compatible with

pleteness, we show in (27) that contrastive topics are licensed in either the IPP or the *ko*-position. So far, we have not been able to detect any interpretational differences between the two options.

- (27) **Context:** *We were at an event with Kibeet, Cheebeet, and many other people attending, and multiple dishes were available. We want to ask who ate what? What did Kibeet eat? What did Cheebeet eat?*
- a. Kà-Ø-ám Kìbê:t ɲé:ndé:k. VSO
 PST-3-eat Kibeet.NOM beans
 ‘Kibeet ate beans.’
- b. Kìbê:t kó kà-Ø-ám ɲé:ndé:k. Ko
 Kibeet TOP PST-3-eat beans
 ‘Kibeet ate beans.’

Having established that the *ko*-position hosts topics in Kipsigis, we discuss in the next section the implications of our data for existing theories of topichood.

4 Towards an account of *ko* in Kipsigis

As section 2 has shown, analyses of aboutness topics and contrastive topics diverge substantially – on the conceptual level (McNally, 1998; Krifka, 2008; Heycock, 2008) as well as in terms of empirical implications (Roberts, 2011). For the Japanese *-wa* marker in particular, a fully unified analysis is rarely proposed (Heycock, 2008, p. 81). Any theory of the *ko* marker in Kipsigis, however, will have to address the double function of *ko* signaling aboutness and contrastive topics. After providing some counter-arguments against the file card account and an all focus structure in sections 4.1 and 4.2, we focus on theories specifically designed for contrastive topics in section 4.3. In section 4.4, we show that the account by von Stechow (1994) is best equipped to account for the *ko* marker in Kipsigis.

4.1 Problems for the entity-based account

Recall from Section 2.1 that entity-based accounts of topicalization predict that quantified and disjunctive NPs cannot serve as topics (Kiss 1993; Tomioka 2007 a.o.). Disjunctions are, however, possible in the *ko*-position in Kipsigis:

- (28) Kìbê:t anan Tjê:bê:t kó kà-Ø-ám kímnpé:t.
 Kibeet or Cheebeet TOP PST-3-eat ugali
 ‘Kibeet or Cheebeet ate ugali.’

Moreover, (29) and (30) provide evidence that quantified NPs are compatible with the *ko* position.

ko, we might have expected subjects to often appear in this position. While corpus data are needed in order to make an accurate statement, the *ko*-position appears quite rarely in elicitations not targeted at topichood, and it was not used at all in a short story that was elicited. Furthermore, as has already been discussed in section 3, the pragmatically neutral word order is VSO, and the IPP is used to host elements with a variety of discourse roles.

- (29) Là:gók tóyòl kó kà-Ø-ám kímpé:t.
 children all TOP PST-3-eat ugali
 ‘All children ate ugali.’
- (30) Là:kwé:t age-tóyòl ko ko:-Ø-ke:r tʃò:rwè:(t)-ní:n_{i/k}.
 child any-all TOP PST-3-see friend-POSS.3SG.NOM
 ‘Every child, his/her friend saw.’

As shown in (31), the quantifier *age*, analyzed as an indefinite determiner by Landman (2019), is also possible, but only under a contrastive topic interpretation.

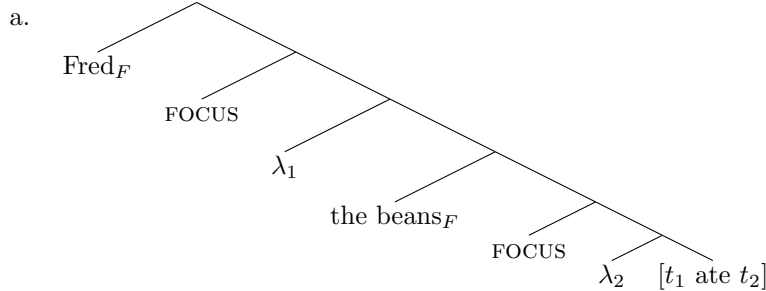
- (31) Là:kwé:t ágè kó Ø-tʃám-è tʃè:gá. Là:kwé:t ágè kó Ø-tʃám-è
 child some TOP 3-like-IPFV milk child some TOP 3-like-IPFV
 tʃa:rk.
 tea
 ‘Some child likes milk; another child likes tea.’

Since the key predictions of the entity-based account are not borne out in Kipsigis, we move on to alternative-based accounts of topic-hood in the next sections.

4.2 *Ko* does not signal a nested focus structure

Wagner (2012) derives contrastive topics as nested focus structures. We illustrate the idea in (32), based on the original example in (6). As can be seen in (32-a), the proposed focus operator FOCUS can take topics or foci as arguments. Each instance of FOCUS is introduced in the right periphery and attracts an F-marked argument.¹¹ Following (32-b) and (32-c), the focus operator presupposes that alternatives to the F-marked phrase must be salient, where each occurrence introduces its own presupposition.

- (32) $\llbracket [\text{Fred}]_F \text{ ate } [\text{the beans}]_F \rrbracket_a^g$ (Wagner, 2012, p. 31)



- b. Presupposition introduced by inner focus:
 $\{ y \mid \text{Fred ate } y \}$ is salient and $\exists a \in \llbracket \text{beans} \rrbracket_a^g$ other than beans
- c. Presupposition introduced by outer focus:
 $\{ x, y \mid x \text{ ate } y \}$ is salient and $\exists a \in \llbracket \text{Fred} \rrbracket_a^g$ other than Fred

While the meaning of contrastive topics in Wagner’s theory is derived by recursively applying FOCUS, simple focus structures are derived by a single application of the focus operator. Assuming that *ko* spells out the focus operator, however,

¹¹For the interpretation, it must be ensured somehow that the outer focus attracts the contrastive topic.

makes the wrong predictions for Kipsigis because we observe that focused elements are consistently infelicitous in the *ko*-position. Answers to *wh*-questions, for example, cannot appear in this position, as shown in (33).¹²

- (33) *Question-answer context*
 Q: Kà-Ø-ám ɲà: ɲé:ndé:k?
 PST-3-eat who.NOM beans
 ‘Who ate beans?’
 A: #Kìbê:t kó kà-Ø-ám ɲé:ndé:k.
 Kibeet TOP PST-3-eat beans
 Intended: ‘Kibeet ate beans.’

The *ko* particle is also incompatible with inherently focused phrases like *wh*-words and phrases associated with exclusive adverbs, shown in (34) and (35), respectively.

- (34) *ɲâ: kó kà-Ø-ám pè:ndá?
 who TOP PST-3-eat meat
 Intended: ‘Who ate meat?’
 (35) *Kìbê:t íné:ké:n kó kà-Ø-só:màn kítàbú:t.
 Kibeet only TOP PST-3-read book
 Intended: ‘Only Kibeet read the book.’

Finally, corrective focus scenarios, as given in (36), do not permit the occurrence of *ko*.

- (36) **Context:** *I tell you that Kibeet is sleeping. But you know that Kibeet is awake, and Cheebeet is sleeping instead. We have this exchange:*
 A: Ø-rú-è Kìbê:t.
 3-sleep-IPFV Kibeet.NOM
 ‘Kibeet is sleeping’
 B: #Â:tɬà, Tɬè:bê:t kó Ø-rú-è.
 no Cheebeet TOP 3-sleep-IPFV
 ‘No, Cheebeet is sleeping.’

Since the recursive application of a focus operator does not yield the right results, we take a closer look at two accounts in the next section that treat contrastive topics differently from foci.

4.3 The double function of *ko*

As discussed in section 2.2, Büring (2003) proposes a dedicated CT-value for contrastive topics producing a new semantic dimension, similar to how Rooth (1992) introduced the focus semantic value for F-marked constituents. At PF, CT-values can get mapped to fall-rise contours, similar to how F-values are argued to get mapped to pitch accents. At LF, CT-values are calculated by

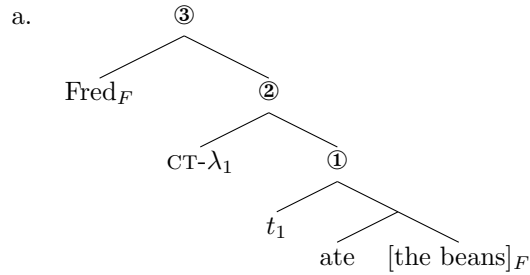
¹²Elements in the *ko*-position can never serve as answers in Kipsigis. Kipsigis, thus, differs from Japanese, which sometimes allows *wa*-marked phrases as answers to certain questions, albeit without focus semantics (Heycock, 2008).

first, replacing F-marked phrases with variables (37-a), and second, replacing CT-marked phrases with variables (37-b).

- (37) $\llbracket [\text{Fred}]_{\text{CT}} \text{ ate } [\text{the beans}]_F \rrbracket^{ct}$ (Büring, 2003, p. 519)
- a. $[\text{Fred}]_{\text{CT}} \text{ ate } y$: What did Fred eat?
- b. What did x eat?: $\{ \text{What did Fred eat? What did Mary eat?, ... } \}$
 $= \left\{ \begin{array}{l} \{ \text{Fred ate the beans, Fred ate the eggplant, ... } \} \\ \{ \text{Mary ate the beans, Mary ate the eggplant, ... } \} \end{array} \right\}$

An alternative account is provided by Constant (2014), who derives the same semantic object for contrastive topics as in (37-b) without positing a CT-value, but instead as a result of topic abstraction. In line with Wagner (2012) but contrary to Büring (2003), both contrastive topics and foci are simply F-marked. Only contrastive topics, however, obligatorily raise and trigger topic abstraction, shown in (38-a). The operator $\text{CT-}\lambda_1$ adds a nesting layer in the focus dimension by abstracting over alternative sets, thereby creating sets of sets of propositions via *pointwise functional application* (Hamblin, 1973). Note that the result of topic abstraction in (38-d) equals the semantic value in (37-b). At PF, the $\text{CT-}\lambda_i$ operator is realized as a clitic with phonological content in English, but can also be realized as a particle in other languages.

- (38) $\llbracket [\text{Fred}]_F \text{ ate } [\text{the beans}]_F \rrbracket_f^g$ (Constant, 2014, pp. 97–98)



- b. $\llbracket \text{①} \rrbracket_f^g = \{ g(1) \text{ ate the beans, } g(1) \text{ ate the eggplant, ... } \}$
- c. $\llbracket \text{②} \rrbracket_f^g = \{ \lambda x. \{ x \text{ ate the beans, } x \text{ ate the eggplant, ... } \} \}$
- d. $\llbracket \text{③} \rrbracket_f^g = \left\{ \begin{array}{l} \{ \text{Fred ate the beans, Fred ate the eggplant, ... } \} \\ \{ \text{Mary ate the beans, Mary ate the eggplant, ... } \} \end{array} \right\}$

Importantly, both Büring (2003) and Constant (2014) treat contrastive topics separately from focus. Assuming that *ko* either spells out $\text{CT-}\lambda_i$ or attaches to a CT-valued phrase predicts that focused phrases cannot occur in the *ko* position, thus deriving the data set in section 4.2, while also capturing the contrastive topic contexts in section 3.2. Crucially, however, neither account can be extended to aboutness contexts, which also trigger the *ko* construction in Kipsigis, as shown in section 3.2.

Given that the two topic types receive very different semantic treatments, yet seem to be marked identically on the surface in languages like e.g., Japanese, proponents of such theories turn to syntactic differences between aboutness and contrastive topics. In Japanese, for example, contrastive topics show properties of movement (e.g. they obey islands), while aboutness topics do not (Hoji 1985;

Heycock 2008 a.o.). In Kipsigis, however, phrases in the *ko*-position always trigger island violations, irrespective of interpretation, shown for two types of islands in (39) and (40) (see also Creider 1987 on the related dialect Nandi).

(39) *Complex NP island*

***Kibe:t**_i ko ka-Ø-soman Tjébê:t [kitàbú:t ne
 Kibeet TOP PST-3-read Cheebeet.NOM book REL.SG
 ki:-Ø-sir-e **íné:ndèt**_i/___ _i].
 PST-3-write-IPFV 3SG.NOM
 Intended: ‘Kibeet, Cheebeet read the book that he wrote.’

(40) *Adjunct island*

***Kibe:t**_i ko ka-ki-si:ndan-ε:tʃ [amun ma-Ø-ɲo: ___ _i].
 Kibeet TOP PST-1PL-win-1PL(IMP) because NEG-3-come
 Intended: ‘Kibeet, they beat us (at the race) because he didn’t come.’

Another aspect in which the two topic types could differ is the restriction to nominals, as described in section 3.2. We find, however, that the *ko*-position is restricted to nominals, irrespective of the type of topic: adverbs and PPs are ungrammatical in that position (with one exception for a subset of speakers discussed further below).

There are only two differences between aboutness and contrastive topics that we could detect in Kipsigis and they concern specific lexical entries.¹³ First, the indefinite quantifier *age* ‘any/some’ can only be used as a contrastive topic, as was shown in (31) in section 3.2. The second difference concerns *ε:n*-PPs in the *ko* position. While for two speakers, PPs are always impossible in the *ko*-position, at least one speaker allows *ε:n*-PPs, but only when used as a contrastive topic. Hoji (1985) argues that *wa*-marked PPs can only be contrastive topics in Japanese (but see Heycock 2008, among others, on scene-setting adverbials):

- (41) ε:n ɔ:snet kó tʃā:ŋ kertik. ε:n desert kó turtem kertik.
 at forest TOP many trees.NOM at desert TOP few trees.NOM
 ‘In the forest, there are many trees. In the desert, there are few trees.’

For *ak*-PPs, recall (16), all speakers agree that they are infelicitous in the *ko* position, independent of topic type.

4.4 *Ko* spells out the \approx operator

In order to account for aboutness topics and contrastive topics uniformly, we need a theory that captures both constructions and ideally links the two via some common element. One such theory is proposed in von Stechow (1994), where topics are argued to be licensed by an operator which is built on the

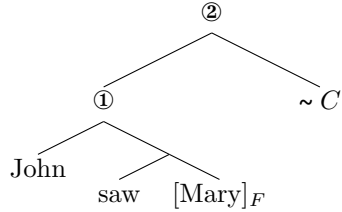
¹³The only potential difference not tied to particular lexical entries concerns the (non-) optionality of placing topics in the *ko*-position. As was discussed in section 3.2, contrastive topics do not obligatorily move to the *ko*-position, while (non-anaphoric) aboutness topics do. Nevertheless, the findings in section 3.2 are preliminary, with further tests needed to: i) determine whether there are any semantic differences between pre- and post-verbal contrastive topics, and ii) confirm whether examples like (13) from Bossi and Diercks (2019) are indeed anaphoric or whether they reflect speaker variation.

semantics proposed for the \sim (squiggle) operator that licenses focused phrases (Rooth, 1992).

Let us first illustrate the mechanism of simple focus structures in (42) before we move on to the topic constructions in (44) and (45). The purpose of the \sim operator is to connect a set of alternatives produced by F-marking to a discourse antecedent. The mediation is performed by a covert variable C : Given the constraint in (42-b), C has to be a subset of the input of \sim , i.e. ① in (42-c), for F-marking to be licensed. C is anaphoric to a discourse antecedent, so if C denotes a set of propositions, produced by the Hamblin-denotation of *Who did John see?* (42-e), C constitutes a subset of the f -value of ①, as shown in (42-d). Hence, the question *Who did John see?* is able to license the F-marking in (42-a).

(42) $\llbracket \text{John saw } [\text{Mary}]_F \rrbracket^{o,f}$

a.



b. *Question-answer constraint:*

In a question-answer pair, $\langle \psi, \alpha \rangle, \psi^o \in \llbracket \alpha \rrbracket^f$.

c. $\llbracket \text{①} \rrbracket^f = \{ \text{John saw Mary, John saw Sue, ...} \}$

d. $\llbracket \text{②} \rrbracket^f = C \subseteq \{ \text{John saw Mary, John saw Sue, ...} \}$

e. $\llbracket \text{Who did John see?} \rrbracket \subseteq \{ \text{John saw Mary, John saw Sue, ...} \}$

In parallel to focus licensing, von Fintel (1994) proposes a \approx (double squiggle) operator for topic licensing that introduces a variable C which is anaphoric to a discourse antecedent. In (43), we provide a definition of the operator.

(43) *The \approx operator* (adapted from von Fintel, 1994, p. 53)

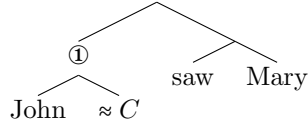
Given a sentence topic associated with an expression α , \approx introduces the anaphor C into the context whose value is constrained to be a subset of the set of propositions of the form ' $\llbracket \alpha \rrbracket^o$ Ps'. The most unmarked situation would be that this is precisely the discourse topic at this point.

In (44), we demonstrate how \approx derives topic licensing for aboutness topics. Following the definition in (43), C has to denote a subset of a set of propositions of the form 'John Ps', given in (44-b). Since *What about John?* (44-c) and arguably also *Tell me something about John!* qualify as such a subset, *John* is licensed as an aboutness topic in (44-a).

(44) $\llbracket [\text{John}]_T \text{ saw Mary} \rrbracket^{o,f}$

(von Fintel, 1994, p. 55)

a.

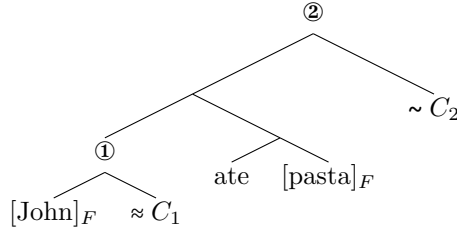


- b. $\llbracket \textcircled{1} \rrbracket = C \subseteq \{ p \mid \exists P[P(\textit{John}) = p] \}$
 $= C \subseteq \{ \textit{John saw Mary, John went home, ...} \}$
- c. $\llbracket \textit{What about John?} \rrbracket \subseteq \{ \textit{John saw Mary, John went home, ...} \}$

Interestingly, the \approx operator is also employed by von Fintel (1994) for the derivation of contrastive topics, as we illustrate in (45). As above, C_1 has to denote a subset of a set of propositions of the form ‘John Ps’ (45-b), which is provided by the question *What about John?*, see (45-c). Since both *John* and *pasta* are F-marked, the \sim operator enters the structure introducing C_2 . This context variable has to denote a subset of the input of \sim , in this case the f -value resulting from the nested focus structure, see (45-d). Given that the question *Who ate what?* qualifies as the value for C_2 (45-e), we have now derived the fact that both *What about John?* and *Who ate what?* have to be present in the discourse to license a contrastive topic reading of *John* in (45). Note that this is exactly how we elicited contrastive topics in section 3.2. We therefore conclude that *ko* spells out the \approx operator.¹⁴

(45) $\llbracket [\textit{John}]_{CT} \textit{ate} [\textit{pasta}]_F \rrbracket^{o,f}$ (von Fintel, 1994, p. 59)

a.



- b. $\llbracket \textcircled{1} \rrbracket = C_1 \subseteq \{ p \mid \exists P[P(\textit{John}) = p] \}$
 $= C_1 \subseteq \{ \textit{John ate pasta, John went home, ...} \}$
- c. $\llbracket \textit{What about John?} \rrbracket \subseteq \{ \textit{John ate pasta, John went home, ...} \}$
- d. $\llbracket \textcircled{2} \rrbracket^f = C_2 \subseteq \left\{ \begin{array}{l} \{ \textit{John ate pasta, John ate pizza, ...} \} \\ \{ \textit{Mary ate pasta, Mary ate pizza, ...} \} \end{array} \right\}$
- e. $\llbracket \textit{Who ate what?} \rrbracket \subseteq \left\{ \begin{array}{l} \{ \textit{John ate pasta, John ate pizza, ...} \} \\ \{ \textit{Mary ate pasta, Mary ate pizza, ...} \} \end{array} \right\}$

¹⁴A problem put forth against the account by von Fintel (1994) applied to Japanese *-wa* marking is that the *-wa* marker is reported to be felicitous in questions. This is not predicted by the account since the question that the topic is anaphoric to is identical to the question actually asked, which seems paradoxical. In Kipsigis, *ko* marking in questions is either unnatural or requires a contrastive reading, which seems to be in line with the prediction. Contrastive topics in questions do presuppose more than what the question asks.

- (i) ?Kibê:t kó kà-Ø-ám nê:?
 Kibeet TOP PST-3-eat what
 ‘What did Kibeet eat?’
 Consultant’s comment: “You can say that though not the most natural way”
- (ii) Kibê:t kó kà-Ø-jáj nê:?
 Kibeet TOP PST-3-do what
 ‘What did Kibeet do?’
 Consultant’s comment: “This would be a continuation. Cheebeet did something, and then you’re asking what Kibeet did.”

To summarize, the fact that quantifiers and disjunctions can serve as topics points against an entity-based theory of topichood in Kipsigis, while the fact that focused phrases are illicit in the *ko*-position excludes analyses of contrastive topics as nested focus structures (Wagner, 2012). Since the *ko* construction is seemingly identical in aboutness and contrastive contexts, this calls for an analysis where one component is shared across aboutness and contrastive topic configurations, as in von Stechow (1994), but impossible for accounts such as Büring (2003), Tomioka (2010), Wagner (2012), and Constant (2014).

5 Additive scalar particles

Before we conclude, we have an interesting puzzle with respect to the *ko* construction. We showed in 4.2 that the *ko*-position is generally incompatible with focus. Nevertheless, the equivalent of the English *even Peter* in (46) must appear in the *ko*-position, as shown by the infelicity of post-verbal orders. *Even* in Kipsigis consists of two parts: obligatory *ogot*, which we gloss as *even* (though it may have non-scalar additive interpretations for non-subjects) and the optional, additive *àk ínê:* ‘and him’, which follows the noun, but can also be ‘stranded’ at the end of the sentence (46-a) without an obvious semantic difference.

- (46) **Context:** *Although we know that Peter doesn’t like ugali, everyone at the party ate it. Even Peter ate ugali.* (van der Wal, 2020, p. 82)
- a. **Ógòt Peter** (àk ínê:) kó kì:-Ø-ám kímpé:t (àk ínê:).
 even Peter and 3SG TOP PST-3-eat ugali and 3SG
 ‘Even Peter ate ugali.’
- b. #kì:-Ø-ám kímpé:t **ógòt Peter** (àk ínê:).
 PST-3-eat ugali even Peter and 3SG
 Intended: ‘Even Peter ate ugali.’
- c. #kì:-Ø-ám **ógòt Peter** (àk ínê:) kímpé:t.
 PST-3-eat even Peter and 3SG ugali
 Intended: ‘Even Peter ate ugali.’

While subject *even*-NPs must occupy the *ko*-position, non-subjects can but do not have to move there. As can be seen in (47), there are multiple word order possibilities for these phrases; it is not clear yet what the semantic differences among them are.

- (47) **Context:** *After you and your friend Kibeet, who does not like ugali, returned from a long and tiring walk, you went to the canteen to eat. Later, you are explaining to another friend how hungry you were, and say: Kibeet ate even ugali (although we know that he hates it).* (van der Wal, 2020, p. 83)
- a. **Ogot kímpé:t** ko ka-Ø-am Kíbê:t.
 even ugali TOP PST-3-eat Kibeet.NOM
 ‘Kibeet ate even ugali.’
- b. Kà-Ø-ám Kíbê:t **ogot kímpé:t**.
 PST-3-eat Kibeet.NOM even ugali
 ‘Kibeet ate even ugali.’

- c. Kìbê:t ko ka-Ø-am **ogot kímpé:t**.
 Kibeet TOP PST-3-eat even ugali
 ‘Kibeet ate even ugali.’

Kipsigis is added to an increasing list of languages where scalars do not pattern with other (especially exclusive) focused elements (e.g. Zimmermann 2005 on *Hausa*, Hartmann and Zimmermann 2007 on *Bura*, Grubic and Zimmermann 2011 on *Ngamo*, Zimmermann 2017 on *Vietnamese*, Driemel and Nformi 2018, fn.5 on *Limbum*). This observation has inspired analyses that make a connection between scalars and contrastive topics (Zimmermann, 2017; Greenberg, 2018), as well as analyses that propose a different type of focus association for scalar/additive vs. exclusive particles (Grubic and Zimmermann, 2011). Further investigation of the Kipsigis pattern and its implications for such theories is an interesting topic for further research.

6 Conclusion

In this paper, we have presented novel data from Kipsigis arguing for a dedicated topic position in the language, marked by the particle *ko*. By providing an investigation of this position, we thus add to existing work on information structure in Kipsigis (Bossi and Diercks, 2019), and East African languages more generally, where topic markers are mostly understudied (but see Asiiimwe and van der Wal 2020 on the Bantu language Rukiga). We have shown that the *ko*-position is compatible with topics but incompatible with any type of focus, which we take as evidence against analyses of contrastive topics in terms of focus (e.g. Wagner, 2012). Furthermore, the *ko*-position can host either aboutness topics or contrastive topics, and the distinction is not accompanied by any syntactic difference. The data thus point towards a unified analysis of aboutness and contrastive topics, which has rarely been pursued in the semantic literature. An exception is von Fintel’s (1994) account, which we argued is able to derive the properties of the topic marker in Kipsigis. Finally, it is worth noting that the Kipsigis data are compatible with typologies such as the one in Neeleman et al. (2009) which employ the three features [topic], [contrast], and [focus]; in such a system, aboutness and contrastive topics would share the [topic] feature.

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