

Upward-Oriented Complementizer Agreement with Subjects and Objects in Kipsigis

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In Kipsigis (Nilotic, Kenya), declarative-embedding complementizers can agree with both main-clause subjects and main-clause objects. This paper documents the morphosyntactic patterns of both, as well as describing the interpretive consequences of both agreement relations.

1 Introduction

While complementizer agreement (CA) is relatively rare (Baker 2008), the construction provides interesting testing grounds for the properties of the Agree relation crosslinguistically (Chomsky 2000; 2001). Perhaps the most familiar form of complementizer agreement come from West Germanic, where the declarative-embedding complementizer agrees with the embedded subject.¹

(1) West Flemish (Carstens 2003)

- a. Kpeinzen dan-k (ik) morgen goan.
I-think that-I (I) tomorrow go
'I think that I'll go tomorrow.'

¹ See Carstens (2003) and Van Koppen (2005) for West Germanic, and see Deal (2015) for a similar downward-oriented agreement pattern on complementizers in Nez Perce (though with very different valuation patterns, resulting in Deal's proposals about *Interaction* and *Satisfaction*).



- b. Kpeinzen (da-j) (gie) morgen goat.
I-think that-you (you) tomorrow go
'I think that you'll go tomorrow.'

Following the standard mechanisms, Carstens (2003) shows that these examples can be readily accounted for in a Probe-Goal Agree operation where the structurally higher probe (on C) searches for matching features on a c-commanded goal, after which an Agree relation values the features on the Probe (Chomsky 2001).

Kipsigis is a Nilotic language of the Kalenjin subgroup, spoken in western Kenya by roughly 2 million people (Lewis, Simons & Fennig 2016).² Kipsigis is verb initial, with quite flexible word order after the verb.³ In contrast to West Germanic, Kipsigis shows an upward-oriented pattern of agreement where complementizers agree with the subject of the main clause:

- (2) Kipsigis (fieldnotes)⁴
ko-a-mwaa a-le ko-Ø-ruuja tuya amut
PST-1sg-say 1sg-C PST-3-sleep cows yesterday
'I said that the cows slept yesterday.'

This pattern of CA has been described for relatively few languages, and a major contribution of this paper is to document its presence in a new language and language family. This upward-oriented CA has been most systematically investigated in Lubukusu (Bantu, Kenya), though it has also been documented in Kinande, Chokwe, Luchazi, Lunda, and Luvale (central Bantu languages), Ikalanga (southern Bantu), Ibibio, and some Mande languages (Baker 2008; Diercks 2013; Kawasha 2007; Idiatov 2010; Torrence 2016; Letsholo & Safir 2017). While these upward-oriented complementizer patterns pose significant theoretical questions, this paper focuses on the description and empirical analysis of the syntactic and interpretive properties of Kipsigis CA.

² The data presented in this paper were provided by Sammy Bor and Robert Langat, collected at Pomona College by the authors from April 2015-June 2016, and in the Fall 2015 Field Methods class.

³ Diercks et al. (2016) analyze Kipsigis word order as consisting of head movement of the verb to the highest inflectional position; scrambling of discourse-prominent constituents to Spec,TP explains most of the flexibility in word order. We refer the reader to that work for data and analysis of Kipsigis core word order patterns.

⁴ All Kipsigis data in this paper come from original fieldwork. Due to a lack of existing analyses of the clause-level tone patterns in Kipsigis, we do not transcribe tone here. To our knowledge the main grammatical role of tone is to case-mark nominative subjects (grouping Kipsigis among the marked-nominative Nilotic languages). Transcriptions are provided in IPA.

Kipsigis also demonstrates a distinct upward-oriented complementizer agreement relation triggered by the matrix object, rather than the matrix subject.

- (3) ko-ɑ-mwaa-un ɑ-le-ndʒin ko-Ø-it tuya amut
 PST-1sg-tell-2sg.OBJ 1sg-C-2sg.OBJ PST-3-arrive cows yesterday
 ‘I DID tell you (sg) that the cows arrived yesterday.’

In contrast to the subject-oriented CA pattern (Subj-CA) in the previous section, this object-oriented agreement form (Obj-CA) is realized as a suffix on the complementizer rather than a prefix. This pattern is a novel contribution to the literature; to our knowledge there is no previous discussion of an upward-oriented, object-oriented agreement relation (on a complementizer or otherwise).

As stated above, our focus in this paper is the description and empirical analysis of Kipsigis complementizer agreement patterns. We describe the morphosyntactic properties of the upward-oriented subject complementizer agreement relation (Subj-CA) in §2, demonstrating broad similarity between the Kipsigis pattern and previously-documented patterns (§2.7 explores some of the interpretive differences between the subject-agreeing complementizer and the non-agreeing complementizer). In §3, we describe the novel agreement pattern of upward-oriented object agreement on complementizers (Obj-CA) and examine the interpretive contribution that it makes (distinct from Subj-CA). §4 briefly discusses some broader implications for these patterns for the analysis of complementizer agreement, and concludes.

2 Prefixed Complementizer Agreement (Subj-CA)

2.1 Partial Complementizer Inventory

Example (4) gives a partial inventory of complementizers in Kipsigis:

(4)	COMP	GLOSS
	AGR-le	that (agreeing)
	kɔle	that (non-agreeing)
	kɛle	that (default agreement)
	amuŋ	because
	koti	if
	ne	focus head/relativizer
	ko	topic head

To our knowledge overt complementizers are obligatory for embedded declarative clauses:

- (5) α-ηγεν *(α-λε/κωλε) ko-Ø-ruuja tuyā amut
 1sg-know 1sg-C/that PST-3-sleep cows yesterday
 ‘I know (that) the cows slept yesterday.’

Only the *AGR-λε* declarative-embedding complementizer shows agreement (either for subjects or for objects, as will become clear in §3). Evidence that *κελε* is a default agreeing form is found in impersonal constructions and noun complement clauses (§2.4 and §2.5.2).

2.2 Prefixed Complementizer Agreement Forms

The agreeing forms of the upward-oriented prefixed complementizer agreement pattern are listed in (6), with illustrative examples in (7).

(6) Prefixed Complementizer Agreement Forms (Subj-CA)

	SG	PL
1st	α-λε	κε-λε
2nd	i-λε	o-λε
3rd	κω-λε	κω-λε

- (7) a. ko-α-mwaa (α-λε) ko-Ø-ruuja tuyā amut
 PST-1sg-say 1sg-C PST-3-sleep cows yesterday
 ‘I said that the cows slept yesterday.’
 b. ko-Ø-mwaa (κω-λε) ko-Ø-ruuja tuyā amut
 PST-3-say 3-C PST-3-sleep cows yesterday
 ‘He/She/They said that the cows slept yesterday.’
 c. ko-o-mwaa (o-λε) ko-Ø-ruuja tuyā amut
 PST-2pl-say 2pl-C PST-3-sleep cows yesterday
 ‘You (pl) said that the cows slept yesterday.’

There is no number distinction between third person forms, as is common in the language (see Jake & Odden 1979; Toweett 1979). The third person form of the complementizer (*κωλε*) can also be used as a non-agreeing complementizer, appearing with any subject, illustrated with a first person subject in (8).

- (8) ko-α-mwaa kɔlɛ ko-Ø-ruuja tuyɑ amut
 PST-1sg-say that PST-3-sleep cows yesterday
 ‘I said that the cows slept yesterday.’

Though the translation in (8) is the same as those for the agreeing complementizer examples, there is an interpretive difference between the two with respect to which contexts they appropriately occur in; see §2.7.

2.3 Prefixed CA Agrees with the Most Local Matrix Subject

Kipsigis prefixed CA has a strict superordinate subject orientation. The Germanic CA pattern—in which the complementizer displays agreement with the embedded subject—is ungrammatical in Kipsigis:

- (9) α-ŋgɛn kɔlɛ/α-lɛ/ *i-lɛ ko-i-amifje amut
 1sg-know that/1sg-C/*2sg-C PST-2sg-eat yesterday
 ‘I know that you ate yesterday.’

The prefixed agreement pattern is also strictly subject-oriented, unable to target objects in the main clause.

- (10) ko-α-mwaa wuun kɔlɛ/α-lɛ/ *i-lɛ ko-Ø-ruuja tuyɑ amut
 PST-1sg-tell-2sg.OBJ that/1sg-C/*2sg-C PST-3-sleep cows yesterday
 ‘I told you (sg) (that) the cows slept yesterday.’

Prefixed CA is also local—only the most local superordinate subject may trigger agreement; in (11) the matrix subject cannot trigger Subj-CA in the lowest clause:

- (11) ko-α-mwaa α-lɛ ko-i-bwɔt i-lɛ/ *α-lɛ ko-Ø-ruuja tuyɑ
 PST-1sg-say 1sg-C PST-2sg-think 2sg-C/1sg-C PST-3-sleep cows
 amut
 yesterday
 ‘I said that you thought that the cows slept yesterday.’

The pattern in (9)-(11) is the same as what is reported for Lubukusu (Diercks 2013), Ikalanga (Letsholo & Safir 2017) Ibibio (Torrence 2016), Chokwe, Luchazi, Lunda, and Luvale (Kawasha 2007). Given the subject-oriented nature of the phenomenon, we refer to it throughout as Subj-CA.

2.4 Subj-CA in Impersonal Constructions

A feature of the Lubukusu CA construction is that many speakers readily accept the agreement pattern with a derived subject in a passive construction (Diercks 2010; 2013). To our knowledge, there is no passive construction in Kipsigis; a similar discourse function is achieved either via a VOS construction or by the impersonal construction (cf. Payne 2011). The impersonal construction is formed by adding a *ye-* prefix to the verb, replacing the subject agreement marker.⁵

Despite its passive-like interpretation, the impersonal construction does not allow for prefixed agreement with the remaining main-clause argument:

- (12) ko-ye-mwaa-an kɔlɛ/(*a-lɛ) ko-Ø-ruuja tuyə amut
 PST-IMP-tell-1sg.OBJ that/1sg-C PST-3-sleep cows yesterday
 ‘I was told that the cows slept yesterday.’ (or, ‘it was told to me ...’)

This is not altogether surprising, as the object in these instances has not been promoted to subject (instead being marked as an object clitic on the matrix verb). Rather than a commentary on the possibility of agreeing with derived subjects, then, this serves as another illustration of non-subjects being unable to trigger prefixed complementizer agreement.

Instead, a default agreement morpheme (*kɛ-*) is available on complementizers in impersonal constructions, occurring with matrix objects of any φ -feature set:

- (13) a. ko-ye-mwaa-an (kɛ-lɛ) yo-Ø-ruuja tuyə amut
 PST-IMP-tell-1sg.OBJ DEF-C PST-3-sleep cows yesterday
 ‘I was told that the cows slept yesterday.’
 b. ko-ye-mwaa-wɔɔy (kɛ-lɛ) yo-Ø-ruuja tuyə amut
 PST-IMP-tell-2pl.OBJ DEF-C PST-3-sleep cows yesterday
 ‘You (pl) were told that the cows slept yesterday.’

We conclude that *kɛlɛ* is an agreeing form with default agreement (rather than a non-agreeing form); the reasoning and evidence for this is explored in §2.7.

2.5 (Non-)Locality Effects for Subj-CA

A standard feature of the Agree operation (and agreement phenomena crosslinguistically) is that it is subject to locality effects: a head must agree with the

⁵ Impersonal constructions appear segmentally identical to an active sentence with a first person plural subject, but the constructions are distinguishable by different tone patterns on the verb.

structurally closest accessible DP (Chomsky, 2000, 2001). In this section we describe the ways in which Kipsigis Subj-CA does not accord with a straightforward Agree operation, as well as showing other patterns relating to the (non-) locality of Subj-CA.

2.5.1 Subj-CA Possible Over an Intervening Object

In Lubukusu CA, non-subjects in the matrix clause do not intervene in CA (Diercks 2013). Similarly in Kipsigis, the Subj-CA pattern is not disrupted by overt objects in the matrix clause:

- (14) ko-(i)-mwɔɔ-tʃi laakwet (i-lɛ) ko-Ø-ruuja tuyɑ amut
 PST-2sg-tell-3.OBJ child 2sg-C PST-3-sleep cows yesterday
 ‘You (sg) told the child that the cows slept yesterday.’

This object non-intervention pattern, shared by Kipsigis and Lubukusu CA, has also been documented in Ibibio (Torrence 2016) and Ikalanga (Letsholo & Safir 2017).

2.5.2 Subj-CA out of Noun Complement Clauses

In Lubukusu, a complementizer inside a noun complement clause (NCC) can agree with the main-clause subject. This is constrained by the presence of an intervening possessor of that noun phrase, which cannot itself trigger CA but prevents CA with the main clause subject (Diercks 2013: 378).

The same pattern occurs in Kipsigis, though our consultants differed in their judgments on the acceptability of agreeing forms of the complementizer in NCCs. One did not find these constructions acceptable, while the other provided them readily and robustly.⁶ For our consultant who accepts it, a complementizer in a NCC may agree with the main clause subject in appropriate contexts:

- (15) a. ko-a-ibut loyujuwɛk (%a-lɛ) ko-Ø-ruuja tuyɑ amut
 PST-1sg-bring news %1sg-C PST-3-sleep cows yesterday
 ‘I brought news that cows slept yesterday.’
 b. a-tɿɛ kajɛnɛt (%a-lɛ) /kɔlɛ/*kɛ-lɛ ko-Ø-it layok
 1sg-have belief/faith 1sg-C/that/*DEF-C PST-3-arrive children
 ‘I have belief/faith that the children arrived.’

⁶ We annotate this interspeaker variation on the examples with a % symbol.

- c. ko-**a**-mwaa atindoniot $\overline{\%a-l\epsilon}$ /kɔlɛ/*kɛ-lɛ ko-Ø-it layok
 PST-1sg-tell story %1sg-C/that/*DEF-C PST-3-arrive children
 ‘I told the story that the children arrived.’

As in Lubukusu, the presence of a possessor inside the noun phrase degrades Subj-CA in Kipsigis. Example (16) is the equivalent of (15c), with the difference that a possessor is added to the noun phrase in (16), resulting in unacceptability of the agreeing complementizer (for both consultants).

- (16) ko-**a**-mwaa atindoniot ap Kiproono kɔlɛ/ $\overline{*a-l\epsilon}$ ko-Ø-it layok
 PST-1sg-tell story of Kiproono that/*1sg-C PST-3-arrive children
 ‘I told Kiproono’s story that the children arrived.’

In the words of one of our consultants regarding (16), “there is something very confusing about the sentence with *alɛ* ... it feels like saying I am the one who’s saying that children arrived, but it’s Kiproono’s story, so there’s a disconnection. So *alɛ* is not the best word to put there.” This replicates the Lubukusu NCC pattern, for one, but it also seems to suggest an interpretive link between the source of the information in the embedded clause and the agreement trigger on CA. These interpretation considerations of the Subj-CA pattern will be explored in §2.7.

2.6 Intermediate Conclusions: Prefixed (Subj-) CA

The list in (17) summarizes the properties of Kipsigis Subj-CA, which largely replicate the Lubukusu patterns of complementizer agreement (Diercks 2013) and are consistent with the other languages with similar constructions (to the extent that parallel facts have been reported).

- (17) Properties of Kipsigis Prefixed (Subj-) CA
- a. Prefixed (Subj-) CA targets the most local superordinate subject.
 - b. Objects in the matrix clause cannot trigger Subj-CA, nor do they intervene in Subj-CA.
 - c. Impersonal constructions only allow a default agreeing form.
 - d. Subj-CA can occur within a noun complement clause (NCC) for some speakers.

The next section looks more closely at the distinction between the agreeing and non-agreeing forms and describes the contexts in which these interpretive differences arise.

2.7 Interpretation of Subj-CA

There are clear interpretive differences between Kipsigis sentences containing an agreeing complementizer and those with a non-agreeing complementizer. Subtle interpretive effects are in fact well-established for upward-oriented agreeing complementizers; Lubukusu agreeing complementizers serve as an indicator of confidence in the source of the speaker's asserted information (Diercks 2013). However, the interpretation of the Kipsigis agreeing pattern is non-identical to the reported Lubukusu pattern:

(18) Interpretive Properties of Kipsigis Subj-CA

- a. Subj-CA is most appropriate when the agreement trigger is the source of the information communicated in the embedded clause.
- b. Subj-CA is most appropriate when it heads a CP whose propositional content is being added to the Common Ground.

2.7.1 Information Source Effect on Subj-CA

The source of the information reported in the embedded clause plays an important role in the acceptability of Subj-CA. As demonstrated in the previous section, sentences such as the one in (19) are perfectly acceptable to speakers with both non-agreeing and agreeing complementizer forms.

- (19) ko-α-mwaa α-lɛ/kɔlɛ ko-Ø-ruuja tuyɑ amut
PST-1sg-say 1sg-C/that PST-3-sleep cows yesterday
'I said that the cows slept yesterday.'

Our consultants' judgments vary with respect to the acceptability of Subj-CA in the complement of a verb of hearing:

- (20) ko-α-yas (α-lɛ)/kɔlɛ ko-Ø-it layok
PST-1sg-hear 1sg-C/that PST-3-arrive children
'I heard that the children arrived.'

One consultant suggests that using Subj-CA in this context sounds more quotative, and the other that it sounds better if you are intending to inform your listeners of the information in the embedded clause. One speaker claimed that using the agreeing complementizer seemed to imply in some way that "the information is coming from you". Throughout our interviews our two main consultants regularly accepted Subj-CA in constructions like this, but both somewhat frequently hesitated over them as well.

The judgments for verbs of hearing become more clear if an explicit source of the reported information is added to the sentence. In these cases, Subj-CA is consistently ruled unacceptable.

- (21) ko-α-yas kobun Kiproono kɔɛ/(*α-lɛ) ko-Ø-ruuja tuyə amut
 PST-1sg-hear through Kiproono that/*1sg-C PST-3-sleep cows yesterday
 ‘I heard through Kiproono that the cows slept yesterday.’

Additional evidence comes from noun complement clauses (NCCs). As we saw above in §2.5.2, a complementizer heading a CP inside a NCC can agree with the main clause subject (the % again marking inter-speaker variation):

- (22) ko-α-ibu loyɔjɔt kɔɛ/(%α-lɛ) ko-Ø-ɪt layok
 PST-1sg-bring news(sg) that/%1sg-C PST-3-arrive children
 ‘I brought the piece of news that the children arrived.’

Note, however, that changing the verb to one in which the subject is definitively not the source of the information in the NCC makes Subj-CA comparatively unnatural for both speakers.

- (23) ko-α-yas loyɔjɔt kɔɛ/(??α-lɛ) ko-Ø-ɪt layok
 PST-1sg-hear news(sg) that/??1sg-C PST-3-arrive children
 ‘I heard the news (sg) that the children arrived.’

We conclude that a condition for Subj-CA is that the referent of the agreement trigger be contextually interpretable as a source of the information communicated in the embedded clause.

2.7.2 Common Ground Distinguishes Subj-CA

An additional interpretive effect of Subj-CA is that the agreeing complementizer is most naturally used when information reported in the embedded CP is being added to the Common Ground. In contrast, when information is already in the Common Ground (or is being treated as already in the Common Ground), the non-agreeing complementizer is most natural. Consider (24a) and (24b), distinguished only by the agreeing vs. non-agreeing complementizer.

- (24) a. ko-α-mwɔɔ-tʃi Kibeet (α-lɛ) ko-Ø-ɪt tuyə amut
 PST-1sg-tell-3.OBJ Kibeet 1sg-C PST-3-arrive cows yesterday
 ‘I told Kibeet that the cows arrived yesterday.’

- b. ko-a-mwɔɔ-tʃi Kibeet (kɔɛ) ko-Ø-ɪt tuya amut
 PST-1sg-tell-3.OBJ Kibeet that PST-3-arrive cows yesterday
 ‘I told Kibeet that the cows arrived yesterday.’

Though the truth conditions of both sentences are identical, specific discourse contexts determine when each is felicitous.

- (25) *Context 1: You (the addressee) and I (the speaker) were together yesterday, and when we were together we saw the cows arrive. Then today I see you, and I want to tell you that I told Kibeet this fact.*

In Context 1 where the embedded clause’s proposition is in the common ground, the non-agreeing complementizer in (24b) is very natural, but the agreeing complementizer in (24a) is infelicitous. Now consider a different context:

- (26) *Context 2: You were not aware that the cows arrived yesterday and I am using this opportunity to inform you not only that I told Kibeet about the cows, but also that the cows arrived.*

In contrast, in Context 2 where the arrival of the cows is not in the common ground, the agreeing complementizer (24a) becomes much more natural, and the non-agreeing complementizer (24b) is now relatively infelicitous. This distinction is also evident with a verb of understanding, as in (27).

- (27) ki-yuitosi kɔɛ/kɛ-lɛ ko-Ø-ruuja tuya amut
 1pl-understand that/1pl-C PST-3-sleep cows yesterday
 ‘We understand that the cows slept yesterday.’

For this type of sentence, the non-agreeing complementizer (*kɔɛ*) is natural in a context where the information in the embedded clause is inconsequential, i.e. when everyone is aware that the cows slept. On the other hand, the agreeing complementizer (*kɛɛ*) would be used in (27) given a different context in which the information in the embedded clause is introduced into the common ground, such as this one: *You and your friend’s cows slept on another person’s plants and you are both now in a lawsuit with them. In that situation someone might assert for the record, “We understand that the cows slept yesterday.”* We conclude that the agreeing complementizer is most natural in contexts where information is being (intentionally) added to the common ground, whereas the non-agreeing complementizer treats information as previously established in the common ground.

One possible avenue of analysis given this conclusion is that the agreeing complementizer is somehow associated with assertion, and the embedded clauses

using such a complementizer are embedded assertions (by ‘assertion’ we mean something that overtly adds a proposition to the common ground). However, agreeing complementizers can readily occur in a variety of non-asserted contexts, suggesting that assertion alone is not the proper explanatory category of what contexts allow the agreeing complementizer. For space concerns we cannot include this evidence here, but the data are available in Rao 2016.

2.7.3 CP as the Main Point of the Utterance (MPU)

We posit that the most appropriate description of the interpretive effect of Kipsigis CA is that the agreeing complementizer is possible when the embedded clause is the main point of the utterance (MPU) of the clause. According to Simons (2007) “the main point of an utterance U of a declarative sentence S is the proposition p, communicated by U, which renders U relevant,” where relevance is assumed to be essentially Gricean relevance (Grice 1975).

(28) Proposed Analysis for Interpretive Effect of Kipsigis CA

The agreeing complementizer is possible when the embedded CP is the main point of the utterance (MPU).

A diagnostic for MPU is offered by (Simons 2007: p. 1036), in which a yes/no question is answered by information that is presented in an embedded clause, thus ensuring that the content of the embedded clause is the MPU. The hypothesis in (28) makes clear predictions in relation to this diagnostic: the agreeing complementizer should be felicitous—and *kɔlɛ* infelicitous—in those cases where the embedded clause contains the MPU; this is confirmed in (29):⁷

- (29) a. Q: ko-Ø-ε ηoo βiiy?
 PST-3-drink who water
 ‘Who drank the water?’
 A: ki-bwɔɔti kɛ-lɛ/#kɔlɛ ko-Ø-ε βiiy tuya
 1pl-think 1pl-C/that PST-3-drink water cows
 ‘We think that the cows drank the water.’
 b. Q: ko-Ø-jaj nɛ laakwet?
 PST-3-do what child
 ‘What did the child do?’

⁷ In each of these cases consultants could find contexts in which the non-agreeing complementizer was allowed, usually requiring that the information in the embedded clause was being recalled from an earlier interaction. These, of course, are the exceptions that prove the rule.

A: ko-ɑ-mwaa ɑ-lɛ/#kɔlɛ ko-Ø-ɔɔn laakwet ɲdaaret
 PST-1sg-say 1sg-C/that PST-3-chase child snake
 ‘I said that the child chased a snake.’

MPU may well also capture the ‘source’ intuitions that we reported previously. If something is the main point of an utterance by the definition above, it emanates from the speaker of an utterance, as it is their contribution to the discourse. Overtly designating an alternative source of the information in the embedded CP may simply be incompatible with a speaker treating that CP as the MPU.

3 Suffixed Complementizer Agreement (Obj-CA)

In addition to the prefixed Subj-CA pattern discussed above, Kipsigis declarative-embedding complementizers can also agree with the matrix object, with a suffixed agreement morpheme (Obj-CA):

(30) Suffixed Complementizer Agreement Forms (Obj-CA)

	SG	PL
1st	-lɛ-ndʒ- an	-lɛ-ndʒ-ɛtʃ
2nd	-lɛ-ndʒ- in	-lɛ-ndʒ-ɔɔɣ
3rd	-lɛ-ndʒ-i	-lɛ-ndʒ-i

To our knowledge, this is an agreement pattern that is novel to the linguistic literature.⁸ Given its novelty, we present a full paradigm of Obj-CA forms in (31). These are translated with verum focus, a translation which is explained in §3.5.

- (31) a. ko-i-mwaa-(**an**) i-lɛ-(**ndʒan**) ko-Ø-it layok
 PST-2sg-tell-1sg.OBJ 2sg-C-1sg PST-3-arrive children
 ‘You (sg) DID tell me that the children arrived.’
 b. ko-i-mwaa-(**un**) ɑ-lɛ-(**ndʒin**) ko-Ø-it layok
 PST-1sg-tell-2sg.OBJ 1sg-C-2sg PST-3-arrive children
 ‘I DID tell you (sg) that the children arrived.’

⁸ Deal 2015 describes a complementizer agreement relation in Nez Perce that agrees with both subjects and objects, but that pattern targets embedded arguments, not main-clause arguments, and the agreement triggers are unambiguously determined structurally, rather than by grammatical function, as seems to be the case (on the surface) for Kipsigis.

- c. ko-i-mwaa-(tʃi) α-lɛ-(ndʒi) ko-Ø-ɪt layok
 PST-1sg-tell-3.OBJ 1sg-C-3 PST-3-arrive children
 ‘I DID tell him/her/them that the children arrived.’
- d. ko-i-mwaa-(weetʃ) i-lɛ-(ndʒeetʃ) ko-Ø-ɪt layok
 PST-2sg-tell-1pl.OBJ 2sg-C-1pl PST-3-arrive children
 ‘You (sg) DID tell us that the children arrived.’
- e. ko-i-mwaa-(wɔɔɣ) α-lɛ-(ndʒɔɔɣ) ko-Ø-ɪt layok
 PST-1sg-tell-2pl.OBJ 1sg-C-2pl PST-3-arrive children
 ‘I DID tell you (pl) that the children arrived.’

To our knowledge, suffixed Obj-CA is possible with any verb that embeds a CP and takes an additional object (mainly verbs of speech).

- (32) ko-α-tʃɔɔm-dʒi Kiproono α-lɛ-(α-lɛ-ndʒi) ko-Ø-ɪt tuyɑ amut
 PST-1sg-whisper-3.OBJ Kiproono 1sg-C/1sg-C-3 PST-3-arrive cows yest.
 ‘I whispered to Kiproono that the cows arrived yesterday.’⁹

In general, the Obj-CA appears to be syntactically optional, though we note below that it is licit only in very specific discourse contexts.

3.1 Suffixed CA Targets the Most Local Matrix Object

In contrast to the prefixed agreement pattern (Subj-CA), Obj-CA targets the matrix clause object. It cannot agree with the matrix subject.

- (33) ko-(α) -mwaa-un α-lɛ-ndʒin/*(α-lɛ-ndʒan) ko-Ø-ruuja tuyɑ
 PST-1sg-tell-2sg.OBJ 1sg-C-2sg.OBJ/*1sg-C-1sg.OBJ PST-3-sleep cows
 ‘I told you (sg) that the cows slept.’

Obj-CA can also only agree with the most local object, similar to Subj-CA:

- (34) ko-Ø-mwɔɔ-(tʃi) tʃɛpkɔɛtʃ Kiproono kɔɛ ko-α-mwaa-un
 PST-3-tell-3.OBJ Chepkoech Kiproono that PST-1sg-tell-2sg.OBJ
 α-lɛ-ndʒin/*(α-lɛ-ndʒi) ko-Ø-ruuja tuyɑ
 1sg-C-2sg.OBJ/*1sg-C-3.OBJ PST-3-sleep cows
 ‘Chepkoech told Kiproono that I told you that the cows slept (recently).’

⁹ Sentences with multiple complementizers (and therefore multiple interpretations) are translated without verum focus.

In multiple embeddings, it is possible to have multiple complementizers that display the suffixed CA pattern.

- (35) ko-Ø-mwɔɔ-tʃi tʃɛpkɔɛtʃ Kiproono kɔ-lɛ-ndʒi ko-ɑ-mwaa-un
 PST-3-tell-3.OBJ Chepkoech Kiproono 3-C-3.OBJ PST-1sg-tell-2sg.OBJ
ɑ-lɛ-ndʒin ko-Ø-ruuja tuyɑ
 1sg-C-2sg.OBJ PST-3-sleep cows
 ‘Chepkoech told Kiproono that I told you that the cows slept.’

In these ways, Obj-CA is very similar to the Subj-CA—showing similar locality constraints—with the significant differences of targeting of objects and appearing as a suffix on the complementizer.

3.2 Obj-CA Only Occurs on the Agreeing Complementizer

Notably, Kipsigis Obj-CA can only occur on the complementizer if it already demonstrates Subj-CA. The non-agreeing complementizer (i.e. *kɔlɛ* with a 1st or 2nd person subject) cannot bear object agreement:

- (36) ko-ɑ-mwaa-un ɑ-lɛ/ɑ-lɛ-ndʒin/kɔlɛ/*kɔlɛ-ndʒin ko-Ø-it
 PST-1sg-tell-2sg.OBJ 1sg-C/1sg-C-2sg.OBJ/that/*C-2sg.OBJ PST-3-arrive
 tuyɑ amut
 cows yesterday
 ‘I told you that the cows arrived yesterday.’

The *kɔlɛndʒin* form of the complementizer is acceptable only when it is in fact the agreeing complementizer, i.e. agreeing with a third person subject.

- (37) ko-Ø-mwaa-un Kiproono kɔ-lɛ-ndʒin ko-Ø-it tuyɑ amut
 PST-3-tell-2sg.OBJ Kiproono 3-C-2sg.OBJ PST-3-arrive cows yesterday
 ‘Kiproono told you (sg) that the cows arrived yesterday.’

It appears then, that Obj-CA is parasitic on Subj-CA (we briefly discuss the significance of this fact in §4).

3.3 Obj-CA in NCCs

Obj-CA can occur in a noun complement clause (NCC) for our consultant who also accepts Subj-CA in NCCs.¹⁰

¹⁰ Inter-speaker variation is again marked with a %.

- (38) a. ko-a-mwaa-un atindoniot kɔle/%a-le/(%a-le-ndʒin)
 PST-1sg-tell-2sg.OBJ story that/%1sg-C/%1sg-C-2sg.OBJ
 ko-Ø-it layok
 PST-3-arrive children
 ‘I told you (sg) the story that the children arrived.’
 b. ko-i-mwaa-an atindoniot kɔle/%i-le/(%i-le-ndʒan)
 PST-2sg-tell-1sg.OBJ story that/%2sg-C/%2sg-C-1sg.OBJ
 ko-Ø-it layok
 PST-3-arrive children
 ‘You (sg) told me the story that the children arrived.’

3.4 Suffixed (Obj-) CA in Impersonal Constructions

We demonstrated in §2.4 above that Subj-CA cannot agree with the remaining DP argument in an impersonal construction, which is appropriate given that this argument is not promoted to subject in a Kipsigis impersonal. Accordingly, the Obj-CA forms may appear on the complementizer in an impersonal construction.

- (39) a. ko-ye-mwaa-an ke-le/kɔle/*a-le/(%kɔle-ndʒan)/(ke-le-ndʒan)
 PST-IMP-tell-1sg.OBJ DEF-C/that/*1sg-C/*C-1sg.OBJ/DEF-C-1sg.OBJ
 ko-Ø-it layok
 PST-3-arrive children
 ‘I was told that the children arrived.’
 b. ko-ye-mwaa-un ke-le/kɔle/*i-le/(%kɔle-ndʒan)/(ke-le-ndʒin)
 PST-IMP-tell-2sg.OBJ DEF-C/that/*2sg-C/*C-2sg.OBJ/DEF-C-2sg.OBJ
 ko-Ø-it layok
 PST-3-arrive children
 ‘You were told that the children arrived.’

Crucially here the *kele* form of the agreeing complementizer must be used. Recall from above that Obj-CA is not possible on the non-agreeing *kɔle* complementizer. Taken together with these facts, this evidence supports the conclusion that *kele* is in fact a default form of the agreeing complementizer (rather than a non-agreeing complementizer), as it may bear object agreement in impersonal constructions where there is no discernible subject to trigger Subj-CA. These facts have some analytical significance, as discussed in §4.

3.5 Interpretation of Obj-CA

The main function of Obj-CA seems to be to add emphasis to an utterance, particularly in the manner of *verum focus*. Verum focus is defined by Höhle (1992) as placing “emphasis on the truth of the proposition it takes scopes over.” It therefore has no effect on the truth conditions of the statement. Verum focus is achieved in English by inserting *do* into a declarative sentence.

- (40) Q: What did Mike eat?
 A1: He ate a cookie.
 A2: #He DID eat a cookie. [*Verum Focus*]

Here, the proposition that Mike ate the cookie is not yet in the common ground and so the verum focus construction in (A2) is infelicitous. If the question was “Did Mike eat a cookie”, (A2) would be felicitous. Now instead, consider a context in which the addressee does not believe that Mike ate a cookie.

- (41) Challenge: Mike didn’t eat a cookie!
 Response 1: #He ate a cookie.
 Response 2: He DID eat a cookie. [*Verum Focus*]

The proposition that Mike ate a cookie is already in the common ground, so Response #2 is acceptable. It does not necessarily assert that Mike ate the cookie, but rather reinforces the speaker’s confidence that Mike ate the cookie.

Now consider the following sentences in Kipsigis, differing only in the presence/absence of Obj-CA marking:

- (42) a. ko-α-mwaa-un (α-lɛ) ko-Ø-ruuja tuyā **No Obj-CA**
 PST-1sg-tell-2sg.OBJ 1sg-C PST-3-sleep cows
 ‘I told you that the cows slept.’
 b. ko-α-mwaa-un (α-lɛ-ndʒin) ko-Ø-ruuja tuyā **Obj-CA**
 PST-1sg-tell-2sg.OBJ 1sg-C-2sg.OBJ PST-3-sleep cows
 ‘I told you that the cows slept.’

Note that the truth conditions for both sentences are the same (i.e. I gave you the information that the cows slept). However, the acceptability of the object-agreeing complementizer varies in different discourse contexts.

- (43) *Context 1: You and I were talking about the cows yesterday and I told you that the cows slept. Today, I talk with you again and you say “I didn’t know that the cows slept yesterday. You never told me!” I counter this with one of the responses in (42).*

Given this context, the object-agreeing complementizer (*alendzin*) in (42b) is perfectly acceptable. One consultant had an intuition that the object-agreeing complementizer was best when the speaker was “being challenged somehow”; in this case the listener doubts that the speaker told them about the cows. This is similar to the earlier provided example of verum focus in (41), but here the content in question is in the embedded clause. Let us consider another context:

- (44) *Context 2: You and I talked about the cows and I told you that the cows slept. The next day, I talk with you and you say “Someone told me that the cows slept, but I don’t remember who it was.”*

In Context 2, in contrast, the Obj-CA construction in (42b) is dispreferred. Like above, our consultant’s reaction to this context was to point out that Obj-CA “is better for when someone is challenging you”. Like the example in (40), the addressee is asking for information rather than asserting a proposition that requires the speaker to confirm the truth of a statement. Obj-CA therefore appears to be licit in contexts where verum focus is licit.

3.6 Intermediate Conclusions: Suffixed (Obj-) CA

Object agreement on complementizers is possible in Kipsigis and has a number of properties similar to that of Subj-CA:

- (45) Properties of Suffixed (Obj-) CA in Kipsigis Similar to Subj-CA
- The target of Obj-CA is constrained to the most local main clause.
 - The pattern is acceptable within a noun complement clause (NCC) for some speakers.
 - The agreement pattern has the appearance of targeting a constituent of a particular grammatical function (Obj-CA targets objects, Subj-CA targets subjects)

On the other hand, there are also some properties that make this agreement pattern distinct from Subj-CA:

- (46) Properties of Suffixed (Obj-) CA in Kipsigis Distinct from Subj-CA
- Obj-CA agrees with the main-clause object, not the subject.
 - Obj-CA can only occur on a Subj-CA complementizer, but Subj-CA can appear without Obj-CA.
 - There is no default Obj-CA (cf. Subj-CA in impersonals)
 - Obj-CA triggers a verum-focus reading of the sentence.

4 Conclusions

4.1 Brief Analytical Comments

Given space constraints we cannot fully discuss the theoretical consequences of these empirical patterns, but we offer a few thoughts here on the direction of analysis where we believe this work ought to lead. The most salient theoretical question that arises centers on the question of the directionality of Agree, which has been the subject of some discussion in the last decade (e.g. Chomsky 2001; Preminger 2013; Zeijlstra 2012; Wurmbrand 2011; Bjorkman & Zeijlstra 2014; Béjar & Rezac 2009; Baker 2008; “” Carstens 2016; Diercks, van Koppen & Putnam 2016). While the Subj-CA facts here (for the most part) simply re-affirm the urgency of establishing a theory of agreement that can accommodate this sort of upward-oriented agreement pattern, the Obj-CA facts enter a new pattern into the theoretical discussion.

Reflecting on Obj-CA for a moment, we are faced with a critical question: if agreement patterns are determined structurally, rather than linked directly with notions like grammatical functions (as a long history of generative theorizing has claimed), it is not clear how to explain how two agreement relations on the same head systematically target DPs with distinct grammatical functions (subjects vs. objects). On verbal forms this is usually accomplished by positing different structural positions for the object-related morphology and the subject-related morphology. But in this instance the head (C) is structurally lower than *both* the matrix subject and object, and even if decomposed into more abstract components, both of those components would be subject to the same structural obstacles to an Agree relation. And while Diercks (2013) proposed that Lubukusu Subj-CA could be analyzed essentially as a self-anaphor, to our knowledge there are no strictly *object-oriented* anaphors, leaving the Kipsigis Obj-CA relation unexplained.

A first step toward an analysis is based on the fact that the agreement morpheme on Subj-CA seems to be obligatory when the complementizer is used (hence, default agreement in impersonal constructions), whereas Obj-CA has no default form, therefore appearing “optionally” on the Subj-CA complementizer. Facts like these have long been taken as indicative of a morphosyntactic difference: perhaps Subj-CA is an agreement morpheme, but Obj-CA is a clitic (in a clitic-doubling configuration with the matrix object). This doesn’t answer every question about how Subj-CA and Obj-CA successfully target their respect agreement triggers, but at least reframes the question in largely familiar terms (subject agreement and object clitic doubling).

That raises an even more critical question, however: how can a matrix object

be clitic-doubled on a functional head that (by widely accepted assumptions) is *always* structurally lower than the base position of the object (heading a complement clause)? Most analyses of clitic doubling (see Roberts 2010; Kramer 2014; Harizanov 2014 for recent versions) rely rather critically on a c-command configuration between the clitic site and the DP object. To maintain these (otherwise quite successful) approaches to clitic doubling, we would be forced to claim that the agreeing complementizer with Subj-CA and Obj-CA in fact C-commands the DP object. On the face of it, such a proposal seems implausible: why/how would a complementizer be in the middlefield of the matrix clause?

However, this kind of analysis is precisely what has been proposed by Carstens (2016) and Diercks et al. (2016) to explain Lubukusu CA. Carstens claims this is a consequence of the Agree relation proper, whereas Diercks, van Koppen & Putnam propose a derivative feature valuation operation called anaphoric agreement composed of movement + Agree (based on Rooryck & Vanden Wyngaerd 2011). Setting those differences aside, both accounts propose that a Subj-CA construction consists of the complementizer moving covertly into the matrix clause (to the edge of *v*P, from which position agreement is possible via a standard downward-probing Agree relation). The Kipsigis Obj-CA facts yield an interesting new perspective on these otherwise quite abstract proposals; for Obj-CA to be the clitic-doubling operation it appears to be, the complementizer would in fact need to be represented in the main clause at some point in the derivation.

Initial evidence from Kipsigis suggests that this is in fact a promising approach: it is possible for a complementizer to *overtly* raise into the main clause, preceding overt arguments in the main clause (and essentially substituting for an otherwise null main verb of speech):¹¹

- (47) kɔ-lɛ-ndʒin Kiproono ko-Ø-ruuja tuyɑ amut
 3-C-2sg.OBJ Kiproono PST-3-sleep cows yesterday
 ‘Kiproono told you that the cows slept yesterday.’

This line of analysis has promise to inform us not only about nature of agreement itself, but also about the structural nature of complementation. Therefore,

¹¹ Similar constructions where a complementizer substitutes for a verb of speech have been reported by Kawasha (2007) for a variety of central Bantu languages, and have also been encountered by Diercks for some Lubukusu speakers (fieldnotes). This is therefore not peculiar to the Kipsigis pattern (though, notably, the SVO word order of the other languages does not clarify the position of the complementizer in the same way that Kipsigis’ verb-initial word order allows for). Note that for examples like (47), an inflectional difference between complementizers and main verbs makes clear that the clause-initial element is in fact a complementizer.

while these analyses require a large amount of detailed work and additional evidence, we can begin to see the sorts of theoretical significance that can emerge in relation to the kinds of facts reported here.

4.2 Summary

This paper describes an upward-oriented complementizer agreement relation in Kipsigis. Many of these properties are also shared by the CA patterns in a variety of languages, demonstrating a growing empirical consensus about the nature of upward-oriented complementizer agreement.¹² While subject-oriented CA constructions (Subj-CA) are becoming more well-known, we have also documented an object-oriented CA construction (Obj-CA), which is a novel contribution to the linguistic literature (to our knowledge). In addition to describing the morphosyntactic properties of both Subj-CA and Obj-CA, we discussed the interpretive consequences of each (both related to their felicitous use in different discourse contexts, rather than truth-conditional semantic differences). While this final section includes some commentary on broader analytical questions, due to space concerns we cannot tackle the deeper theoretical questions that are raised by upward-oriented complementizer agreement (both Subj-CA and Obj-CA); these include the nature of feature valuation/Agree, phases, and counter-cyclic operations in syntax (among others). We refer the reader to the work cited throughout the paper for more depth with these issues, and specifically to Diercks, van Koppen & Putnam (2016) for an account that can accommodate the facts presented here.

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¹² Though, of course, individual languages continue to add new wrinkles, for example Ikalanga's influence of tense/voice on CA (Letsholo & Safir 2017).

the project and worked on the empirical and theoretical questions together. The first complete written version of this work was the second author's undergraduate thesis at Pomona College, which was revised for publication by the first author.

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