



“Say”-based complementation: Insights from Kipsigis

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Kipsigis (Nilotic, Kenya) has been reported to have upwards-oriented complementizer agreement with a matrix subject (Diercks and Rao 2019, Diercks et al. 2020).¹

- (1) a. \hat{u} :ŋgén \hat{u} :lé Ø-rú-è Kíbê:t.
1SG-know 1SG-C 3-sleep-IPFV Kibeet.NOM
‘I know that Kibeet is sleeping.’
- b. \hat{i} :ŋgén \hat{i} :lé Ø-rú-è Kíbê:t.
2SG-know 2SG-C 3-sleep-IPFV Kibeet.NOM
‘You know that Kibeet is sleeping.’
- c. \hat{i} :ŋgèn Kíplàngàt **kò**-lé Ø-rú-è Kíbê:t.
3-know Kiplangat.NOM 3-C 3-sleep-IPFV Kibeet.NOM
‘Kiplangat knows that Kibeet is sleeping.’

Main claim:

- The C-agreement pattern raises questions about the directionality and locality of agreement.
- We argue that what has been described as a “say”-based complementizer in the language is in fact the lexical verb “say”.
- Complementizer agreement in Kipsigis is logophoric agreement between a verb and its (often covert) local subject.
- Our theory makes use of an eventuality-based model of attitude and speech reports, where ‘say’-based complementation instantiates $\langle v, t \rangle$ -type clausal complements.

¹The following abbreviations are used: 1/2/3 = 1st/2nd/3rd person, APPL = applicative, C = complementizer, IND = indicative, IMP = impersonal, IPFV = imperfective, NOM = nominative, PST = past, PERF = perfect, PL = plural, SG = singular, SUBJ = subjunctive

Tone is transcribed whenever possible, but some transcriptions are incomplete because of sound difficulties in Skype elicitation. Additionally, the tone on *le* is always transcribed as H, but it should be noted that it sometimes becomes low when it is followed by a word that starts with a H tone. The details of this sandhi phenomenon are currently not well-understood.

1 Previous accounts of upwards-oriented C agreement

- A number of African languages have been reported to display upwards-oriented complementizer agreement, where C agrees with the matrix subject (e.g. Baker (2008) on *Kinande*, Idiatov (2010) on *Mande languages*, Diercks (2013) on *Lubukusu*, Duncan and Torrence (2017) on *Ibibio*, Nformi (2017) on *Limbum*, Diercks and Rao (2019) on *Kipsigis*, Letsholo and Safir (2019) on *Ikalanga*).²
- This is different from the well-studied pattern in Germanic, where C agrees with the subject of the embedded clause (Shlonsky 1994, Zwart 1997, van Koppen 2005, 2012, Fuß 2008, 2014, Haegeman and van Koppen 2012).
- Two questions are addressed regularly within the literature on upwards-oriented complementizer agreement: a) the direction of Agree and b) the nature of the goal.
- Upwards-oriented agreement via ...

... upward Agree directly between the embedded C head and the matrix subject (Nformi 2017, Letsholo and Safir 2019, McFadden and Sundaresan 2020)

(2) *Upward Agree account*

[_{vP} SUBJECT_[φ] ... [_{ForceP} FORCE_[uφ] ... [_{FinP} ... [_{TP} SUBJECT ...]]]]

... downward Agree with an additional (covert) movement step of the embedded complementizer prior to Agree (Carstens 2016, Diercks and Rao 2019, Diercks et al. 2020)

(3) *Movement + Downward Agree account*

[_{vP} FORCE_[uφ] [_{vP} SUBJECT_[φ] ... [_{ForceP} <Force> ... [_{FinP} ... [_{TP} SUBJ ...]]]]]]

- Whereas Upward Agree accounts make the subject uniformly the target, downward Agree approaches differ in terms of the agreement goal.
 - Direct Agree between (moved) complementizer and matrix subject (Carstens 2016)
 - Complementizer first agrees with an anaphor, which is subsequently bound by the matrix subject (Diercks 2013), cf. also Baker (2008)
 - Complementizer moves to the matrix clause to check anaphoric ϕ -features (Diercks and Rao 2019, Diercks et al. 2020)

2 C-agreement in Kipsigis

2.1 Background on Kipsigis

- 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 et al. 2020).

²Outside of Africa, a similar phenomenon has been reported for the Trans-New Guinean language *Teiwa* (Sauerland et al. 2020).

- The language is pro-drop, and it has VSO word order (Bossi and Diercks 2019) and a marked nominative case system (Toweett 1979, Kouneli 2019).³
- Unless otherwise indicated, data in this handout come from original fieldwork.⁴

2.2 The pattern: prefixal agreement

- The Kipsigis complementizer consists of the root of the lexical verb *le* ‘say’ and a person/number agreement prefix.⁵

(4) a. â:-ŋgén â:-lé Ø-rú-è Kíbê:t.
 1SG-know 1SG-LE 3-sleep-IPFV Kibeet.NOM
 ‘I know that Kibeet is sleeping.’

b. Kà-ó-mwá ò:-lé Ø-rú-è Kíbê:t.
 PAST1-2PL-say 2PL-LE 3-sleep-IPFV Kibeet.NOM
 ‘You(pl) said that Kibeet is sleeping.’

- (5) **Agreement prefixes on *le***
 (=subjunctive subject prefixes for verbs of conjugation Class I)

	SG	PL
1	â:-	kè:-
2	ì:-	ò:-
3		kò-
imp		kè:-

- Diercks and Rao (2019) argue that the Kipsigis complementizer can only agree with the matrix subject.
- We do indeed find upwards-oriented agreement with the matrix subject with verbs from a variety of lexical classes (e.g. *ja:n* ‘to believe’, *mwa* ‘to say’, *rua:tit* ‘to dream’, *ta:m* ‘to falsely accuse’, *neret:f* ‘to be angry (about)’).

(6) α:-bwa:t-i â:-lé kà-Ø-tʃó:r Kíbê:t rabɪ:nɪk.
 1SG-think-IPFV 1SG-LE PST-3-steal Kibeet.NOM money
 ‘I think that Kibeet stole the money.’

- It is clear from our data, however, that the complementizer may agree with non-subject DPs in the matrix clause, a possibility that is not fully explored in Diercks and Rao (2019).

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

⁴We are grateful to Boniface Kemboi, Donald Kibeet, Enock Kirui, Wesley Kirui, Hillary Mosonik, Victor Mutai, Philemon Ronoh, and Nathan Rotich for their valuable work as linguistic consultants. We’d also like to thank Travis Major, Malte Zimmermann, and the audiences at the University of Potsdam, NYU, and Universität Leipzig for useful feedback.

⁵Diercks and Rao (2019) also report a non-agreeing form of the complementizer, but our speakers find this form ungrammatical. It is possible that there is dialectal (or speaker) variation, and we focus here on the uses of the agreeing form.

- Agreement with the source of information reported in the embedded clause:

(7) **Kà-∅-kás-ε:n-m** **Kíplàngàt** **kò-lé/î-lé** **kà-∅-tʃó:r**
 PST-3-hear-INST-2SG Kiplangat.NOM 3-LE/2SG-LE PST-3-steal
Kíbê:t **rabɪ:nɪk.**
 Kibeet.NOM money
 ‘Kiplangat heard from you that Kibeet stole the money.’

- Agreement with applied arguments that can act as a logophoric center:

(8) **Ko:α-mwai-te:tʃi** **Tfèbê:t** **ε:n tuɔjɛ:t** **à-lé/kò-lé** **kò:∅-tʃó:r**
 PST-1SG-say-IT-APPL Cheebet at meeting 1SG-LE/3-LE PST-3-steal
Kíbê:t **rabɪ:nɪk.**
 Kibeet.NOM money
 ‘At the meeting, I said on Cheebet’s behalf that Kibeet stole the money.’

- These data point towards logophoricity and we do find further evidence for a logophoric requirement:

- Agreement with inanimate sources is not possible (Charnavel and Sportiche 2016, Charnavel 2020a,b).⁶

(9) a. **Ka-a-kas-ε:n** **Alice à-lé/ko-le** **ka-kɔ-it**
 PST-1SG-hear-INST Alice 1SG-LE/3-LE PST-3.PERF-arrive
l̩:ɡò:k.
 children.NOM
 ‘I heard from Alice that the children arrived.’
 b. **Ka-a-kas-ε:n** **kurge:t à-lé/*ko-le** **ka-kɔ-it**
 PST-1SG-hear-INST door 1SG-LE/3-LE PST-3.PERF-arrive
l̩:ɡò:k.
 children.NOM
 ‘I heard from the door that the children have/had arrived.’

- Agreement with benefactive arguments that cannot act as logophoric centers is not possible.

(10) ***Ka-a-kas-ʃi** **Kíbê:t kò-lé** **∅-jɑ:tʃ-e** **ko-wa** **Nairobi.**
 PST-1SG-hear-APPL Kibeet 3-LE 3-must-IPFV 3.SUBJ-go Nairobi
 ‘I heard on Kibeet’s behalf that one should go to Nairobi.’

- The complementizer may also display impersonal agreement, with the form being morphologically identical to the impersonal form of lexical verbs in the subjunctive.⁷

⁶For some speakers, agreement with DPs denoting the source of information is not only sensitive to animacy, but also to how reliable the source is judged to be by the speaker (Culy 1994, Speas 2004). For example, in a context where Alice in (9-a) is known to be an unreliable person (e.g. someone who lies often), one consultant reports that that 3rd person agreement on *le* is no longer possible. Thanks to Deniz Özyıldız for the idea of investigating agreement with unreliable sources, and for creating the ‘unreliable Alice’ context.

⁷The impersonal construction in Kipsigis is syntactically active. Morphologically, it is expressed by combining a first-person plural subject agreement prefix with 3rd person tonal melody. In the subjunctive of CV verbs (such as *le*) there is no tonal difference between 1/2nd and 3rd person forms.

- (11) Kí:-ngèn kè:-lé Ø-rú-è Kíbê:t.
 1PL-know.IMP IMP-LE 3-sleep-IPFV Kibeet.NOM
 ‘It is known that Kibeet is sleeping.’

- For all of our speakers, impersonal agreement on the complementizer is also available for a wide range of fully inflected lexical verbs in the matrix clause.
- If the impersonal form of the complementizer is used, a hearsay or rumour interpretation arises.

- (12) Kà-Ø-kás Kíplàngàt kè:-lé kà-Ø-tʃó:r Kíbê:t rabɪ:nɪk.
 PST-3-hear Kiplangat.NOM IMP-LE PST-3-steal Kibeet.NOM money
 ‘Kiplangat heard that Kibeet stole the money.’ (Kiplangat heard a rumour that Kibeet stole the money, but he does not know with certainty whether this is true.)

- (13) Ko:-ɑ-ruɑ:tɪt kè:-lé kà-Ø-tʃó:r Kíbê:t rabɪ:nɪk.
 PST-1SG-dream IMP-LE PST-3-steal Kibeet.NOM money
 ‘I dreamed that Kibeet stole the money.’ (In my dream, Kibeet stole the money, but this was a rumour that I could not confirm with certainty in the dream)

- A form of *le* (morphologically) identical to the impersonal is used with content nominals:

- (14) [lɔgɔjwɛ:k **ke:-le/*ko-le** ko:-Ø-ki:tun Tʃé:bè:t] ko ko:-Ø-jaj Kíbê:t
 news KEE-LE/*3-LE PST-3-marry Cheebeet.NOM TOP PST-3-do Kibeet
 ko-ma-bajbaj.
 ADV-NEG-happy
 ‘The news that Chebet got married made Kibet unhappy.’

Interim conclusion:

The Kipsigis complementizer consists of the root *le* ‘say’ and an agreement prefix that tracks the logophoric center.

2.3 The pattern: suffixal agreement

- Diercks and Rao (2019) report a pattern of what they call *object agreement*, where the complementizer (optionally) agrees with the indirect object of the matrix verb (the examples are all from speech verbs).

- (15) ko-ɑ-mwaa-un ɑ-lɛ-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.’ (Diercks and Rao 2019: ex.3, p.371)

- In this case, the prefix on the complementizer tracks subject agreement, while the suffix tracks object agreement.

- We prefer the term *suffixal agreement* for this pattern because there are two types of object agreement: prefixal object agreement (for objects that act as the logophoric center) and suffixal object agreement (for indirect objects of speech verbs mostly).

3 The say-based complementizer is a verb

Main claim:

The Kipsigis agreeing complementizer is not a complementizer, but a lexical verb (*le* ‘say’).

Even though say-based complementizers have been linked to verbal properties before (e.g. Grimshaw 2015, Bondarenko 2020), analyses of these complementizers as elements of category V, and not C, have been sporadic in the literature (e.g. Koopman 1984, Koopman and Sportiche 1989, Kinyalolo 1993, Özyıldız et al. 2018, Demirok et al. 2020, Major and Torrence 2020).

3.1 *le* can be a matrix verb

- The verb *le* ‘say’ can act as a matrix verb. Crucially, the “complementizer” is ungrammatical in this case.

(16) **kà-∅-lé** Kíbê:t (***kò-lé**) ∅-rú-è là:kwè:t.
 PST-3-LE Kibeet.NOM (*3-LE) 3-sleep-IPFV child.NOM
 ‘Kibeet said that the child is sleeping.’

- The word order of the language is VSO, which makes it clear that *le* is in the position of the verb here.

3.2 *le* is inflected in the subjunctive mood

- Diercks and Rao (2019) and Diercks et al. (2020) argue that when *le* ‘say’ is used as a matrix verb, it is not base-generated in the matrix clause.
 - the complementizer raises to the matrix clause, where the main verb is a silent speech verb.
- Their analysis, however, cannot account for the following observation:
 - **The verb *le* ‘say’ is inflected in the indicative mood when used as a matrix verb, but in the subjunctive when used as a “complementizer”.**
- Kipsigis distinguishes between indicative and subjunctive mood for all lexical verbs (Toweett 1979, Creider and Creider 1989).
 - while various tense and aspect distinctions are made in the indicative, only two forms are distinguished in the subjunctive : the perfective and imperfective.

- the language lacks infinitives and the subjunctive is used in all subordinate clauses (reflected in the descriptive terminology: *subjunctive* for Creider and Creider 1989 and *governed verb form* for Toweett 1979).

- (17) a. Kì:-á-rú.
PST-1SG-sleep.IND
'I slept.'
- b. á-mátʃ-é à:-rú.
1SG-want-IPFV 1SG-sleep.SUBJ
'I want to sleep.'
- (18) a. Kì:-á-lé kì:-∅-tʃó:r Kíbê:t rabɪ:nɪk.
PST-1SG-LE PST-3-steal Kibeet.NOM money
'I said that Kibeet stole the money.'
- b. Kì:-á-mwá à:-lé kì:-∅-tʃó:r Kíbê:t rabɪ:nɪk.
PST-1SG-say 1SG-LE PST-3-steal Kibeet.NOM money
'I said that Kibeet stole the money.'

- for 3rd person subjects, the prefix is ∅ in most cells of the paradigm, while it is always *ko-* in the subjunctive.

- The mood inflection follows naturally if *le* is a verb:
 - indicative when used in the root clause
 - subjunctive when it is embedded under a matrix verb (in verbal complementation)

3.3 *Le* can inflect for Aspect

- *le* can inflect for Aspect even when used in complementation contexts (as a reminder, verbs in the subjunctive only make a perfective vs. imperfective distinction).

- (19) Ka-a-mwa-e a:-le/a:-le:ɪn ka-∅-tʃó:r Kíbê:t rabɪ:nɪk.
PST-1SG-say-IPFV 1SG-LE/1SG-LE.IPFV PST-3-steal Kibeet.NOM money
'I was saying that Kibeet stole the money.'

3.4 Applicative and reflexive morphology on *le*

- Remember the suffixal agreement pattern reported by Diercks and Rao (2019):

- (20) ko-a-mwaa-un a-ɛ-ndʒɪn ko-∅-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.' (Diercks and Rao 2019: ex.3, p.371)

(21) Suffixal agreement (Diercks and Rao 2019: 381)

	SG	PL
1	-lɛ-ndʒ-ɑn	-lɛ-ndʒ-ɛtʃ
2	-lɛ-ndʒ-in	-lɛ-ndʒ-ɔ:ɣ
3	-lɛ-ndʒ-i	

- We observe that all forms share not only *le*, but also a [ndʒ] consonant sequence. This indicates the possibility that there is a hidden morpheme present between *le* and the person/number suffixal agreement.
- We argue here that this is indeed the case, with the forms reported in (21) being decomposable into an allomorph of *le* – *le:n* –, followed by the applicative suffix *-tʃi*, followed by the regular object clitics in the language. We give an analysis in the Appendix.
- Regular phonological processes (e.g. voicing of obstruents after nasals and vowel coalescence rules; Kouneli 2019: Chapter 2) give the surface forms that we see in (21).⁸

(22) Suffixal agreement decomposed into APPL and object clitics

	SG	PL
1	-le:n-tʃi-ɑn (le:ndʒɑ:n)	-le:n-tʃi-ɛtʃ(le:ndʒɛtʃ)
2	-le:n-tʃi-in (le:ndʒi:n)	-le:n-tʃi-ɑ:k (le:ndʒɑ:k)
3	-le:n-tʃi (le:ndʒi)	

- The morphemes making up the forms in (22) are independently attested in the language:
 - The suffix *-tʃi* is the most common applicative morpheme (Toweett 1979, Rottland 1982, Creider and Creider 1989), used to introduce applied arguments with a variety of thematic roles (e.g. recipient, beneficiary).^{9, 10}
 - The object clitics that we have postulated are the regular object clitics in the language (Toweett 1979: p.209).
 - We make the claim that *le* has an allomorph *le:n* (see Zwarts 2004 for similar allomorphs for the cognate word in the Kalenjin dialect Endo).
- Reflexive morphology can also appear on *le*:¹¹

⁸Our [ATR] and vowel length transcriptions are slightly different from those in Diercks and Rao (2019). Their [ATR] transcriptions possibly contain typos, since they display mismatches in the [ATR] values of vowels within a single word, which is prohibited in Kipsigis: the language has a well-studied system of dominant [ATR] vowel harmony (Hall et al. 1974, Halle and Vergnaud 1981, Baković 2000, Nevins 2010).

⁹There is another applicative suffix *-e:n*, which is mostly used for sources and instruments (Toweett 1979, Rottland 1982).

¹⁰The applicative *-tʃi* has an allomorph *-ʃi* when attached to verbs ending in an alveolar obstruent. It also has the allomorph *-u* for 1/2 person applied arguments for most (but not all) lexical verbs. This has been analyzed as a specialized use of the ventive suffix *-u* in Kalenjin/Southern Nilotic languages (Rottland 1982, Creider and Creider 1989, Zwarts 2004, Mietzner 2009).

¹¹The suffix *-kɛ:* is unique in being outside of the [ATR] harmony domain of the verb.

- (23) ki-ke:r-e-ke:.
1PL-look-IPFV-REFL
'We are looking at ourselves/at each other.'
- (24) Ko:-Ø-tʃɑ:m-tʃi-ke: Kíbê:t ko-le:n-tʃi-ke: ηâ:m.
PST-3-whisper-APPL-REFL Kibeet.NOM 3-LE-APPL-REFL clever
'Kibeet whispered to himself that he's intelligent.'

- **The presence of applicative and reflexive/reciprocal morphology on *le* (even when it is used as a complementizer) strongly supports its analysis as a verb.**

4 Analysis

We adopt an eventuality-based framework where the relation between the attitude holder and the proposition is mediated by contentful eventualities.

Contentful eventualities

- Content nouns like *theory*, *belief*, and *rumour* do not take clausal arguments, rather *that*-clauses adjoin to such nouns (Stowell 1981, Grimshaw 1990, Kayne 2010, Sportiche 2016).
- *that*-clauses constitute predicates with propositional content, which undergo predicate modification with content nouns (Kratzer 2006, 2013, Moulton 2009, 2015).
- In order to get from individuals to their content, Kratzer introduces a content function *CONT* which if applied to an individual returns a set of possible worlds.

- (25) a. The [_{NP} theory [_{CP} that pigs fly]] actually has a lot of support.
b. $\llbracket \text{theory THAT pigs fly} \rrbracket = \lambda x_e [\text{theory}(x) \wedge \text{CONT}(x) = \{w : \text{pigs fly at } w\}]$
 \rightsquigarrow set of individuals such that they are a theory
the content of which is that pigs fly at w

- CPs can also denote sets of contentful eventualities (Kratzer 2013, Elliott 2016, 2017, Moulton 2019, Özyıldız et al. 2018, Demirok et al. 2020, Bondarenko 2020).
- These CPs are of type $\langle v, t \rangle$ and are able to combine with attitude predicates via predicate modification (assumption: external argument introduced via Voice making the attitude predicate of type $\langle v, t \rangle$).

- (26) a. Emma believes Jane to be clever.
b. $\llbracket \text{believes Jane to be clever} \rrbracket$
 $= \lambda e_v [\text{believe}(e) \wedge \text{CONT}(e) = \{w : \text{Jane is clever at } w\}]$
 \rightsquigarrow set of eventualities such that they are a belief the content of which is
that Jane is clever at w

- We analyze *le*-clauses as sets of contentful eventualities but take the obligatory subjunctive of *le* to be responsible for combining *le*-clauses with the matrix predicate.

4.1 The status of covert subjects

In section 2.2, we have given evidence for a logophoric requirement on the antecedents of agreement with *le*. Since *le* is a verb, it will introduce its own local subject. We now provide four arguments in favour of a *pro* analysis of this subject.

1. Analyzing the covert subject as an anaphor predicts *Anaphor Agreement Effects* (Rizzi 1989, Woolford 1999, Sundaesan 2016, Murugesan 2020), contrary to fact

↪ Kipsigis seems to display an AAE strategy in line with *anaphoric* agreement (Woolford 1999:264): complementary distribution of cliticization vs. reflexivization via ϕ -invariant verbal suffix *-ke:*

(27) K α - α -ke:r(*-an)-ke: / K α - α -ke:r-ke:(*-an)
 PST-1SG-SEE-1SG-REFL / PST-1SG-SEE-REFL-1SG
 ‘I saw myself.’

2. No c-command: *-le* agrees with the source even if the source is embedded in a PP

(28) Ka-i-kas [PP kobun **Kiplàngàt**] kè:lé/ **kò-lé**/ ì:lé kà- \emptyset -tʃó:r
 PST-2SG-hear from Kiplangat IMP-LE/ 3-LE/ 2SG-LE PST-3-steal
 Kíbê:t rabi:nik.
 Kibeet.NOM money
 ‘You heard from Kiplangat that Kibeet stole the money.’

3. No c-command: *-le* can sometimes agree with a discourse antecedent (see also the analysis for *kè:lé* in (38))

*Context: You are an investigative journalist and you have one **informant**. No one knows your **informant** but the people you talk to (incl. your editor) know you only get your information from **him**. So, you go to your editor and you say:*

(29) Ka-a-kas **kò-lé** kà- \emptyset -tʃó:r Kíbê:t rabi:nik.
 PST-1SG-hear 3-LE PST-3-steal Kibeet.NOM money
 ‘I heard that Kibeet stole the money.’

4. The subject can be made overt under certain conditions.

(30) Ka-a-mwa α :-le **ane:** kà- \emptyset -tʃó:r Kíbê:t rabi:nik.
 PST-1SG-say 1SG-LE 1SG PST-3-steal Kibeet.NOM money
 ‘I said that Kibeet stole the money.’

We conclude that the ϕ -morphology seen on *le* results from Agree with *pro*. This pronoun establishes co-reference with a logophoric antecedent in the matrix clause via the assignment function.

- We do not propose that the pronominal subject is bound indirectly by a covert binder which itself is coreferent with the antecedent, in contrast to what is often done for long-distance reflexives (Anand and Hsieh 2005, Anand 2006, Charnavel 2020b) or logophoric pronoun systems (Koopman and Sportiche 1989, Safir 2004, Speas 2004, Anand 2006).
- Instead, we encode the logophoric requirement as a presupposition of *le* itself.

4.2 Prefixal agreement

Main claim:

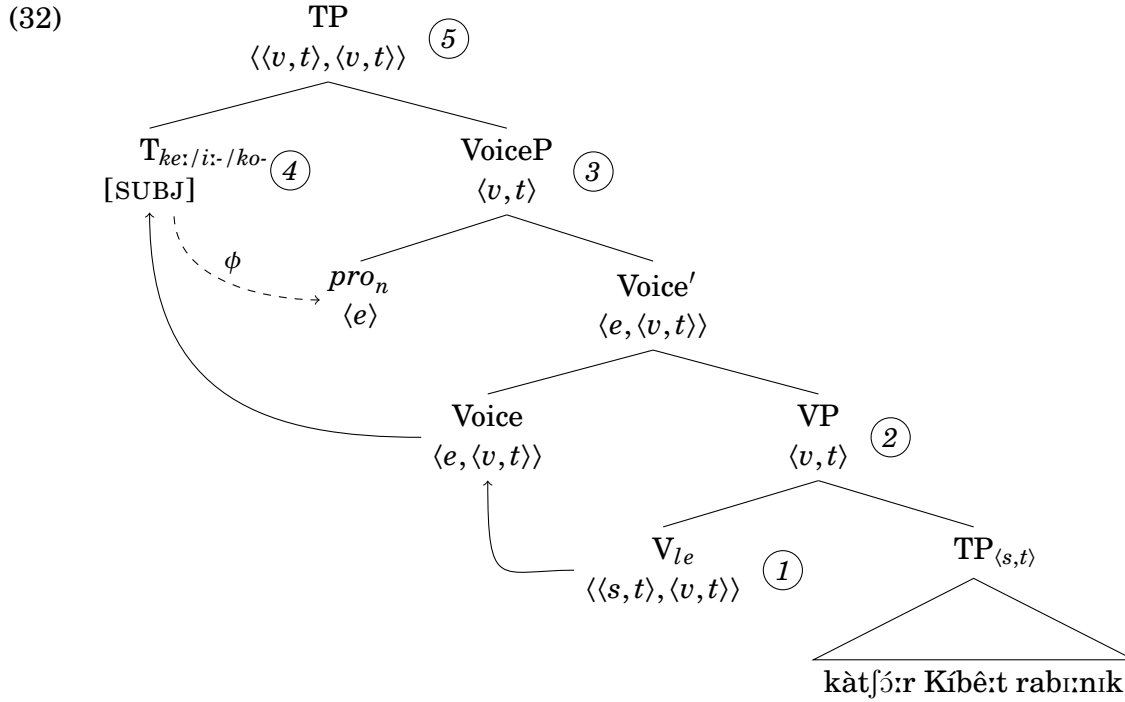
Embedded clauses headed by agreeing forms of *le* constitute sets of contentful eventualities, where the verbal nature of *le* ‘say’ is reflected in its semantics.

Assumptions:

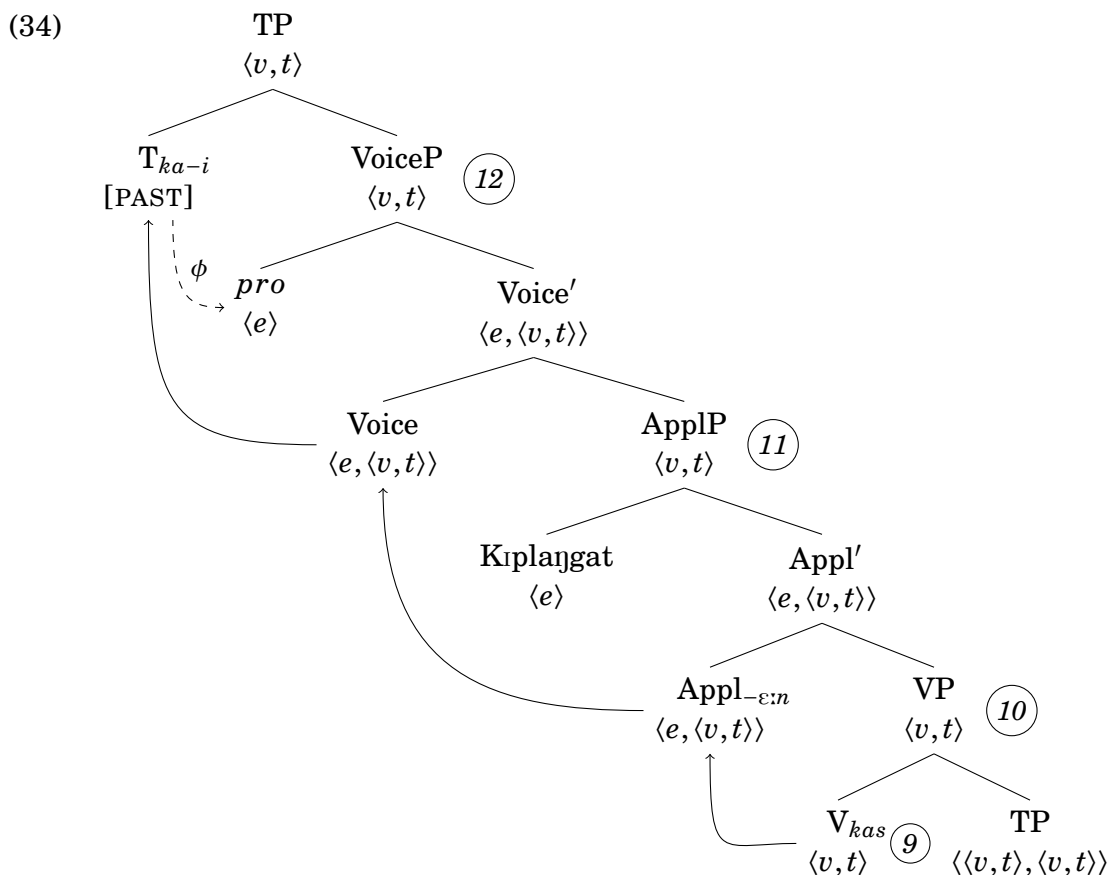
- Agreeing *le* is not a complementizer but a verbal category, introducing an eventuality and the content argument, and presupposing that the agent of the eventuality is the logophoric SOURCE (Sells 1987).
- Voice introduces the external argument (Kratzer 1996) and combines with its complement via *Event Identification* (same for Appl).
- V moves via Voice to T (or a higher projection, see Bossi and Diercks (2019)); T agrees downward with the logophoric subject.
- The subject is a free pronoun with its own set of ϕ -features serving as a goal for agreement with T.
- Subjunctive is introduced in T and serves as a causal linker between the saying event and the event introduced by the matrix predicate, see Özyıldız et al. (2018).

We now provide the structure for:

- (31) [TP Ka-i-kas-ε:n Kìplàngàt [TP ke:-le/ i:-le/ ko-le kà-Ø-tʃó:r
 PAST1-2SG-hear-APPL Kiplangat IMP-LE/ 2SG-LE/ 3-LE PAST1-3-steal
 Kíbê:t rabı:nık]]
 Kibeet.NOM money
 ‘You heard from Kiplangat that Kibeet stole the money.’



- (33) [(1)]^{w,g} = $\lambda p_{\langle s, t \rangle} \lambda e_v [say(e) \wedge CONT(e) = p]$,
 defined iff AG(e) qualifies as the logophoric SOURCE of p
 [(2)]^{w,g} = $\lambda e_v [say(e) \wedge CONT(e) = \{w : \text{Kibeet stole the money at } w\}]$
 [(3)]^{w,g} = $\lambda e_v [say(e) \wedge CONT(e) = \{w : \text{Kibeet stole the money at } w\} \wedge AG(e) = g(n)]$
 [(4)]^{w,g} = $\lambda P \lambda Q \lambda e'' . \exists e' [e' \sim e'' \wedge P(e') \wedge Q(e'')]$
 [(5)]^{w,g} = $\lambda Q \lambda e'' . \exists e' [e' \sim e'' \wedge say(e') \wedge CONT(e') = \{w : \text{Kibeet stole the money at } w\}$
 $\wedge AG(e') = g(n) \wedge Q(e'')]$, defined iff AG(e')
 qualifies as the logophoric SOURCE of $\{w : \text{Kibeet stole the money at } w\}$



- (35)
- $\llbracket \textcircled{9} \rrbracket^{w,g} = \lambda e_v [hear(e)]$
 - $\llbracket \textcircled{10} \rrbracket^{w,g} = \lambda e'' . \exists e' [e' \sim e'' \wedge say(e') \wedge CONT(e') = \{w : \text{Kibeet stole the money at } w\} \wedge AG(e') = g(n) \wedge hear(e'')]$
 - $\llbracket \textcircled{11} \rrbracket^{w,g} = \lambda e'' . \exists e' [e' \sim e'' \wedge say(e') \wedge CONT(e') = \{w : \text{Kibeet stole the money at } w\} \wedge AG(e') = g(n) \wedge hear(e'') \wedge SOURCE(e'') = \textit{kiplangat}]$
 - $\llbracket \textcircled{12} \rrbracket^{w,g} = \lambda e'' . \exists e' [e' \sim e'' \wedge say(e') \wedge CONT(e') = \{w : \text{Kibeet stole the money at } w\} \wedge AG(e') = g(n) \wedge hear(e'') \wedge SOURCE(e'') = \textit{kiplangat} \wedge EXP(e'') = g(i)]$, defined iff $g(i)$ is addressee¹² and $AG(e')$ qualifies as the logophoric SOURCE of $\{w : \text{Kibeet stole the money at } w\}$

The forms of **-le** result from ϕ -agreement with the local subject:

- (36) Ka-i-kas-ε:n pro_1 Kiplangat₂ **ì-lé** pro_1 kà-Ø-tjó:r K. rabı:nık.
PAST1-2SG-hear-APPL ↓ ↓ 2SG-LE ↓ PAST1-3-steal K. money
 Addr Kiplangat **Addr**

- (37) Ka-i-kas-ε:n pro_1 Kiplangat₂ **kò-lé** pro_2 kà-Ø-tjó:r K. rabı:nık.
PAST1-2SG-hear-APPL ↓ ↓ 3-LE ↓ PAST1-3-steal K. money
 Addr Kiplangat **Kiplangat**

¹² ϕ -features on pronouns denote partial identity functions of type $\langle e,e \rangle$ (Sauerland 2003, 2008, Heim 2008); for free pronouns the relevant assignment is given by the utterance context.

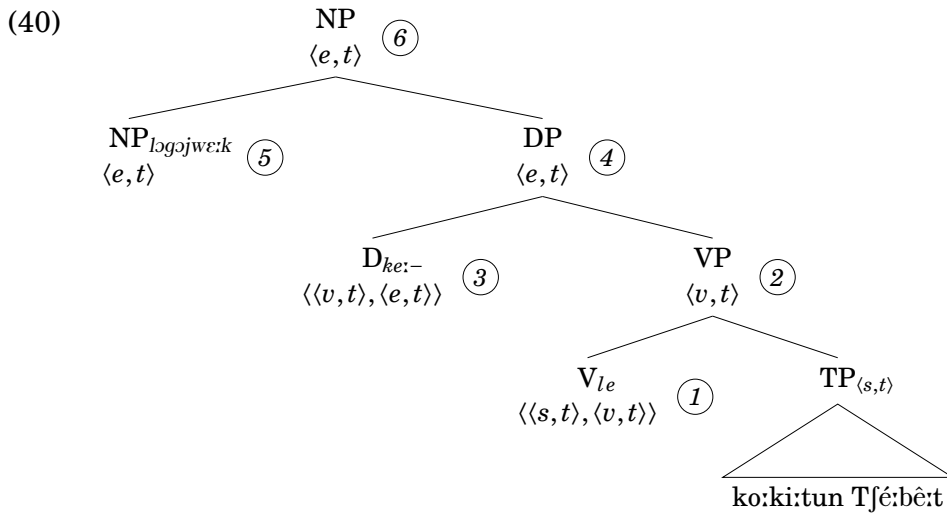
- (38) Ka-i-kas-ε:n *pro*₁ Kiplangat₂ **kè:-lé** *pro*₃ kà-∅-tʃó:r K. rabɪ:nɪk.
 PAST1-2SG-hear-APPL ↓ ↓ IMP-LE ↓ PAST1-3-steal K. money
 Addr Kiplangat **discourse antecedent**

4.3 Nominalized *le*

- Recall that a form of *le* (morphologically) identical to the impersonal is used with content nominals:

- (39) [lɔgɔjwɛ:k **ke:-le**/***ko-le** ko:-∅-ki:tun Tʃé:bê:t] ko ko:-∅-jaj Kibê:t
 news KEE-LE/*3-LE PST-3-marry Cheebet.NOM TOP PST-3-do Kibebet
 ko-ma-bajbaj.
 ADV-NEG-happy
 ‘The news that Chebet got married made Kibet unhappy.’

- We argue that *ke:le* here is a nominalized form of the verb, with *ke:le* being a default/unmarked form of the verb. This is consistent with the observation that this morphological form corresponds to the citation form of lexical verbs in the language.
- Here is a tentative analysis of *lɔgɔjwɛ:k ke:le ko:ki:tun Tʃé:bê:t* ‘news that Chebet got married’. The denotation of the nominalizer in (3) is inspired by Wood (2020:95).



- (41) [(1)]^{w,g} = $\lambda p_{\langle s, t \rangle} \lambda e_v [\text{say}(e) \wedge \text{CONT}(e) = p]$
 [(2)]^{w,g} = $\lambda e_v [\text{say}(e) \wedge \text{CONT}(e) = \{w : \text{Chebet got married at } w\}]$
 [(3)]^{w,g} = $\lambda P_{\langle v, t \rangle} \lambda x \exists e [P(e) \wedge \text{RESULT}(x, e)]$
 [(4)]^{w,g} = $\lambda x \exists e [\text{say}(e) \wedge \text{CONT}(e) = \{w : \text{Chebet got married at } w\} \wedge \text{RESULT}(x, e)]$
 [(5)]^{w,g} = $\lambda y [\text{news}(y)]$
 [(6)]^{w,g} = $\lambda x \exists e [\text{news}(x) \wedge \text{say}(e) \wedge \text{CONT}(e) = \{w : \text{Chebet got married at } w\} \wedge \text{RESULT}(x, e)]$

- Further support for the nominalization analysis comes from examples like (42), which show that only phrases introduced by *ke:-le* can appear in subject position.

(42) Já [ke:-le/*ko-le/*ɑ:-le kà-∅-tʃɔ:r Kíbê:t rabɪ:nɪk].
 bad KEE-LE/3-LE/1SG-LE PST-3-steal Kibet.NOM money
 ‘That Kibeet stole the money is bad.’

- Moreover, phrases introduced by *ke:-le*, but not phrases introduced by agreeing forms, can appear in the pre-verbal position marked by the topic marker *ko*, see (43). This is a derived position that can only host nominals.

(43) [Ke:-le/*ɑ:-le ko:-sɪ:r Tʃé:bê:t] ko â:-ŋgɛn
 KEE-LE/1SG-LE PST-pass Chebet.NOM TOP 1SG-know
 ‘That Chebeet passed the exams, I know.’

5 Conclusion and Outlook

- We have argued that the Kipsigis “complementizer” is in fact a verb, and C-agreement is logophoric agreement between a verb and its local subject.
- This analysis resolves the problems for locality and directionality of Agree posed by the upwards-oriented C-agreement pattern.
- “say”-based complementizers could be lexical verbs in more languages than previously thought; see also work on *Abe* (Koopman and Sportiche 1989), *Turkish* (Özyıldız et al. 2018), *Laz* (Demirok et al. 2020), and *Avatime* (Major and Torrence 2020).
- Reported cases of complementizer agreement might not always reflect agreement with an element of category C.
- Patterns of upwards-oriented complementizer agreement don’t necessarily require Upward Agree.
- Our analysis suggests an interesting avenue for further research, where the semantic type of the embedded proposition is reflected in the syntactic category of the embedder.

Outlook:

- Moulton (2019) and Bondarenko (2020) have recently argued that there is a relation between $\langle v, t \rangle$ -type CPs and hyper-raising.
- Preliminary data suggests that this relation holds in Kipsigis (see Jake and Odden 1979 for details on hyper-raising in the language).

(44) ɑ:-ŋgɛn-in_i [ɑ:-le ka-ɪ-tʃɔ:r ____i rabɪ:nɪk].
 1SG-know-2SG 1SG-LE PST-2SG-steal money
 ‘I know that you stole the money.’

References

- Anand, P. (2006). *De de se*. PhD thesis, MIT.
- Anand, P. and Hsieh, F.-f. (2005). Long-distance reflexives in perspective. In Alderete, J., Han, C.-h., and Kochetov, A., editors, *Proceedings of the 24th West Coast Conference on Formal Linguistics*, pages 43–51. Cascadilla Proceedings Project, Somerville, MA.
- Baker, M. (2008). *The Syntax of Agreement and Concord*. Cambridge University Press, Cambridge.
- Baker, M. (2015). *Case*. Cambridge University Press, Cambridge, UK.
- Baković, E. (2000). *Harmony, Dominance, and Control*. PhD thesis, Rutgers University.
- Bondarenko, T. (2020). Hyperraising and Logical Form: evidence from Buryat. GLOW 43 Poster, tbond.scripts.mit.edu.
- Bossi, M. and Diercks, M. (2019). V1 in Kipsigis: Head movement and discourse-based scrambling. *Glossa: a journal of general linguistics*, 4.1:65.
- Carstens, V. (2016). Delayed Valuation: A Reanalysis of Goal Features, “Upward” Complementizer Agreement, and the Mechanics of Case. *Syntax*, 19:1–42.
- Charnavel, I. (2020a). *Locality and logophoricity: A theory of exempt anaphora*. Oxford University Press, Oxford.
- Charnavel, I. (2020b). Logophoricity and Locality: A View from French Anaphors. *Linguistic Inquiry*, 51:671–723.
- Charnavel, I. and Sportiche, D. (2016). Anaphor Binding: What French Inanimate Anaphors Show. *Linguistic Inquiry*, 47:35–87.
- Creider, C. and Creider, J. T. (1989). *A grammar of Nandi*. Helmut Buske Verlag Hamburg, Hamburg.
- Culy, C. (1994). Aspects of logophoric marking. *Linguistics*, 32:1055–1094.
- Demirok, O., Özyıldız, D., and Öztürk, B. (2020). Complementizers with attitude. In Baird, M. and Pesetsky, J., editors, *Proceedings of the North East Linguistics Society 49*. GLSA, Amherst.
- Diercks, M. (2013). Indirect agree in Lubukusu complementizer agreement. *Natural Language and Linguistic Theory*, 31:357–407.
- Diercks, M. and Rao, M. (2019). Upward-oriented complementizer agreement with subjects and objects in Kipsigis. In Clem, E., Jenks, P., and Sande, H., editors, *Theory and description in African Linguistics: Selected papers from the 47th Annual Conference on African Linguistics*, pages 369–393. Language Science Press, Berlin.
- Diercks, M., van Koppen, M., and Putnam, M. (2020). Agree Probes Down: Anaphoric Feature Valuation and Phase Reference. In Smith, P. W., Mursell, J., and Hartmann, K., editors, *Agree to Agree: Agreement in the Minimalist Programme*, pages 347–389. Language Science Press, Berlin.
- Duncan, P. T. and Torrence, H. (2017). Verbal complementizers and the Indirect Agree relation in Ibibio. Handout from talk given at the 91st Meeting of the LSA.
- Eberhard, D. M., Simons, G. F., and Fennig, C. D., editors (2020). *Ethnologue: Languages of the World. Twenty-third edition*. SIL International, Dallas, Texas.
- Elliott, P. D. (2016). Explaining DPs vs. CPs without syntax. In *Proceedings of the 52nd annual meeting of the Chicago Linguistics Society*, pages 171–185. Chicago Linguistic Society, Chicago.
- Elliott, P. D. (2017). *Elements of clausal embedding*. PhD thesis, University College London. Revised version, January 2020.
- Fuß, E. (2008). Multiple agreement and the representation of inflection in the C-domain.

- Linguistische Berichte*, 213:78–108.
- Fuß, E. (2014). Complementizer agreement (in Bavarian): Feature inheritance or feature insertion? In Grewendorf, G. and Weiß, H., editors, *Bavarian Syntax: Contributions to the theory of syntax*, volume 220, pages 51–82. John Benjamins, Amsterdam/Philadelphia.
- Grimshaw, J. (1990). *Argument Structure*, volume 18 of *Linguistic Inquiry Monographs*. The MIT Press, Cambridge, MA.
- Grimshaw, J. (2015). The Light Verbs Say and SAY. In Toivonen, I., Csúri, P., and van der Zee, E., editors, *Structures in the Mind*, pages 79–99. MIT Press, Oxford.
- Haegeman, L. and van Koppen, M. (2012). Complementizer agreement and the relation between C^o and T^o. *Linguistic Inquiry*, 43:441–454.
- Hall, B., Hall, R., Pam, M. D., Myers, A., Antell, S. A., and Cheron, G. K. (1974). African vowel harmony systems from the vantage point of kalenjin. *Afrika und Übersee*, 241–267:241–267.
- Halle, M. and Vergnaud, J.-R. (1981). Harmony processes. In *Crossing the Boundaries in Linguistics: Studies Presented to Manfred Bierwisch*, pages 1–22. Springer, Dordrecht.
- Handschuh, C. (2014). *A typology of marked-S languages*. Language Science Press, Berlin.
- Heim, I. (2008). Features on bound pronouns. In Harbour, D., Adger, D., and Béjar, S., editors, *Phi-Theory. Phi-features across Modules and Interfaces*, pages 35–56. Oxford University Press, Oxford.
- Idiatov, D. (2010). Person-number agreement on clause linking markers in Mande. *Studies in Language*, 34:832–868.
- Jake, J. and Odden, D. (1979). Raising in Kipsigis. *Studies in the Linguistic Sciences*, 9.2:131–155.
- Kayne, R. (2010). *Comparisons and Contrasts*. Oxford University Press, Oxford.
- Kinyalolo, K. K. W. (1993). On some syntactic properties of \dot{q} . *Lingua*, 91(2-3):201–233.
- König, C. (2006). Marked nominative in Africa. *Studies in Language*, 30.4:655–732.
- König, C. (2008). *Case in Africa*. Oxford University Press, Oxford.
- Koopman, H. (1984). *The Syntax of Verbs*. Foris, Dordrecht.
- Koopman, H. and Sportiche, D. (1989). Pronouns, logical variables, and logophoricity in Abe. *Linguistic Inquiry*, pages 555–588.
- Kouneli, M. (2019). *The syntax of number and modification: An investigation of the Kipsigis DP*. PhD thesis, New York University.
- Kratzer, A. (1996). Severing the external argument from its verb. In Rooryck, J. and Zaring, L., editors, *Phrase Structure and the Lexicon*, pages 109–137. Kluwer, Dordrecht.
- Kratzer, A. (2006). Decomposing attitude verbs. Handout from a talk in honor of Anita Mittwoch on her 80th birthday.
- Kratzer, A. (2013). Modality for the 21st century. In Stephen R. Anderson, J. M. and Reboul, F., editors, *L'interface Langage-Cognition / The Language-Cognition Interface: Actes du 19e Congrès International des Linguistes Genève*, pages 179–199. Librarie Droz.
- Letsholo, R. and Safir, K. (2019). Complement clause C-agreement beyond subject phi-agreement in Ikalanga. In Lotven, S., Bongiovanni, S., Weirich, P., Botne, R., and Obeng, S. G., editors, *African linguistics across the disciplines: Selected papers from the 48th Annual Conference on African Linguistics*, page 159–186. Language Science Press, Berlin.

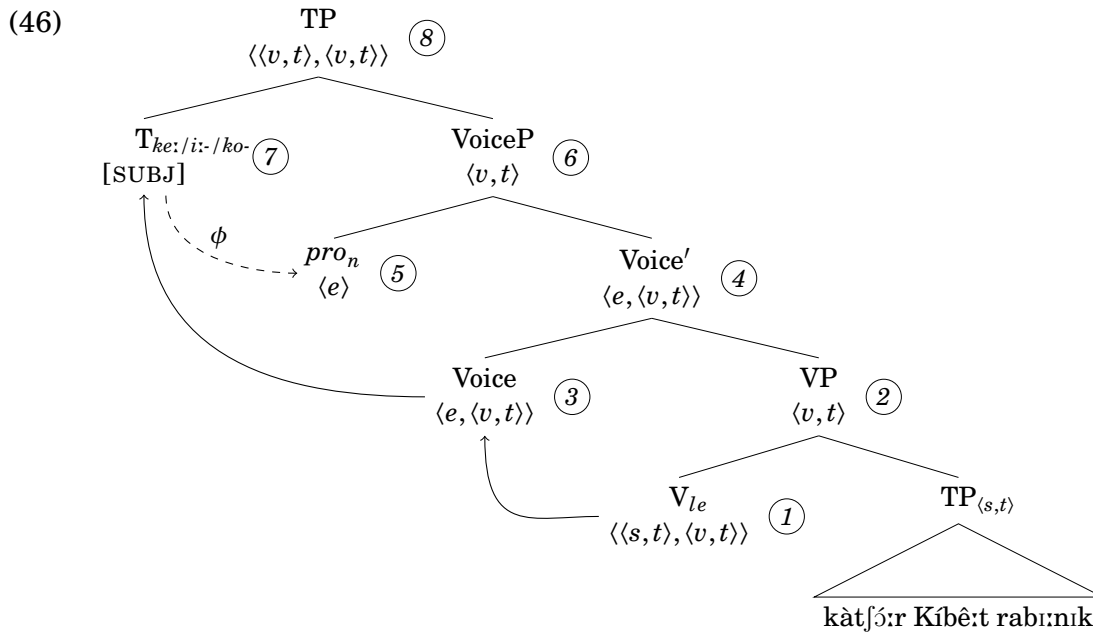
- Major, T. and Torrence, H. (2020). “Say”-chains, not “say”-complementation. To appear in Proceedings of WCCFL 38.
- McFadden, T. and Sundaresan, S. (2020). Unifying species of C-agreement. Flash Talk, NELS 51.
- Mietzner, A. (2009). *Räumliche Orientierung in nilotischen Sprachen*, volume 24 of *Nilo-Saharan: Linguistic Analyses and Documentation*. Rüdiger Köppe Verlag, Köln.
- Moulton, K. (2009). *Natural Selection and the Syntax of Clausal Complementation*. PhD thesis, University of Massachusetts Amherst.
- Moulton, K. (2015). CPs: copies and compositionality. *Linguistic Inquiry*, 46:305–342.
- Moulton, K. (2019). Decomposing attitude verbs. Slides, GLOW in Asia XII, Workshop on (Non-)Complementation, <http://sicogg.or.kr/GLOW-Asia-12-2019/>.
- Murugesan, G. (2020). Deriving the Anaphor Agreement Effect and its Violations. To appear in *Syntax*, lingbuzz/005135.
- Nevins, A. (2010). *Locality in vowel harmony*. MIT Press, Cambridge, MA.
- Nformi, J. (2017). Complementizer agreement and intervention effects. Manuscript.
- Özyıldız, D., Major, T., and Maier, E. (2018). Communicative reception reports as hearsay: Evidence from indexical shift in Turkish. In Stockwell, R., O’Leary, M., Xu, Z., and Zhou, Z., editors, *Proceedings of the 36th West Coast Conference on Formal Linguistics*, pages 296–305. Cascadilla Proceedings Project, Somerville, MA.
- Rizzi, L. (1989). On the Anaphor-Agreement Effect. *Rivista di Linguistica*, 2:27–42.
- Rottland, F. (1982). *Die Südnilotischen Sprachen: Beschreibung, Vergleichung und Rekonstruktion*, volume 7 of *Kölner Beiträge zur Afrikanistik*. Dietrich Reimer Verlag, Berlin.
- Safir, K. (2004). Person, context and perspective. *Rivista di Linguistica*, 16:107–153.
- Sauerland, U. (2003). A new semantics for number. In Young, R. and Zhou, Y., editors, *Proceedings of SALT 13*, pages 258–275, Ithaca, NY. CLC Publications.
- Sauerland, U. (2008). On the semantic markedness of phi-features. In Harbour, D., Adger, D., and Béjar, S., editors, *Phi-Theory. Phi-features across Modules and Interfaces*, pages 35–56. Oxford University Press, Oxford.
- Sauerland, U., Hollebrandse, B., and Kratochvíl, F. (2020). When hypotaxis looks like parataxis: embedding and complementizer agreement in Teiwa. *Glossa: a journal of general linguistics*.
- Sells, P. (1987). Aspects of logophoricity. *Linguistic Inquiry*, 18:445–479.
- Shlonsky, U. (1994). Agreement in Comp. *The Linguistic Review*, 11:351–375.
- Speas, M. (2004). Evidentiality, logophoricity and the syntactic representation of pragmatic features. *Lingua*, 114:255–276.
- Sportiche, D. (2016). Neglect. Manuscript, University of California, Los Angeles.
- Stowell, T. (1981). *Origins of phrase structure*. PhD thesis, MIT.
- Sundaresan, S. (2016). Anaphora vs. Agreement: A New Kind of Anaphor Agreement Effect in Tamil. In Grosz, P. and Patel-Grosz, P., editors, *The Impact of Pronominal Form on Interpretation*, pages 77–105. de Gruyter, Berlin.
- Toweett, T. (1979). *A study of Kalenjin linguistics*. Kenya Literature Bureau, Nairobi.
- van Koppen, M. (2005). *One Probe – Two Goals: Aspects of Agreement in Dutch Dialects*. LOT, Utrecht.
- van Koppen, M. (2012). The distribution of phi-features in pronouns. *Natural Language and Linguistic Theory*, 30:135–177.
- van Urk, C. (2015). *A uniform syntax for phrasal movement: A case study of Dinka Bor*. PhD thesis, MIT.

- Wood, J. (2020). Icelandic nominalizations and allosemy. Book-length manuscript, lingubuzz/005004.
- Woolford, E. (1999). More on the anaphor agreement effect. *Linguistic Inquiry*, 30:257–287.
- Zwart, J.-W. (1997). *Morphosyntax of Verb Movement. A Minimalist Approach to the Syntax of Dutch*. Dordrecht, Kluwer.
- Zwarts, J. (2004). *The Phonology of Endo: A Southern Nilotic Language*. LINCOS Studies in African Linguistics 59, München.

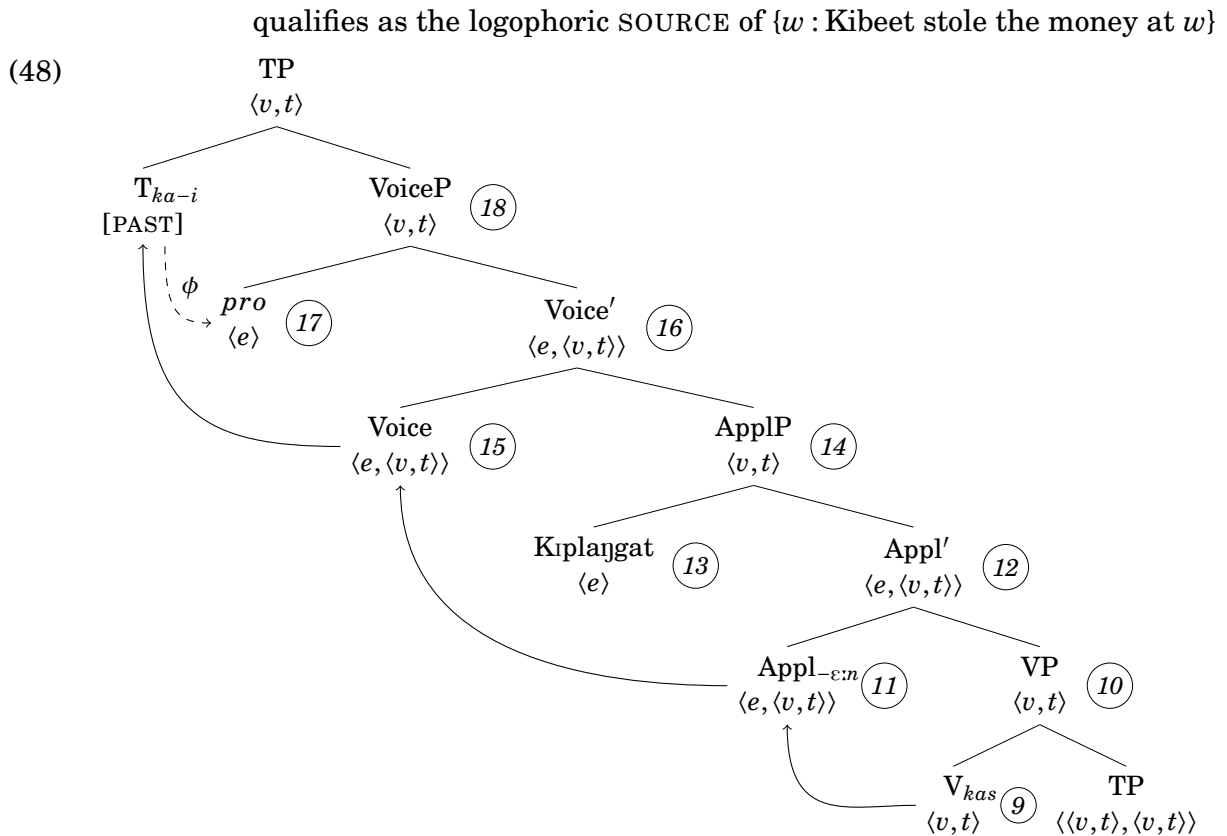
Appendix

Prefixal agreement (complete derivation)

- (45) Ka-i-kas-ε:n Kiplàngàt ke:le/ i:le/ ko-le kà-∅-tjó:r
 PAST1-2SG-hear-APPL Kiplangat IMP-LE/ 2SG-LE/ 3-LE PAST1-3-steal
 Kíbê:t rab:ɪ:nɪk.
 Kibeet.NOM money
 ‘You heard from Kiplangat that Kibeet stole the money.’



- (47) [(1)]^{w,g} = $\lambda p_{\langle s,t \rangle} \lambda e_v [\text{say}(e) \wedge \text{CONT}(e) = p]$,
 defined iff AG(e) qualifies as the logophoric SOURCE of p
- [(2)]^{w,g} = $\lambda e_v [\text{say}(e) \wedge \text{CONT}(e) = \{w : \text{Kibeet stole the money at } w\}]$
- [(3)]^{w,g} = $\lambda x_e \lambda e_v [\text{AG}(e) = x]$
- [(4)]^{w,g} = $\lambda x_e \lambda e_v [\text{say}(e) \wedge \text{CONT}(e) = \{w : \text{Kibeet stole the money at } w\} \wedge \text{AG}(e) = x]$
- [(5)]^{w,g} = $g(n)$
- [(6)]^{w,g} = $\lambda e_v [\text{say}(e) \wedge \text{CONT}(e) = \{w : \text{Kibeet stole the money at } w\} \wedge \text{AG}(e) = g(n)]$
- [(7)]^{w,g} = $\lambda P \lambda Q \lambda e'' . \exists e' [e' \sim e'' \wedge P(e') \wedge Q(e'')]$
- [(8)]^{w,g} = $\lambda Q \lambda e'' . \exists e' [e' \sim e'' \wedge \text{say}(e') \wedge \text{CONT}(e') = \{w : \text{Kibeet stole the money at } w\} \wedge \text{AG}(e') = g(n) \wedge Q(e'')]$, defined iff AG(e')



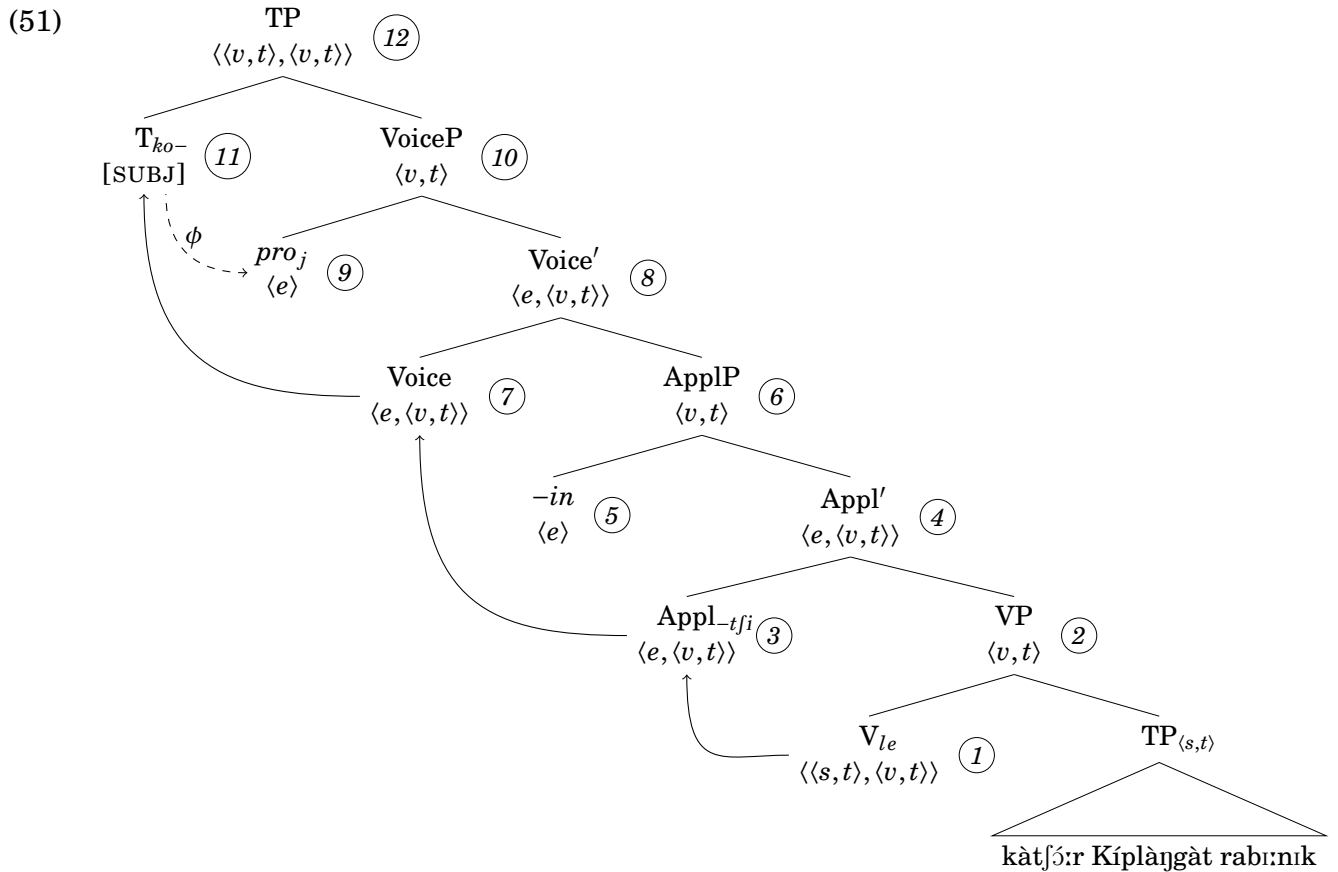
- (49)
- [[9]] $^{w,g} = \lambda e_v [\text{hear}(e)]$
 - [[10]] $^{w,g} = \lambda e'' . \exists e' [e' \sim e'' \wedge \text{say}(e') \wedge \text{CONT}(e') = \{w : \text{Kibeet stole the money at } w\} \wedge \text{AG}(e') = g(n) \wedge \text{hear}(e'')]$
 - [[11]] $^{w,g} = \lambda x_e \lambda e_v [\text{SOURCE}(e) = x]$
 - [[12]] $^{w,g} = \lambda x \lambda e'' . \exists e' [e' \sim e'' \wedge \text{say}(e') \wedge \text{CONT}(e') = \{w : \text{Kibeet stole the money at } w\} \wedge \text{AG}(e') = g(n) \wedge \text{hear}(e'') \wedge \text{SOURCE}(e'') = x]$
 - [[13]] $^{w,g} = \text{Kiplangat}$
 - [[14]] $^{w,g} = \lambda e'' . \exists e' [e' \sim e'' \wedge \text{say}(e') \wedge \text{CONT}(e') = \{w : \text{Kibeet stole the money at } w\} \wedge \text{AG}(e') = g(n) \wedge \text{hear}(e'') \wedge \text{SOURCE}(e'') = \text{kiplangat}]$
 - [[15]] $^{w,g} = \lambda x_e \lambda e_v [\text{EXP}(e) = x]$
 - [[16]] $^{w,g} = \lambda x \lambda e'' . \exists e' [e' \sim e'' \wedge \text{say}(e') \wedge \text{CONT}(e') = \{w : \text{Kibeet stole the money at } w\} \wedge \text{AG}(e') = g(n) \wedge \text{hear}(e'') \wedge \text{SOURCE}(e'') = \text{kiplangat} \wedge \text{EXP}(e'') = x]$
 - [[17]] $^{w,g} = g(i)$, defined iff $g(i)$ is addressee¹³
 - [[18]] $^{w,g} = \lambda e'' . \exists e' [e' \sim e'' \wedge \text{say}(e') \wedge \text{CONT}(e') = \{w : \text{Kibeet stole the money at } w\} \wedge \text{AG}(e') = g(n) \wedge \text{hear}(e'') \wedge \text{SOURCE}(e'') = \text{kiplangat} \wedge \text{EXP}(e'') = g(i)]$, defined iff $g(i)$ is addressee and $\text{AG}(e')$ qualifies as the logophoric SOURCE of $\{w : \text{Kibeet stole the money at } w\}$

¹³ ϕ -features on pronouns denote partial identity functions of type $\langle e, e \rangle$ (Sauerland 2003, 2008, Heim 2008); for free pronouns the relevant assignment is given by the utterance context.

Suffixal agreement

The occurrence of suffixal agreement is predicted under an account that treats *le* as a verb. In such cases *le* introduces an applied argument in addition to a subject.

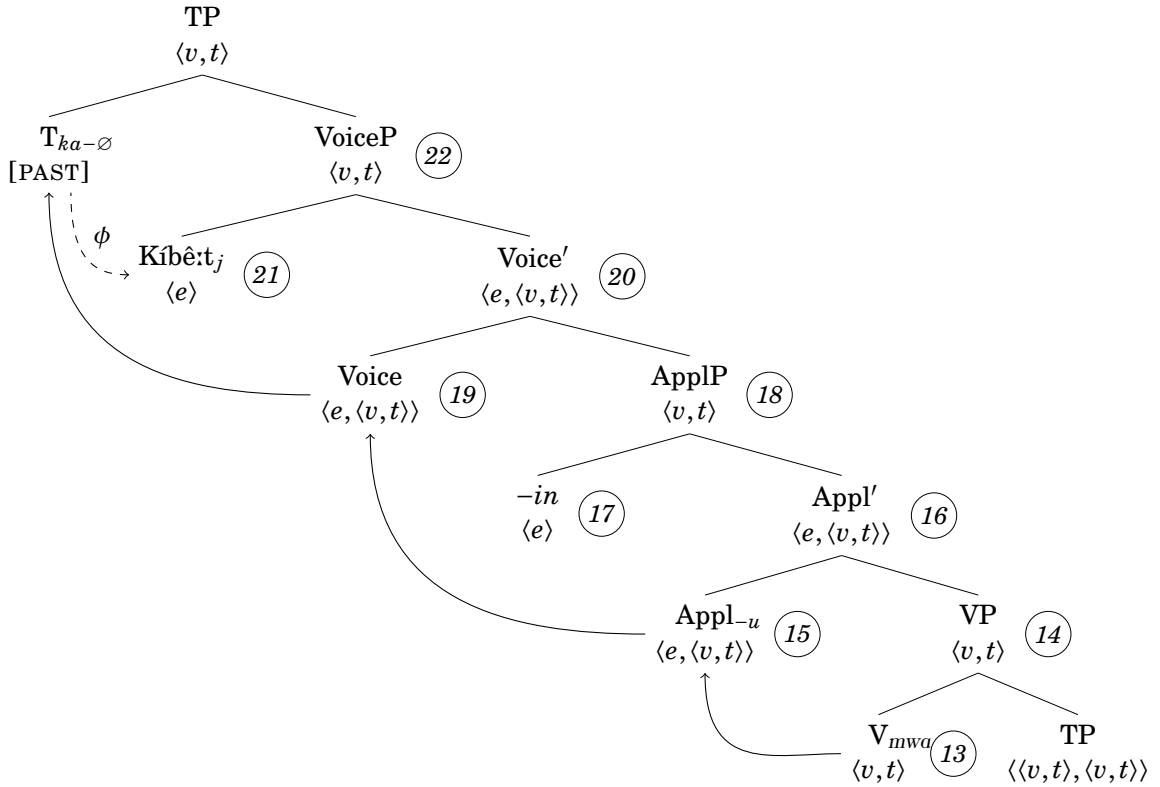
- (50) **Ka-mwa-u-in** Kíbê:t ko-le:n-**tfi-in** ka-tfɔ:r Kíplàngàt
 PAST1-say-VENT-2SG Kibeet.NOM 3-LE-APPL-2SG PAST1-steal Kiplangat.NOM
 rabɪ:nɪk.
 money
 ‘Kibeet told you that Kiplangat stole the money.’



- (52) [(1)]^{w,g} = $\lambda p_{\langle s,t \rangle} \lambda e_v [\text{say}(e) \wedge \text{CONT}(e) = p]$,
 defined iff AG(*e*) qualifies as the logophoric SOURCE of *p*
- [(2)]^{w,g} = $\lambda e_v [\text{say}(e) \wedge \text{CONT}(e) = \{w : \text{Kiplangat stole the money at } w\}]$
- [(3)]^{w,g} = $\lambda x_e \lambda e_v [\text{GOAL}(e) = x]$
- [(4)]^{w,g} = $\lambda x \lambda e [\text{say}(e) \wedge \text{CONT}(e) = \{w : \text{Kiplangat stole the money at } w\} \wedge \text{GOAL}(e) = x]$
- [(5)]^{w,g} = $g(i)$, defined iff *g*(*i*) is addressee
- [(6)]^{w,g} = $\lambda e [\text{say}(e) \wedge \text{CONT}(e) = \{w : \text{Kiplangat stole the money at } w\} \wedge \text{GOAL}(e) = g(i)]$
- [(7)]^{w,g} = $\lambda x_e \lambda e_v [\text{AG}(e) = x]$
- [(8)]^{w,g} = $\lambda x \lambda e [\text{say}(e) \wedge \text{CONT}(e) = \{w : \text{Kiplangat stole the money at } w\} \wedge \text{GOAL}(e) = g(i) \wedge \text{AG}(e) = x]$
- [(9)]^{w,g} = $g(j)$
- [(10)]^{w,g} = $\lambda e [\text{say}(e) \wedge \text{CONT}(e) = \{w : \text{Kiplangat stole the money at } w\} \wedge \text{GOAL}(e) = g(i) \wedge \text{AG}(e) = g(j)]$

- [(11)] $^{w,g} = \lambda P \lambda Q \lambda e'' . \exists e' [e' \sim e'' \wedge P(e') \wedge Q(e'')]$
 [(12)] $^{w,g} = \lambda Q \lambda e'' . \exists e' [e' \sim e'' \wedge \text{say}(e') \wedge \text{CONT}(e') = \{w : \text{Kiplangat stole the money at } w\} \wedge \text{GOAL}(e') = g(i) \wedge \text{AG}(e') = g(j) \wedge Q(e'')]$,
 defined iff $g(i)$ is addressee and $\text{AG}(e')$ qualifies as the logophoric SOURCE of $\{w : \text{Kiplangat stole the money at } w\}$

(53)



- (54) [(13)] $^{w,g} = \lambda e_v [\text{tell}(e)]$
 [(14)] $^{w,g} = \lambda e'' . \exists e' [e' \sim e'' \wedge \text{say}(e') \wedge \text{CONT}(e') = \{w : \text{Kiplangat stole the money at } w\} \wedge \text{GOAL}(e') = g(i) \wedge \text{AG}(e') = g(j) \wedge \text{tell}(e'')]$
 [(15)] $^{w,g} = \lambda x_e \lambda e_v [\text{GOAL}(e) = x]$
 [(16)] $^{w,g} = \lambda x \lambda e'' . \exists e' [e' \sim e'' \wedge \text{say}(e') \wedge \text{CONT}(e') = \{w : \text{Kiplangat stole the money at } w\} \wedge \text{GOAL}(e') = g(i) \wedge \text{AG}(e') = g(j) \wedge \text{tell}(e'') \wedge \text{GOAL}(e'') = x]$
 [(17)] $^{w,g} = g(i)$, defined iff $g(i)$ is addressee
 [(18)] $^{w,g} = \lambda e'' . \exists e' [e' \sim e'' \wedge \text{say}(e') \wedge \text{CONT}(e') = \{w : \text{Kiplangat stole the money at } w\} \wedge \text{GOAL}(e') = g(i) \wedge \text{AG}(e') = g(j) \wedge \text{tell}(e'') \wedge \text{GOAL}(e'') = g(i)]$
 [(19)] $^{w,g} = \lambda x_e \lambda e_v [\text{GOAL}(e) = x]$
 [(20)] $^{w,g} = \lambda x \lambda e'' . \exists e' [e' \sim e'' \wedge \text{say}(e') \wedge \text{CONT}(e') = \{w : \text{Kiplangat stole the money at } w\} \wedge \text{GOAL}(e') = g(i) \wedge \text{AG}(e') = g(j) \wedge \text{tell}(e'') \wedge \text{GOAL}(e'') = g(i) \wedge \text{AG}(e'') = x]$
 [(21)] $^{w,g} = \text{Kibet}_j$
 [(22)] $^{w,g} = \lambda e'' . \exists e' [e' \sim e'' \wedge \text{say}(e') \wedge \text{CONT}(e') = \{w : \text{Kiplangat stole the money at } w\} \wedge \text{GOAL}(e') = g(i) \wedge \text{AG}(e') = g(j) \wedge \text{tell}(e'') \wedge \text{GOAL}(e'') = g(i) \wedge \text{AG}(e'') = \text{Kibet}]$,
 defined iff $g(i)$ is addressee and $\text{AG}(e')$ qualifies as the logophoric SOURCE of $\{w : \text{Kiplangat stole the money at } w\}$

Supportive evidence comes from the fact that for some matrix verbs some speakers allow applied arguments to be interpreted by *le* exclusively, without being present on the matrix verb. Such a verb is *ɲo:ɲ* ‘complain’ (but also *sir* ‘write’).

- (55) *Ko:ɑ-ɲo:ɲ* *ɑ:-le:n-tʃi* *Kibe:t ko:-ja:tʃ-e:n* *àmìtwá:gík*.
 PST-1SG-complain 1SG-LE-APPL Kibeet PAST2-bad-PL food.NOM
 ‘I complained to Kibeet that the food was bad.’