C-Agree is local subject-verb agreement in Kipsigis

1. Introduction. Kipsigis (Nilotic, Kenya; VSO) has been reported to have upwards-oriented complementizer agreement with a matrix subject (Diercks and Rao 2019, Diercks et al. 2020): the complementizer consists of the root of the verb *le* 'say' and an agreement prefix, see (1)-(2).

(1) Kà-**á**-tʃáːm   **à̀ː-lé**   rú-è   Kíbêːt. (2) Kà-**í**-tʃáːm   **ì̀ː-lé**   rú-è   Kíbêːt.
    PST-1SG-whisp. 1SG-C sleep-IPFV K.NOM   PST-2SG-whisp. 2SG-C sleep-IPFV K.NOM
    'I whispered that Kibet is sleeping.'   'You whispered that Kibet is sleeping.'

Upwards-oriented C agreement raises questions about the directionality and locality of agreement. In this talk, we argue that what has been described as an agreeing 'say'-based complementizer in Kipsigis is the lexical verb 'say', and what looks like C-Agree is in fact logophoric agreement between this verb and its local subject. Our analysis highlights that: a) 'say'-based complementizers might be of category V, and not C, in more languages than previously thought (e.g. Koopman 1984, Koopman and Sportiche 1989, Major and Torrence 2020), which means that some instances of what has been described as C-Agree may instantiate standard verbal agreement, b) upwards-oriented patterns of (apparent) C-Agree can be analyzed with downward Agree and standard locality assumptions. Data come from original fieldwork with 8 native speakers. **2. Agreeing *le* is a verb.** We present two pieces of evidence: A) *le* can be a matrix verb. The language's VSO order makes it clear that *le* occupies the verb position in (3). Crucially, the "complementizer" is ungrammatical in this case. Diercks and Rao (2019) (henceforth D&R) report examples like (3), but Diercks et al. (2020) take them as evidence that *le* raises to the matrix clause. However, such an analysis cannot account for the difference in mood inflection that we observe: *le* is in the indicative in (3), but in the subjunctive in (1) and (2); mood is reflected in the form of the subject agreement prefix, and Toweett (1979) and Creider and Creider (1989) claim that subjunctive is used in Kipsigis when a verb is embedded under another verb (the language lacks infinitives). If *le* is a verb, it follows that subjunctive will be used in complementation, but indicative in matrix clauses.

(3) **kà̀-∅-lé**   Kíbêːt   (***kò-lé**)   ∅-rú-è   làːkwèːt.
    PST-3.IND-LE Kibet.NOM (*3.SUBJ-LE) 3.IND-sleep-IPFV child.NOM
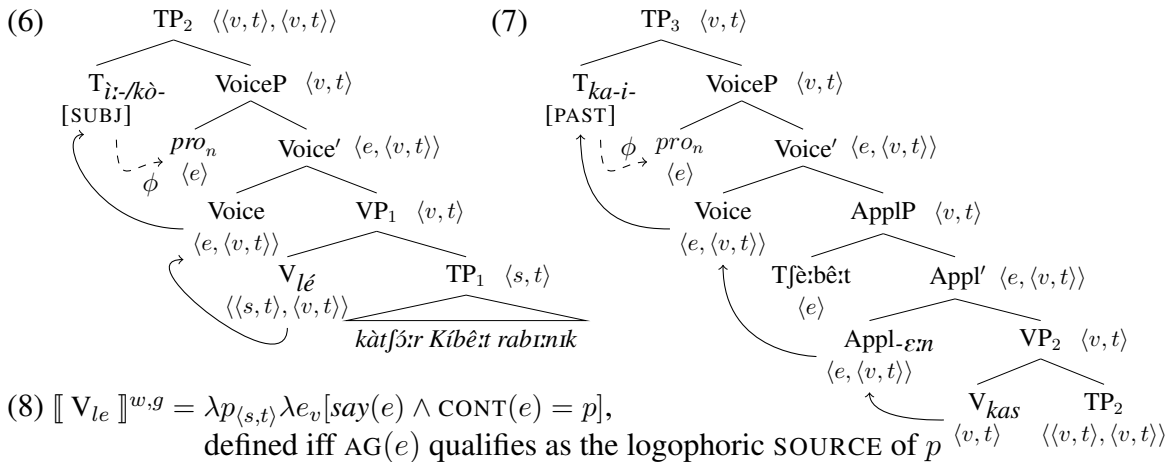   'Kibet said that the child is sleeping.'

B) applicative and reflexive morphology on *le*. With speech verbs, *le* optionally displays suffixal agreement with the indirect object of the matrix verb (in addition to subject prefixal agreement). While D&R call this agreement, our data show that suffixal agreement consists of the applicative -*tʃi* (Toweett 1979, Rottland 1982) followed by an object clitic. Further support comes from (4), where -*tʃi* and the reflexive -*kɛː* are present (*leːn* is the allomorph of *le* before -*tʃi*; this is an allomorphy rule targeting a class of CV verbs in Kalenjin dialects (Zwarts 2004).

(4) Kɑ-∅-tʃɑːm-**tʃi-kɛː**   Kíbêːt   **ko-leːn-tʃi-kɛː**   ŋâːm.
    PST-3-whisper-APPL-REFL Kibet.NOM 3-LE-APPL-REFL clever
    'Kibet whispered to himself that he's intelligent.

The presence of applicative and reflexive morphology on *le* strongly supports its analysis as a verb. **3. Analysis.** While D&R only show that *le* agrees with the matrix subject, we observe in our data that *le* can additionally co-vary with an applied object if it qualifies as the logophoric source. Both options are shown in (5); indices indicate the respective co-reference relations, and -*ɛːn* is the applicative introducing sources/instruments in the language (Toweett 1979). Thus, we conclude that *le* introduces and locally agrees with its own subject which has to qualify as a logophoric SOURCE (Sells 1987) for the embedded proposition (see presupposition in (8)). Further evidence for logophoricity comes from the fact that neither benefactives nor inanimate sources (Charnavel 2020) can serve as antecedents for agreement (data not shown here).

(5) Ka-i-kas-ɛːn   *pro*₁ Tʃèːbêːt₂ **ìː-lé/kò-lé**   *pro*₁/₂ kà-∅-tʃɔ́ːr Kíbêːt   rabɪːnɪk.
     PST-2SG-hear-APPL   Chebet 2SG-LE/3-LE   PST-3-steal Kibet.NOM money
     'You heard from Chebet that Kibet stole the money.'

Since *le* is a verb and embeds a clause, it introduces an eventuality and a content argument (Kratzer 2013), see (8). We provide a detailed derivation for (5), where (7) shows the derivation of the matrix clause, and (6) the internal structure of TP₂ in (7). Voice introduces the external argument (Kratzer 1996) and Appl the source; each combines with its complement via *Event Identification*. VSO order results from head movement (Bossi and Diercks 2019). Subjunctive is introduced in T and serves as a causal linker ($\sim$ in 9) between the saying event and the event introduced by the matrix predicate (Özyıldız et al. 2018), the result of which is shown in (10). As a free pronoun, the local subject comes with its own ϕ-features serving as a goal for agreement with T (via downward Agree). Co-reference via the assignment function with the antecedent of embedded *pro* determines the different forms of *le*: for (5), 2SG = co-reference with matrix *pro*, 3SG = co-reference with the source *Tʃèːbêːt*.

(6)   TP₂ $\langle\langle v,t\rangle,\langle v,t\rangle\rangle$ (7)   TP₃ $\langle v,t\rangle$

     T$_{ìː-/kò-}$ VoiceP $\langle v,t\rangle$ T$_{ka-i-}$ VoiceP $\langle v,t\rangle$
     [SUBJ]   [PAST]

     pro$_n$ Voice′ $\langle e,\langle v,t\rangle\rangle$ ϕ *pro*$_n$ Voice′ $\langle e,\langle v,t\rangle\rangle$
     ϕ $\langle e\rangle$ $\langle e\rangle$

     Voice VP₁ $\langle v,t\rangle$ Voice ApplP $\langle v,t\rangle$
     $\langle e,\langle v,t\rangle\rangle$ $\langle e,\langle v,t\rangle\rangle$

     V$_{lé}$ TP₁ $\langle s,t\rangle$ Tʃèːbêːt Appl′ $\langle e,\langle v,t\rangle\rangle$
     $\langle\langle s,t\rangle,\langle v,t\rangle\rangle$ $\langle e\rangle$

     kàtʃɔ́ːr Kíbêːt rabɪːnɪk   Appl-$_{ɛːn}$ VP₂ $\langle v,t\rangle$
     $\langle e,\langle v,t\rangle\rangle$

     V$_{kas}$ TP₂
     $\langle v,t\rangle$ $\langle\langle v,t\rangle,\langle v,t\rangle\rangle$

(8) $[\![\text{V}_{le}]\!]^{w,g} = \lambda p_{\langle s,t\rangle}\lambda e_v[say(e) \wedge \text{CONT}(e) = p]$,
     defined iff AG(e) qualifies as the logophoric SOURCE of p

(9) $[\![\text{T}_{[\text{SUBJ}]}]\!]^{w,g} = \lambda P\lambda Q\lambda e''.\exists e'[e' \sim e'' \wedge P(e') \wedge Q(e'')]$

(10) $[\![\text{VP}_2]\!]^{w,g} = \lambda e''.\exists e'[e' \sim e'' \wedge say(e') \wedge \text{CONT}(e') = \{w : \text{Kibeet stole the money at } w\}$
     $\wedge \text{AG}(e') = g(n) \wedge hear(e'')]$

This analysis makes the prediction that the subject of *le* can also be overt, borne out in (11).

(11) Ka-a-mwa   ɑː-le   **anɛː** kà-∅-tʃɔ́ːr Kíbêːt   rabiːnik.
     PST-1SG-say 1SG-LE 1SG PST-3-steal Kibeet.NOM money
     'I said that Kibeet stole the money.'

Suffixal agreement (see discussion on example 4) falls out naturally from our analysis. *le* being a verb can also introduce applied arguments, like an addressee pronoun in (12) which cliticizes to *le*+APPL. The equivalent VP₂ of (12) simply adds the addressee as the goal of the saying event, see (13).

(12) Kɑ-mwɑ-u-in   Kíbêːt₁   ko-leːn -tʃi-in   *pro*₁ ka-tʃɔːr Kíplàŋgàt rabɪːnɪk.
     PST-say-APPL-2SG Kibeet.NOM 3-LE-APPL-2SG   PST-steal Kip.NOM money
     'Kibeet told you that Kiplangat stole the money.'

(13) $[\![\text{VP}_2]\!]^{w,g} = \lambda e''.\exists e'[e' \sim e'' \wedge say(e') \wedge \text{CONT}(e') = \{w : \text{Kiplangat stole the money at } w\}$
     $\boxed{\wedge \text{GOAL}(e') = g(i)} \wedge \text{AG}(e') = g(n) \wedge tell(e'')]$

5. Conclusion. Our analysis resolves the problems for locality and directionality of Agree posed by upwards-oriented C-agreement patterns. It also shows that 'say'-based complementizers may be of category V, and not C, in more languages than previously thought (e.g. Sells 1987, Özyıldız et al. 2018, Major and Torrence 2020). Furthermore, our analysis supports the claim that the semantic type of CPs varies cross-linguistically ($\langle e,t\rangle$ vs. $\langle v,t\rangle$; (Demirok et al. 2020 a.o.), and suggests that the type is reflected in the syntactic category of the embedder.

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