Puzzling sloppy readings of the logophoric pronoun *yè* in Ewe

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In this paper we present new data from Ewe that show that the logophoric pronoun *yè* doesn't always have to be bound directly by an attitude verb, as suggested in the literature, cf. Schlenker (2003); von Stechow (2004); Pearson (2015). Logophoric pronouns can also be bound by non-attitudinal intervening operators as long as these operators stand in a binding chain with the lincensing attitude verb.

The data. The examples we discuss involve the construction *ko yé* corresponding to English 'only' as in (1).

(1)   Kofi súsú be   yè   ko   yé   wɔ yè-fe   dɔ
        Kofi think COMP LOG only FOC do LOG-POSS work
        'Kofi thinks that he is the only one who did his work'

This sentence can be read with a strict interpretation for the second occurence of *yè* as paraphrased in (2-a). This is as expected. It is crucial now that the example in (1) can also have a sloppy interpretation for the second occurence of *yè* as paraphrased in (2-b).

(2)   a.   'Kofi thinks that he is the only one (of a salient group of individuals) of whom the property $(\lambda x.\ x$ does Kofi's job$)$ is true'.   **strict interpretation** for (1)
      b.   'Kofi thinks that he is the only one (of a salient group of individuals) of whom the property $(\lambda x.\ x$ does x's job$)$ is true.'   **sloppy interpretation** for (1)

It is the sloppy interpretation in (2-b) that is not predicted under common assumptions about the semantics of 'only' and the semantic binding conditions for logophoric pronouns as suggested in the literature, cf. Schlenker (2003); von Stechow (2004); Pearson (2015). The existence of the sloppy interpretation for the second occurence of *yè* in (1) was confirmed by one of the authors and two consultants and doesn't seem to be controversial. In fact, the only way to get the intended sloppy interpretation is by reusing the logophoric pronoun *yè* as in (1).

Background assumption: binding by verbs. It is a well established fact in the literature on the logophoric pronoun *yè* in Ewe that it can only occur in the context of an attitude report, Clements (1975); Schlenker (1999); Pearson (2015). The restriction to attitude contexts has been modelled by Schlenker (1999, 2003); von Stechow (2003, 2004); Pearson (2015) as "binding by attitudes". According to this view, logophoric pronouns are a special kind of anaphoric pronoun the features of which can only be checked by an attitude verb as its binder. The way this idea is implemented by the different authors differs only in the semantic details. A general schematic illustration of the basic idea is the following: The logophoric pronoun *yè* comes with an uninterpretable logophoric feature (= uLOG) that needs to be checked. Attitude verbs come with a binder index that carries a corresponding interpretable feature (= 1[iLOG] in (3)). Only if the logophoric pronoun is bound by a binder index with a corresponding interpretable iLOG-feature, it's feature is licensed. If licensed, the complement is interpreted as a property of centered worlds which results in a *de se*-interpretation when combined with the attitude verb, cf. Pearson (2015) for the most recent discussion.

(3)   **Kofi thinks-1[iLOG] [yè₁[uʟᴏɢ] is smart]**
                ↓‾‾‾‾‾‾‾‾‾↑

Background: sloppy readings with *only*. For the meaning of *ko yé* ('only'), we assume that it has the same semantic contribution in Ewe as *only* in English on Heim (2008)'s account.

(4) $[\![\mathbf{only}]\!] = \lambda x_e.\ \lambda f_{\langle e,t \rangle}.\ \{y: f(y) = 1\} = \{x\}$ (Heim, 2008, p. 44)

[Heim](2008) assumes that *only* is a quantifier that needs to move on LF and can bind pronouns in its semantic scope. The sloppy interpretation for the sentence in (5-a) is accounted for by Heim (2008) by a movement operation on LF that binds the lower pronoun as in (5-b).

(5) a. Only Kofi did his job.   compare ([Heim](2008), p. 43: example (24))
     b. LF: [**only Kofi**] 1 [t_1 **did his**$_1$ **job**]
     c. $[\![(5\text{-}a)]\!] = 1$ iff $\{y: y$ did y's job$\} = \{$Kofi$\}$

The puzzle.   Our claim in this paper is that if we try to combine these assumptions to account for the sloppy interpretation of (1), we find that it is impossible to satisfy the corresponding binding requirements simultaneously. According to the assumption 'binding by verbs', *yè* needs to be bound by the attitude, cf. the corresponding LF in (6-a). But this only gives us the strict interpretation for (1). For the sloppy interpretation, *yè* must be bound by *only*, cf. the LF in (6-b). But this leaves the [uLOG]-feature of the second occurence of the logophoric pronoun unlicensed since it is not bound by the binder index 1[iLOG] of the attitude verb (therefore *-marked).

(6) a. **Kofi thinks-**1[iLOG] **[only yè**$_1$[u̶L̶O̶G̶] **] 2 [t**$_2$ **did yè**$_1$[u̶L̶O̶G̶]**'s job]**
     b. ***Kofi thinks-**1[iLOG] **[only yè**$_1$[u̶L̶O̶G̶] **] 2 [t**$_2$ **did yè**$_2$[uLOG]**'s job]**

On an intuitive level, the problem is that there is a binding operator that intervenes between the attitude verb and the logophoric pronoun. [A similar problem has been observed by [Sode](2014) in the modal domain for German subjunctive mood that is characterized by ([Schlenker](2003), p. 75) as "a temporal or modal version of the logophoric pronouns that are found in Ewe".]

The solution.   As a remedy, we propose a sequence rule for logophors (cf. the discussion of feature transmission under binding in [Heim](2008)):

(7) **Sequence rule for logophors in Ewe**
     a. A binding operator inherits the logophoric features of its arguments.
     b. A binding operator with inherited logophoric features can check all the logophoric features on the pronouns that it binds.

With this additional assumption, we predict both the right interpretation and the right distribution of features for the sloppy interpretation of (1):.

(8) **Kofi thinks-**1[iLOG] **[only yè**$_1$[u̶L̶O̶G̶] **]-**2[u̶L̶O̶G̶] **[t**$_2$ **did yè**$_2$[u̶L̶O̶G̶]**'s job]**
     |_____↑ |by (7) ↑ |_____↑

Theoretical consequences.   The new data discussed in this paper also has theoretical consequences for the question whether "binding by attitudes" should be implemented with monsters as proposed in [Schlenker](2003) or with a feature checking approach as proposed in [von Stechow](2004): It is a clear case in favour of a feature checking approach.

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