The anaphor, the logophor, and the phi-features

Workshop on Gisbert Fanselow's Contributions to Syntactic Theory

Imke Driemel ❖ Humboldt-Universität zu Berlin

Fanselow (1991)

Fanselow (1991) proposes the principle of complete specification (1) to reduce the number of GB-principles (Chomsky 1981):

(1) **Vollständige Spezifikation:**
XP muß für alle Merkmale spezifiziert sein, die für Kategorien des Typs X in der jeweiligen Sprache vorgeschrieben sind.
'XP is specified for all features relevant for category X in the respective language.'

Implications for anaphors and binding theory:

▷ (1) implies that every nominal phrase is specified for ϕ-features.

▷ R-expressions and pronouns are specified for ϕ-features inherently.

▷ Observation across languages: Anaphors are often only partially marked for ϕ-features (no number/gender): German, Spanish, Latin, Bangla, Hindi, Lithuanian, Russian, etc.

(2) Der Mann$_{sg}$/die Männer$_{pl}$ liebt/lieben sich$_{sg/pl}$.

▷ Consequence: Anaphors are ϕ-deficient, they have to derive ϕ-features from their antecedent to obey (1).

Variables are ϕ-deficient

The assumption that anaphors are licensed by receiving ϕ-features from their binders has figured in a number of proposals since Fanselow (1991):

▷ Principle A derived via Agree (Hicks 2005, Heinat 2009)

▷ The distribution of fake indexicals as a consequence of Feature Transmission: ϕ-feature copying between a binder and the bindee (Schlenker 1999, Heim 2001, 2008, Kratzer 2009, Wurmbrand 2017)

▷ The distribution of logophoric pronouns have been modeled via obligatory binding by an attitude predicate, based on an uninterpretable [log]-feature (von Stechow 2003, Heim 2005, Pearson 2015).

– logophors have to occur in the scope of an attitude predicate
– logophors have to co-refer with the attitude holder

(3) a. *$\mathbf{yè}_1$ dzó
Log leave.
'He left.'

b. Kofi$_1$ be $\mathbf{yè}_{1/*2}$ dzo. **Ewe**
Kofi say Log left
'Kofi said that he left.' (Clements 1975, Pearson 2015)

(4) Kofi said$_{[\phi,\text{LOG}]}$ [$\lambda x_{2[\phi,\text{LOG}]}$ λw $\mathbf{yè}_{2[u\phi,u\text{LOG}]}$ left$_w$]
feature checking

Analysis:

▷ Logophors (like anaphors) are variables that need to be bound.

▷ Attitude predicate introduces an individual abstractor to which they pass on the log-feature and the ϕ-features.

▷ The uLog-feature on the logophor needs to get feature checked by the abstractor.

▷ This checking operation enforces index matching.

▷ Coupled with the semantics of the attitude predicate, this binding operation leads to the interpretation where the logophor refers the attitude holder's recognized self (de se reading).

(5) a. $[\![\text{say}]\!]^w = \lambda P \lambda x.\, \forall \langle w', x' \rangle \in \text{say}_{x,w},\ P(x')(w') = 1$ (Pearson 2015)
$\text{say}_{x,w} := \{\langle w', x' \rangle$: what x says in w is true in w' and x identifies themselves as x' in $w'\}$

b. $[\![(4)]\!] \approx$ *In all worlds in which what Kofi says is true, the person Kofi identifies as himself in those worlds left.* (*de se* reading)

▷ Indeed, logophors receive obligatory de se readings, not only in Ewe but also in other logophoric languages such as Yoruba (Adésọlá 2005).

▷ Bimpeh et al. (2022) make use of mistaken identity scenarios to investigate the availability of de re readings. Logophors are infelicitous in such contexts.

(6) <u>De re *context:*</u> *Donald Duck went to the grocery store to buy flour. He mistakenly put sugar in his cart. Soon after, he saw a trail of sugar going up and down the aisles and thought that someone's bag had a hole in it and looked around for the guy. Donald Duck says: "The guy who is losing sugar is so stupid, he did not check his bag".*

a. Donald Duck súsú be **é** / #**yè** dzɔ-mo-vi. **Ewe**
Donald Duck think that he / Log exist.with-face-small
'Donald Duck thinks that he is stupid.'

b. Donald Duck rò pé **ó** / #**òún** jẹ́ òmùgọ̀ **Yoruba**
Donald Duck think that he / Log is stupid.person
'Donald Duck thinks that he is stupid.'

Selected References: Bassi, Driemel, Bimpeh, Silleresi (2023). Strict Logophors in Ewe, Yoruba, and Igbo. *Proceedings of Sinn und Bedeutung 27.* • Bimpeh, Driemel, Bassi, Silleresi (2022). Obligatory de se logophors in Ewe, Yoruba and Igbo: variation and competition. *Proceedings of WCCFL 40.* • Fanselow (1991). *Minimale Syntax*, Habilitation thesis, Universität Passau. • Sauerland (2013). Presuppositions and the Alternative Tier. *Proceedings of SALT 23.*

Logophors are not ϕ-deficient

Given the feature checking + binding account, we expect logophors to pattern like anaphors, in that they are ϕ-deficient. But this is not the case:

(7) a. Kofi$_1$ be $\mathbf{yè}_{1/*2}$ dzó.
Kofi say Log left
'Kofi said that he left.'

b. [Kofi kple Ama]$_1$ be $\mathbf{yè\text{-}wó}_{1/*2}$ dzó. **Ewe**
Kofi and Ama say Log-pl left
'Kofi and Ama said that they left.' (Bimpeh 2023)

(8) a. Olú$_1$ wí pé $\mathbf{òun}_{1/*2}$ wá. **Yoruba**
Olu say that log come
'Olu said that he came.'

b. Wọ́n$_1$ sọ pé $\mathbf{àwọn}_{1/*2}$ ti rí bàbá àwọn.
they say that log.pl asp see father log.pl
'They said that they have seen their fathers.' (Adésọlá 2006)

▷ Plural Logs also known for Gokana (Hyman & Comrie 1981) and Ibibio (Newkirk 2019).

Strict Readings

Fanselow (1991), Sauerland (2013), McKillen (2016):

▷ Not all anaphors are ϕ-deficient. the ones that are not, are often morphologically complex, in that they are decomposed into a pronoun + self part.

▷ English *himself/herself* is inflected for gender and number and contains self.

▷ Fanselow (1991) proposes that such anaphors should be analyzed just like that: as a pronoun with a reflexive operator: *herself* $\equiv$ [*pro*$_i$ self]

▷ The locality of Principle A is derived by self restricting the referent of *pro* to be identical to that of the co-argument of the predicate (Reinhart & Reuland 1993)

(9) Sauerland (2013), McKillen (2016):

a. Mary defended herself $\rightsquigarrow$ Mary defended [*pro*$_i$ self] (*pro*$_i$ free)

b. $[\![\text{self}]\!] = \lambda x \lambda R \lambda y : x = y.\ R(y, x)$

▷ This decomposition has the benefit to derive strict readings of *himself/herself*:

(10) Only MARY defended herself.

a. *Strict*: 'No one else defended Mary.'

b. *Sloppy*: 'No one else defended themselves.'

▷ The self's contribution can be ignored across focus alternatives, which derives strict readings (same also wrt. ϕ-features of fake indexicals)

(11) a. *LF for* (10): only [MARY$_F$ defended [her$_1$ self]] (Sauerland 2013)

b. *Focus Alternatives (strict reading)*: {[Sue defended [her$_1$ self]],
[Ana defended [her$_1$ self]], ... }

▷ **Observation:** Logophors can also receive strict readings!

(12) Élì kò yé súsú bé **yè** ɖùdzí lè àwù-dódó ƒé hòʋíʋlí mè.
Eli only foc think comp Log win in dress-wear poss contest inside
'Only Eli thinks that he won (the costume contest).' **Ewe**

a. *Strict:* 'No one but Eli$_i$ thinks **he**$_i$(=Eli) won the costume contest.'

b. *Sloppy:* 'No one$_j$ but Eli thinks **they**$_j$ won the costume contest.'

(13) Adé nìkan ni ó rò wípé **òun** máa tayọ nínú ìdíje asọ náà.
Adé only foc rp think that Log fut to.win inside contest clothes det
'Only Adé thinks that he will win the costume contest.' **Yoruba**

a. *Strict:* 'No one but Ade$_i$ thinks **he**$_i$(=Ade) won the costume contest.'

b. *Sloppy:* 'No one$_j$ but Ade thinks **they**$_j$ won the costume contest.'

▷ Bassi et al. (2023) develop a semantics for logophors that derives *de se* readings by decomposing them into a [Log]-feature + pronoun: e.g. *yè* $\equiv$ [log *pro*$_i$]

– *pro*$_i$ is a (free) variable over individual concepts; type $\langle s, e \rangle$
– Log encodes reference to the 'Logophoric Center' of the embedded world via a presupposition; LogP constraints the individual concept *pro*$_i$ stands for to be one which maps the local evaluation worlds to their center (center made reference to by the attitude predicate)

(14) a. *LF for (12)*: Only [Eli$_{[\text{FOC}]}$ thinks λw_x [[$_{\text{LogP}}$ [log *pro*$_i$]$_{w_x}$] won$_{w_x}$]]

b. *Alt's (strict)*: { Kofi thinks λw_x [[$_{\text{LogP}}$ [log *pro*$_i$]$_{w_x}$] won$_{w_x}$],
Koku thinks λw_x [[$_{\text{LogP}}$ [log *pro*$_i$]$_{w_x}$] won$_{w_x}$], ...}

▷ Just like with complex anaphors, the semantics of LogP gets us (i) obligatory coreference without binding, (ii) predicts strict readings, and (iii) does not predict ϕ-deficiency. **Conclusion:** Logophors are not obligatorily bound.