Agreement mismatches in logophoric domains

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Worum geht es?

- May languages exhibit person features mismatches in attitudinal contexts, e.g., when embedded under verbs of speech or thought.
- Both the distribution and understanding of these mismatches are still poorly understood.
- Today I focus on one class of languages – languages with **logophoric pronouns (LPs)** – and argue that they should be given a separate treatment from other, apparently similar surface phenomena such as shifted indexicals or monstrous agreement.
- The present account allows us to understand the apparent mismatches and reconsider the view that LPs are 'outliers' in a given paradigm, making use of conservative, property-denoting person features (Harbour 2006; Sauerland and Bobaljik 2022).

Introduction

- Since the pioneering work of Schlenker (1999, 2003), the cross-linguistic study of indexicals and their behaviour in intensional contexts has led to the discovery of an ever-increasingly rich empirical domain, with important consequences on the theorizing of indexicality and grammatical person.
- At least three (apparently) distinct phenomena have been discussed in the literature in this regard:
  - Shifted indexicals (SIs) (Schlenker, 1999, 2003; Anand, 2006; Deal, 2020b)

(1) Homer anɛ ɛti zbelexku (ʔɨjɛ) ʔɨlu
Homer 1SG.NOM DEF best (COP.1SG) say.PST.3SG.M
'Homer$_i$ said that he$_i$ was the best.'
[Eritrea Tigrinya (Semitic), personal fieldwork]

– Logophoric pronouns (LPs) (Koopman and Sportiche, 1989; Schlenker, 2003; Bassi et al., 2023; Blunier, 2024)

(2) Kofi be **yè** dzo
Kofi say **LOG** leave
'Kofi$_i$ said that he$_{\{i/\#j\}}$ left'
[Ewe (Niger-Congo), Clements 1975]

– Monstrous agreement (MA) (Sundaresan, 2011; Messick, 2023)

(3) Raju [tanu parigett-ææ-nu ani] cepp-ææ-Du.
Raju 3SG run-PST-1SG COMP say-PST-3SG.M
'Raju$_i$ said that he$_i$ ran.'
[Telugu (Dravidian), Messick 2023: (10b)]

- There is evidence that at least two of these phenomena - SIs and MA - although very similar on the surface, must be treated separately (Deal, 2020b, 2024)
- Today, I will bring additional evidence that LPs, although sharing properties with both SIs and MA, cannot be reducible to one or the other category.

Goals for today

- Present the three empirical phenomena at stake (SIs, LPs, MA)
- Present the SIs/MA analysis of Deal (2024) and its main tenets;
- Introduce novel empirical evidence from logophoric languages, and argue that LPs, too, have a distinct 'shifty profile' than SIs and MA.

Setup: Kaplanian two-dimensional semantics

- Indexicals are traditionally conceived as rigid designators: they cannot outscope traditional operators such as modals or attitude verbs (Kaplan, 1989):

$s(c)$ = speaker of c
$a(c)$ = addressee of c

(4) Claire$_i$ said that I$_{s(c)/*i}$ wanted to visit Trier.

- Kaplan (1989) cashes this out by assuming a two-dimensional semantics in which the interpretation function $[\![\cdot]\!]$ is relativized to a context parameter c, distinct from the index i.

(5) **Semantic value**
$\lambda i.[\![\alpha]\!]^{g,c,i}$

A function from index parameters to truth values, relative to a context.

- Crucially for our purposes, I take the index (or circumstances of evaluation) i to be isomorphic to context c :

Von Stechow and Zimmermann (2005); Anand (2006)

(6) a. $c = \langle s(c), a(c), w(c), t(c), l(c) \rangle$

b. $i = \langle s(i), a(i), w(i), t(i), l(i) \rangle$

- Modals and attitude verbs act on i and never shift c:

(7) **Attitudinal quantification**

a. $[\![\text{think } \phi]\!]^{g,c} = \lambda x.\forall i' \in \text{DOX}(x,i) : [\![\phi]\!]^{g,c,i'}$
Where $i' \in \text{DOX}(x,i)$ iff x thinks in i that she might be $s(i')$ in $w(i')$ at $loc(i')$ and $time(i')$.

b. $[\![\text{say } \phi]\!]^{g,c} = \lambda x.\forall i' \in \text{SAY}(x,i) : [\![\phi]\!]^{g,c,i'}$
Where $i' \in \text{SAY}(x,i)$ iff what x said in i is compatible with x being $s(i')$ in $w(i')$ at $loc(i')$ and $time(i')$.

- Kaplan famously argued that no operator in natural language could ever shift c - a claim that was to be refuted.

Indexical shift

- Some languages use first- and second-person indexicals to refer to reported speech or thought participants, (1)-(8):

(8) Tursun [men kim-ni kör-dim] di-di?
Tursun 1SG who-ACC see-PST.1SG say-PST.3
✓ 'Who did Tursun say Tursun saw?'
✗ 'Who did Tursun say I saw?'
[Uyghur (Turkic), Sudo 2012: 205]

- The matrix scope reading of the wh-element *kim* 'who' in (8) ensures that the embedded clause is not quoted; nevertheless, the embedded first-person pronoun *men* can only refer to the attitude holder (AH) Tursun, and not to the speaker.

- A possible solution would be to assume that *men* in Uyghur and analogous forms in related languages are not genuine indexicals but bindable elements that merely *look like* indexicals - a solution that we will come back to. However, data such as (9) suggests that this would be a mistake to do so:

(9) vɨzeri Rojda Bill-ra va kɛ ɛz to-ra miradisa
yesterday Rojda Bill-to say.PST COMP 1SG 2SG-to angry.be.PRS

✓ 'Yesterday Rojda$_i$ said to Bill$_j$ that he$_i$ is angry at him$_j$.'
✓ 'Yesterday Rojda$_i$ said to Bill$_j$ that I am angry at you.'
✗ 'Yesterday Rojda$_i$ said to Bill$_j$ that I am angry at him$_j$.'
✗ 'Yesterday Rojda$_i$ said to Bill$_j$ that he$_i$ is angry at you.'
[Zazaki, Anand and Nevins 2004: (13)]

- Zazaki being an optional-shifting language, the sentence in (9) is only two-way ambiguous.
- Under a shifted interpretation, both first- and second-person indexicals refer to the reported speaker and addressee, respectively;
- Under the unshifted interpretation, they refer to $s(c)$ and $a(c)$.
- Crucially, mixed or 'cross-contextual' readings are excluded: in other words, indexicals must 'shift together' in Zazaki.

(10) **Shift together**
If one indexical of class ψ picks up reference from context c, then all indexicals of class ψ within the same minimal attitude complement must also pick up reference from context c. [Deal 2020b: 42]

- The most straightforward (and successful) way to implement this analysis is to assume that IS-languages make use of a context-shifting operator $\overset{\cdot\cdot}{\frown}$, (11):

(11) **The monster operator**
$[\![\overset{\cdot\cdot}{\frown}\,\alpha]\!]^{g,c,i} = [\![\alpha]\!]^{g,i,i}$

First proposed by Anand and Nevins (2004). The $\overset{\cdot\cdot}{\frown}$ notation is from Sudo (2012)

(12) $[\![$Yesterday Rojda said to Bill that $\overset{\cdot\cdot}{\frown}$ [I am angry at you]$]\!]^{g,c,i} = 1 \Leftrightarrow$
$\forall i'$ compatible with what Rojda said in i, then the speaker in i' is angry at the addressee in i'.

- The $\overset{\cdot\cdot}{\frown}$ operator, when inserted, shifts everything in its scope.

- This accounts for shift-together effects.
- Coupled with appropriate syntactic assumptions (such that the fact that 👻 is usually encoded in the C head of a CP), the operator-based approach to indexical shift is able to accomodate most of the cross-linguistic data, among which the fact that indexicals only shift in CPs and not other kinds of complements (such as nominalized clauses, as in Turkish, Tatar, Buryat and Uyghur).

Şener and Şener 2011; Sudo 2012; Shklovsky and Sudo 2014; Podobryaev 2014; Wurmbrand 2018

Monstrous agreement

- Other languages display an analogous 'shifty' behavior with first-person agreement markers in clauses embedded by attitude verbs, (3)-(14):

(3) Raju [tanu parigett-ææ-nu ani] cepp-ææ-Du.
Raju 3SG run-PST-1SG COMP say-PST-3SG.M

'Raju$_i$ said that he$_i$ ran.'

[Telugu (Dravidian), Messick 2023: (10b)]

(13) Alsu ***pro*** ber kajčan da miŋga bag-m-a-s-mɤn
Alsu ***pro*** one when nPCL 1SG.DAT look.at-NEG-ST-POT-1SG
diep bel-ä
COMP know.ST-IMPF

'Alsu$_i$ knows that **I**$_i$ would never look at **me**$_{s(c)}$'

[Mishar Tatar (Turkic), Podobryaev 2014: (210)]

(14) a. boris man-a ***pro*** san-ba ëɕl-e-p te-ze
boris I.OBJ ***pro*** 2SG-INS work-NPST-1SG say-COMP
kala-rj-ə
say-PST-3SG

'Boris$_i$ told me that I / he$_i$ will work with you$_{a(c)}$.'

b. boris man-a ep san-ba ëɕl-e-p te-ze
boris I.OBJ I.NOM 2SG-INS work-NPST-1SG say-COMP
kala-rj-ə
say-PST-3SG

'Boris$_i$ told me that I / *he$_i$ will work with you$_{a(c)}$.'

[Poshkart Chuvash (Turkic), Knyazev 2022: (28)]

(15) àbu papà tolim ɛbè àlózì iŋèz morotó
AUX father say COMP 1SG.go.NPST 3SG Moroto
'Father$_i$ said that he$_i$ was going to Moroto.'
[Karimojong (Nilotic), Curnow 2002: (18)]

- In (3)-(15), we see 1SG agreement with a standard 3rd person form (or silent *pro*) that can be 'shifty' in the familiar sense.
- However, first- and second-person pronouns *do not* shift in these languages, as evidenced notably by (13) and (14).
- Sometimes, languages can have both LPs and MA ('first-person logophoricity' in the sense of Curnow 2002); this is the case of Donno So:

(16) a. Oumar ma jɛmbɔ paza **boli** miñ tagi
Oumar 1SG.SBJV sack.DEF drop left.3SG 1SG.OBJ inform.PST
'Oumar$_i$ told me that I had left without the sack.'
[Culy 1994: (20)]

b. Oumar inyemɛ jɛmbɔ paza **bolum** miñ tagi
Oumar LOG sack.DEF drop left.1SG 1SG.OBJ inform.PST
'Oumar$_i$ told me that he$_i$ had left without the sack.'

- Monstrous agreement forms therefore a typologically distinct category from SI, with a different empirical profile.

Deal's analysis

- Deal (2020b, 2024) proposes an analysis of MA along the following lines.
- Languages with MA display a 'split' in person features: the speaker-denoting feature AUTHOR is divided into two 'sub-persons', AUTH-C and AUTH-I.

(17) **Person features**

Noyer (1992); McGinnis (2005); Harbour (2006); Sauerland (2008); Sauerland and Bobaljik (2022)

a. $[\![\text{AUTHOR}]\!]^{g,c,i} = \lambda x : s(c) \sqsubseteq x.x$

b. $[\![\text{PARTICIPANT}]\!]^{g,c,i} = \lambda x : s(c) \sqsubseteq x \vee a(c) \sqsubseteq x.x$

(18) **Person features in MA languages**

a. $[\![\text{AUTHOR-C}]\!]^{g,c,i} = \lambda x : s(c) \sqsubseteq x.x$

b. $[\![\text{AUTHOR-I}]\!]^{g,c,i} = \lambda x : s(i) \sqsubseteq x.x$

c. $[\![\text{PARTICIPANT}]\!]^{g,c,i} = \lambda x : s(c) \sqsubseteq x \vee a(c) \sqsubseteq x.x$

- AUTH-C is indexical and refers to the context speaker; AUTH-I refers to the center of the index tuple i:

(19) a. $[\![[\text{AUTH-C}]]\!]^{g,c,i} = s(c)$

b. $[\![[\text{AUTH-I}]]\!]^{g,c,i} = s(i)$

- Since AUTH-I-specified elements refer to the center of the index, attitudinal quantification will shift its reference to the attitude holder:

(7a) **Attitudinal quantification**
$[\![\text{think } \phi]\!]^{g,c} = \lambda x.\forall i'$ compatible with what x thinks in $i : [\![\phi]\!]^{g,c,i'}$

- The central idea is that in some languages, AUTH-C and AUTH-I come apart, while in others, they are syncretic.
- Let us illustrate the first case using Deal's own example. Consider again the Donno So data in (16), repeated here:
- Consider now the following problem:

(20) Oumar ma jɛmbɔ paza **boli** miñ tagi
Oumar 1SG.SBJV sack.DEF drop left.3SG 1SG.OBJ inform.PST
'Oumar$_i$ told me that I had left without the sack.'
[Culy 1994: (20)]

- In this example, the center of i and that of c (the speaker) are distinct.
- Let's assume that first person agreement in Donno So realizes AUTH-I, while third person is the elsewhere case.

(21) a. [AUTH-I, F] ⇔ *-um*

b. [F] ⇔ *-i*

- Since Donno So is a LP-language, it also make use of two different pronominal forms, a standard first person and a logophoric one:

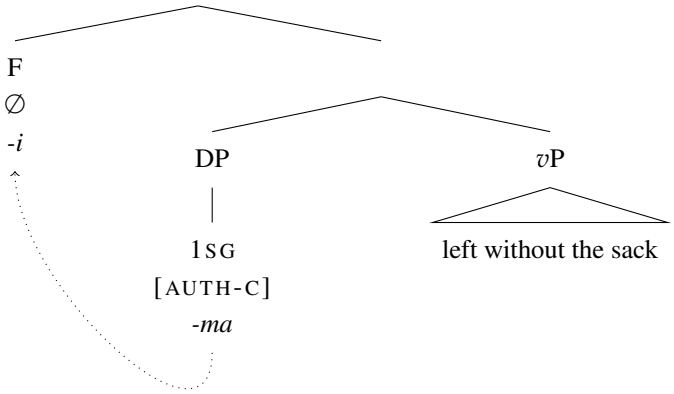
(22) a. [AUTH-I, D] ⇔ *inyemɛ*

b. [AUTH-C, D] ⇔ *-ma*

- Following a standard, derivational model of Agree in which heads specified with uninterpretable features probe downward to find goals with a (subset of) ϕ-features to satisfy the agreement relation , the probe looks for a goal that is specified with the same feature.

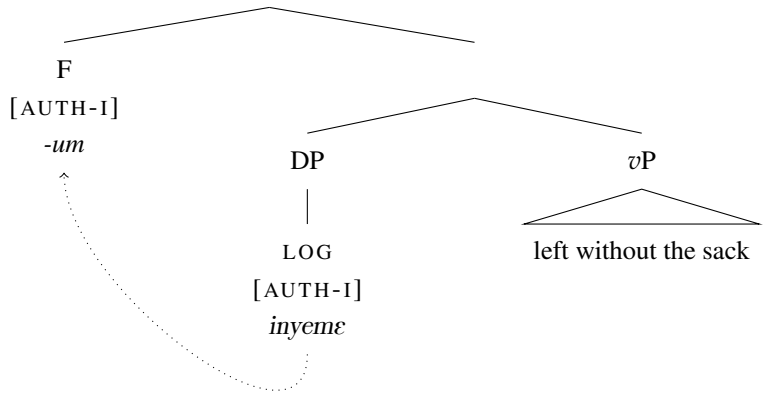
Chomsky (2000, 2001); Bejar and Rezac (2003); Pesetsky and Torrego (2007); Béjar and Rezac (2009); Preminger (2014); Deal (2015, 2020a)

- In the case of (20), the probe is specified with AUTH-I but the goal - a standard first-person pronoun - is specified with AUTH-C: the elsewhere exponent is inserted.



- If the controller of the agreement relation is an AUTH-I element, then the first-person exponent *-um* is inserted:

(23) Oumar inyemɛ jɛmbɔ paza **bolum** miñ tagi
Oumar LOG sack.DEF drop left.1SG 1SG.OBJ inform.PST
'Oumar$_i$ told me that he$_i$ had left without the sack.'



- Since, in matrix contexts, $s(c) = s(i)$, we correctly predict *-um* to surface with first persons only in these environments.

Syncretism of AUTH-C *and* AUTH-I

- In some languages, AUTH-C and AUTH-I are syncretic: they both lead to realization of first person.
- This is the case for languages Mishar Tatar and Chuvash above: in both, first person agreement on the embedded verb spells out both AUTH-C and AUTH-I features, as does the silent *pro*: the standard first person, however, spells out only AUTH-C.

(14) a. boris man-a ***pro*** san-ba ëɕl-e-p te-ze
boris I.OBJ ***pro*** 2SG-INS work-NPST-1SG say-COMP
kala-rj-ə
say-PST-3SG
'Boris$_i$ told me that I / he$_i$ will work with you$_{a(c)}$.'

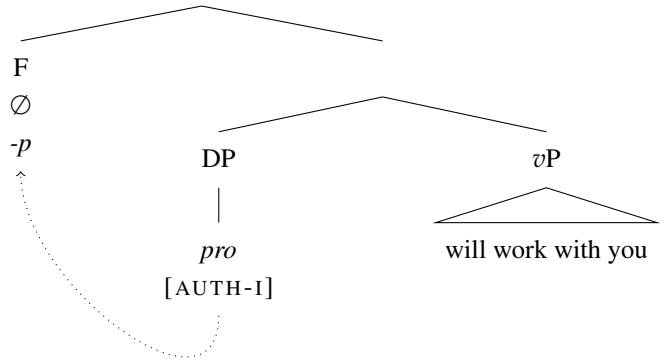
b. boris man-a ep san-ba ëɕl-e-p te-ze
boris I.OBJ I.NOM 2SG-INS work-NPST-1SG say-COMP
kala-rj-ə
say-PST-3SG
'Boris$_i$ told me that I / *he$_i$ will work with you$_{a(c)}$.'
[Poshkart Chuvash (Turkic), Knyazev 2022: (28)]

(24) a. [AUTH-C, AUTH-I, F] ⇔ *-p*

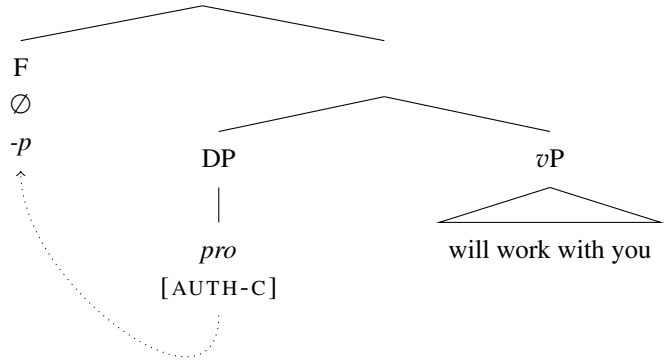
b. [AUTH-C, AUTH-I, D] ⇔ *pro*

c. [AUTH-C, D] ⇔ *-ep*

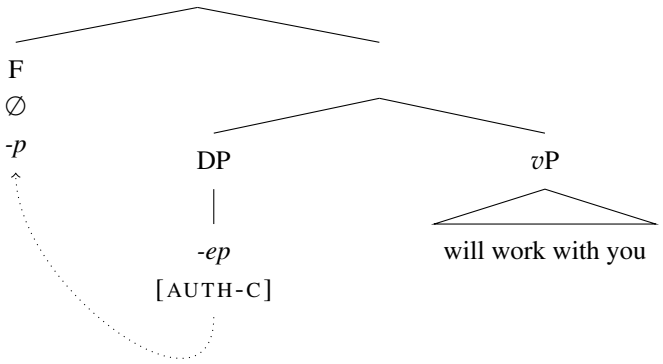
(25) **Derivation of (14a) (shifted reading)**



(26) **Derivation of (14a) (unshifted reading)**



(27) **Derivation of (14b)**



- Deal's AUTH-I analysis makes two crucial predictions:

  1. **Locality.** Since AUTH-I-elements denote the center of index i, and that attitudinal quantification affects the center of the index $s(i)$, AUTH-I-elements in multiply embedded sentences should denote the center of the most local attitude verb. This is illustrated in (28):

(28) Se:du [u wa [*pro* yɔgu wɔ-ŋ] gi-y] gi-y
Seydou 2SG QUOT.SBJV nasty be-1SG say-PFV say-PFV
✓ 'Seydou$_i$ said you said that you are nasty.'
✗ 'Seydou$_i$ said you said that he$_i$ is nasty.'
[Donno Sɔ, Heath 2016, 304]

In (28), the 1SG marker can only refer to the closest center (which is also the context addressee, $a(c)$), but not the topmost center Seydou.

  2. **Conflation of $s(c)$ and $s(i)$.** Whenever the current speaker reports something that he himself said - that is, when the value of $s(c)$ and $s(i)$ is the same -, then AUTH-I should be inserted. This is borne out with the 1SG *-N* marker in Donno So:

(29) mi da:ŋa-ŋ gi-y-ŋ
1SG.SBJV sit.STAT-1SG say-PFV-1SG
'I said that I am sitting.'
[Donno Sɔ, Heath 2016, 303]

Main takeaway

- Deal (2024) successfully accounts for cases involving MA, a form of first person agreement that cross-refers attitude holders in embedded contexts.
- A question that is left open is the following: **can the analysis be readily extended to logophoric pronouns (LPs)?** This is what we set out to answer now.

Enter logophors: two problems for the AUTH-I *analysis*

Problem #1: non-local index antecedence

- At first sight, LPs are simply AUTH-I elements:

(2) a. Kofi be **yè** dzo
Kofi say **LOG** leave
'Kofi$_i$ said that he$_{\{i/*j\}}$ left'

b. Kofi be **e** dzo
Kofi say **3SG** leave
'Kofi$_i$ said that he$_{\{*i/j\}}$ left'
[Ewe (Niger-Congo: Gbe), Clements 1975]

- One of Deal (2024)'s prediction is that LPs should be subject to a form of locality requirement: in multiply embedded contexts, LPs should be able to retrieve their reference from the closest attitudinal domain only.
- However, we can find instances of LPs in which this is clearly not the case:

(30) a. Kofi xɔ-e se be Ama gblɔ be yè-ʃu yè.
Kofi receive hear COMP Ama say COMP LOG-beat LOG
'Kofi$_i$ believed that Ama$_j$ said that LOG$_{i/j}$ beat LOG$_{i/j}$.'
[Ewe, Clements 1975, 73]

b. Marie be Kofi xɔse be yè na yè cadeau.
Mary say Kofi believe COMP LOG give LOG gift
'Mary$_i$ said that kofi$_j$ believed that LOG$_{i/j}$ gave LOG$_{i/j}$ a gift.'
[Ewe, Pearson 2015, (47)]

(31) a. Olù ní Adé so pé àwon rì òun
Olu say Ade say COMP 3SG.PL see LOG

'Olu$_i$ said that Ade$_j$ said that they$_{j,k}$ saw him$_k$.'
[Yoruba (Niger-Congo: Yoruboid), Adesola 2005, 207]

b. Olù so pé Ade ro pé bàbá oun ti rì
Olu say COMP Ade think COMP father LOG PERF see
ìyá òun
mother LOG

'Olu$_i$ said that Ade$_j$ said that his$_{i/j}$ father saw his$_{i/j}$ mother.'
[Yoruba, Anand 2006, 60]

(32) Ekpe a-bo ke Udo a-ke a-kere ke imo
Ekpe 3SG-say COMP Udo 3SG-PST 3SG-think COMP LOG
ì-ke í-kit Ima
LOG-PST LOG-see Ima

'Ekpe$_i$ says that Udo$_j$ thinks that he$_{i/j}$ saw Ima.'
[Ibibio (Niger-Congo: Cross-River), Newkirk 2019, (12)]

(33) Api bO wu ye n kolo n
Api believe COMP LOG likes LOG

'Api$_i$ believes that he$_{i/k}$ likes him$_{i/k}$.'
[Abe (Niger-Congo: Kwa), Koopman and Sportiche 1989, (44a)]

- This requires a more flexible system.

*Problem #2: the *1SG-LOG pattern*

- A robust cross-linguistic generalization is that LPs cannot take 1st person antecedents.
- In other words, whenever $s(c) = s(i)$, a logophor cannot be used, on pains of generating oddness:

(34) a. ŋ gé doo **nà** ŋ gà
1SG said QUOT 1SG.PRF PRF go

'I said that I am gone'

b. è gé doo **ɓà** ŋ gà
3SG said QUOT LOG.SG PRF go

'He$_i$ says he$_{i/*j}$ is gone'
[Wan (Niger-Congo), Nikitina 2012: (6), (25)]

(35) a. M xɔse be m nyi sukuvi nyoe de.
1SG believe COMP 1SG COP student good DEF
'I_i believe that I_i am a good student'

b. #M xɔse be yè nyi sukuvi nyoe de.
1SG believe COMP LOG COP student good DEF
Intended: 'I_i believe that I_i am a good student'
[Ewe, Pearson 2015: (48)]

(36) a. Kofí ŋa bə yi lɔ Áma
Kofi know COMP LOG love Ama
'Kofi$_i$ knows that he$_{i/*j}$ loves Ama'

b. #ɱə ŋa bə yi lɔ Áma
1SG know COMP LOG love Ama
Intended: 'I_i know that I_i love Ama'
[Danyi Ewe, O'Neill 2015: (3a, c)]

(37) a. #ŋ-ké bò ké ì-mà í-kót ŋwèt
1SG-PST say COMP LOG-PST LOG-read book
Intended: 'I_i said that I_i read a book'

b. #ì-ké bò ké mmìmɔ ì-mà í-kót ŋwèt
1SG-PST say COMP LOG.PL LOG-PST LOG-read book
Intended: 'We$_i$ said that we$_i$ read a book.'
[Ibibio (Niger-Congo), Newkirk 2019: (10), (12))]

- Deal's prediction here is that the *1-LOG configuration **should** obtain, contrary to fact: taking the Wan example (34), if *-ŋ* is to be treated as the spellout of AUTH-I, then what prevents it to be inserted when the subject is first person, that is, when $s(i) = s(c)$?
- The intermediate conclusion is that LPs are a distinct type of AUTH-I elements.
- In what follows, we aim at providing a more adequate theoeretical description of what these elements could be, in line with Deal (2024)'s findings.

Towards an account of LPs

- Our proposal, following an early insight by Schlenker (1999), is that LPs, because they are specific lexical elements within a given paradigm, compete with other forms (cp. the recent proposal by Bassi et al. 2023).
- In our account, LPs are complex elements consisting of i) an index variable i , and ii) an individual variable x: they are individual concepts.

  Cresswell (1990); Schlenker (1999, 2003); Percus (2000)
- Pronouns additionally compose with ϕ-features PERSON, NUMBER and GENDER within a ϕ-phrase.

  Heim (1998); Von Fintel and Heim (2011)

  Sauerland (2003, 2008); πP in Harbour (2016)
- Index variables are of the same type as contexts (type k) and are complex entities consisting of the familiar tuple $i = \langle s(i), a(i), w(i), t(i), l(i)\rangle$.
- ϕ-features are partial functions from individuals to individuals that introduce presuppositions: they restrict the value of the variable with respect to that of the index i.

  Cooper 1979; Heim and Kratzer 1998; Sauerland 2003, 2008; Heim 2008; Charnavel 2019

(38) **Person features (final)**

a. $[\![\text{AUTHOR}]\!]^{g,c,i} = \lambda x : s(i) \sqsubseteq x.x$

b. $[\![\text{PARTICIPANT}]\!]^{g,c,i} = \lambda x : s(i) \sqsubseteq x \vee a(i) \sqsubseteq x.x$

- Last, I assume an additional $\pm$ACTUAL feature of type $\langle k, k\rangle$ which, when of positive valence, identifies the value of the index variable i with that of c; when negative, it is idle and has no semantic import.

  Inspired by Schlenker (1999, 2003)

  This assumption might be problematic if we want to assume (alongside i.e. Harbour 2011b,a, 2014 i.a.) that feature negation is always interpreted as logical negation ($\neg$).

(39) **The ACTUAL feature**

a. $[\![\text{+ACTUAL}]\!]^{g,c} = \lambda i : i = c.i$

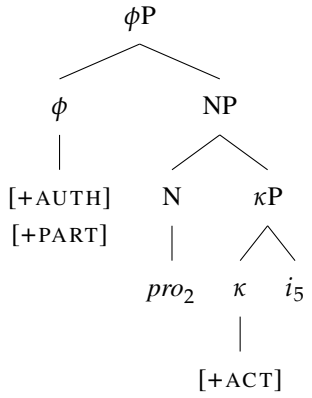
b. $[\![\text{-ACTUAL}]\!]^{g,c} = \lambda i.i$

- Depending on their functional structure and the valence of $\pm$ACTUAL, pronouns will behave differently in attitude contexts.

Case 1: indexical pronouns with +ACTUAL

- When composing with +ACTUAL, pronouns will *not* be affected by (centered) attitudinal quantification: they will be indexical in the Kaplanian sense.

(40) **Indexical first person**



(41) a. $[\![+\text{ACT}_{\langle k,k\rangle}]\!]^{g,c} = \lambda i : i = c.i$ ACTUAL *feature*

b. $[\![i_{5_k}]\!]^{g,c} = g(5)$ *context pronoun*

c. $[\![+\text{ACT}_{\langle k,k\rangle}]\!]^{g,c}([\![i_{5_k}]\!]^{g,c}) = g(5)$ *by FA*

d. $[\![pro_{2_{\langle k,e\rangle}}]\!]^{g,c} = \lambda i.g(2)(i)$ *individual concept*

e. $[\![pro_{2_{\langle k,e\rangle}}]\!]^{g,c}([\![[\text{-ACT}[i_5]]_k]\!]^{g,c}) = g(2)(g(5))$ *by FA*

f. $[\![+\text{AUTH}_{\langle e,e\rangle}]\!]^{g,c}([\![[pro_2[+\text{ACT}[i_5]]]_e]\!]^{g,c} =$
$g(2)(g(5))$ iff $\begin{cases} s(g(5)) \sqsubseteq g(2)(g(5)) \wedge s(g(5)) = s(c) \\ \text{undefined otherwise} \end{cases}$
by FA

- For ease of exposition, I will represent the structure $[+\text{AUTH}[pro_2[+\text{ACT}[i_5]]]]_e$ simply as I_5, keeping the index subscript explicit.
- When embedded under an attitude verb, the indexical will always refer to the matrix speaker through identification of i with c, as desired:

The complete structure of the first person is $[+\text{AUTH}_{\langle e,e\rangle}[+\text{PART}_{\langle e,e\rangle}[pro_{2_{\langle k,e\rangle}}[+\text{ACT}_{\langle k,k\rangle}[i_{5_k}]]]]]_e$; in that case, however, the bundle [+AUTH, +PART] is equivalent to +AUTH alone (per the Absorption Law: $P \wedge (P \vee Q) \equiv P$). There are, however, both empirical and theoretical arguments that the former representation is the correct one - that is, grammars exploit every feature-value combinations of the feature set up to contradiction (δ-completeness, Harbour 2006, 2016).

(42) a. Diane said that I was funny.

b. $[\![\text{funny}_{\langle k\langle e,t\rangle\rangle}]\!]^{g,c} = \lambda i.\lambda x.x$ is funny in i

c. $[\![\text{funny}_{\langle k\langle e,t\rangle\rangle}]\!]^{g,c}([\![i_{5_k}]\!]^{g,c}) = \lambda x.x$ is funny in $g(5)$ *by FA*

d. $[\![\text{I}_{5_e}]\!]^{g,c} = g(2)(g(5))$iff $\begin{cases} s(g(5)) \sqsubseteq g(2)(g(5)) \wedge s(g(5)) = s(c) \\ \text{undefined otherwise} \end{cases}$

$\sim s(c)$

e. $[\![[\text{funny } i_5]_{\langle e,t\rangle}]\!]^{g,c}([\![\text{I}_{5_e}]\!]^{g,c}) = s(c)$ is funny in $g(5)$ *by FA*

f. $[\![\lambda 5\ [\text{I}_5[\text{funny } i_5]]]\!]^{g,c} = \lambda i.s(c)$ is funny in i *by λ-abstraction*

g. $[\![\text{say}_{\langle\langle k,t\rangle\langle e\langle k,t\rangle\rangle\rangle}]\!]^{g,c} = \lambda p_{\langle k,t\rangle}.\lambda x_e.\lambda i_k.\forall i'$ compatible with what x says in $i, p(i')$

h. $[\![\text{say}_{\langle\langle k,t\rangle\langle e\langle k,t\rangle\rangle\rangle}]\!]^{g,c}([\![\lambda 5\ [\text{I}_5[\text{funny } i_5]]]\!]^{g,c}) = \lambda x.\lambda i.\forall i'$ compatible with what x says in $i, s(c)$ is funny in i' *by FA*

i. $[\![\text{Diane said that I was funny}]\!]^{g,c} \Leftrightarrow \forall i'$ compatible with what Diane says in $w(c), s(c)$ is funny in i'

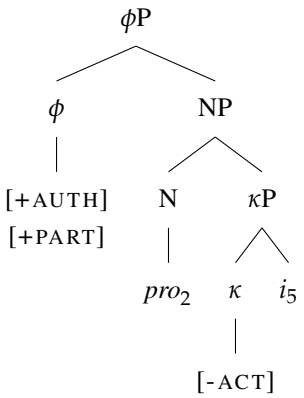
- We ensure that the (indexical) presupposition projects to the matrix clause by adopting Heim (1992)'s presupposition projection (PP) rule in (43):

(43) **Presupposition projection under attitudes (Heim, 1992)**
$[\![x \text{ says } p]\!]^{g,c,i}$ is defined iff $\forall i' \in \text{SAY}(x,i) : [\![p]\!]^{g,c,i'}$ is defined.

Case 2: Logophoric pronouns with -ACTUAL

- By contrast, if a language lexicalizes the -ACTUAL feature, it will have a 'center-denoting' first person that need not be the actual center in its paradigm - that is, a logophoric pronoun:

(44) **Center-denoting first person (logophor)**



(45) a. $[\![\text{-ACT}_{\langle k,k\rangle}]\!]^{g,c} = \lambda i.i$

b. $[\![i_{5_k}]\!]^{g,c} = g(5)$

c. $[\![\text{-ACT}_{\langle k,k\rangle}]\!]^{g,c}([\![i_{5_k}]\!]^{g,c}) = g(5)$ *by FA*

d. $[\![pro_{2_{\langle k,e\rangle}}]\!]^{g,c} = \lambda i.g(2)(i)$

e. $[\![pro_{2_{\langle k,e\rangle}}]\!]^{g,c}([\![[\text{-ACT}[i_5]]_k]\!]^{g,c}) = g(2)(g(5))$ *by FA*

f. $[\![\text{+AUTH}_{\langle e,e\rangle}]\!]^{g,c}([\![[pro_2[\text{-ACT}[i_5]]]_e]\!]^{g,c} =$
$g(2)(g(5))$ iff $\begin{cases} s(g(5)) \sqsubseteq g(2)(g(5)) \\ \text{undefined otherwise} \end{cases}$ *by FA*

(46) a. Diane said that LOG was funny.

b. $[\![\text{funny}_{\langle k\langle e,t\rangle\rangle}]\!]^{g,c} = \lambda i.\lambda x.x$ is funny in i

c. $[\![\text{funny}_{\langle k\langle e,t\rangle\rangle}]\!]^{g,c}([\![i_{5_k}]\!]^{g,c}) = \lambda x.x$ is funny in $g(5)$ *by FA*

d. $[\![\text{LOG}_{5_e}]\!]^{g,c} = g(2)(g(5))$iff $\begin{cases} s(g(5)) \sqsubseteq g(2)(g(5)) \\ \text{undefined otherwise} \end{cases}$
$\sim s(g(5))$

e. $[\![[\text{funny } i_5]_{\langle e,t\rangle}]\!]^{g,c}([\![\text{LOG}_{5_e}]\!]^{g,c}) = s(g(5))$ is funny in $g(5)$ *by FA*

f. $[\![\lambda 5\ [\text{LOG}_5[\text{funny } i_5]]]\!]^{g,c} = \lambda i.s(i)$ is funny in i *by λ-abstraction*

g. $[\![\text{say}_{\langle\langle k,t\rangle\langle e\langle k,t\rangle\rangle\rangle}]\!]^{g,c} = \lambda p_{\langle k,t\rangle}.\lambda x_e.\lambda i_k.\forall i'$ compatible with what x says in i, $p(i')$

h. $[\![\text{say}_{\langle\langle k,t\rangle\langle e\langle k,t\rangle\rangle\rangle}]\!]^{g,c}([\![\lambda 5\ [\text{LOG}_5[\text{funny } i_5]]]\!]^{g,c}) = \lambda x.\lambda i.\forall i'$ compatible with what x says in $i, s(i')$ is funny in i' *by FA*

i. $[\![\text{Diane said that LOG was funny}]\!]^{g,c} \Leftrightarrow \forall i'$ compatible with what Diane says in $w(c), s(i')$ is funny in i'

Solving problem 1: multiple embeddings of LPs

- Recall that LP-languages allow for non-local logophoric reference:

(30a) Marie be Kofi xɔse be yè na yè cadeau.
Mary say Kofi believe COMP LOG give LOG gift

✓ 'Mary$_i$ said that kofi$_j$ believed that she$_i$ gave him$_j$ a gift.'
✓ 'Mary$_i$ said that kofi$_j$ believed that he$_j$ gave her$_i$ a gift.'
[Ewe, Pearson 2015, (47)]

(31) Olù ní Adé so pé àwon rì òun
Olu say Ade say COMP 3SG.PL see LOG
'Olu$_i$ said that Ade$_j$ said that they$_{j,k}$ saw him$_k$.'
[Yoruba, Adesola 2005, 207]

- Now our system is flexible enough to account for it: the index variable of LOG can be bound by the local abstractor (as above) or the intermediate one:

Percus (2000); Schwarz (2012)

(47) a. Mary said that [λ3 Kofi believed that [λ7 LOG$_3$ gave LOG$_7$ a gift]]

b. Mary said that [λ3 Kofi believed that [λ7 LOG$_7$ gave LOG$_3$ a gift]]

- Similar reasoning applies *ceteris paribus* to (31).

Solving problem 2: logophoric blocking

- Recall that, in a wide variety of languages, LPs cannot take 1st person antecedents.
- The generalization we came to is that whenever $s(c) = s(i)$, a logophor cannot be used.

(34) a. ŋ gé doo **nà** ŋ gà
1SG said QUOT 1SG.PRF PRF go
'I said that I am gone'

b. è gé doo **ɓà** ŋ gà
3SG said QUOT LOG.SG PRF go
'He$_i$ says he$_{i/*j}$ is gone' [Wan, Nikitina 2012: (6), (25)]

- What very likely happens here is that the LOG form triggers an **antipresupposition** that the presupposition of the first person is not satisfied in the Common Ground *CG*, which obviously clashes our contextual assumptions. As a result, the sentence is odd.

Percus (2006); Sauerland (2008); Heim (2008); Chemla (2008); Singh (2011); Schlenker (2012); Rouillard and Schwarz (2017, 2018)

- Where does this antipresupposition come about? At the level of pronouns.
- Consider a system such as that of Wan, which has both first-person and logophors in its paradigm:

(48) a. $[\![[+\text{AUTH}[pro_2[+\text{ACT}[i_5]]]]_e]\!]^{g,c} =$
$g(2)(g(5))$ iff $\begin{cases} s(g(5)) \sqsubseteq g(2)(g(5)) \wedge s(g(5)) = s(c) \\ \text{undefined otherwise} \end{cases}$

b. $[\![[+\text{AUTH}[pro_2[-\text{ACT}[i_5]]]]_e]\!]^{g,c} =$
$g(2)(g(5))$ iff $\begin{cases} s(g(5)) \sqsubseteq g(2)(g(5)) \\ \text{undefined otherwise} \end{cases}$

- Note that the first person has a strictly stronger presupposition than LOG - it is satisfied in less worlds (only the world of c) and therefore, it is more informative.
- By *Maximize Presupposition!* , we expect the pronoun with the stronger presupposition to be favored at the utterance level:

Heim (1991)

(49) **Maximize Presupposition! (standard version; to be revised)**
Do not use ϕ in context C if there is a $\psi \in \text{ALT}(\phi)$ s.t.

a. the presuppositions of ψ and ϕ are satisfied within C;

b. $[\![\psi]\!]^C = [\![\phi]\!]^C$, and

c. the presupposition of ψ (ψ_π) asymmetrically entails the presupposition of ϕ (ϕ_π).

Following standard usage, I use capital C here to denote the stalnakerian context set (Stalnaker, 1974), that is, the set of all possible worlds compatible with the *common ground*, that is, the set of all possible propositions compatible with what the interlocutors in a conversation believe/take for granted and not subject for further discussion. This is to be contrasted with the Kaplanian context c used so far.

- Taken as a pragmatic filtering condition on utterances, the principle states that, given a presuppositional element ϕ that has a set of alternatives ALT(ϕ), speakers should prefer to use any member of that set ψ if it is (i) presuppositionally stronger, and (ii) true in the context of utterance.
- If a competent and cooperative speaker were to utter ϕ under those conditions, then the hearer would consistently infer that she did not utter the presuppositionally stronger ψ on purpose, and that the speaker does not know whether ψ is the case or not: in other words, the utterance of ϕ would give raise to an *antipresupposition*.

It is commonly accepted that this inference is eventually strengthened somehow, leading the hearer to infer that the speaker does not believe ψ to be true (Spector, 2003; Sauerland, 2004b,a; Chemla, 2008).

- The principle of *MP!* in (49) needs to be refined, however, because we ultimately want the presuppositions of pronouns to be computed not only against the set of the *actual* context and common ground, but the set of possible contexts that the attitude verb quantifies over:

(50) ***Maximize presupposition!* (relativized to possible indexes)**
Do not use ϕ with respect to the current common ground C and assignment g if $\exists\psi \in \text{ALT}(\phi)$ such that

a. $\forall i \in C, \phi \in dom([\![\cdot]\!]^{g,c,C})$ and $\psi \in dom([\![\cdot]\!]^{g,c,C})$

b. $\forall i \in C, [\![\phi]\!]^{g,c,C} = [\![\psi]\!]^{g,c,C}$, and

c. $\forall i \in \kappa$, if $\psi \in dom([\![\cdot]\!]^{g,c,C})$, then $\phi \in dom([\![\cdot]\!]^{g,c,i,C})$, but not the other way around.

- This revised statement of *MP!* allows us to enforce competition among alternative utterances with different presuppositional strenghts across possible indexes κ.
- For two alternatives ϕ and ψ, using ϕ over ψ will be infelicitous if i) both have their respective presuppositions satisfied in C, ii) both are denotationally equivalent in C, and iii) the presuppositions of ψ asymettrically entails the presuppositions of ϕ across every possible index $i \in \kappa$.
- Accordingly, using a LOG element *in lieu* of a 1SG indexical element will trigger the antipresupposition that it is not the case that the reported and actual speakers coincide, clashing with the CG:

(51) a. #I said that LOG am gone.

b. $\rightsquigarrow s(i) \neq s(c)$

Structural competition and the nature of alternatives

- A crucial component of the *MP!*-based approach to antipresupposition (as well as other implicature-related phenomena) is the definition of the alternative set ALT, over which the inference mechanism operates.
- I follow Rouillard and Schwarz (2017) in adopting Katzir (2007)'s theory of structural alternatives for the presuppositional domain.
- In Katzir's account, structural complexity plays a crucial role in determining what counts as an alternative for a given sentence ϕ; the set of formal alternatives $\text{ALT}(\phi)$, represented in (52) will consist in that set of alternatives that are at-most-as-complex as ϕ, which are created by replacing constituents of ϕ with elements in the subsitution source of the language, (53):

(52) $\text{ALT}(\phi) = \{\psi : \psi \precsim \phi\}$

(53) **Substitution source for alternatives** [Breheny et al. 2018: (7)]
An item α is in the Substitution Source of a sentence ϕ in c if

a. α is a constituent that is salient in c (e.g. by virtue of having been mentioned); or

b. α is a subconstituent of ϕ; or

c. α is in the lexicon.

- Since they rely on structural complexity to describe the inferential potential of linguistic objects, the Katzirian view on alternatives can be viewed as a test for probing the syntactic structure of the elements that compete in a given language (cf. Nina's talk).
- However (and crucially), I think that alternatives can be defined are the structural level only, without being restricted at the level of the lexicon:

(54) **Substitution source for alternatives (revised)**
An item α is in the Substitution Source of a sentence ϕ in c if

a. α is a constituent that is salient in c (e.g. by virtue of having been mentioned); or

b. α is a subconstituent of ϕ; or

c. ~~α is in the lexicon.~~

- In our case, competition is sub-morphemic and takes place at the level of features.
- Looking into our feature matrices for pronouns, we can therefore see that our system ensures that the pronominal forms of a language with speaker logpophors are of equal complexity, allowing them to be alternatives to each other and therefore compete by the algorithm outlined in (50).

Sauerland and Bobaljik (2022); Alexiadou et al. (2024)

(55) a. 1st: [+AUTH, +PART, +ACTUAL]

b. LOG: [+AUTH, +PART, -ACTUAL]

c. 2nd: [-AUTH, +PART, -ACTUAL]

d. 3rd: [-AUTH, -PART, -ACTUAL]

- Note that a featural representation of the same paradigm with privative features would eschew the complexity algorithm and, as a consequence, would predict no disjointness inference to arise, contrary to fact: this is essentially because privativity at the level of features obliterate the distinction between negative specification and absence of a feature (Harbour, 2013).

(56) a. 1st: [AUTH, PART, ACTUAL]

b. LOG: [AUTH, PART]

c. 2nd: PART

d. 3rd: ∅

- In such a paradigm, pronouns get increasingly more complex as they are specified with more features.
- This prevents the 1st person to count as an alternative to LOG and therefore, have their presuppositions strenghtened via *MP!*.
- Even more problematic, it fails to account for the fact that 3rd person pronouns in LP-languages also compete with LOG, (30b):

(2) a. Kofi be **yè** dzo
Kofi say **LOG** leave
'Kofi$_i$ said that he$_{\{i/*j\}}$ left'

b. Kofi be **e** dzo
Kofi say **3SG** leave
'Kofi$_i$ said that he$_{\{*i/j\}}$ left'

[Ewe, Clements 1975]

- The Katzirian conception of alternatives thus provides us with an indirect argument for the valence vs. privativity of features.

Note that an alternative privative solution would be to allow the syntax to represent a semantically vacuous – but syntactically contentful – PERSON feature on the 3rd person; this is essentially the strategy pursued by Alexiadou et al. (2024), on the basis of the (un)availability of generic readings in presence/absence of definite determiners in Romance and Germanic languages. The choice of one or the other solution therefore depends on one's own take about arguments for or against feature privativy; for a review of these arguments, see notably Harbour (2013).

Main takeaway

- LPs are an hybrid class in the shifty landscape, having a different distribution than shifted indexicals and monstrous agreement.
- We argue that LPs are individual concepts containing an index variable *i* that might be bound by attitude verbs.
- Indexical pronouns (unshiftable) are elements containing an indexical presuppositional feature, +ACTUAL, that identifies the value of the index variable to that of the context of utterance *c*, preventing such binding.
- By contrast, LPs contain a semantically vacuous -ACTUAL feature.
- Contrary to Deal (2020b, 2024), we do not posit two primitive AUTH features AUTH-C and AUTH-I, but only the conservative, binary features ±AUTH and ±PART, with an additional indexical feature ±ACTUAL.
- Assuming the Katzirian theory of alternatives, the distribution of LPs with respect to their 1SG/3SG counterparts provides us with an indirect argument for viewing pronouns as **feature bundles of equal complexity**, rather than elements of increasing complexity (as in privative theories or geometries, Harley and Ritter 2002; McGinnis 2005).

Further predictions

Logophoric agreement

- Some languages like Gokana (Niger-Congo: Ogoni) do not have LOG lexical items, but LOG agreement:

(57) a. aè kɔ aè dɔ-ɛ
3SG said 3SG fell-LOG
'He$_i$ said he$_i$ fell.'

b. mm kɔ mm dɔ
1SG said 1SG fell
'I$_i$ said I$_i$ fell.'

c. #mm kɔ mm dɔ-ɛ
1SG said 1SG fell-LOG
'I$_i$ said I$_i$ fell.' [Gokana, Hyman and Comrie 1981: (11)]

- This is a similar case of blocking effect at the morphosyntactic level.

- Our theory accounts for cases such as (57b) and the observed blocking effect in (57c): here the relevant feature bundle for LOG agreement is [+AUTH, -ACT]; no agreement can occur therefore if the controller is specified with +ACT.

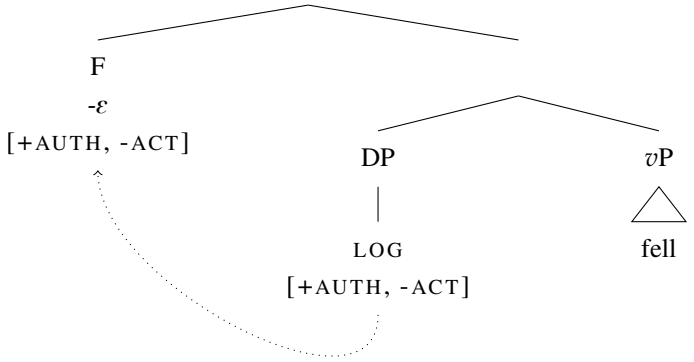
(58) a. [+AUTH, +PART +ACT, D] ↔ *mm*

b. [+AUTH, +PART -ACT, D] ↔ *aè*

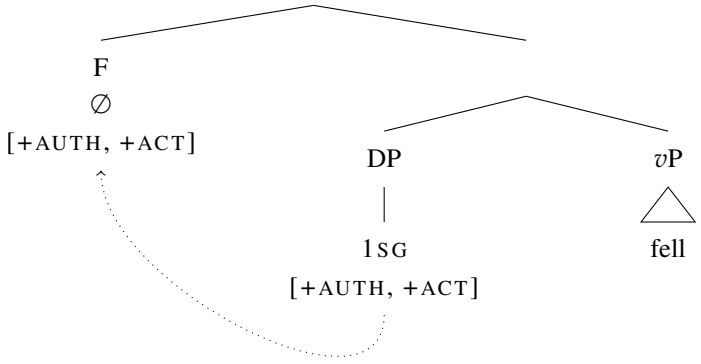
c. [+AUTH, +PART +ACT, F] ↔ ∅

d. [+AUTH, +PART -ACT, F] ↔ *-ε*

(59) **Embedded DP is a logophor: logophoric agreement obtains**



(60) **Embedded DP is first person: no logophoric agreement**



Monstrous agreement, syncretism, and ±ACTUAL

- Just like Deal (2024), our account is able to derive monstrous agreement.
- In our account, MA is similar to logophoric agreement, except that there is no agreement exponence specific to the bundle [+AUTH, -ACT, F]; probes are only sensitive to [+AUTH].

What would be the difference between probes specified for [+AUTH, ±ACT, F] vs [+AUTH, F] alone?

(14) a. boris man-a ***pro*** san-ba ëɕl-e-p te-ze
boris I.OBJ ***pro*** 2SG-INS work-NPST-1SG say-COMP
kala-rj-ə
say-PST-3SG
'Boris$_i$ told me that I / he$_i$ will work with you$_{a(c)}$.'

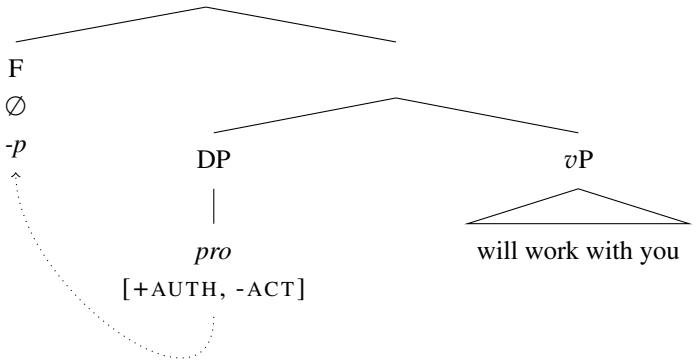
b. boris man-a ep san-ba ëɕl-e-p te-ze
boris I.OBJ I.NOM 2SG-INS work-NPST-1SG say-COMP
kala-rj-ə
say-PST-3SG
'Boris$_i$ told me that I / *he$_i$ will work with you$_{a(c)}$.'
[Poshkart Chuvash (Turkic), Knyazev 2022: (28)]

(61) a. [+AUTH, ±ACT, F] ⇔ *-p*

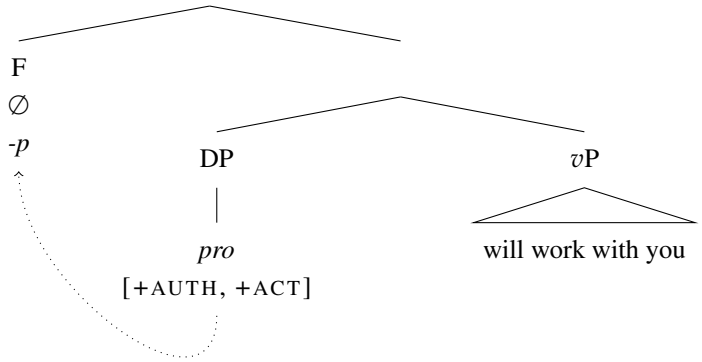
b. [+AUTH, ±ACT, D] ⇔ *pro*

c. [+AUTH, +ACT, D] ⇔ *-ep*

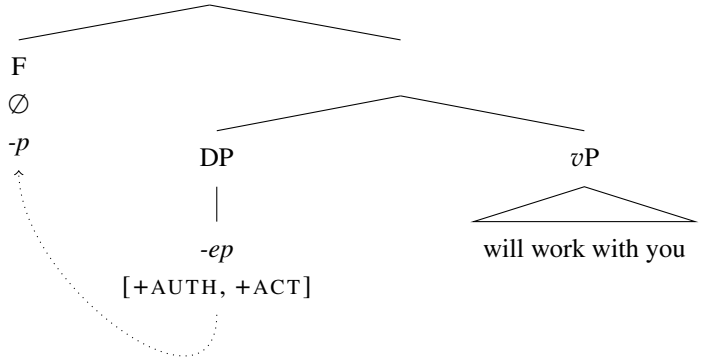
(62) **Derivation of (14a) (shifted reading)**



(63) **Derivation of (14a) (unshifted reading)**



(64) **Derivation of (14b)**



Encoding of reported addressees

- An advantage of the present system is that ±ACTUAL can lexicalize on various persons, regardless of their feature specifications.
- For instance, we correctly predict the existence of languages with 2nd person LPs, with or without 1st person LPs in the paradigm:

(65) k'wal yin gwa goe tu ji
talk say SG.M.LOG.2 OBLIG kill SG.M.LOG.1

'He$_i$ said he$_j$ should kill him$_i$'
(lit. 'He$_i$ said you$_j$ should kill me$_i$')
[Goemai (West Chadic), Hellwig 2006: 219]

(66) n-sat n-wur nə **gwar** ji
1SG-say PREP-3SG COMP **2SG.LOG** come
'I told him$_i$ that he$_i$ should come'
(lit. 'I told him that 2SG.LOG should come.')
[Mupun (West Chadic), Frajzyngier 1997: (35)]

- Since both Goemai and Mupun exhibit both classes of logophoric pronouns (first and second person), we can capture their paradigm with the following person hierarchy:

(67) **Featural system with speaker and addressee LOGs**

a. 1st: [+AUTH, +PART, +ACTUAL]

b. LOG1: [+AUTH, +PART, -ACTUAL]

c. LOG2: [-AUTH, +PART, -ACTUAL]

d. 2nd: [-AUTH, +PART, +ACTUAL]

e. 3rd: [-AUTH, -PART, -ACTUAL]

- Note that it is predicted that for a paradigm such as (67), the second person can only be used in logophoric contexts to denote actual addressees, as example (68) confirms:

(68) n-sat n-wur nə **wur** ji
1SG-say PREP-3SG COMP **2SG** come
'I told him that you$_{a(c^*)}$ should come.'
[Mupun, Frajzyngier 1997: (36)]

- One can also find languages with LOG addressees, but no LOG authors. This is the case of West Chadic language Pero:

(69) ca peemu ta kayu laa mu mijiba
say.PST LOG.2SG FUT drive away man DEM stranger
'[He] said that he$_{a(c')}$ is going to drive the stranger away.'
(lit. '[He] said that you$_{a(c')}$ are going to drive the stranger away.')
[Pero (West Chadic), Frajzyngier 1985: (23b)]

- The Pero pattern can be described with the following hierarchy:

(70) **Featural system with addressee LOG only**

a. 1st: [+AUTH, +PART, +ACTUAL]

b. LOG2: [-AUTH, +PART, -ACTUAL]

c. 2nd: [-AUTH, +PART, +ACTUAL]

d. 3rd: [-AUTH, -PART, -ACTUAL]

Problems: languages of the Caucasus

Agreement blocking

- Aqusha Dargwa (Nakh-Daghestanian) has a shifty first person pronoun that can optionally trigger first person agreement on the embedded verb.
- **Key observation:** the shifted interpretation is available only in cases where first person marking is realized; if it isn't, the sentence can only have an unshifted interpretation.

(71) a. ʔlis hanbikib [nu q'an **iub-ra** ili]
Ali think.PST.3SG 1SG late became.**1** COMP
✓'Ali$_i$ thought that he$_i$ was late'
✓'Ali$_i$ thought that I was late'

b. ʔlis hanbikib [nu q'an **iub** ili]
Ali think.PST.3SG 1SG late became.**3** COMP
✗'Ali$_i$ thought that he$_i$ was late'
✓'Ali$_i$ thought that I was late'
[Aqusha Dargwa, Ganenkov 2021: (10a, 11b)]

(72) a. nab hanbikib [nu q'an **iub-ra** ili]
Ali think.PST.3SG 1SG late became.**1** COMP
'I$_i$ thought that I$_i$ was late.'

b. *nab hanbikib [nu q'an **iub** ili]
1SG think.PST.3SG 1SG late became.**3** COMP
Intended: 'I$_i$ thought that I$_i$ was late.'
[Aqusha Dargwa, Ganenkov 2021: (10b)]

- Assuming (as we and Deal 2024 do) that Aqusha is just like Chuvash in that both its pronominal and agreement exponents are syncretic, we end up with:

(73) a. [+AUTH, +PART +ACT, D] ↔ *nu*

b. [+AUTH, +PART -ACT, D] ↔ *nu*

c. [+AUTH, +PART +ACT, F] ↔ *-ra*

d. [+AUTH, +PART -ACT, F] ↔ *-ra*

- But this predicts first person agreement across the board! It does not derive the observed restriction.
- Analogous data can be found for the Lezgic language Tabasaran (Nakh-Daghestanian; Republic of Daghestan, Russia):

(74) a. rasul-di izu derben-di-s aG-idi-za
Rasul-OBL.ERG 1SG.ABS Derbent-OBL-DAT go-FUT-1SG
k'udi p-nu.
COMP say-AOR

✓ 'Rasul$_i$ said that he$_i$ would go to Derbent'
✗ 'Rasul said that I would go to Derbent'

b. rasul-di izu derben-di-s aG-idi k'udi
Rasul-OBL.ERG 1SG.ABS Derbent-OBL-DAT go-FUT COMP
p-nu.
say-AOR

✗ 'Rasul$_i$ said that he$_i$ would go to Derbent'
✓ 'Rasul said that I would go to Derbent'
[Northern Tabasaran, Ganenkov and Bogomolova 2021: (70)]

- Note that the interpretation of (74a) is restricted to the shifted reading only (whereas no restriction of this sort is observed in Aqusha).

First person agreement with non-authors

- In addition of the above, Aqusha has shifty 1SG agreement with non-first persons, (75a)-(75b):

(75) a. çed hanbikib [çu q'an **iub-ra** ili]
You think.PST.3SG 2SG late became-**1** COMP
'You thought that you were late.'
lit. 'You thought that I was late.'

b. çed hanbikib [çu q'an **iub-ri** ili]
You think.PST.3SG 2SG late became-**2SG** COMP
'You thought that you were late.'
[Aqusha Dargwa, Ganenkov 2021: (13)]

- Again, this is unpredicted by all of the accounts I am aware of: since the 2SG pronoun *çu* only bears a +PART feature (alongside a -ACTUAL feature), it is not supposed to be able to trigger 1SG agreement on the verb, on the assumption that agreement requires feature matching or subsumption.

Frampton and Gutmann (2000); Pesetsky and Torrego (2007)

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