

Logophoric pronouns are not (always) inherently logophoric

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Introduction

Linguists originally drew a distinction between the two sentences below:

- (1) Game of Thrones's writers_i tried to PRO_i ruin the final season.
(control)
- (2) Game of Thrones's fans_i seem t_i to hate the final season.
(raising)

Since Hornstein (1999), many have assumed that there is no distinction, apart from control structures involving movement into a θ -position.

If control is movement, this seems to be at odds with Heim (2002)'s observation that PRO and logophoric pronouns seem similar, and that the distribution of PRO and logophoric pronouns can be both derived by Chierchia (1990)'s abstraction operator.

Logophoric pronouns

The logophoric pronoun refers to the individual whose thought or speech is reported in a given context (Clements (1975)). *be*, a complementizer in Ewe, can also mean *say*.

- (3) a. Kofi_i be yè_i/*_k/*_s dzo.
Kofi say LOG leave
'Kofi_i said he_i left.'
- b. Kofi_i be e*_i/_k/*_s dzo.
Kofi say he leave
'Kofi_i said he_k left.'
- c. Kofi_i be me*_i/*_k/_s dzo.
Kofi say I leave
'Kofi said I left.'

In Ewe, *yè* can only appear after the complementizer *be*. It has 3rd person features.

Analysis

- I argue that the so-called logophoric pronoun *yé* is actually a non-logophoric overt PRO in nonfinite position (at least in the Anlo dialect of Ewe). Therefore, contra Clements (1975), *yé* in Anlo Ewe is a new kind of pronoun, which I call a *left-periphery bound pronoun*.
- I provide an update to Pearson (2015)'s reason, based on ϕ -features, for why PRO cannot have long-distance antecedents and *de re* readings.
- I'm going to present some issues for control as movement. In principle, the MTC approach could account for the problems presented here. However, the additional assumptions needed to account for them would merely redescribe the facts and would not provide insight to what is going on. They would not be independently motivated; the solutions would be ad hoc.

Analysis

- Finally, I argue for a synthesis of two separate approaches to logophoric pronouns and OC PRO.
- For Clements (1975), Pearson (2015), the logophoric pronoun is bound by an abstraction operator in the left periphery of the embedded clause.
- For Chierchia (1990), OC PRO is bound by an abstraction operator in the left periphery clause, as well.
- I argue that we have empirical evidence for a synthesis of these approaches given the phonetic identity between OC PRO and the logophoric pronoun: they are both *yé*.

Logophoric pronouns need not be read *de se*

Pearson (2015) shows that, contrary to assumptions by Heim (2002) among others, *yè* need not be read *de se*. Below is my own example of the *de re* reading noted by Pearson.

- (4) Scenario: Kofi is taking his dog out for a walk, and his dog constantly poops on the ground, but Kofi doesn't realize it. There are other people walking their dogs down the same path. He starts to walk back to his home, and he sees the trail of poop that he made on the ground. He gets very angry at whoever did this (but doesn't realize that it was him). He thinks whoever this guy is, he is stupid.
- a. Kofi bou be *yè nyi honvi*. (Kofi thinks he is stupid.)

Yè in Spec,nonfinite TP

- It has not been examined in the specifier of a nonfinite clause.
- It is in the form *yèa* (optionally *ya*). *-a* is the irrealis marker.
- All control infinitives have an irrealis mood (Stowell (1982)).

(5) Agbe_i djagbagba/nlobe/dzina/vovom/wosumu/dzi/susum
Agbe try/forget/want/afraid/decide/like/intend

be yè_i-a dzo.

COMP LOG-IRR leave

'Agbe_i tried/forgot/wanted/is afraid/decided/likes/intends PRO_i
to leave.'

(6) Kofi_i djagbagba/nlobe/dzina/vovom/wosumu/dzi/susum
Kofi try/forget/want/afraid/decide/like/intend

be yè_i-a kpo dzidzor.

COMP LOG-IRR experience happiness

'Kofi_i tried/forgot/wanted/is afraid/decided/likes/intends PRO_i to
be happy.'

Ewe doesn't have covert PRO

You can't leave a gap instead of the logophoric pronoun, in any sentence with ...*be yèa*...:

- (7) *Agbe_i djagbagba be \emptyset _i a dzo.
Agbe try COMP \emptyset IRR leave
'Agbe_i tried PRO_i to leave.'

This looks like a that-trace effect. This means that it doesn't involve movement with a trace or covert PRO (but it could still involve movement with resumptive pronouns). *Be* is not optional either.

Yèa is read as a bound variable

It's been noted that PRO is interpreted as a bound variable (Landau (2013)). So is yè.

- (8) Ame adeke me be yè-a dzo o.
person no-one NEG1 COMP LOG-IRR leave NEG2
'No one said to leave.'
- (9) Ame adeke me djagbagba be yè-a kpo
person no-one NEG1 try COMP LOG-IRR experience
dzidzor o.
happiness NEG2
'No one tried to be happy.'

Yèa must be read *de se*

Chierchia (1990) first noted that PRO must be read *de se*. This context and sentence is from Hornstein (1999), translated:

- (10) Kofi is a war hero who suffers from amnesia and remembers nothing of his wartime experiences. Suppose this person sees a TV program describing his own exploits, and is impressed with the courage exhibited by that person, who he does not know is himself. Kofi comes to believe that the hero will win a medal.

- a. Kofi_i emo kpom be yè_i-a_{de se}/*_{de re} ho kplu.
Kofi expect see COMP LOG-IRR COP medal
'Kofi_i expects PRO_i to get a medal.'

Yèa must be c-commanded

- (11) [Agbe_k fe velia-wo]_i djagbagba be yè_{i/*k}-wo dzo.
Agbe GEN friend-PL try COMP LOG-PL leave
'Agbe's friends tried to leave.'
- (12) [Kofi_k fe dzila-wo]_i wosusu be yè_{i/*k}-wo ho ekplu
Kofi GEN parent-PL decide COMP LOG-PL COP medal
'Kofi's parents decided to get a medal.'

Yèa cannot usually have a long-distance antecedent

It's been well-known that finite yè can have long-distance antecedents (ex. Clements (1975), Pearson (2015)). Yèa cannot.

- (13) Agbe_j kadedzi be Kofi djagbagba be yè_{i/*j}-a kpo
Agbe believe COMP Kofi try COMP LOG-IRR experience
dzidzor.

happiness

'Agbe believes that Kofi tried to be happy.'

- (14) Agbe_j be Kofi dzi-be yè_{i/*j}-a yide sukuu.
Agbe COMP Kofi want-COMP LOG-IRR go-to school

'Agbe said that Kofi wants to go to school.'

It can only in the case of *promise*.

Inanimate control is possible

This is the big one, because *yè* can't have inanimate referents in finite clauses (see Clements (1975), Pearson (2015)). Even in English, there is a sense in which the sentences below don't involve personification and are still grammatical:

(15) Emo_i djagbagba be yè_i-a dzegome.

Machine try COMP LOG-IRR start

'The machine tried to reboot.'

(16) Emo_i wosumu be yè_i-a dzudzu.

Machine decide COMP LOG-IRR stop

'The machine decided to stop.'

It's difficult to find genuine examples of inanimate control in Ewe due to it having SVCs (I can't use "John forced the car to stop").

Inanimate control is possible

The sentence below is fine. Usually, a sentence like this would be analyzed as a raising construction due to inanimates, but as we'll see, Ewe doesn't seem to have raising (no pun intended).

- (17) *Ati-a_i dzegome/dzudzo/yidzi be yè_i-a nge.*
Tree-NOM begin/stop/resume COMP LOG-IRR break.
'The tree_i began/stopped/resumed PRO_i to break.'

If we follow Charnavel & Sportiche (2016) in using inanimacy as a test for logophoricity, this would mean that *yè* is not actually a logophoric pronoun.

Charnavel & Sportiche (2016) is intuitive: it wouldn't make any sense for *trees* and other inanimate objects to be logophoric anyway as they can't have attitudes.

Only sloppy reading under ellipsis

(18) Kofi_i djagbagba be yè_i-a fle agbale afi Agbe.
Kofi try COMP LOG-IRR buy book before Agbe
'Kofi tried to buy a book before Agbe ~~tried to buy a book~~.
(sloppy reading only)'

(19) Kofi_i be yè_i fle agbale afi Agbe.
Kofi COMP LOG buy book before Agbe
'Kofi said he bought a book before Agbe ~~said he bought a book~~. (both sloppy and strict readings available)'

Summary

Properties	Finite yè	Nonfinite yè	OC PRO
Phonetically overt	✓	✓	✗
Has ϕ -features	✓	✓	✗
Must be c-commanded	✓	✓	✓
Must be read <i>de se</i>	✗	✓	✓
Long-distance antecedent?	✓	✗	✗
Bound variable	✓	✓	✓
Inanimate reading?	✗	✓	✓
Sloppy reading only	✗	✓	✓

Finiteness

Nonfinites cannot be progressive; nonfinites license NPIs.

- (20) a. Kofi_i be yè_i dzo dzo-m.
Kofi COMP LOG leave RED-PROG
'Kofi said he left (was leaving).'
- b. *Kofi_i be yè_i-a dzo dzo-m.
Kofi COMP LOG-IRR leave RED-PROG
'(lit. Kofi_i said PRO_i to leave (*leaving).)'
- (21) a. *Kofi_i me-be yè_i dzo o.
Kofi NEG1-COMP LOG leave NEG2
'Kofi said he left (was leaving).'
- b. Kofi_i me-be yè_i-a dzo o.
Kofi NEG1-COMP LOG-IRR leave NEG2
'(lit. Kofi_i said PRO_i to leave (*leaving).)'

Other dialects of Ewe

As it turns out, we don't get these results for other dialects of Ewe. Anne Bimpeh (p.c.), a native speaker of the Ewedome dialect, doesn't get the *de re* reading noted by Pearson, and she always gets long-distance readings even with nonfinite clauses, and for her, an inanimate reading is not possible.

An anonymous reviewer has also pointed out to me that their consultants did not agree with the inanimate control judgments I have provided here.

I am currently surveying speakers of Anlo and so far, the 2 Anlo speakers I consulted both agreed with the data that I have provided here. So this distribution seems unique to the Anlo dialect of Ewe.

We get subject control with *promise*, as expected.

- (22) Agbe_i do englugble ne Fafa_k be yè_i-a fo ntsu-a.
Agbe make promise to Fafa COMP LOG-IRR beat man-DEF
'Agbe_i promised Fafa_k PRO_i to beat the man.'

Split control is also a possibility. This is particularly interesting.

- (23) Agbe_i do englugble ne Fafa_k be [yè_i-wo meve
Agbe make promise to Fafa COMP LOG-PL two+person
yè_k-wo]_{i+k} fo ntsu-a.
LOG-PL beat man-DEF
'Agbe_i promised Fafa_k PRO_i to beat the man.'

No partial control

Mysteriously, Ewe doesn't have partial control.

- (24) *Agbe_i do englugble ne Fafa_k be yè_{i+}-wo fo ntsu-a.
Agbe make promise to Fafa COMP LOG-PL beat man-DEF
'Agbe_i promised Fafa_k PRO_{i+} to beat the man.'

Problems for the control as movement approach

- There seems to be a raising vs. control contrast in Ewe.
- Can it derive split control in Ewe?
- Can't explain why the resumptive control pronoun and the logophoric pronoun have the same phonetic form.

Nonfinite *yè* being a resumptive

- Why should the finite and nonfinite have the exact same phonetic form, down to the tone?
- A logophoric pronoun being a resumptive is not attested in the Niger-Congo languages (Buli, Akan, etc.) or even in Niger-Congo languages with logophoric pronouns (Yoruba). In the former it's the usual third person pronoun in and in Yoruba it's some kind of clitic.
- According to the control as raising account, this is a complete coincidence, but we know it's not. This isn't satisfying. We already have the tools to derive this similarity.
- In my approach, the answer is simple: in PF, *yè* is obtained when it's bound by an operator in the left periphery.
- Instead of looking for similarities between control and raising, why not look for similarities between control and logophoric pronouns in other African languages?

Sulemana (2018) points out that the third person pronoun *wa* is also a resumptive pronoun in Buli; it is employed in long-distance extraction of a subject.

- (25) (ka) wana_i *(ati) fi pa:-chim *(wa_i) ali dig lammu:
Q who ? 2SG think 3SG ? cook meat.DEF
'Who do you think cooked the meat?'

Buli

Fortuitously, Sulemana (2018) argues in favor of the MTC, claiming that *wa* is a resumptive pronoun that is overt PRO derived by A-movement. We might have expected Anlo to behave similarly in this regard by also using the weak third person subject pronoun, but it doesn't.

Does Ewe have raising?

I haven't been able to find a single instance of raising in Ewe. This is because almost all predicates we'd expect to be raising like *seem* and *likely* take only finite embedded clauses. *begin*, *stop* and *resume* are the few predicates that take nonfinite embedded clauses and they involve control in Ewe.

If control the same thing as raising, then this is not expected. If a language has control but no raising, then they're not the same.

- (26) Ati-a_i dzegome/dzudzo/yidzi be yè_i-a nge.
Tree-NOM begin/stop/resume COMP LOG-IRR break.
'The tree_i began/stopped/resumed PRO_i to break.'

- (27) *E dzegome/dzudzo/yidzi be ati-a_i nge.
It begin/stop/resume COMP tree-NOM break.
'It began/stopped/resumed (for) the tree to break.'

Does Ewe have raising?

There's a clear contrast with *seem*. The expletive construction is fine, but the one involving raising or the controlled pronoun is not.

- (28) a. E wo be ati-a nge.
It seem COMP tree-NOM break
'It seems the tree broke'
- b. *Ati-a_i wo be t_i nge.
Tree-NOM seem COMP break
'The tree seems to be breaking.'
- c. *Ati-a_i wo be yè_i nge.
Tree-NOM seem COMP LOG break
'The tree seems to be breaking.'

Does Ewe have raising?

In his work on Buli on overt control, Abdul-Razak Sulemana points out that one such predicate is *right* or *appropriate*. But this doesn't work in Ewe either. To date, I haven't been able to find any examples of raising.

- (29) *Agbe nyo be yèi-a na yi sukuu.
Agbe right COMP LOG-IRR ? go school
'Agbe is right to go to school.'
- (30) E nyo be Agbe na yi sukuu.
It right COMP Agbe ? go school
'It is right for Agbe to go to school.'

Raising 1

There are two ways out of this sort of problem. We can either make the assumption that Ewe allows control via movement if there are θ -roles involved. Raising, A-movement with one θ -role, is just banned.

There are two problems with this. First, it's an *ad hoc* assumption. Second, it seems to be empirically false. Ewe has unaccusatives, as Collins (1997) points out, which involve movement from a θ -role position to the subject:

- (31) Kofi dzo.
Kofi leave
'Kofi left.'

Why shouldn't raising be blocked? We would need another *ad hoc* assumption to rule this out.

Raising 2

We might "bite the bullet" and say that control is not movement... only in Anlo Ewe (Hornstein, p.c.). This might be because Anlo Ewe is a language without A-movement, and it has to resort to some operation to establish the same thing.

There are two problems with this. First, this is *ad hoc*; we want our theory of control to be the same in every language. Second, Ewe does seem to have A-movement because it has unaccusatives.

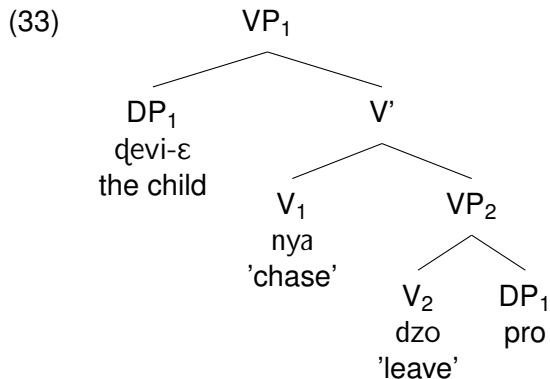
Raising 3

We might try to get out of this by saying that raising in Ewe is obligatory. There are two counterarguments I have against this. Anlo has very few suitable idioms with which to test this, but one possible idiom is *Adoglo lia ati* 'the lizard climbed the tree' (meaning 'one is hungry'). In Anlo, the idiomatic meaning cannot be obtained in a sentence such as (32) (it is completely unacceptable); but the sentence is fine without the idiomatic meaning:

- (32) *Adoglo-a_i dzegome/dzudzo/yidzi be yè_i-a lia
Lizard-NOM begin/stop/resume COMP LOG-IRR climb
ati.
tree.
'(Intended meaning) One began/stopped/resumed to be
hungry/being hungry.'

Raising 4

Anlo also has serial verb constructions in which the argument of the unaccusative stays in its base-generated position, showing it is not raised:



Split control

- (34) Agbe_i do englugble ne Fafa_k be [yè_i-wo meve
Agbe make promise to Fafa COMP LOG-PL two+person
yè_k-wo]_{i+k} fo ntsu-a.
LOG-PL beat man-DEF
'Agbe_i promised Fafa_k PRO_i to beat the man.'

In this case, OC PRO has the following structure:

- (35) yè_i-wo meve yè_k-wo
LOG-PL two+person LOG-PL

Meve originates from coalescence between two words, *wome* and *eve* which mean *two* and *person*, respectively. Also, the complex pronoun is an external argument of the embedded verb.

Split control

- Each of the pronouns refer to one of the controllers. Together, the entire complex pronoun refers to both of the controllers.
- The structure *Agbe meve Fafa* is ungrammatical.
- *Meve* is some kind of word that can only be used with pronouns.

(36) *Wo meve wo fo ntsua.*
3PL two+men 3PL beat man
'They beat the man.'

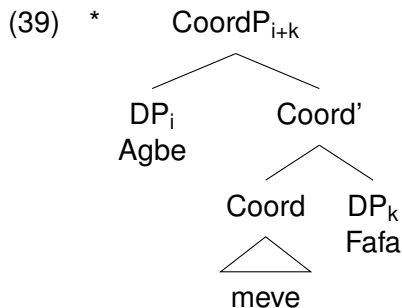
(37) *Agbe kple/*meve Fafa fo ntsua.*
Agbe and/two+men Fafa beat man
'Agbe and Fafa beat the man.'

Split control

In the control as movement approach, *yè* would be analyzed as a resumptive pronoun, and the names would be base-generated. But this is just ungrammatical in Ewe.

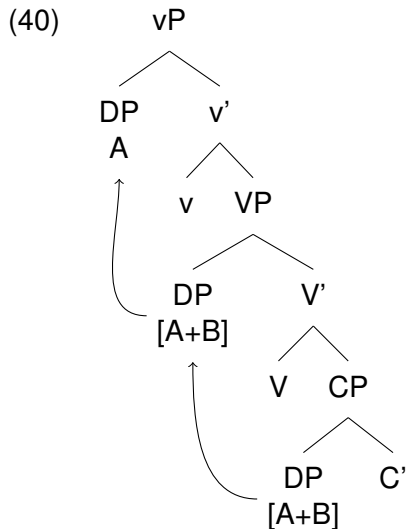
(38) * $[Agbe_i\ meve\ Fafa_k]_{i+k}$

Here is one attempt at a structure (though this is not crucial to my analysis).



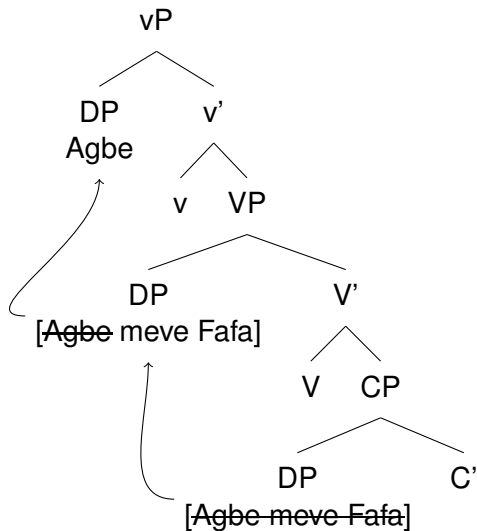
Split control

The solution to split control in Fujii (2006) involves pied-piping as follows.



Split control

(41)



Split control

- What happens to *meve*? It's not a resumptive pronoun. So why doesn't it move up together with *Fafa*, as well?
- Why don't we see three resumptive pronouns instead of two? Why are there no resumptive pronouns in the middle of the tree? And why don't we see raising?
- In the movement approach, we'd have to try and account for this tree with multiple assumptions about how the pronouns are spelled out. Why is this phonetic form not preferred (among other potential forms):

(42) *Agbe_i do englugble yè meve Fafa_k be fo ntsu-a.

If we have an alternate approach to control where PRO exists, we have an immediate easy explanation for this.

Solution

The reason the logophoric pronoun and the control pronoun have the same phonetic form is because they're both bound by the very same operator (potentially *be*).

- The usual approach to logophoric pronouns (ex. Anand (2006)): they're bound by an operator in the left periphery of the embedded clause.
- Chierchia (1990)'s approach to OC PRO: bound by an operator in the left periphery of the embedded clause.

Heim (2002), among others, have already made this suggestion. All I've done is find empirical evidence for a synthesis of these two approaches.

Heim notes that Chierchia's theory of control can also account for the distribution of logophoric pronouns.

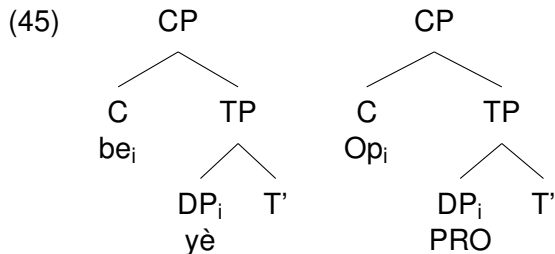
(43) $[_{CP_1} \lambda w_1 [w_1 \text{ John claimed}_{[log]} [_{CP_2} \lambda x_{2[log]} \lambda w_3 [w_3 \text{ PRO}_{2[log]} \text{ to be clever}]]]]]$

(44) $[_{CP_1} \lambda w_1 [w_1 \text{ John claimed}_{[log]} [_{CP_2} \lambda x_{2[log]} \lambda w_3 [w_3 \text{ yè}_{2[log]} \text{ was clever}]]]]]$

This is obviously false because PRO can have inanimate readings, but I will repair this shortly.

Solution

Since they only occur after *be*, it could be that they're both bound by *be*. I assume a similar syntactic structure to Anand (2006)'s.



However, unlike Anand (2006) and Heim (2002), given the existence of inanimate control I argue that this operator need not be in the left periphery of an attitudinal embedded clause.

One conclusion from this data that I would like to argue for, however, is that *yè* is not a logophoric pronoun in Anlo Ewe. It is a new kind of pronoun that merely has to be bound in the left periphery of the embedded clause. I call this a *left-periphery bound pronoun*. This accounts for its phonetic form.

What makes Ewe weird

- Logophoric pronouns have not been studied very much. But from what we do know, in languages like Yoruba and Tangale, the logophoric pronoun cannot have *de re* readings. The Ewedome dialect of Ewe also does not seem to have *de re* readings.
- But other dialects of Ewe, such as the Kpele and Anlo dialects, are able to get the *de re* readings. This makes Ewe's logophoric pronouns unique. We have explanations for why *de re* readings are possible. But there is no way to prevent *de re* readings in Ewedome, Yoruba and Tangale. This needs future research.
- Anlo's logophoric pronoun is not even a logophoric pronoun anymore, making it very unique.

Accounting for the distribution of PRO and nonfinite yè

Pearson claims that the impossibility of long-distance readings blocks de re readings (accounting for PRO because it cannot be read de re), and long-distance readings are impossible because of ϕ -features. This is plainly false in Anlo because the pronoun has third person features:

- (46) a. Me be me dzo.
b. *Me be yè dzo.

Accounting for the distribution of PRO and nonfinite $y\grave{e}$

Nonfinite $y\grave{e}$ and PRO are also licensed by a [C] feature rather than [log]. I have no idea what [C] is right now.

(47) $[_{CP_1} \lambda w_1 [w_1 \text{John claimed}_{[C]} [_{CP_2} \lambda x_{2[C]} \lambda w_3 [w_3 \text{PRO}_{2[C]} \text{to be clever}]]]]]$

(48) $[_{CP_1} \lambda w_1 [w_1 \text{John claimed}_{[log]} [_{CP_2} \lambda x_{2[log]} \lambda w_3 [w_3 y\grave{e}_{2[log]} \text{was clever}]]]]]$

Because they are not inherently logophoric, the long-distance readings and therefore de re readings are blocked.

Conclusion

- I've argued that the logophoric pronoun in the Anlo dialect of Ewe is actually an overt PRO in nonfinite subject position; it's not a logophoric pronoun, as previously thought. It's a new kind of pronoun I call a *left-periphery bound pronoun*.
- Both control and logophoricity involve binding by an abstraction operator in the left periphery of the embedded clause.
- It might be worthwhile to investigate what control and logophoric pronouns have in common.
- Many other problems remain untouched (lack of partial control, etc.)
- Thank you!

References I

- Anand, Pranav. 2006. *De de se*: dissertation.
- Charnavel, I. & D. Sportiche. 2016. Anaphor binding – what French inanimate anaphors show. *LI* 47(1). 35–87.
- Chierchia, Gennaro. 1990. Anaphora and attitudes de se. In R. Bartsch, J. van Benthem & P. van Emde Boas (eds.), *Semantics and contextual expression*, 1–32. Dordrecht: Foris.
- Clements, G. 1975. The logophoric pronoun in Ewe: its role in discourse. *Journal of West African Linguistics* 10(2).
- Collins, Chris. 1997. Argument sharing in serial verb constructions. *Linguistic Inquiry* 28(3). 461–497.
- Fujii, Tomohiro. 2006. *Some theoretical issues in Japanese control*: University of Maryland dissertation.
- Heim, Irene. 2002. Features of pronouns in semantics and morphology.
- Hornstein, Norbert. 1999. Movement and Control. *Linguistic Inquiry* 30(1). 69–96.
- Landau, Idan. 2013. *Control in generative grammar: A research companion*. Cambridge, England: Cambridge University Press.
- Pearson, H. 2015. The interpretation of the logophoric pronoun in Ewe. *Natural Language Semantics* 23. 77–118.
- Stowell, Tim. 1982. The tense of infinitives. *Linguistic Inquiry* 1(3). 561–570.
- Sulemana, Abdul-Razak. 2018. Obligatory controlled subjects in Buli.