

Capturing ‘exempt’ anaphors with local binding

Connie Ting – McGill University

connie.ting@mail.mcgill.ca

1 Introduction

- Goal: to investigate the differences between ‘plain’ and ‘exempt’ anaphors wrt Binding Principle A
 - Plain: John likes himself.
 - Exempt: The picture of himself in the museum bothered John.
- extend existing analysis (Charnavel 2019: French) to English

(1) Binding Principle A:

An anaphor is bound (that is, c-commanded and co-indexed) in its binding domain.

(A binding domain is defined as the minimal XP that has a potential antecedent.)

(Chomsky 1986)

1.1 Plain anaphors

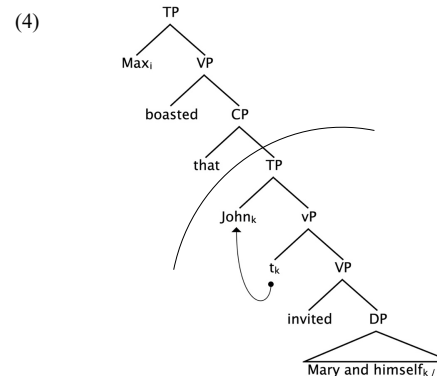
- The above definition of Principle A is able to predict the following:
 - [John_i likes himself_i].
 - *[Bill_i said that [John_j likes himself_i]].
- In (2a) *John* is the first potential antecedent for *himself*, therefore the entire sentence is the binding domain
- In (2b) *John* is again the first potential antecedent and therefore the embedded clause is the minimal XP containing a potential antecedent and thus must be the binding domain, ruling out *himself* being bound by outer *Bill*.

1.2 Exempt anaphors

- The picture of himself_i in the museum bothered John_i. (Pollard & Sag 1992)
- Max_i boasted that John invited Lucie and himself_i for a drink. (Reinhart & Reuland 1993)

* Thanks to Junko Shimoyama and Jessica Coon for helpful discussion.

- (3a) should be unacceptable because *himself* is not bound by *John*.
- In (3b), according to Principle A, *himself* can't be bound by *Max* since *John* is the first potential antecedent.



1.3 Explaining exempt anaphors

- some have proposed changes to the binding theory/Principle A in order to account for the data (Huang 1983, Pollard & Sag 1992, among others)
- others maintain Principle A and argue instead for (possible) covert local binding:
 - Nishigauchi's 2014 proposal made use of a point of view projection to account for what's called 'long distance binding' for reflexive *zibun* in Japanese
 - Charnavel's 2019 approach similarly introduces a logophor projection meant to deal with exempt anaphors and account for French *lui-même* and *son propre*

2 Charnavel 2019 (French)

2.1 Proposal

- all instances of anaphors are essentially plain and must obey Principle A, but may behave differently due to the nature of their **binder**
- the binder of a “plain” anaphor only needs to satisfy the structural c-command requirement
- the binder of an “exempt” anaphor has certain additional conditions

2.2 Criteria for exempt anaphors

- o exempt anaphors must exhibit logophoric (perspectival) properties
 - animacy (stemming from the generalization that logophoric centers cannot be inanimate)
 - exempt anaphors must be anteceded by a DP denoting a perspective center:
 - i) attitude holder (including the speaker) – intellectual perspective
 - ii) empathy loci – perceptual/emotional perspective
(defined as: the event participant that the speaker empathizes with)
- o must occur in a constituent whose content is expressed from the perspective of that center
- o these are proposed to explain the difference between French sentences in (5)
- o Animacy: in both (5a) and (5b), *son propre* cannot be interpreted as an exempt anaphor
- o *son propre* tolerates a local inanimate antecedent (5a), but not one outside its domain (5b)

(5) *Inanimate antecedent: plain/*exempt*

a. Cette auberge_i fait de l'ombre à son_i propre jardin et au
 this inn makes of the shade to its own garden and to the
 jardin de la maison voisine.
 garden of the house neighbouring

'This inn_i gives shade to its own garden and to the garden of the neighbouring house.'¹

*Inanimate antecedent: *plain/*exempt*

b. *Cette auberge_i bénéficie du fait [que les touristes
 this inn benefits from the fact that the tourists
 préfèrent son_i propre jardin à ceux des auberges voisines].
 prefer its own garden to those of the inns neighbouring

'*This inn_i benefits from the fact that the tourists prefer its_i own garden to that of the neighbouring inns.'

(Charnavel 2019)

- o other reports suggest this condition might apply to English as well, as shown in (6):
- o *itself* tolerates a local antecedent in (6a) but not an antecedent outside its domain as in (6b)
- o in (6c), the animacy of *John* allows for *himself* to be exempt

¹ Note that the stars indicated for English translations reflect only the French judgements (Charnavel 2019).

- (6) a. The moon spins on itself. (Charnavel & Sportiche 2016)
 b. *The moon influences [people sensitive to itself]. (Charnavel & Sportiche 2016)
 c. John_i said to Mary that nobody would doubt that physicists like himself_i were a godsend. (Kuno 1987)

2.3 The logophoric operator hypothesis

- o the operator is a syntactic head (OP_{LOG}) represented under LogP
 - selects a silent logophoric pronoun *pro_{log}* as subject and requires that its complement be represented from the first-personal perspective of its subject
- o since the binder is silent, exempt anaphors only appear to be non-locally bound
- o the referential value of the logophoric center is determined pragmatically, on the basis of discourse and syntactico-semantic factors

- (7) [XP [YP [LogP *pro_{log-i}* OP_{LOG} [α ... exempt anaphor_i ...]]]]
 [[OP_{LOG}] = $\lambda\alpha.\lambda x.$ α from x 's first-personal perspective]

3 Extending the analysis to English

3.1 Attitude holder

- o intellectual perspective: *think, believe, said, etc.*
- (8) a. John_i said to Mary that physicists like himself_i were a godsend.
 b. According to John_i, the article was written by Mary and himself_i.
 (König & Siemund 2000; Kuno 1987)
- (9) *Speaking of John_i, the article was written by Mary and himself_i.² (K&S 2000)

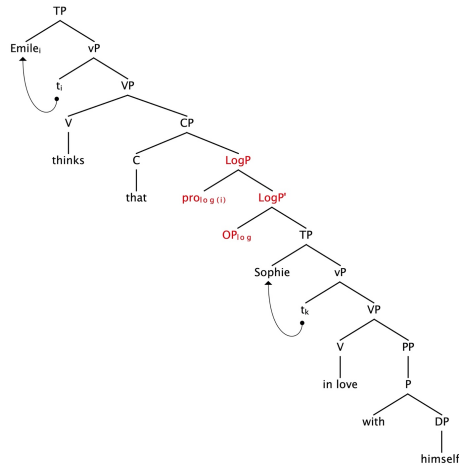
² Whether or not *John* can be an empathy locus here is a remaining question.

3.2 Limitations of a direct extension

- Not all sentences that include a clear attitude holder are acceptable
- In (10), *Emile* is the attitude holder; if we extend Charnavel's analysis from French to English, (10) should be acceptable

(10) **Emile_k thinks that Sophie_i is in love with himself_k.* (Adapted from Charnavel 2019)

(11)



- (12) a. *John said about Lisa that physicists like himself were a godsend.
 b. ?? John said about Lisa that physicists like herself were a godsend.
 c. ?? John heard about Lisa that physicists like herself were a godsend.

- (12a) is ungrammatical/infelicitous even though *John* is the attitude holder
 - since *John* is saying something *about Lisa*, what follows should have something to do with *Lisa*
- (12b) introduces a clear attitude holder (*John*), but the anaphor refers to *Lisa*
 - Charnavel argues that (for a similar French sentence, see (13)) in such a context, *Lisa* is not an empathy locus:

(13) * *Luc a dit de Lise_i que les professeurs étaient contents d'elle-même.*
 'Luc said about Lise that the teachers were happy with herself.'

- As a result, (12b) would be predicted to be unacceptable

- There is no attitude holder in (12c), so the only other possible antecedent type is an empathy locus, but again it is unclear whether *Lisa* qualifies as one (at least in English)

→ perhaps this calls for a more stringent definition of what an empathy locus is/can be

4 More Judgements

Testing a variety of sentences:

- *Attitude Holder:*
 - According to X_i ... herself_i
 e.g. According to Felix_i, Mary is in love with himself_i.
 - X_i said/thinks/boasted/is afraid... Y_k ... herself_{i/k}
 e.g. Michael_i said that Julie was proud of himself_i.
- *Hearer*
 - X_i heard from Y that... herself_i
 e.g. Sarah heard from Tommy that authors like herself were underrated.
- *About X*
 - X_i said about Y_k ... herself_k
 e.g. John said about Lisa that physicists like herself were a godsend.
- *Speaking of X*
 - Speaking of X_i ... herself_i
 e.g. Speaking of John, the article was written by Mary and himself.
- *Animacy Condition*
 - e.g. Your webpage contains many links towards itself and mine does too (contain many links towards your webpage).

An effect of grammatical function? (subject vs. object)

- sentences can further be split into those where the anaphor occurs as a subject vs. object
 e.g. (12) Sarah heard from Tommy that authors like herself were underrated. (subject)
 (13) John said to Lisa that the university needed a physicist like herself. (object)

An effect of conjunction?

- o Does the acceptability judgement improve if the anaphor is in a conjunction?

(14) Max_i boasted that the queen invited Lucie and himself_i for a drink.

(Reinhart & Reuland 1993)

Predictions based on Charnavel’s analysis:

- o all attitude holders should allow for the presence of an exempt anaphor
- o all others should not (**if they do not hold the status of empathy locus**)
- o no prediction regarding an effect of grammatical function or conjunction

Sentence Type	Prediction		
	Subject	Object	Conjunction
Attitude holder			--
Hearer	*	*	--
About X	*	*	--
Speaking of X	*	*	--
Inanimate	*	*	--

Table 1. Predictions of grammaticality judgements for English sentences based on Charnavel’s proposal for French.

Pilot Results

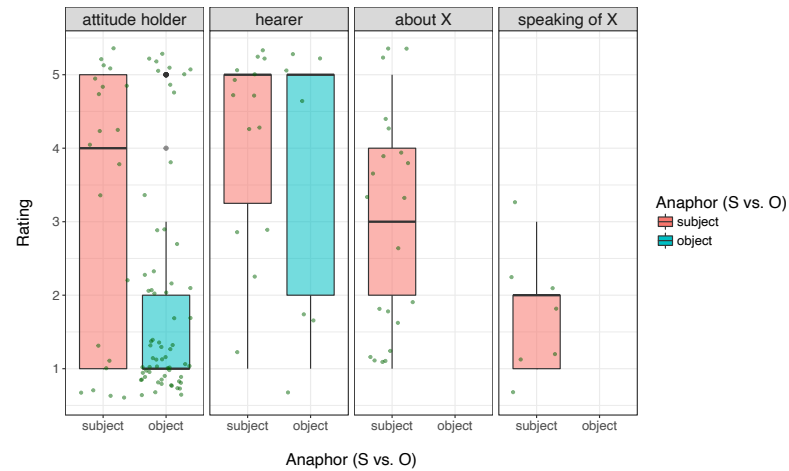


Figure 1. Boxplot of speaker ratings for English sentences by Anaphor Role for each Sentence Type.

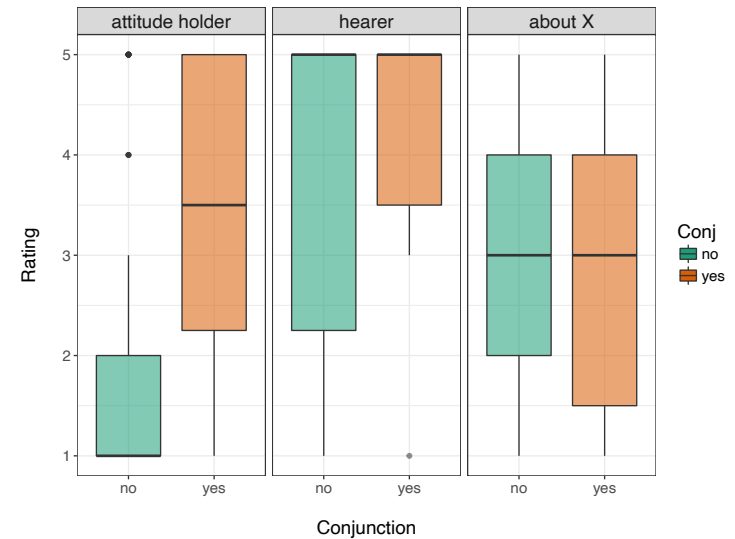


Figure 2. Boxplot of speaker ratings for English sentences by presence of anaphor in a conjunction (Conj) for each Sentence Type.

Sentence Type	Prediction		Judgement	
	Subject	Object	Subject	Object
Attitude holder				*
Hearer	*	*		
About X	*	*	?	
Speaking of X	*	*	*	
Inanimate	*	*	*	*

Table 2. Predictions and preliminary results of English judgements.

4 Remaining Questions / Next Steps

- o If it’s not true that any attitude holder can license an exempt anaphor, why?
- o Does grammatical function and/or conjunction play a role? To better understand these differences, is it necessary to move away from traditional definitions of Binding Theory?
- o Does the animacy rule apply to English?
- o What additional conditions can/must be included to account for English data?

References

- Charnavel, I. 2019. *Locality and Logophoricity: A Theory of Exempt Anaphora*. In *Oxford Studies in Comparative Syntax*. Oxford University Press.
- Charnavel, I. & Sportiche, D. 2016. Anaphor Binding : What French Inanimate Anaphors Show. *Linguistic Inquiry*, 47(1), 35-87.
- Chomsky, N. .1986. Knowledge of Language: Its Nature, Origin, and Use . Praeger.
- Huang, C. T. J. 1983. A note on the binding theory. *Linguistic Inquiry*, 14(3), 554-61.
- König, E., & Siemund, P. 2000. Locally free self-forms, logophoricity, and intensification in English. *English Language and Linguistics*, 4, 183-204.
- Kuno, S. 1987. *Functional Syntax*. Chicago: University of Chicago Press.
- Nishigauchi, T. 2014. Reflexive binding: awareness and empathy from a syntactic point of view. *Journal of East Asian Linguistics*, 23, 157-206.
- Pollard, C., & Sag, I. A. 1992. Anaphors in English and the Scope of Binding Theory. *Linguistic Inquiry*, 23(2), 261-303.
- Reinhart, T., & Reuland, E. 1993. Reflexivity. *Linguistic Inquiry*, 24(4), 657-720.

Appendix

Sentences used in survey:

1. Michael said that Julie was proud of himself.
2. Ethan thinks that Sophie is in love with himself.
3. Max_m boasted that John invited Lucie and himself_m.
4. Sally said that Colin is in love with only herself.
5. Tommy thinks that Lily is in love with himself and not Michael.
6. Ethan is afraid that Sophie is in love with himself.
7. John heard about Lisa that physicists like herself were a godsend.
8. John said about Lisa that physicists like himself were a godsend.
9. John said about Lisa that physicists like herself were a godsend.
10. John heard about Lisa that physicists like Carrie and herself were a godsend.
11. Sarah heard from Tommy that authors like herself were underrated.
12. Speaking of John, the article was written by Mary and himself.
13. John said to Lisa that the university needed a physicist like herself.

14. Sophie said to Michael that physicists like Jerry and himself were a godsend.
15. According to Felix, Mary is in love with himself and nobody else.
16. According to John, the book was written by Mary and himself.
17. According to John, Mary is in love with himself.
18. According to Alex, Cindy is in love with both himself and Jacob.
19. Look at that guy over there. According to Eric, his own children depend on him.
20. During the neighbour's sickness, my dear mother and his own mother often came to the hospital where I was treating him.
21. Paul worked with his wife at a university where physicists like herself were highly regarded.
22. To the right of the teacher, his own student plays the clarinet.
23. Your webpage contains many links towards itself and mine does too (contain many links towards your webpage).