

24.902 Problem set #9
[Due Wednesday, November 12]

At this point in the class, we have seen about 1/3 of Binding Theory. We have not yet discussed Principle C (which many of you will nonetheless remember from 24.900) and we have only begun to explore the "locality conditions" on Binding Theory. Nonetheless, we can still do a useful problem set with the material we have.

Here are some of the ingredients of the story at the moment. I introduce the term *Binding Domain* and elaborate slightly on the last point we covered in class, which was the following:

- (1) a. Mary_i considers [*herself*_i to admire Bill]
- b. *Mary_i considers [*her*_i to admire Bill]

- (2) a. Mary_i considers [Bill_j to admire ^{ok}*himself*_j / **herself*_i too much].
- b. Mary_i considers [Bill_j to admire **him*_j / ^{ok}*her*_i too much].

These data, plus the everything that we saw earlier, motivate the following (provisional) version of Binding Theory:

Principle A: An anaphor must be bound in its Binding Domain.
Principle B: A pronoun must be free in its Binding Domain

Binding Domain

The Binding Domain for a DP α is the minimal IP that contains α and a subject that c-commands α . [A node does not c-command itself.]

Part 1: A first exercise on Binding Theory

Each of the following sentences is acceptable -- except (in certain examples) for the presence of an unlawful anaphor or an improperly indexed pronoun. For each sentence do the following.¹

1. Draw a tree.
2. For *each* pronoun or anaphor in the example, say what its binding domain is and why (e.g. "The Binding Domain for *herself* is IP2 because it is the minimal IP that contains *herself* and a subject *Bill* that c-commands *herself*").
3. State which Binding Principle applies to the pronoun or anaphor and whether it violates or satisfies that principle.

¹ Please do not forget about Control vs. ECM, and don't forget to include PRO, where relevant.

- (3) *Bill_i's mother saw himself_i .
- (4) *John_i promised Sue to arrest him_i.
- (5) We_i consider ourselves_i to have surpassed each other_i;
- (6) Mary_i believes herself_i to be innocent of any crime.
- (7) [Sue's friends]_i consider Tom to be angry at them_i.
- (8) *We_i know that Mary hates ourselves_i.
- (9) The parents_i invited each other_i's children to a party.

Part 2: "Psych verbs"

Question 1: The following sentences are acceptable for many English speakers. What interesting problem is posed by their acceptability?

- (10) a. The pictures of himself worry John.
- b. Those stories about herself frightened Sue.
- c. Criticisms of themselves annoy the kids.

Question 2: The phenomenon seen in (10) is found with verbs of the *worry*, *frighten*, *annoy* semantic class -- often called "psychological predicates" or "psych verbs". The acceptable sentences given in (11) below (from the same crude British Isles dialect discussed in the last problem set) should suggest an analysis of sentences with psych verbs that might shed light on (10). Sketch such an analysis, drawing at least one explicit tree that makes the analysis clear.

- (11) a. Fuck-all worries John anymore.
- b. Fuck-all frightens Sue.
- c. Fuck-all annoys the kids.

Note: If your analysis appears to violate a generalization introduced in class in the week before we got to Binding Theory, you are actually on the right track. State this problem as well, but do not attempt to solve it.

Question 3: Your analysis should also explain the judgments in (12) below. Explain how it does:

- (12) a. *Pictures of himself worry John's mother.
- b. *Stories about herself frighten Sue's brother.
- c. *Criticisms of themselves annoy the teacher of those kids.

Question 4: How does binding theory interact with the rest of the grammar? This is a question you have probably already begun to address in question 2, but I now want to make life more difficult for you by offering the following examples. In some cases starred sentences will sound good to you, but the point is that they cannot have the meaning indicated by the indexing. If you disagree with any of the judgments, let us know, but answer the problem using the judgments provided.

Your answer should discuss the relative ordering of Binding Theory and something else...

- (13) a. $Mary_i$ seems to herself_i to be the best candidate.
b. * $Mary_i$ seems to her_i to be the best candidate.

Extra credit: What does (14) tell us that is interesting in light of your answers so far?

- (14) *Herself worried her.
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Part 3: Fun with Binding Theory

This problem is simple, but requires a bit of thought and some imagination.

Step one: This is the set-up, and is simple. Why is it that example (15) below is an acceptable English sentence that lacks one particular reading, but example (16) is pretty much unacceptable?

(15) John trusted him.

(16) *I trusted me.

Also: describe and explain the very limited circumstances under which (17) is acceptable, and why.

(17) You trusted you.

Step two: Now for the real question. Why are both of the following sentences acceptable, and why do they mean different things?

(18) I wouldn't trust myself as an informant, if I were you.

(19) I wouldn't trust me as an informant, if I were you.

Make up other examples, if they are useful to prove your point.

[The linguist George Lakoff noted in a 1968 paper that descriptions of dreams pose similar puzzles, and offered the now famous example: *I dreamed that I was Brigitte Bardot, and that I kissed me.* Feel free to ponder this one too.]