

Syntax II – Class #14

Binding Theory – Predicates and Bound Variables

1. Reflexivity

- Sensitivity of anaphor choice to nature of predicate makes fundamental problem for NP-based theory.

- (1) a. Max haat zichzelf/*zich/*hem
Max hates himself/*self/*him
- b. Willem bewondert zichzelf/*zich/*hem
Willem admires himself/*self/*him

- (2) Max schaamt zich
'Max is ashamed of himself.'

other inherently reflexive predicates: *wash, shave* etc.

zich is an anaphor that can be bound long-distance; similar anaphors in numerous other languages

- (3) Jon bad oss forsoke a fa deg til a snakke pent om seg [Norwegian]
Jon asked us to-try to get you to talk nicely about SE

- (4) Jan_i hoorde Marie een lied voor zich_i/hem_i fluiten. [Dutch]
Jan heard Marie a song for SE/him whistle

- Argument/adjunct distinctions (internal to clause) also don't fall out easily from a view in which binding domains are clause-bounded

- (5) a. Wallace_i washed himself_i/*him_i.
b. Wallace_i speaks with himself_i/*him_i.

- (6) a. Gromit_i saw a picture of himself_i/?him_i.
b. Gromit_i likes jokes about himself_i/?him_i.

- (7) a. Wallace_i saw a cracker near ?himself_i/him_i.
b. Shawn_i counted five sheep in the room apart from himself_i/him_i.
c. Knuckles_i put the glove next to ?himself_i/him_i.
d. Knuckles_i put the glove on himself_i/*him_i.
e. Wallace_i sat Gromit next to *himself_i/him_i.

Government-Binding "Condition B"

A pronoun is free in its governing category

Reflexivity "Condition B"

A reflexive-predicate is reflexive-marked

- Anaphors embedded inside conjoined NPs and adjuncts

- (8) a. It angered him that she tried to attract a man like himself.
b. *It angered him that she tried to attract himself.

- (9) a. She gave both Brenda and myself a dirty look.
 b. *She gave myself a dirty look.

Government-Binding “Condition A”
 An anaphor is bound in its binding domain

Reflexivity “Condition A”
 A reflexive marked predicate is reflexive

2. Coreference and Variable Binding

Most of this material taken from Grodzinsky & Reinhart 1993, “The Innateness of Binding and Coreference”, Linguistic Inquiry 24, 69–101.

Difference between variable binding and coreference

- (10) a. Wallace thinks he is a great cook.
 i. Wallace_i (x (x thinks he_i is a great cook))
 ii. Wallace (x (x thinks x is a great cook))

Note: the lambda operator creates an expression containing a free variable, in other words a property. We may read the expression (1a.ii) as ‘Wallace has the property of being an x such that x thinks that x is a great cook’; while cumbersome, this paraphrase allows us to distinguish the meaning from (1a.i), which may be read as ‘Wallace has the property of being an x such that x thinks that he – Wallace – is a great cook.’

- b. Everybody thinks he is a great cook.
 i. Everybody (x (x thinks he_i is a great cook))
 ii. Everybody (x (x thinks x is a great cook))

Note: only under the bound variable interpretation in (1b.ii) is the reference of ‘he’ dependent on the matrix subject ‘everybody’.

- (11) a. Wallace thinks he is a great cook, and Gromit does too.
 i. [1a.i] & Gromit_j (x (x thinks he_i is a great cook))
 ii. [1a.ii] & Gromit (x (x thinks x is a great cook))

Terminology: the reading in which the reference of the pronoun is constant in both conjuncts is often referred to as the ‘strict’ reading, and the bound variable reading is often referred to as the ‘sloppy’ reading.

- b. Only Wallace thinks he is a great cook.
 i. (only Wallace_i)(x (x thinks he_i is a great cook))
 ii. (only Wallace) (x (x thinks x is a great cook))

- c. Even Wallace thinks he is a great cook.
- i. (even Wallace)_i(x (x thinks he_i is a great cook))
- ii. (even Wallace) (x (x thinks x is a great cook))

- Situations in which variable binding is impossible: when pronoun is not bound (i.e. c-commanded) by antecedent.

- (12) a. Most of her_i friends adore Lucie_i.
 b. A party without Lucie_i annoys her_i.
 c. Most of Lucie_i's friends adore her_i.

- (13) a. * Most of her_i friends adore every actress_i.
 b. *A party without every actress_i annoys her_i.

- (14) a. A party without Lucie annoys her, and a party without Susan does too.

strict (coreference) reading of 'her': ok
 sloppy (bound-variable) reading of 'her': bad

- b. Most of Lucie's friends adore her, and most of Susan's friends do too.

strict (coreference) reading of 'her': ok
 sloppy (bound-variable) reading of 'her': bad

The fact that the sloppy (bound-variable) reading is unavailable for (5a,b) indicates that bound-variable readings are only possible when a pronoun is c-commanded by its antecedent.

- (15) a. Most of her friends adore only Lucie.
 b. A party without Lucie annoys only her.
 c. Most of Lucie's friends adore only her.

- Coreference readings can sometimes escape binding conditions

- (16) a. (Who is this man over there?) He_i is Colonel Weisskopf.
 b. Only Churchill_i remembers Churchill_i giving the speech about blood, sweat, toil, and tears. (Fodor 1975: 134)
 c. Everyone has finally realized that Oscar is incompetent. Even he_i has finally realized that Oscar_i is incompetent. (Evans 1980: (52))
 d. I know what Ann and Bill have in common. She thinks that Bill is terrific and he_i thinks that Bill_i is terrific. (adapted from Evans 1980:(49))
 e. I dreamt I was Brigitte Bardot, and I kissed me. (due to George Lakoff, discussed in Heim 1991)
 f. Oscar is sad. He_i thinks that Oscar_i is incompetent.

- Bound-variable readings can **never** escape binding conditions

- (17) a. I know what Ann and every linguist at this conference have in common.
 * She thinks that every linguist is terrific, and he_i thinks that every linguist_i is terrific. (Demirdache 1998)
- b. I know what every philosopher and every linguist at this conference have in common.
 * Every philosopher thinks every linguist is terrific, and he_i thinks that every linguist_i is terrific.
- (18) a. * Only he_i thinks that every linguist_i is a genius.
 b. *Everybody is sad. He_i thinks that everybody_i is incompetent.
 c. I dreamt I was Brigitte Bardot, and Wallace dreamt that he was Wendolene, and I kissed me, and Wallace did too. [strict reading only]

- If coreference interpretations escape binding conditions, and binding conditions only regulate bound-variable readings, then how can we explain basic constraints on coreference?

- (19) a. * Lucie adores her.
 b. *He adores Wallace.
 c. * He thinks that Wallace is a great cook.

- Grodzinsky & Reinhart's answer: if a coreference relation *can* be treated as a variable-binding relation (because c-command is satisfied), then it *must* be treated as a variable-binding relation.

- (20) *Rule I: Intrasentential Coreference* (Grodzinsky & Reinhart 1993, 79)
 NP A cannot corefer with NP B if replacing A with C, C a variable A-bound by B, yields an indistinguishable interpretation.