

Binding Theory determines the interpretation and distribution of pronouns and anaphors. It is formulated in terms of three principles, Condition A, which applies to anaphors, Condition B, which applies to pronouns, and Condition C, which applies to name and other referential expressions (R-expressions).

We have already discussed Condition C.

- (1) Condition C: a pronoun cannot refer to an R-expression that it c-commands.

We now focus on Conditions A and B of the binding theory.

1 Condition A

Condition A governs the distribution and interpretation of anaphors. Anaphors are dependent nominal elements, which must have a sentence-internal antecedent. Unlike pronouns, they cannot refer to a sentence-external contextual element.

Most languages have two kinds of anaphoric elements.

- (2) a. reflexives: *himself, herself, themselves, myself, ourselves, yourself*
b. reciprocals: *each other*

The discussion here will focus largely on reflexives. Most of what we will propose for reflexives will also apply to reciprocals, but reciprocals introduce additional complexity which we will not get into here.

1.1 Properties of Anaphors

- Anaphors, unlike pronouns, must have an antecedent within the sentence.

- (3) a. *Himself arrived.
b. He arrived.

The ungrammaticality of (3a) can be plausibly attributed to an inability of *himself* to appear in a nominative position. (4) does not run into this problem.

- (4) a. *[For himself to leave now] would be good.
b. [For him to leave now] would be good.

- Anaphors must have feature-compatible antecedents.

- (5) a. Stephin_i likes himself_i .
b. * Claudia_i likes himself_i
- (6) a. * Susan_i believes [himself_i to be a genius].
b. Susan believes [him to be a genius].

Pronouns do not require a sentence-internal antecedent. However, if they do have a sentence-internal antecedent, then it must be feature-compatible with the pronoun.

- (7) a. Vladislav_i thinks that he_{i/j} is a genius.
b. Vladislav_i thinks that she_{j/*i} is a genius.

• The antecedent of the anaphor must c-command the anaphor.

- (8) a. *Stephin's_i mother likes himself_i.
b. Stephin's_i mother likes him_i.
c. *[That Stephin_i is always ignored] irritates himself_i.
d. [That Stephin_i is always ignored] irritates him_i.

Pronouns do not have a c-command requirement. The antecedents of the pronouns in (8b, d) do not c-command them.

• The antecedent of the anaphor cannot be 'too far' from the anaphor.

- (9) a. *Stephin_i thinks that Claudia likes himself_i.
b. Claudia thinks that Stephin_i likes himself_i.

The antecedent of a pronoun cannot be 'too close' to the anaphor.

- (10) a. Stephin_i thinks that Claudia likes him_i.
b. *Claudia thinks that Stephin_i likes him_i.

1.2 Binding Domains

The intuition is that anaphors must have a binder that is 'close enough,' while pronouns may not have a binder that is 'too close.'

- (11) NP₁ **binds** another NP₂ iff NP₁ c-commands NP₂ and NP₁ and NP₂ are co-indexed.
(An NP is bound iff there is an NP' s.t. NP' binds NP)
- (12) a. Condition A: An anaphor must be locally bound.
b. Condition B: A pronoun must not be locally bound.
c. Condition C: An R-expression can not be bound.

What does *locally bound* mean? In particular, what constitutes *local*?

local in the context of the binding theory = **binding domain**

Thus the binding conditions can be restated as:

- (13) a. Condition A: An anaphor must be bound in its binding domain.
b. Condition B: A pronoun must not be bound in its binding domain.
c. Condition C: An R-expression can not be bound.
- (14) Binding Domain (Attempt 1): the binding domain of an NP is the smallest IP that contains it.

1.3 Problems with 14

(14) goes quite far in capturing the examples we have seen so far. In fact, it explains every single example discussed in this handout up until this point.

It can also explain cases of ambiguity like the following.

- (15) They pointed the guns at each other.

Despite this, it is ultimately inadequate.

ECM provides one environment where (14) makes incorrect predictions.

- (16) a. Vladislav_i believes [_{IP}himself_i to be a genius].
b. *Vladislav_i believes [_{IP}him_i to be a genius].

By (14), the binding domain of the subject of the embedded IP is the embedded IP. Therefore, we incorrectly predict that (16a) should be ungrammatical and that (16b) should be grammatical.

One might think (17) to also be a counterexample.

- (17) a. John_i tried [_{IP} to kill himself_i].
b. *John_i tried [_{IP} to kill him_i].

Given our assumptions, it isn't a counterexample. Why?

We might have the intuition that what is going wrong in (16) is that we are dealing with a non-finite IP and that therefore we should reformulate (14) as follows:

- (18) Binding Domain (Attempt 2): the binding domain of an NP is the smallest **finite** IP that contains it.

However, ECM proves to be a problem once again.

- (19) a. *Risto_i considers [Liina to be fond of himself_i].
b. Risto_i considers [Liina to be fond of him_i].

By (18), the binding domain of *himself/him* in (19) is the entire sentence – the entire sentence is the minimal finite clause that contains the anaphor/pronoun. Hence (19a) is incorrectly predicted to be good and (19b) to be bad.

- Reverse engineering points out that we need to distinguish between the subject of an ECM infinitive and the object of an ECM infinitive. The binding domain of the subject of the ECM infinitive seems to be larger than that of the object of the ECM infinitive.

1.4 Reformulating Binding Domains

- Binding domain of the subject of the ECM infinitive includes the clause of the ECM verb.
- Binding domain of the object of the ECM infinitive includes only the ECM infinitive.

- (20) Binding Domain (Attempt 3): the binding domain of an NP is the smallest clause that contains (i) the NP, (ii) its case-marker, and (iii) a subject.