On the Necessity of Binding Conditions

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I will be concerned in this talk with the structural requirements governing certain anaphoric relations. I will give particular attention to "Condition C" effects, and will argue that something like Condition C does indeed exist. That is, Condition C cannot be replaced by independently motivated pragmatic constraints (see Reinhart (1983) for extensive discussion of such constraints) nor by core properties of the theory of "Linking" (Higginbotham (1983)). A number of the arguments will be seen to carry over to Condition B as well. In the course of the discussion, it will become evident that a partial reformulation of Condition C is in order, but its basic nature as a structural constraint on binding will remain intact.

There seems to be a mild prohibition, reasonably regarded as extragrammatical in nature, against repetition of R-expressions. The effect of this can be seen in the slight oddness of a sentence like (1) or a sequence of sentences like (2). [Throughout, I will be concerned only with readings involving coreference (or overlap).]

(1) ?After John walked in, John sat down.
(2) ?John walked in. Then John sat down.

This repetition constraint would also be involved in (3) and (4), presumably, but, unaided, is too weak to account for the sharp contrast between these examples, on the one hand, and (1, 2), on the other.

(3) *John regrets that John wasn't chosen.
(4) *John thinks that I admire John.

Note that this additional constraint seems crucially grammatical in nature, in at least two respects. First, it is dependent on hierarchical structure. Second, its effects run directly counter to a plausible discourse principle favoring clarity. The acceptable sentences expressing the contents of the unacceptable (3, 4), namely (5, 6), are more vague than their counterparts.

(5) John regrets that he wasn't chosen.
(6) John thinks that I admire him.

It is also significant, I believe, that we find Condition C effects even in unacceptable examples that lack acceptable meaning-preserving counterparts. Anaphoric epithets represent one such striking case.

(7) *John thinks that I admire the idiot.

While (6) is, perhaps, a reasonable paraphrase of (4), it does not seem to be a reasonable paraphrase of (7), since it clearly lacks information represented in the latter example. Further, even the mild prohibition against repetition is without effect in such cases. Analogues to (1, 2) with epithets are not even slightly unacceptable.

(8) After John walked in, the idiot sat down.
(9) John walked in. Then the idiot sat down.

Finally, note that Condition C effects are even evident in cases not involving coreference, but merely overlap in reference.

(10) They told John to leave. [John ∉ they]
(11) They told John to visit Susan. [John ∉ they. Susan ∉ they .]

In these cases, it is particularly clear that there is no well-formed alternative to the ill-formed examples. To account for these cases, we need two things: 1) a prohibition on binding; and 2) a principle giving semantic import to lack of binding. (See Lasnik (1981) for discussion of the interaction between these two mechanisms.)

Arguments similar to some of those above can be constructed for Condition B. For example, (12) seems unacceptable even though it lacks a grammatical alternative, as shown by (13).

(12) *We like me.
(13) *We like myself.

(14) is a further case.

(14) *John and Mary like him/himself.

(15) is an example of this general type illustrating both B and C effects.

(15) *John told them that Mary should leave.

The mechanism of linking was advanced to deal with some of the limitations of binding theory, including those of the type pointed out in Lasnik (1981). The proposals put forward were partially successful (a treatment was made available for split antecedence, for example) but a number of issues remained unresolved, in particular, some of those outlined above. Further, the attempted elimination of Condition C was not entirely satisfactory, even for a simple case such as (3) above. To account for (3) in terms of linking, one must prohibit either occurrence of *John* from being linked to the other. Further, one must explain why coreference is precluded in the absence of a link. Higginbotham, essentially following Evans (1980), denied the factual basis behind the second mechanism, apparently reducing (3) to (1) or (2), an incorrect reduction, I have argued. For the first mechanism, he prohibited downwards linking quite generally. And he prohibited R-expressions from being linked. A direct prohibition would have been tantamount to Condition C, but Higginbotham argued that no such direct prohibition is required (or desired). Rather, the impossibility of linking an R-expression is a special case of (16).

(16) The interpretation of an expression is given in one and only one way.

The idea behind (16) is that since R-expressions receive interpretation internally, they cannot also receive interpretation via an antecedent. As it stands, (16) is arguably too strong. In (17), plausibly *himself* receives some of its interpretation internally - person, gender, number - even though it requires an antecedent.

(17) Leslie likes himself.

Note that the semantic difference between reflexives and reciprocals makes it quite clear that anaphors do make an "internal" contribution to the meaning of a sentence. (18) and (19) are not synonymous: the difference resides in the choice of anaphor.

> (18) They like themselves.
> (19) They like each other.

I will consider the revisions and extensions (Higginbotham (1985)) of the theory of linking with respect to these issues.

An examination of patterns of coreference in a variety of languages provides further evidence for a grammatical approach to disjoint reference effects, and in particular, a Condition C type approach. The oddness of an English example like (7) is a fact which must be explained. But in many other languages, this fact does not obtain. The variation seems parametric in an interesting sense. In Thai (20) and Vietnamese (21), for example, an R-expression need not be completely A-free: ["ɔ" indicates an open "o"]

> (20) cɔɔn khít wâa cɔɔn chàlaàt
>   'John thinks that John is smart'
> (21) John tin John sẽ thǎńg
>   'John believes John will win'

But within a clause, these two languages diverge:

> (22) cɔɔn chɔ̂ɔp cɔɔn
>   'John likes John'
> (23) *John thương John
>   'John likes John'

As a first approximation, we have the following: An R-expression is free (English); An R-expression is free in its governing category (Vietnamese); No requirement (Thai). However, if the first NP in (20-23) is replaced by a pronoun (*no* in Vietnamese or *khaw* in Thai), all four examples become ungrammatical. Apparently, Condition C is really two conditions, and the one just mentioned, unlike any of the standard binding conditions, involves reference to the binder as well as the bindee:

> (24) An R-expression is pronoun-free.

As far as I know, (24) is universal. (24) was not seen as a property of English in earlier work, since its effects all fall under [the English parametrization of] Condition C. Such is not the case in Thai or Vietnamese.

As predicted, sentences with the structure of (7) above are wellformed in both Thai and Vietnamese.

> (25) cɔɔn khít wâa ʔâybâa chàlaàt
>   'John thinks that the nut is smart'
> (26) John tin thǎńg chó de sẽ thǎńg
>   'John believes the son of a bitch will win'

In Vietnamese, unsurprisingly, anaphoric epithets must be free in their GC's. What is surprising is that this requirement holds in Thai also, a language in which R-expressions need not be free.

(27)   *cɔɔn chɔ̂ɔp ʔâybâa
       'John likes the nut'

In all of the languages under discussion, in fact universally as far as I know, a pronominal must be free in its GC. I will argue that (27) actually falls under Condition B rather than under any version of Condition C, and in particular that epithets are pronominal R-expressions. Finally, I will explore the implications of this hypothesis for the feature analysis ($\pm$a, $\pm$p) of NPs.

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