Resumptive Pronouns Can Be Syntactically Bound

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In this squib, we will argue that the binding relation between a *wh*-element and a "resumptive" pronoun is, at least in some languages, of the same nature as the binding relation between a *wh*-element and a trace. We will call this relation *syntactic binding*. The intended relation is exemplified for English in (1).

(1) Who$_i$ did Robin say she had spoken to t$_i$?

We take the defining characteristic of syntactic binding to be the fact that the *wh*-element can exhibit features such as case marking or reflexivization which it can acquire only through association with the position in which the trace occurs. The arguments presented here are neutral with respect to the problem of whether the binding relation is to be represented in the grammar through transformational movement or base-generation. We will present the arguments using the terminology common in transformational grammar, but they can be equally well formulated within a theory of base-generation.

It has in general been tacitly assumed that syntactic binding can occur only between a *wh*-element and positions to which access is not prohibited by "island" constraints, whereas positions that are inside islands are accessible only to "simple anaphoric" binding[1] (e.g. relations of "predication" in the sense of Chomsky (1977)). We will show that this dichotomy

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[1] The attempts that have been made to reduce trace binding to anaphoric binding have led to terminological confusions (among other things). We will call "simple anaphoric binding" what was (simply) "anaphoric binding" in more traditional approaches, that is, the relation between a full NP and a nonresumptive pronoun that refers back to it.

does not hold in Swedish and that, at least for that language, syntactic binding can occur between a *wh*-element and a resumptive pronoun, as well as into positions that seem to be islands for the binding between a *wh*-phrase and a phonologically null element. We will present two arguments in support of this claim. The first is based on reflexivization, and the second on coordination.

1. Reflexivization

It is not our aim here to provide an exact formulation of Reflexivization in Swedish. It suffices to observe that it is by and large a clause-bounded phenomenon and, more specifically, that reflexives cannot normally precede and command the NP with which they are coindexed. This is illustrated by the ungrammaticality of the following examples.

(2) *Sina$_i$ flickvänner säger att han$_i$/Kalle$_i$
     his   girlfriends   say   that he/Kalle
     är på dåligt humör.
     is in a bad mood

(3) *[En av sina$_i$ flickvänner]$_j$, jag undrade om
      one of his   girlfriends   I wonder if
      det att   Kalle$_i$ inte längre fick träffa henne
      it that Kalle no longer sees   her
      kunde ligga bakom hans dåliga humör.
      could lie   behind his bad   mood

In (2) the reflexive *sina* is properly contained in the subject of a clause that dominates the clause containing the "antecedent"; the result is ungrammatical whether the antecedent is a full NP or a pronoun. In (3) the reflexive is contained in a left-dislocated constituent, a position that we assume to be base-generated as such; the result is also ungrammatical. Nor would it help to have a possible antecedent in the immediately preceding discourse, as shown by the ungrammaticality of the sequence in (4).

(4) *Vi talade om Kalle$_i$. Sina$_i$ flickvänner säger att han
     är på dåligt humör.
     'We talked about Kalle. His girlfriends say that he
     is in a bad mood.'

Reflexives can, however, occur in topicalized or *wh*-fronted constituents, as shown by the following example:

(5) Vilken av sina$_i$ flickvänner tror du att Kalle$_i$
     which of his   girlfriends think you that Kalle
     inte längre träffar?
     no longer sees

The standard transformational explanation for this pattern is

that Reflexivization applies before (unbounded) rules like *Wh Movement*.

Now notice that the following sentence is grammatical.

(6) [Vilken av sina$_i$ flickvänner]$_j$ undrade du   om
    which of his   girlfriends   wonder you if
    det att   Kalle$_i$ inte längre fick träffa henne$_j$
    it   that Kalle no   longer sees   her
    kunde ligga bakom hans dåliga humör?
    could lie   behind his   bad   mood

(6) contains a resumptive pronoun *henne* inside an embedded sentential subject. Note that the link between the fronted *wh*-phrase *vilken av sina flickvänner* and the pronoun *henne* cannot be "simple anaphoric" binding because we would then expect (6) to match (3) in grammaticality. Instead, we find that (6) has the same status as (5), showing that both a resumptive pronoun and a gap allow the same type of binding relation to be established. We can account for this pattern of grammaticality judgments if we assume (6) to be derived by the same rule as (5). Hence, the link between the *wh*-phrase and the resumptive pronoun must be considered an instance of syntactic binding.

2. Coordination

A well-known observation due to Ross (1967) is that if an extraction rule has applied in one conjunct of a coordinate structure, it must also have applied in the other conjuncts. Thus, (7) is ungrammatical both in English and Swedish, whereas (8) is grammatical.

(7) *Där borta går   en man som jag ofta   träffar
    there   goes a   man that I   often meet
    men inte minns   om Marie känner Kalle.
    but don't remember if   Marie knows Kalle
(8) Där borta går   en man som jag ofta
    there   goes a   man that I   often
    träffar men inte minns   om du   känner.
    meet   but don't remember if   you know

The exact conditions on "across-the-board" rule application are worked out in a transformational framework in Williams (1978). The conditions include the requirement that the affected elements in each conjunct be "identical" in syntactic category (see Williams (1978, 36, (31))).

Now observe that the following sentence is grammatical:

(9) Där borta går   en man$_i$ som jag ofta
    there   goes a   man that I   often
    träffar men inte minns   vad han$_i$ heter.
    meet   but don't remember what he   is called

In (9) the two conjuncts are the two VPs. We assume that *Wh*

Movement or Relative Deletion must apply across-the-board to an identical element in both conjuncts. Then the only way that (9) can be derived is to assume that *Wh* Movement or Relative Deletion has applied to both conjuncts, and that the trace that is left behind is "spelled out" as a (resumptive) pronoun in one case, but as a gap in the other. Assuming further that this spelling-out cannot change the syntactic category of the trace, both gaps and resumptive pronouns must be of the same syntactic category. The requirement of across-the-board rule application means that the same rule must have applied to both conjuncts; hence, we cannot assume that one conjunct exhibits syntactic binding established by the application of, say, *Wh* Movement, and that the other conjunct simply exhibits anaphoric binding.

This conclusion is not limited to a transformational framework. It also holds for slightly different reasons in a base-generated framework like the one proposed in Gazdar (1981), where it is assumed that only constituents of the same syntactic type can be conjoined, and that constituents out of which something has been extracted are of a different syntactic category from complete constituents. (See Maling and Zaenen (1981) for more discussion.)

3. Conclusion

Given the similarities between resumptive pronouns and gaps noted here, we can conclude that at least in Swedish the use of resumptive pronouns does not reflect a switch from syntactic binding to anaphoric binding. It follows that the fact that resumptive pronouns are typically used in syntactic islands cannot be due to a difference in the type of binding involved, as has often been suggested.

References

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