BOUNDING PHENOMENA AND BINDING CONDITIONS

Arie Verhagen

This paper is concerned with a conceptual problem with regard to Conditions on Binding; this problem will be discussed on the basis of some particular classes of adverbial phrases. To begin with, I will give some examples of the adverbials I have in mind (the examples will be from Dutch).

Firstly, there are the so-called subject-oriented adverbials, for example opzettelijk ("deliberately") in (1).

(1)a dat Jan opzettelijk zijn broertje in de kast heeft gestopt
      that John deliberately his brother in the closet has put
   b dat Jan zijn broertje opzettelijk in de kast heeft gestopt

This adverbial ascribes a certain mental state to the referent of an NP with respect to the event described; it can only be associated with one NP, both in (1)a and (1)b, namely the subject NP.

Secondly, there are the 'predicative adjuncts', like dronken ("drunk") in (2).

(2)a dat de buurman dronken zijn gasten naar huis bracht
      that the neighbour drunk his guests home brought
   b dat de buurman zijn gasten dronken naar huis bracht

The case of (2)b shows that such a predicative adjunct can be associated, in principle, with more than one NP in a sentence: in (2)b the adverbial AP dronken can be associated with both the subject and the direct object of the sentence. A predicative adjunct can never be associated with an indirect object. For example, dronken in (3) cannot be associated with the NP zijn gasten although it seems necessary that the structural relation between the indirect object NP and the AP in (3) should be the same as the one between the direct object NP and the AP in (2)b.

(3) dat de buurman zijn gasten dronken een lift aanbood
      that the neighbour his guests drunk a lift offered

It seems possible to take certain adverbs of manner which also ascribe some property to the referent of an NP as belonging to the same subclass: they can be associated with the subject, sometimes with the direct object (depending on the verb), but never with an indirect object. Consider the examples in (4).

(4)a dat de paus de mensen overal enthousiast ontving
      that the pope the people everywhere enthusiastically received
   b dat de paus de mensen overal enthousiast achterliet
      that the pope the people everywhere enthusiastically left behind

In (4)a, enthusiasm is ascribed to the pope; in (4)b, enthousiast is associated with the direct object de mensen (it specifies the state of mind in which the people remain after the pope's visit).

Finally, there are cases of adverbials that do not ascribe properties or anything of the sort, but that can best be described as 'reading instructions': they specify the way in which the speaker wants his hearer to interpret some NP: collectively, distributively, etc. (cf. Bakker (1972)). This applies to such adverbials as samen ("together"), allemaal ("all"), ieder ("each"), i.e. in general, 'floating quantifiers'. They can be connected with any NP in the

sentence, no matter what its grammatical function: i.e., with the subject, the direct object and also the indirect object. Consider the examples in (5) and (6) (the b-cases are again ambiguous).

(5)a dat deze regeringen allemaal de vakbonden in de gordijnen jagen
       that these governments all   the trade unions drive into anger
   b dat deze regeringen de vakbonden allemaal in de gordijnen jagen

(6)a dat zij toen samen   de kinderen een kilo engelse drop gaven
       that they then together the children a   kilo of liquorice gave
   b dat zij de kinderen   toen samen   een kilo engelse drop gaven

There are clearly some differences among these 3 (or 4) types of adverbials: some can only be associated with one NP, some others with at most two NP's, and again others with all three NP's that can maximally accompany a verb. However, I do not want to concentrate on these differences here. I assume that they can be explained on semantic grounds. In the case of opzettelijk ("deliberately"), for example, it is clear that the NP involved must have an Agent as a referent (perhaps more generally: a human being which 'controls' the situation or event described in the sentence), given the meaning of the word. In the case of the predicative adjuncts one might argue that they have to be taken as abstract 'Locations' (in the sense of Jackendoff (1972)), as they involve secondary predication (cf. Den Hertog (1972)), which can only be associated with an NP that at least allows an interpretation as 'Theme' with respect to the Location. Indirect objects can be said never to allow such an interpretation, because they are necessarily only Locational (i.e. Goal, sometimes Location or Source; cf. Verkuyl (1976); these are the three mutually exclusive locational roles).

What I want to concentrate on now, however, is something all these adverbials have in common and that distinguishes them from 'ordinary' adverbials (of place and time, sentence adverbs, other manner adverbs than those in (4), like mechanically, etc.). This is the fact that the adverbials in question entertain some specific relation with a (generally clause-mate) NP, which is why I will call them, for the rest of this paper, 'bindable' adverbials (though the very existence of this class of phrases will give rise to a criticism of the use of the notion 'binding' in grammatical theory, as we will see).

The specific character of this relation finds expression, among other things, in the fact that in the examples given so far, it is a necessary (but not sufficient) condition for all bindable adverbials that the binding NP should be to the left of the adverbial. This implies that sentences containing bindable adverbials are impossible if every possible binder, including the subject, is to the right of the adverbial. Such cases cannot be improved by stressing the subject, or by taking a quantifying phrase as subject (for example, iedereen ("everyone")), which indicates that the unacceptability is not a matter of (pragmatic) focus-interpretation (the strategies just suggested can make sentences with other, ordinary, adverbials in initial position fully acceptable, which fact can be naturally explained in terms of focus-interpretation; cf. Verhagen (1979)). For example, all sentences in (7) are ungrammatical.

(7)a *dat opzettelijk   Jan zijn huis in brand stak
       that deliberately John his house on fire   set
   b *dat opzettelijk   Jàn zijn huis in brand stak
   c *dat opzettelijk iedereen zijn huis in brand stak

(This all holds for the basic SOV-order of subordinate clauses in Dutch; things are more complicated in root sentences.)

Furthermore, in the other examples given so far, only those cases are ambiguous in which there is more than one possible binder to the left of the adverbial. Or take a case like (4)b; if we put de mensen to the right of enthousiast, we get (8), for instance.

(8) dat de paus overal   enthousiast   de mensen achterliet
      that the pope everywhere enthusiastically the people left behind

This is a 'funny' sentence, at most interpretable on a somewhat cynical reading, according to which enthusiasm is ascribed to the pope as he leaves the people behind. That it is possible, in principle, for a sentence with enthousiast to the right of the direct object, like (4)b, to be ambiguous is apparent in (9), where a is not ambiguous, but b is.

(9)a dat de profeet enthousiast   zijn volgelingen op pad stuurde
       that the prophet enthusiastically his disciples on their way sent
   b dat de profeet zijn volgelingen enthousiast   op pad stuurde

In the case of opzettelijk, too, one can in fact construct such an ambiguity, although a somewhat more complicated construction is needed, in view of the semantic requirements imposed on the NP's involved (see above). Consider (10).

(10)a dat de auteur opzettelijk Oedipus met zijn moeder liet trouwen
       that the author deliberately Oedipus with his mother had marry
    b dat de auteur Oedipus opzettelijk met zijn moeder liet trouwen

The second case, and only the second case, is ambiguous with respect to the person to whom intentional behaviour is ascribed (I will return to this example below, in connection with its particular structure).

Yet another kind of ambiguity related to the position of an adverbial with respect to an NP is that between subject- and speaker-orientation, as can be seen from (11)[1].

(11)a dat gelukkig iedereen huiswaarts keerde
       that happily everyone homeward   turned
   b dat iedereen gelukkig huiswaarts keerde

In (11)a, there is only a speaker-oriented interpretation of the adverbial gelukkig; in (11)b, both a speaker- and a subject-oriented reading are possible. Thus, the position of an adverbial in the sentence is not relevant to speaker-orientation, but it is relevant to subject-orientation.

In fact it is not (or not only) a linear (left-right) relation that constrains the possibilities of linking a bindable adverbial to some NP, but rather some structural relation. This can be concluded from the impossibility of construing the adverbials in (12) and (13) with the co-indexed NP's, although these NP's are to the left of the adverbials.

(12) *dat de broer   van $[\text{Joseph}]_i$ $[\text{dronken}]_i$ achter het stuur zat
      that the brother of   Joseph   drunk   behind the wheel sat

(13) *dat zij   van $[\text{ons}]_i$ gisteren $[\text{samen}]_i$ een kilo engelse drop kregen
      that they from us yesterday together a kilo of liquorice got

Consider (13), for example. The NP ons is to the left of samen, but it is contained in a PP. Therefore, some type of 'command' relationship is involved, apparently. I leave aside the question which one exactly is involved, but will only point out that it will probably be difficult to state the constraint involved purely in structural terms. Consider the cases of c-command, m-command and superiority[2]. The ungrammaticality of the sentences in (7) is especially problematic for the first two notions. The adverbial and the subject must be analysed as sisters, so that the subject both m-commands and

c-commands the adverbial, but the sentences are ungrammatical. If we take the relevant notion to be superiority, this particular problem will disappear, precisely because the subject cannot be superior to the adverbial in (7). But then the grammaticality of (2)b, (4)b, (5)b and (9)b, in which adverbials are semantically construed with direct objects, becomes a problem: direct objects cannot be analysed as superior to adverbials in the same VP, yet construal is still possible[5]. For the moment, it seems that we cannot entirely dispense with linear constraints, alongside structural ones (cf. Koster (1979)).

Yet it remains a fact that the relationship between a bindable adverbial and an NP depends, _inter alia_, on the structural position of the phrases with respect to one another. In another respect, too, this relationship resembles the relation between an antecedent and an anaphor, namely in that both relationships are sensitive to the same structural boundaries; they are limited to the same structural domains, in particular the clause (for convenience, I take S', not S, as the relevant bounding node; nothing hinges on this choice in the present context). In the first instance, the examples are rather straightforward. A case of an embedded tensed sentence is given in (14).

(14) dat Jan verklaarde [$_{S'}$dat Wim hen dronken thuis had gebracht]
      that John stated   that Bill them drunk home had brought

The AP dronken cannot, of course, be associated with the subject of the matrix sentence, Jan.

An example of an extraposed infinitival complement is given in (15).

(15) dat Jan Wim instrueerde de gasten nuchter thuis te brengen
      that John Bill instructed the guests sober home to bring

At first sight, nuchter can be associated with de gasten (direct object in the complement), with Wim, and not with Jan. Here too, the explanation is that the categorial status of the complement is S', which is hardly controversial for these extraposed complements (cf. the optionality of the complementizer om ("for"), that might have been present in initial position of the complement in (15)). Thus, the structure of (15) is as indicated in (16).

(16) dat Jan Wim instrueerde [$_{S'}$[$_{NP}$e] de gasten nuchter thuis te brengen]

The adverbial can only be linked to NP's within its minimal S', one of which is the empty subject, controlled by Wim in the matrix sentence. This explains that, in (16), a relationship between nuchter and Wim does appear to be possible, and that one between nuchter and Jan does not. That the connection between nuchter and Wim must indeed be seen as indirect is also evident from (17), where the AP precisely cannot be associated with Wim (but only with the subject Jan), in spite of the fact that these phrases are in the 'correct' structural relationship and contained in precisely the same clause.

(17) dat Jan Wim nuchter instrueerde de gasten thuis te brengen
      that John Bill sober instructed the guests home to bring

Wim performs the role of an abstract Goal with respect to the verb instrueerde, which makes it impossible for it to be construed with another ('secondary') Locational phrase (cf. the remarks above on the impossibility of predicative adjuncts with indirect objects). It follows that nuchter in (15) cannot be directly related to Wim, which adds strong supporting evidence to the analysis (16), i.e., _inter alia_, S'-status for the infinitive.

How about the Verb-raising complements, of which (10) was an example? The ambiguous case, (10)b, is repeated here for convenience.

(10)b dat de auteur Oedipus opzettelijk   met zijn moeder liet trouwen
      that the author Oedipus deliberately with his mother had marry

Suppose we want to assign to these infinitives a structure as similar as
possible to the structure of extraposed infinitival complements, i.e. a sen-
tential status (say S, and not S', because of the obligatory absence of a
complementizer), with an empty subject, somehow linked to <u>Oedipus</u> (whether as
trace or as PRO is again irrelevant at the moment). It then appears that the
ambiguity could be accounted for in structural terms, given that the string
(10)b could be assigned the following two structural analyses[4] (with the em-
bedded verb raised to the matrix).

(18)a dat de auteur Oedipus opzettelijk [$_S$[$_{NP}$ e]] met zijn moeder] liet trouwen

    dat de auteur Oedipus [$_S$[$_{NP}$ e]] opzettelijk met zijn moeder] liet trouwen

Thus, the ambiguity of (10)b seems to follow naturally, maintaining the
assumption that construal of a bindable adverbial with some NP is clause-
bound, which is a desirable result.

However, this analysis loses its significance in the light of examples (19)
and (20).

(19) dat Vader het gezin doodnuchter liet vertellen dat 't geld op was
      that father the family blandly   had tell   that the money out was

(20) dat de voorzitter hem de zaal voldaan   zag verlaten
      that the chairman   him the hall satisfied saw leave

In these sentences, only one structural analysis is available: in both cases
the adverbials are parts of the complements, given that they are to the right
of the indirect and direct object of the complement, respectively. Yet, <u>dood-</u>
<u>nuchter</u> in (19) can easily be construed with <u>Vader</u> (subject of the matrix),
and necessarily directly so, because <u>Vader</u> is not the antecedent of any empty
element in the complement. And (20) is a case of ambiguity (according to most
speakers), which means that again a direct linking is possible between <u>vol-</u>
<u>daan</u> and <u>de voorzitter</u>. This means that we have to allow bindable adverbials
in a V-raising complement to be directly linkable to NP's outside the comple-
ment. This implies in turn that there is no way to avoid <u>opzettelijk</u> in (10)b
also being directly linked to <u>Oedipus,</u> and <u>voldaan</u> in (20) to <u>hem</u>, in both
cases over the head of the alleged empty subject (cf. (18)). Thus, this sub-
ject is essentially unmotivated. A potential argument that every predicate
together with a subject constitutes a sentence, expressing as a whole some
elementary pattern of relations, so that we must also assume sentential sta-
tus and a subject position for V-raising infinitives, is nullified by the
fact that such infinitives may contain adverbials that precisely do <u>not</u> be-
long, semantically, to the pattern of relations involved; (19) is an example,
and a case with a non-bindable adverbial is (21), where <u>daarom</u> modifies the
entire tensed clause[5]:

(21) dat ik de auto daarom   laat verven
      that I the car therefore have paint

Semantically, there is also no reason to take the relation between the ad-
verbial and the NP as indirect, as there was in (15): in the V-raising cases
the NP's involved function themselves as abstract Themes with respect to the
matrix verbs[6].

In one way or another, it must be stated that V-raising complements are, in
principle, completely transparent for bindable adverbials, in contrast to the
situation with tensed clauses and infinitival extraposed complements, i.e.

that there is no bounding node, or that it is somehow 'invisible' in these constructions. At first sight, the most straightforward solution seems to be that there is no bounding node at any level of analysis, but it is not clear a priori that this solution would really differ from a mechanism like S'-deletion, suggested by Chomsky in Pisa (in 1979); this also depends on the construction of other parts of the theory (for example, X'-theory and the position of S and S' within it).

Whatever may ultimately be the best analysis of V-raising complements, it is clear that it is undesirable to give them (precisely) the same status as finite or non-finite sentential complements, if we want to be able to express the apparent generalization that construal of a bindable adverbial with an NP is clause-bound. In this respect, too, bindable adverbials behave like anaphors, for which V-raising complements are transparent, too. Consider (22), from Daalder (1977).

(22) dat zij   zichzelf   lieten verwennen
     that they themselves had   indulge

The reflexive direct object of _verwennen_ takes the subject of the 'matrix', _zij_, as antecedent. Boundedness apparently holds equally for anaphors and for bindable adverbials, in all respects; it is clear that there must be one general explanation for the boundedness of both kinds of relationship. This implies that if a specific composition of conditions for bounding is not credible in the case of bindable adverbials, it cannot represent the general format of these conditions, thus not the format for anaphors either.

Recently, the conditions are often stated as conditions on certain representations and they are called 'conditions on binding'. It is stipulated that certain elements may or may not be bound within certain structurally limited domains. This being the case, the following question arises: as we have evidence for bounding with a certain type of adverbials, do we then also have binding here (so that the binding conditions could generalize over these phenomena)? Let us try to pin down the consequences of a positive answer to this question.

Suppose we were to try to incorporate these phenomena into the "government-and-binding-framework" that Chomsky recently proposed (Chomsky (1980)), say by means of a condition of the following kind:

(23) A bindable adverbial must be bound within its minimal governing
     category

The first questions arise with respect to the applicability of the notion 'government' here. Suppose that adverbial phrases are not governed, which seems to be the most natural initial assumption. Then (23) more or less states that bindable adverbials in all clause types are as free as the (ungoverned) PRO-subject of infinitives. On the other hand, the assumption that adverbials _are_ governed, which avoids this consequence, will probably strip the notion 'government' of every relation with case-assignment, subcategorization, etc., i.e. of its specific content (limited as it perhaps already was). Thus, to avoid complications in this respect, I will not consider (23), but rather a formulation such as in (24) (recall that I, rather arbitrarily, took S' as bounding node):

(24) A bindable adverbial must be bound within its minimal S'

We can now concentrate on the content of the notion 'binding'. In the Pisa-lectures, Chomsky actually defined binding only for arguments (i.e. NP's), so that (24) would strictly speaking be senseless, but this is a minor problem; without essential modifications, binding can be defined for categories

as follows:

(25) A category a is bound = a is co-indexed with a c-commanding argument

Of the two major elements in this definition, the c-command requirement essentially indicates that binding-relations can only exist under certain structural conditions; it does not specifically form a part of the content of 'binding'[7]. The question of the content of 'binding' is the question of the content of co-indexing.

Originally, an index in a structural representation indicated the referentiality of the category involved, and co-indexing indicated coreference; cf. Chomsky (1965: 145-146). On this view, the content of 'binding' is coreference. Later, this view was modified, because the same type of relations that one wanted to describe with 'coreference' could be observed with NP's which were not referential themselves, so that the relation could not, of course, be one of coreference (for example, relations between wh-phrases and pronouns or reflexives); cf. Chomsky (1976)[8]. If one wants to determine the content of the modified notion of binding in the literature (which is not very easy), then I think it comes down to the idea that the reading of one element is somehow contained in the reading of the other. This is in itself rather poor, but it will be clear that if one wants to maintain (24) for the sake of uniformity, the content of 'binding' must be stretched so far that it will no longer have any particular content but will simply mean: "any relation, of whatever nature".

As a consequence, formulations like (24) simply state that "no relation", of any nature, may hold between a position within and one outside an S', i.e. precisely the same as such original formulations of the conditions as "no rule can relate X and Y in ...". Thus, there is no profit at all, conceptual or otherwise, in trying to capture these matters in a binding terminology (as is stated in a number of publications, for example Freidin (1978)).

On the other hand, if one maintains that 'binding' must have at least some particular content, then the uniformity of the bounding phenomena can only be expressed by formulating the conditions explicitly as general conditions on rules, on relations-of-any-nature. Conceptually, this boils down to the same situation as we have just discussed, but in this case it is less concealed that the specific content of the relation antecedent-anaphor or NP-bindable adverbial is something still completely open for research; for the predicative adjuncts, I suggested (abstract) 'Location', and this is clearly only a tentative start.

It can be shown, finally, that co-indexing is in fact even technically inadequate to indicate the specific relation between an NP and a bindable adverbial. There are completely grammatical sentences like (26) and (27):

(26) dat het huis opzettelijk   in brand is gestoken
     that the house deliberately on fire is set

(27) dat het bericht enthousiast   is ontvangen
     that the message enthusiastically is received

In these sentences, there are no NP's that the adverbials could be construed with. Apparently, the foregoing observations must be interpreted in such a way that the NP linked to an adverbial may not be outside the minimal S', while its presence within it is not strictly required[9]. Suppose that we were to replace (24) with (28) for this reason.

(28) A bindable adverbial may not be bound outside its minimal S'

This leads to problems, however, give the definition of 'binding' in terms of

co-indexing (cf. (25)), for now, for example, every structure of the form (29) (with the required structural relations between the phrases) is incorrectly filtered out:

(29)   ... NP_i ... $[_{S'}$ PRO_i ... AP_i ... $]$ ...

If the AP is bound by PRO in its own S' and PRO is bound by the NP outside S', then definition (25) implies that the NP binds the AP, which violates (28). What is needed, then, is for a particular relationship to be assumed between the AP and exactly one NP, which we may call the 'binder', for ease of exposition. We may then replace (28) with (30):

(30)   A 'binder' of a bindable adverbial may not be outside the minimal S' containing the adverbial

This 'bindership relation' is necessarily to be construed as intransitive[10], so that the NP in (29) cannot be a binder of the AP, even if the NP is the binder of PRO, and PRO is the binder of the AP. It is clear that this cannot be expressed by means of indexing nodes in a phrase marker. On the contrary, even if the process of index-assignment proceeded locally, it would be unavoidable for there to be, in the resulting representation, co-indexed nodes on both sides of structural boundaries. This means that the correct results cannot be derived (except, of course, by adding new stipulations[11]).

In short, technical considerations support the (more important) conceptual considerations of the preceding discussion: binding conditions, as generally conceived, hinder a conceptually satisfying expression of the uniformity of bounding phenomena.

Footnotes

1. Because of the focus-oriented nature of sentence adverbs (see Verhagen (1979)), the interpretation of (11)b can be moved in one direction or the other by means of specific intonation patterns. If stressed, the adverbial becomes (part of the) focus, preventing interpretation as focal modifier, i.e. sentence adverb. On the other hand, extra stress on the directional phrase more or less isolates it as the focus, so that the adverbial is not part of the focus, which stimulates interpretation as a sentence adverb.

2. See Verkuyl & Kerstens (1978). The definitions of c-command and superiority are familiar, I assume. M-command is defined as follows: "A m-commands B iff: a) neither A nor B dominates the other, and b) the first major category dominating A dominates B". Thus, m-command is the non-anti-symmetric counterpart of superiority.

3. If it could be motivated that adverbials together with the verb form a 'small VP', in which the direct object is not contained, these remarks form an argument in favor of superiority, because this one structural relation would be sufficient, while assuming m- or c-command would necessitate assuming a linear condition too.

4. An alternative is, of course, to assume deep structure interpretation and complete deletion of the subject. This view will meet the same problems as the movement/control analysis expressed in (18), with respect to the interpretation of adverbials to the right of some object in the complement (see the discussion of (19), (20)). Again another alternative is to have Oedipus itself in the subject position of the infinitive. The problems just mentioned are then even bigger, because the adverbial in (10)b is necessarily analysed unambiguously as a structural part of the complement,

so that (given the semantic ambiguity) the generalization that construal of adverbial and NP is clause-bound would already be lost.

5. As (21) shows (and (19) too), the 'subject' of the complement sometimes need not be expressed at all. In this respect, these complements do not seem to differ from the (extraposed) S'-infinitives discussed earlier. There are cases like (i):

   (i) dat Jan verbood de gasten dronken naar huis te brengen
        that John forbade the guests drunk home   to bring

   where no controller is present in the matrix. Still, dronken in the infinitive cannot be construed with Jan, but only with the (unspecified) understood subject of naar huis te brengen, a situation which differs essentially from that in (19) and (21).

6. This implies, inter alia, that these NP's are direct (not indirect) objects, which in turn implies that the complement cannot be seen as being in complementary distribution with the direct object, contrary to what is assumed in Verhagen (1979) and other literature on the base component of the grammar of Dutch. This means that such complements cannot be arguments, but that they must have adverbial function, according to the hypothesis on the interpretation of the base rules in Verhagen (1979). And it does not seem incorrect to say that these complements are predicative adjuncts (cf. Den Hertog (1972)), i.e. secondary Locations for the Theme (the direct object).

7. Thus, the conditions on anaphoric relations fall into two different types: limitations to certain structurally related positions and limitations to certain syntactic domains. Cf. Koster (1979), who calls the first type "primacy relations" and the second type "locality principles".

8. It might seem that the crucial distinction in the government-binding-framework between variable-binding and argument-binding entails a return to coreference, namely as the content of argument-binding. However, traces of wh-phrases are arguments in that framework, and they may bind an anaphor as such, but they still are not referential phrases.

9. This has some consequences for the analysis of a number of constructions. Firstly, consider the sentences in (i).

   (i)a dat het huis door Jan opzettelijk in brand is gestoken
         that the house by   John deliberately on fire is set
     b dat het huis opzettelijk   door Jan in brand is gestoken

   In connection with the remarks in the text, the relation between Jan and opzettelijk in (i) must be seen as indirect, and not as structurally determined. That is, the fact that intentionality is ascribed to John in setting the house on fire in both sentences is determined just as pragmatically as in the text "The house has deliberately been set on fire. I think that John did it".
   Secondly, these things mean that noting can be concluded concerning the presence or absence of a structural subject from the fact that the following V-raising sentences are grammatical:

   (ii)   dat wij het huis opzettelijk   in brand hebben zien steken
          that we the house deliberately on fire   have   seen set
   (iii) dat ik er ijverig   aan zal laten werken
          that I   industriously on it will have work

10. If we combine this with the arguments from Daalder & Blom (1976) and Verkuyl & Kerstens (1978), to the effect that the antecedent-anaphor relation

is intransitive, the general picture emerges that all relationships that are determined interpretively are intransitive. That thematic relations are not carried over under control is apparent, _inter alia_, from the analysis of (15): if the thematic roles of <u>Wim</u> and <u>PRO</u> in (16) were the same, there would be no explanation for either the well-formedness of (15), or the ill-formedness of (17), with <u>nuchter</u> construed with <u>Wim</u>.

11. An example of such a stipulation is the "linking convention" in Freidin's (1978: 530) formulation of the "Opacity Principle", which makes this principle ultimately far less distinct from a condition on rules than Freidin suggests. Furthermore, it seems to me that the effect of the linking convention follows (and thus need not be stipulated separately), if the conditions are interpreted as conditions on rules. In this respect, there is a difference between this conception and that of binding conditions, which is not explicitly mentioned by Freidin. Another remark on the status of the linking convention is that, according to Freidin, it serves to express the fact that "the binding relation is local" (Freidin (1978: 529)), but technically this is done in the form of a restriction on the scope of the Opacity Principle, and not in the definition of the binding relation. Thus, Freidin's system in fact expresses that: "1) Binding is transitive and non-local; 2) only those cases where the binding relation is local are subject to the Opacity Principle". It is clear that this is conceptually not very satisfactory.

Bibliography

BAKKER, D.M.
1972 Ieder, samen, respectievelijk, elkaar; in <u>Taalwetenschap in Nederland 1971</u>, published by the Algemene Vereniging voor Taalwetenschap, Amsterdam

CHOMSKY, N.
1965 <u>Aspects of the theory of syntax</u>, Cambridge, Mass.
1976 Conditions on rules of grammar; in <u>Linguistic Analysis</u> 2, p. 303-351
1980 <u>Lectures on binding and government</u>, Dordrecht

DAALDER, S.
1977 Enkele beschouwingen over infinitief-konstrukties; in <u>Handelingen van het XXXIe Vlaam Filologencongres</u>, Brussel

DAALDER, S. and BLOM, A.
1976 De strukturele positie van reflexieve en reciproke pronomina; in <u>Spektator</u> 5, p. 397-414

FREIDIN, R.
1978 Cyclicity and the theory of grammar; in <u>Linguistic Inquiry</u> 9, p. 519-549

HERTOG, C.H. DEN
1972 <u>Nederlandse Spraakkunst</u>, ingeleid en bewerkt door H. Hulshof, dl. I, De leer van de enkelvoudige zin, Amsterdam [third printing; originally 1903-1904]

JACKENDOFF, R.S.
1972 <u>Semantic interpretation in generative grammar</u>, Cambridge, Mass.

KOSTER, J.
1979 <u>Anaphora: an introduction without footnotes</u>, University of Nijmegen

VERHAGEN, A.
1979 Fokusbepalingen en grammatikale theorie; in <u>Spektator</u> 8, p. 372-402

VERKUYL, H.J.
1976 Thematische relaties; in G. Koefoed and A. Evers (eds.), <u>Lijnen van</u>
      <u>taaltheoretisch onderzoek</u>, Groningen

VERKUYL, H.J. and KERSTENS, J.G.
1978 Structurele relaties; in P.C.A. van Putte and H.J. Verkuyl (eds.),
      <u>Nieuwe tegenstellingen op Nederlands taalgebied</u>, Utrecht