Obviation properties of the *d*-pronoun in Dutch

Jacqueline van Kampen
UiL OTS, Utrecht University

The present paper discusses a decisive difference in Dutch between the *d*(emonstrative)-pronoun and the *p*(ersonal)-pronoun. The *d*-pronoun is a grammatical device for focus-to-topic-shift. Van Kampen (2010) derived this from two properties of the *d*-pronoun, neither of them present in the *p*-pronoun. (i) The *d*-pronoun obviates as antecedent all arguments except the first preceding focus. (ii) The *d*-pronoun introduces the new topic of its sentence. The present paper derives three other properties of the *d*-pronoun. The *d*-pronoun allows a bound variable reading in certain complex CPs (Section 2). A *d*-pronoun in a temporal adjunct CP can bind a quantifier in the matrix CP, but it does not do so in non-temporal adjunct CPs (Section 3), nor in complement CPs (Section 4). Since the *d*-pronoun is not only an anaphor locally bound by the first preceding focus, but also a discourse anaphor, it invites a reconsideration of the notion 'bound anaphor' in the Binding Theory.

Keywords: Dutch *d*-pronoun, focus-to-topic-shift, A-bar pronoun, Binding Theory, bound variable reading, tense quantification, X-bar stress assignment

1. Introduction

The discourse sequences in (1) demonstrate a difference in Dutch between the *d*(emonstrative)-pronoun *die* and the *p*(ersonal)-pronoun *ze* ('they').

(1) a. $[\text{De detectives}]_i$ waarschuwden $[\text{de secretaresses}]_k$
$[\text{The detectives}]_i$ warned $[\text{the secretaries}]_k$
b. $\text{Ze}_{i/k}$ / $\text{Die}_{*i/k}$ verlieten het gebouw.
$\text{They}_{i/k}$ / $\text{Dpro}_{*i/k}$ left the building.

The *d*-pronoun *die* in (1b) refers to the first preceding focus $[\textit{de secretaresses}]_k$ where 'focus' is the DP argument marked by neutral sentence stress (Steedman

Linguistics in the Netherlands 2012, **68–81**. DOI 10.1075/avt.29.06kam
ISSN 0929–7332 / E-ISSN 1569–9919

1991). I will define 'first preceding focus' and 'neutral sentence stress' more precisely in Section 4. Due to its strict preference for an antecedent in focus, and even more locally the first preceding focus, the *d*-pronoun obviates a non-focus like [*de detectives*]$_i$ as a possible antecedent. This is indicated by the index *i in (1b). The *p*-pronoun *ze* in (1b) is the unmarked option without obviation. It allows as antecedent the focus argument [*de secretaresses*]$_k$ as well as the non-focus argument [*de detectives*]$_i$. The *d*-pronoun (*die*$_k$) does not block the alternative construction with the *p*-pronoun (*ze*$_k$).

The *d*-pronoun *die* in (1b) and (2b) below is the new topic and it needs a focus antecedent. From this it follows that the subsequent pronominal reference *k* in (2c) requires the *p*-pronoun *ze*$_k$ when the antecedent *die*$_k$ in (2b) is the new topic and a non-focus. A repeated use of *die* in (2c) is predictably blocked.

(2) a. [De detectives]$_i$ waarschuwden [de secretaresses]$_k$
[The detectives]$_i$ warned [the secretaries]$_k$
b. Die$_k$ verlieten het gebouw.
Dpro$_k$ left the building.
c. Ze$_k$ / *die$_k$ gingen vlug naar huis.
They$_k$ / *Dpro$_k$ went quickly home.

The *d*-pronoun is a grammatical device for focus-to-topic-shift. As such it has a sentence (CP) characterizing function (enhanced CP aboutness) which is not present in the *p*-pronoun. This discourse function of the *d*-pronoun has already been as argued for and exemplified in van Kampen (2010).

The present paper will discuss three further properties of the *d*-pronoun. It will be observed in Section 2 how the topic *d*-pronoun allows in certain constructions a quantified antecedent resulting in a bound variable reading. Section 3 will develop an analysis that explains the grammaticality of the *d*-pronoun in temporal adjunct clauses, versus its ungrammaticality in non-temporal adjunct clauses. Section 4 will consider how the different configurations for an adjunct CP and a complement CP explain that the *d*-pronoun in a complement clause obviates any matrix antecedent, whether quantified or not.

A characterization of *d*-pronouns within the Binding Theory has been proposed in Wiltschko (1998) and Broekhuis et al. (to appear). I rather follow the view of Postma (1984) and Hoekstra (2000) that the properties of the *d*-pronoun do not simply fall within the usual assumptions of the Binding Theory. My analysis is nevertheless different and based on the locality of the antecedent for the *d*-pronoun. Like *p*-pronouns, *d*-pronouns require an antecedent outside a certain domain ('governing category', sentence), but unlike *p*-pronouns and more like reflexives, *d*-pronouns require that their antecedent is restricted to a local domain, i.e. the first preceding focus. Such a pronominal device for focus-to-topic-shift between

adjacent CPs is not present in English, but is present in the other Germanic languages, the V2 languages. To my mind, Germanic V2 confronts us with two types of locally bound anaphors: locally bound A-anaphors (reflexives, subject-oriented) and locally bound A-bar anaphors (*d*-pronouns, focus-oriented).

2. Bound variable reading of the A-bar d-pronoun

Two excellent corpus-based studies, Jansen (1978, 1981) and Bouma (2008), have established that the *d*-pronoun in Dutch appears most of the time (85%) in sentence-initial position, but not necessarily so. The examples in (6) and (9) below will show that the *d*-pronoun need not necessarily move into the sentence-initial position, and more importantly, they show that the *d*-pronoun with its focus-to-topic-shift function may appear in subordinate clauses.

Major constituent objects that move into the sentence-initial position, the SpecCP in V2 Dutch, have an enhanced stress with a somewhat contrastive flavor, but the single, non-attributive *d*-pronoun is different. See (3).

(3) a. Er werkte daar [een secretaresse]$_i$.
There worked there [a secretary]$_i$
'A secretary worked there'
b. [Die secretarésse]$_i$ hebben we nog gewaarschuwd.
[That secretary]$_i$ have we yet warned
b'. Die$_i$ hebben we gewaarschuwd.
Dpro$_i$ have we warned
'We have yet warned that secretary/her'

The single *d*-pronoun need not and usually does not carry stress, and it need not serve a contrastive or emphatic effect (Overdiep 1949: 525; Sassen 1953: 212; Jansen 1978: 107, 1981: 82). The *d*-pronoun rather performs a focus-to-topic-shift function without contrastive stress effects, as noted in Haeseryn et al. (1997:§5.6.3.3.1) and van Kampen (2010).

The preference of the *d*-pronoun for the SpecCP position, the lack of stress, and the ungrammatically of an antecedent *d*-pronoun as in (2c) reminds us of the relative pronoun, which turns a CP into an adjunct of a DP. See the restrictive relative clause in (4).

(4) [De secretaresse]$_k$ die$_k$ het gebouw verliet ging naar huis.
[The secretary]$_k$ Relpro$_k$ the building left went home.
'The secretary that left the building went home'

The topic *d*-pronoun and the relative pronoun are different categories since their morphological paradigms in Dutch differ, especially in the oblique case (van Kampen 2007). More important, though, is their parallel function. Both are A-bar pronouns, that is they have a CP scope-bearing function. The *d*-pronoun as a scope-bearing pronoun has been a concern in van Kampen (1997: chapt. 4), Hoekstra (2000) and Postma (2004: 16–17). A-bar pronouns are pronouns that (generally) move into a sentential scope (SpecCP) position and they allow long distance movement. See (5), with in (5a) a question *wh*-pronoun, in (5b) a relative *d*-pronoun (Barbiers et al. 2006), and in (5c) the topic *d*-pronoun (van Kampen 2010).

(5) a. Wie$_k$ denk je dat de detectives t$_k$ hebben gewaarschuwd?
Who$_k$ think you that the detectives t$_k$ have warned?
'Who do you think that the detectives have warned?'

b. [De secretaresse]$_k$ die$_k$ ik denk
[The secretary]$_k$ Relpro$_k$ I think
dat de detectives t$_k$ hebben gewaarschuwd.
that the detectives t$_k$ have warned.
'The secretary who I think that the detectives have warned'

c. Daar komt [jouw secretaresse]$_k$.
There comes [your secretary]$_k$.
Die$_k$ denk ik dat de detectives t$_k$ hebben gewaarschuwd.
Dpro$_k$ think I that the detectives t$_k$ have warned.
'It is her, I think that the detectives have warned'

The *d*-pronouns, and more generally A-bar pronouns, cannot have an antecedent within the CP domain they have scope over (the so-called 'crossover' constraint). This offers a parallel with R-expressions (independent non-pronominal DP arguments), cf. Wiltschko (1998). I will argue, though, that such a parallel is superficial. The major reason is that the *d*-pronoun can have a quantified antecedent and can get a bound variable reading, like the *p*-pronoun. See (6a), where *die* refers distributively to the focus antecedent [*elke secretaresse*]$_k$. It is true that the use of the *d*-pronoun with a bound variable reading is excluded in the non-temporal adjunct clause (6b), but the *p*-pronoun and the *d*-pronoun maintain the parallel. Both are grammatical in (6a) and both are ungrammatical in (6b).

(6) [De detectives]$_i$ hebben [elke secretaresse]$_k$ gewaarschuwd,
[The detectives]$_i$ have [every secretary]$_k$ warned,

a. voordat ze$_k$ / die$_k$ het gebouw verliet.
before she$_k$ / Dpro$_k$ the building left.

b. omdat *ze$_k$ / *die$_k$ het gebouw verliet.
because *she$_k$ / *Dpro$_k$ the building left.

'The detectives have warned every secretary

a. before/b. because she left the building'

The grammaticality variants in (6) will be derived in Section 3. Apparently, the temporal subordinate is responsible for the bound variable reading of the pronoun. See also (7) where the *d*-pronoun appears in a temporal *nadat* 'after' clause. The argument status of the *d*-pronoun is irrelevant. It may be a subject as in (6) above, or an object as in (7).

(7) [De detectives]$_i$ hebben [elke secretaresse]$_k$ geïnformeerd,
[The detectives]$_i$ have [every secretary]$_k$ informed,
nadat zij$_i$ die$_k$ naar huis toe stuurden.
after they$_i$ Dpro$_k$ at home to sent
'The detectives have informed every secretary after they sent her home'

The bound variable reading is also present for restrictive relatives as in (8).

(8) [De detectives]$_i$ waarschuwden [elke secretaresse]$_k$ die$_k$ het gebouw verliet.
[The detectives]$_i$ warned [every secretary]$_k$ Relpro$_k$ the building left.
'The detectives have warned every secretary that left the building'

When the matrix antecedent *secretaresse* is no longer quantified, the *d*-pronoun and the *p*-pronoun appear without problem in both types of adjunct clauses, temporal as well as non-temporal. See (9a) and (9b) where *de secretaresse* is the first preceding focus argument marked by neutral sentence stress.

(9) [De detectives]$_i$ hebben [de secretaresse]$_k$ geïnformeerd,
[The detectives]$_i$ have [the secretary]$_k$ informed,
a. voordat ze$_k$ / die$_k$ het gebouw verliet.
before she$_k$ / Dpro$_k$ the building left.
b. omdat ze$_k$ / die$_k$ het gebouw verliet.
because she$_k$ / Dpro$_k$ the building left.
'The detectives have informed the secretary
a. before/b. because she left the building'

The complement clause of (10), by contrast, shows a difference between the *p*-pronoun (grammatical) and the *d*-pronoun (ungrammatical). See Wiltschko (1998) and Hoekstra (2000) and for the same observation.

(10) [De detectives]$_i$ hebben [de secretaresse]$_k$ gezegd
[The detectives]$_i$ have [the secretary$_k$ told
dat ze$_k$ / *die$_k$ in gevaar was en het gebouw moest verlaten.
that she$_k$ / *Dpro$_k$ in danger was and the building must leave
'The detectives have told the secretary that she was in danger and had to leave the building'

The ungrammatical variant in (10) has been a reason for Wiltschko (1998: 165, her example (38)) to argue that the *d*-pronoun cannot be bound. She concludes that *d*-pronouns are parallel to R-expressions. Her example, though, does not prove this point. A bound *d*-pronoun in a complement clause is in principle possible as will be shown in (16), but for an independent reason its focus antecedent cannot be located in the matrix CP. By consequence, obviation of the matrix argument in (10) follows, see Section 4. The *d*-pronoun is certainly not an R-expression. R-expressions cannot have an antecedent ever, let alone a bound variable reading as in (6a)/(7), where the *d*-pronoun must have a local antecedent and cannot have but a bound variable reading.

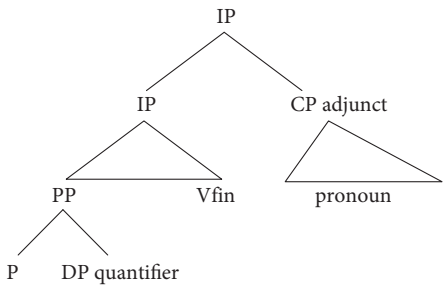
3. Quantification of the tense index

The bound variable reading is possible for temporal adjunct clauses as in (6a), but not for non-temporal adjunct clauses as in (6b). That is, when the pronoun is located in a non-temporal clause like (6b), it resists a bound variable reading. The temporal/non-temporal restriction holds for *p*-pronouns and *d*-pronouns alike. The example in (11) amounts to a potential problem for the scope of the quantifier over the subordinate clause. Example (11) contains the quantified antecedent within a PP argument [*met* [*elke secretaresse*]] 'with each secretary'. Nevertheless, the *p*-pronoun and *d*-pronoun in the temporal adjunct clause in (11a) continue to admit a bound variable reading.

(11) [De detectives]$_i$ willen [met [elke secretaresse]]$_k$ spreken,
[The detectives]$_i$ want [with [every secretary]]$_k$ speak,
a. voordat ze$_k$ / die$_k$ het gebouw verlaat.
before she$_k$ / Dpro$_k$ the building leaves.
b. omdat *ze$_k$ / *die$_k$ het gebouw verlaat.
because *she$_k$ / *Dpro$_k$ the building leaves.
'The detectives want to speak with every secretary
a. before/b. because she leaves the building'

It used to be assumed that a quantified antecedent must c-command the pronoun that it binds (Reinhart 1983). However, when the adjunct CP is adjoined to the predicate, a quantified argument within that predicate will not c-command a pronoun (variable) within the adjunct CP. See in the tree structure in (12) representing the constructions in (11).[1]

(12)



The assumption that the adjunct CP will not allow a bound variable reading for the quantified antecedent in the matrix clause is successful for the non-temporal adjunct clause (11a), but fails for the temporal adjunct clause (11b). The *d*-pronoun remains here parallel with the *p*-pronoun both in (6a) and (11a) where *p*-pronoun and *d*-pronoun are grammatical versus (6b) and (11b) where *p*-pronoun and *d*-pronoun are ungrammatical. To solve the problem of the two adjunct types, one might assume an analysis with the temporal adjunct clause generated within the VP as in Larson (1988) and non-temporal adjuncts outside the VP.[2] That seems, though, a doubtful fact-saving operation. I will rather follow a different line of reasoning, neutral with respect to c-command relations and based on the scope of tense.

It makes sense, intuitively, that the bound variable reading is possible for temporal adjunct clauses only. The quantification of the matrix argument implies a kind of quantification for the matrix tense index. Consider the following story for which I take (6a) and (6b) as an example. In order to interpret the quantified matrix argument *elke secretaresse*, one needs a separate piece of time for each secretary and the associated complex event. Within that stretch of time, each secretary is first warned by the detectives and then she departs. The detectives will continue to take action over and again for each next secretary in her own stretch of time. The detectives may in principle be busy all day long with repeating a scheme for the event sequence {a. secretary is warned (matrix clause); b. secretary departs (adjunct clause)}. Now, the following is the crucial point of the intuitive story. The temporal adjunct (6a) is part of the repeating event sequence. There will be as many successive complex events as there are secretaries. The warnings of the detectives repeat, but the reason for the warning given in (6b) *omdat* 'because' does not repeat. The non-temporal adjunct is rather seen as a constant in the background. The reason that keeps the detectives going, is understood as an unchanging factor.

The heart of the matter is that the temporal adjunct clause represents a part of the repetitive event scheme, whereas the non-temporal adjunct clause does not. This suggests to me the two statements in (13).

(13) a. A quantified argument in the matrix clause will automatically imply a repetition, i.e. a quantification of the tense index, for short an event quantification.
b. The pronoun in the adjunct clause gets a bound variable reading only when the adjunct joins the tense quantification in the matrix clause. That holds for temporal adjuncts and does not hold for non-temporal adjuncts.

The co-indexing of the adjunct tense with the matrix tense is due to a lexical property of the complementizer *voordat* 'before'/*nadat* 'after'.

Now we have the key for the difference between (6b)/(11b) with a quantified antecedent and (9b) with a non-quantified antecedent. As far as the syntactic structure is concerned, free variables in the adjunct clause may co-index with the matrix argument and enter in an antecedent-pronoun relation without problem. This is exemplified in (9a,b). If, by contrast, the pronoun relates to a quantified antecedent as in (6)/(11), it does not refer to a referential item. Rather it refers to a list of referential items. Remarkably enough, it remains possible for the pronoun to take part in the repetitive list reading of the antecedent. The condition is that the tense within the adjunct connects to the tense quantification in the matrix clause. Only if the adjunct predicate is tense quantified corresponding to the tense quantification in the matrix clause, as in (6a) and (11a), the pronoun within the adjunct clause will allow a repeated reading for each implied stretch of time. Well, as I have just argued, the tense quantification holds for temporal adjunct clauses due to a lexical property of the complementizer and it does not hold for non-temporal adjunct clauses. The (6a)/(11a) versus (6b)/(11b) difference is thereby explained.

The close association of the predicate tense index and the quantified argument index reminds of, or corresponds with, the rule Quantifier Raising. Reinhart (2006:Chapter 2.7) criticizes Quantifier Raising as constructing ad hoc a c-command relation. In her view Quantifier Raising merely postulates that c-command relation for a PF input that persistently lacks it. Reinhart even wonders whether this need for an ad hoc rule reveals a systematic imperfection of the human syntax for quantification. This may now be seen in a more favorable light. Any distributively quantified argument implies without exception a corresponding distributive quantification of the tense index, the statement in (13a). An extension of the tense-index quantification into subordinate CPs is dependent on the lexical-semantic property of the subordinate complementizer, the statement in (13b).

The proposals in (13a,b) do not enter the question whether the quantified antecedent has c-command over the subordinate clause. The quantifier scope is simply a matter of tense scope. The c-command of the quantified element itself is now irrelevant and so is Quantifier Raising. It is also irrelevant for the present solution

whether for that matter the subordinate clause is inside the matrix VP, as in Larson (1988), or adjoined to it, as in the tree structure in (12). The present analysis is simply viable as long as the matrix tense has strict scope over the subordinate tense.

Let me summarize the present section. The *d*-pronoun and the *p*-pronoun allow a bound variable reading when they occur in a temporal adjunct clause, as shown in (6a) and (11a). The *d*-pronoun is an antecedent dependent variable as is testified by its bound variable reading. In Section 4 I will derive how the *d*-pronoun obviates antecedents that lack neutral sentence stress and hence focus status. The antecedent difficulties of the *d*-pronoun in complement clauses can be explained from this (non-focus) obviation property. For that reason, Section 4 will deal with a stress difference between complement CPs and adjunct CPs.

4. Obviation of the matrix antecedent

The previous section established the ability of the *d*-pronoun to have a bound variable reading in a temporal adjunct clause. It is no surprise that a *p*-pronoun in a complement CP also allows a bound variable reading. The *d*-pronoun, by contrast, is ungrammatical in the simple co-referent context (10), as well as in the bound variable context (14).

(14) [De detectives]$_i$ hebben [elke secretaresse]$_k$ gezegd
[The detectives]$_i$ have [every secretary]$_k$ told
dat ze$_k$ / *die$_k$ in gevaar was en het gebouw moest verlaten.
that she$_k$ / *Dpro$_k$ in danger was and the building must leave.
'The detectives have told every secretary that she was in danger and had to leave the building.'

The loss of a parallel distribution for the *p*-pronoun and the *d*-pronoun and the ungrammaticality of the *d*-pronoun in (14) can be derived from the focus-to-topic-shift function of the *d*-pronoun. The antecedent of the *d*-pronoun must be the first preceding focus, whereas the *p*-pronoun is not subject to such an antecedent restriction. A *p*-pronoun in the complement CP may take any matrix DP argument as its antecedent, see (15). If we substitute the pronoun *haar* for the matrix object *de secretaresse*, the use of the *d*-pronoun in the temporal adjunct clause in (15) becomes ungrammatical, because its antecedent, the pronoun *haar*, cannot be a focus. The *p*-pronoun in the adjunct of (15) is not antecedent restricted and is grammatical.

(15) [De detectives]$_i$ hebben [haar]$_k$ geïnformeerd,
[The detectives]$_i$ have [her]$_k$ informed

voordat ze$_k$ / *die$_k$ het gebouw verliet.
before she$_k$ / *Dpro$_k$ the building left
'The detectives have informed her before she left the building.'

It is less clear, though, why *secretaresse* in the root clause of (10)/(14) is not available as a focus antecedent. As a non-pronominal direct object it rather seems an excellent target for a focus argument. For example, when we add a sentence as in (16a), the same *d*-pronoun within the same type of complement construction as in (10), turns out to refer to the focus of (16a).

(16) a. Bij de deur stond [een conciërge]$_{k.}$
at the door stood [a janitor]$_k$
'There was a janitor at the door.'
b. [De detective]$_i$ heeft [de secretaresse]$_j$ gezegd
[the detective]$_i$ has [the secretary]$_j$ told
dat die$_k$ naar huis kon gaan.
that Dpro$_k$ to house could go
'The detective has told the secretary that he could go home.'

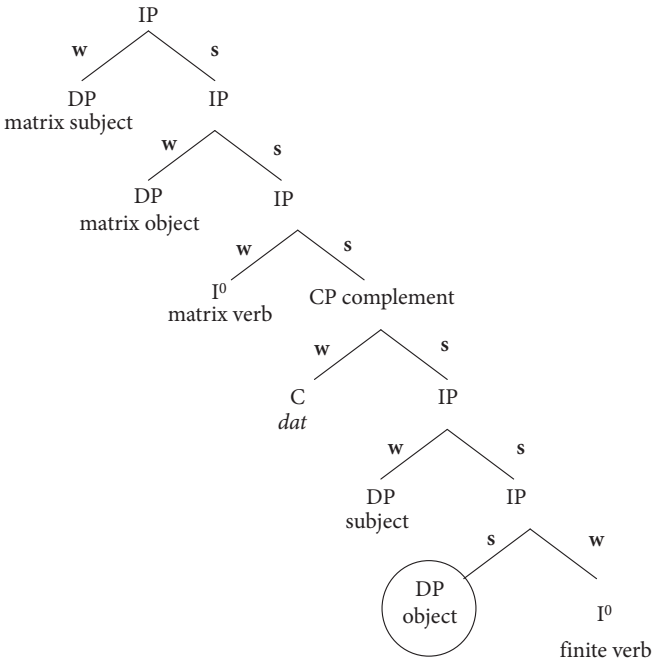
I now adhere to the contention that the antecedent of the *d*-pronoun must be the first preceding focus (van Kampen 2010). It then follows that *een conciërge* in (16a) must be the first focus preceding the *d*-pronoun in (16b). If so, the argument *de secretaresse* in the matrix clause of (16b) is predicted to lack the neutral focus stress. What has to be showed then, is that *een concierge* is the first preceding focus, whereas *de secretaresse* is not, given neutral sentence stress.

Strikingly, the likely absence of a neutral focus stress in the matrix clause of (16b) can be predicted by a stress assignment procedure for post-posed complement CPs versus post-posed adjunct CPs. It then follows that the *d*-pronoun in the complement of (16b) will obviate the matrix arguments in (16b) as non-focus arguments and that *een concierge* is indeed the first preceding focus. The *d*-pronoun maintains its status as a locally bound pronoun by selecting the focus argument of (16a). The analysis of stress assignment and focus status that follows in (17) and (18) below is admittedly too short on a notoriously complex issue. What I aim here is to defend the contention that the *d*-pronoun in its non-contrastive use remains a locally bound (A-bar) pronoun.[3]

The procedure for nuclear stress assignment below is applied in Reinhart (2006:Chapter 3.1.2) who refers for it to Szendrői (2001). For reasons of exposition, I will follow here a simplified variant of the same idea present in Evers (2003) who used it to predict the stress assignment in scrambled verbal clusters allowing left/right switches in the linear surface order. The stress procedure applies to binary branching trees. For each pair of branches that comes together in a label, one

branch is marked ***w*** (weaker stress part) and the other ***s*** (stronger stress part). See the tree structures below in (17) and (18). The markings follow the projection line downwards until the head of the projection line is reached. Just before that point, the marking switches. The branch towards the head gets the ***w*** and the qualifying branch towards the sister complement gets the ***s***. The general point is that phrasal stress will be assigned to the 'qualifying element' closest to the head of the phrase. The procedure needs to be more flexible to get anaphoric de-stressing and stress-shift (Reinhart 2006), but the simplified form suffices to predict neutral stress differences between the complement CP in (17) and the adjunct CP in (18).

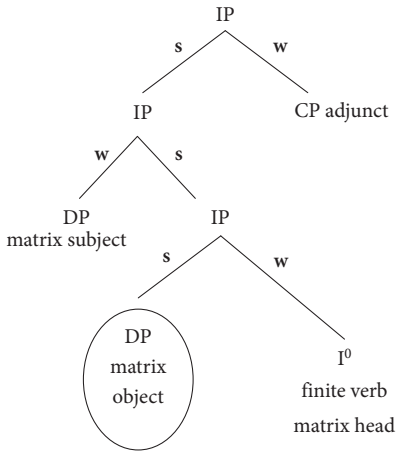
(17) Stress assignment for a matrix clause + complement CP



When the complement CP in (17) is in a sister position with the matrix head, the path of strong branches is directed to the right and goes down into the complement CP. The neutral stress of the entire sentence will fall on some argument within the complement CP, as the encircled DP in (17) indicates. The result is that the matrix clause will lack a focus stress of its own.

When the adjunct CP is adjoined as an IP segment, it will always be on a weak branch. The path of strong branches is most likely to come down towards a matrix object argument on the left, as the encircled DP in (18) indicates.

(18) Stress assignment for a matrix clause + adjunct CP



In this way, the **s/w** X-bar stress rule predicts presence of a matrix focus in (18) and absence of a matrix focus in (17). The X-bar stress rule is a general procedure. When 'neutral sentence stress' is equated with (non-contrastive) focus, the stress rule predicts the parallel between *p*-pronoun and *d*-pronoun in adjunct CPs, example (9a,b), and the difference between *p*-pronoun and *d*-pronoun in complement CPs, example (10). The reason is that the matrix clause will have a focus candidate of its own when followed by an adjunct CP, but no longer so when followed by a complement CP.

5. Conclusion

The focus-to-topic-shift function of the *d*-pronoun (Section 1) has several consequences for the Binding Theory. Section 2 demonstrated that *d*-pronouns are A-bar pronouns (CP scope-bearing pronouns) that operate in discourse, but may have a bound variable reading inside complex CPs. Section 3 showed how the bound variable reading of *p*-pronouns and *d*-pronouns in adjunct clauses is restricted to temporal adjuncts. In order to capture that fact, a quantification of the tense index has been proposed as a substitute for quantifier raising and a more precise restriction on bound variable readings. Section 4 connected the strong obviation properties of the *d*-pronoun in complement clauses with an independent procedure of X-bar stress assignment (Szendrői 2001; Evers 2003). The general conclusion is that the topic *d*-pronoun is an A-bar anaphor that is locally bound to the first preceding focus.

Notes

1. See Barker (2008) for a highly readable criticism of c-command as a requirement on binding and bound variable readings. Most of his examples carry over to Dutch.

2. See Bianchi (1997) for an extensive discussion about such alternatives.

3. I am aware of the fact that a full assignment of neutral sentence stress involves a host of difficulties documented in the literature.

References

Barbiers, Sjef et al. 2006. *Dynamische Syntactische Atlas van de Nederlandse Dialecten* (DynaSAND). Amsterdam, Meertens Instituut, <http://www.meertens.knaw.nl/sand/>

Barker, Chris. 2008. "Quantificational binding does not require c-command". Ms. New York University, <http://semanticsarchive.net/barker/barker-c-command.pdf>

Bianchi, Valentina. 1997. "On the structural position of time clauses". *Quaderni del Laboratorio di Linguistica* 11.66–90.

Bouma, Gerlof. 2008. Starting a sentence in Dutch: A corpus study of subject- and object-fronting. PhD diss., University of Groningen.

Broekhuis, Hans, Evelien Keizer & Marcel den Dikken. To appear. Grammar of Dutch: Nouns and noun phrases. Ms. Leiden University.

Evers, Arnold. 2003. "Verbal clusters and cluster creepers". *Verb constructions in German and Dutch* ed. by Pieter Seuren and Gerard Kempen, 44–90. Amsterdam: Benjamins.

Haeseryn, Walter, Karin Romijn, Guido Geerts, Jaap de Rooij & Maarten C. van den Toorn, eds. 1997. *Algemene Nederlandse Spraakkunst* (*ANS*) 2nd edition. Groningen: Wolters-Noordhoff. <http://www.let.ru.nl/ans/e-ans>

Hoekstra, Eric. 2000. "On D-pronouns and the movement of topic features". *Folia Linguistica* XXXIII/1 ed. by Werner Abraham, 59–74. Berlin: Mouton de Gruyter.

Jansen, Frank. 1978. "Sentence initial elements in spoken Dutch". *Linguistics in the Netherlands 1974–1976* ed. by Wim Zonneveld, 102–108. Lisse: Peter de Ridder.

Jansen, Frank. 1981. *Syntaktische constructies in gesproken taal*. Amsterdam: Huis aan de Drie Grachten.

van Kampen, Jacqueline. 1997. *First steps in wh-movement*. Delft: Eburon.

van Kampen, Jacqueline. 2007. "Relative agreement in Dutch". *Linguistics in the Netherlands* 24 ed. by Bettelou Los and Marjo van Koppen, 112–125. Amsterdam: John Benjamins.

van Kampen, Jacqueline. 2010. "Anaforische middelen voor topicverschuiving". *Nederlandse Taalkunde* 15(2/3).189–210.

Larson, Richard. 1988. "On the double object construction". *Linguistic Inquiry* 19.335–391.

Overdiep, Gerrit. 1949. *Stilistische grammatica van het Moderne Nederlandsch*. Zwolle: Tjeenk Willink.

Postma, Gertjan. 1984. "The Dutch pronouns *diens*; distribution and reference properties". *Linguistics in the Netherlands 1984* ed. by Hans Bennis and Willem van Lessen Kloeke, 147–157. Dordrecht: Foris.

Postma, Gertjan. 2004. "Structurele tendensen in de opkomst van het reflexief pronomen 'zich' in het 15de-eeuwse Drenthe en de Theorie van Reflexiviteit". *Nederlandse Taalkunde* 9.144–168.
Reinhart, Tanya. 1983. *Anaphora and semantic interpretation*. Chicago: University of Chicago Press.
Reinhart, Tanya. 2006. *Interface strategies. Optimal and costly computations*. Cambridge, MA: MIT Press.
Sassen, Albert. 1953. *Het Drents van Ruinen*. Assen: Van Gorcum.
Steedman, Mark. 1991. "Structure and intonation". *Language* 67(2).260–296.
Szendrői, Kriszta. 2001. Focus and the syntax-phonology interface. PhD diss., University College London.
Wiltschko, Martina. 1998. "On the syntax and semantics of (relative) pronouns and determiners". *Journal of Comparative Germanic Linguistics* 2.143–181.

Author's address

Jacqueline van Kampen
UiL OTS
Trans 6
3512 JK Utrecht

J.vanKampen@uu.nl