

EXPLETIVE RAISING AND EXPLETIVE REPLACEMENT IN DUTCH

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Recently, two competing analyses of expletives of the there type have been put forward. Chomsky (1986a, 1989) argues that these expletives are meaningless elements that are freely inserted at S-structure and have to be replaced at LF by the NP the expletive is associated with (the associate). Moro (1990) argues that these expletives are small clause predicates, to be raised at S-structure, as in ordinary copular constructions and constructions of Locative Inversion as analyzed in Hoekstra & Mulder (1990). In this paper I will argue that the Dutch expletive er has exactly the properties one would expect it to have under either analysis. Hence, I conclude that there are two types of expletive constructions, expletive replacement and expletive raising, and that whereas Dutch has both types of expletive constructions, English has only expletive raising.

1. Expletive Constructions in English

There are three salient properties of English expletive constructions that any analysis of them should capture (in this paper, the term 'expletives' refers to expletives of the there type only).

The first property is, that the associate must be indefinite (Milsark 1974, cf. Reuland & Ter Meulen 1987).

- (1) a. There will be trouble ahead
- b. * There will be the trouble with Harry ahead

Second, the verb must be unaccusative.

- (2) a. There was happiness
- b. There arrived a package
- c. * There danced a couple
- d. * There bought a man a house

There are two interesting types of exceptions to this requirement. First, passives are considered to be unaccusatives, but are not allowed in expletive constructions.

- (3) a. * There was danced
- b. * There was arrested a man

Second, unergative verbs are allowed in expletive constructions, provided they are accompanied by a locative PP.

- (4) a. * There hung a picture
- b. There hung a picture on the wall

I will leave the case of passives aside, noting that the fact that they are ungrammatical doesn't undermine the generalization that only unaccusative verbs are allowed in expletive constructions (cf. Zwart 1991).

As for the unergatives, it has been argued extensively by Hoekstra & Mulder (1990) that unergatives accompanied by a locative PP are unaccusatives. An example is given in (5).

- (5) a. A picture hung on the wall
- b. On the wall hung a picture [locative inversion]

The locative PP in (5) is analyzed as the predicate of a small

clause, which has a picture as its subject. Both the subject and the predicate can raise to the structural subject position. However, if raising takes place, the verb cannot assign an external theta role, hence, by Burzio's Generalization, it must be unaccusative. The structure of (4b) is a little more complicated, as will become clear below. However, I will assume that the Hoekstra & Mulder analysis is correct, which means that unergatives accompanied by a locative PP confirm the generalization that expletive constructions in English are only allowed when the verb is unaccusative.

A third salient property of expletive constructions in English is that they force an existential reading of the associate NP (Milsark 1977).

- (6) a. Many men are in the garden
 b. There are many men in the garden

(6a) has two readings, to be called 'presuppositional' and 'existential', respectively:¹

- (7) a. many men are such that they are in the garden
 b. a situation exists such that many men are in the garden

(6b) lacks the reading in (7a).

I will have little to say about the definiteness effect in existential constructions. The other two salient properties of expletive constructions play a crucial role in the evaluation of the two competing analyses of expletive constructions mentioned above. But this becomes much more clear if we take a look at the properties of expletive constructions in Dutch first.

2. Expletive Constructions in Dutch

Of the three properties of expletive constructions in English mentioned in section 1, only the definiteness effect appears to be present in Dutch.

- (8) Er stond een/*de regenboog boven het meer
 there stood a the rainbow over the lake

Expletive constructions occur with all kinds of verbs, unergatives and unaccusatives, actives and passives.

- (9) a. Er was geluk
 there was happiness
 b. Er kwam een pakketje binnen
 there came a package in
 c. Er danste een paar
 there danced a couple
 d. Er kocht een man een huis
 there bought a man a house

- (10)a. Er werd gedanst
 there was danced
 b. Er werd een man gearresteerd
 there was a man arrested²

Also, the expletive does not force an existential reading of the associate NP, as noted by De Hoop (1990).

- (11)a. dat veel katten in de tuin waren
 that many cats in the garden were
 b. dat er veel katten in de tuin waren
 that there many cats in the garden were

Thus, both (11a) and (11b) allow the presuppositional reading:³

(12) many cats are such that they were in the garden

As demonstrated by De Hoop (1990), there are two ways to disambiguate (11b). First, the two readings require different stress patterns.

(13)a. dat er veel KATTEN in de tuin waren [existential]
b. dat er VEEL katten in de TUIN waren [presuppositional]

Second, scrambling brings out the presuppositional reading of the associate.

(14)a. ? dat er veel KATTEN gisteren in de tuin waren
that there many cats yesterday in the garden were
b. ? dat er gisteren VEEL katten in de TUIN waren
that there yesterday many cats in the garden were

With the stress patterns reversed, both sentences in (14) are completely acceptable.⁴

De Hoop (1990) also shows that individual level predicates are allowed in Dutch existential constructions, contrary to English (Milsark 1977).

(15)a. there are many people sick
b. * there are many people intelligent

(16)a. er zijn veel mensen ziek
there are many people sick
b. er zijn veel mensen intelligent
there are many people intelligent

The distribution of stress reveals that individual level predication and existential interpretation do not combine, just as in English.

(17)a. * er zijn veel MENSEN intelligent
b. er zijn VEEL mensen intelligent

Therefore, (11b) is ambiguous between an existential reading and a non-existential reading, and it is the latter reading which allows individual level predication.

In section 5 I will present an even stronger argument to back up the claim that the Dutch expletive constructions are ambiguous. First, however, let us consider the expletive replacement analysis of Chomsky (1986a,1989) and the expletive raising analysis of Moro (1990), and see how well they account for the properties of English and Dutch expletive constructions.

3. Expletive Replacement

In Chomsky (1986a), a principle of Full Interpretation is proposed, according to which an element that does not contribute to the interpretation of a sentence cannot be present at LF. According to Chomsky (1986a,1989), expletives are a case in point. Since expletives cannot survive at LF, they have to be removed. In Chomsky (1986a), the associate moves to the position of the expletive at LF, and replaces it. The LF movement explains certain locality conditions on the relation between the expletive and the associate, as LF movement leaves a trace behind which has to satisfy the ECP.

However, if the expletive is fully replaced by the associate, two of the three properties of expletive constructions

mentioned in section 1 seem to be hard to account for, viz. the definiteness effect and the forced existential interpretation. It is not clear why the expletive could not be replaced by a definite NP, so that (18a) would have the interpretation (18b), as both would have the LF representation (18c).

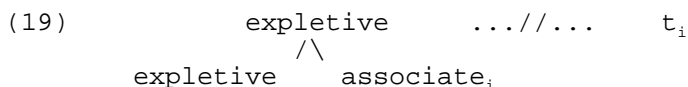
- (18)a. * There will be the trouble with Harry ahead
 b. the trouble with Harry will be ahead
 c. [the trouble with Harry]_i will be [t_i ahead]

Also, it is not clear how the expletive could block any reading if it were completely replaced at LF.

For this reason, Chomsky (1989) assumes that the expletive is an LF affix, which needs to be adjoined to in order to become a legitimate LF object. The adjunction takes place, again, by LF movement of the associate. As part of the complex resulting from the adjunction, the expletive can play a role in determining the definiteness effect and in forcing the existential interpretation. This is the analysis I will refer to as 'the expletive replacement analysis'.⁵

There are a few problems with this analysis. First, the restriction to unaccusative verbs is a mystery under this analysis. This is important, because it is not a universal property of expletive constructions that the verb has to be unaccusative, as we have seen.

Second, it is not immediately clear why adjunction of the associate to the expletive would block the presuppositional or proportional reading of the associate. Suppose, for example, that the expletive is a scope marker, as in Williams (1984). Adjunction of the associate to the expletive would yield a structure as in (19).



In (19), the associate must be able to c-command its trace, otherwise the ECP would be violated. More generally, after expletive replacement the associate c-commands everything the expletive c-commands.⁶ So if the two possible readings in existential constructions are to be expressed in terms of scope, it is unclear why one of the readings would be blocked, since the expletive and the associate have the same scopal domain. In short, the representation in (19) predicts a state of affairs that doesn't exist in English, but does exist in Dutch: both the expletive and the associate can take wide scope.

Of course, there are ways, other than through scope, to express the fact that the expletive forces an existential reading in English. But any other way would face the problem that somehow expletives in Dutch behave differently in this respect. As we will see, this problem does not arise in the expletive raising analysis.

4. Expletive Raising

A different analysis, developed in Moro (1990,1991a,b), starts off with the counterintuitive assumption that there is not an expletive but a predicate. Being a predicate, there is a legitimate LF object, so expletive replacement is never an issue in this analysis.⁷

The observation that expletive constructions (in English) crucially involve unaccusative verbs is the key to this analysis. All other unaccusative constructions involve raising, and especially copular constructions take a small clause complement

of which both the subject and the predicate can be raised. Consider (20).

- (20)a. is [John [the culprit]]
- b. John_i is [t_i [the culprit]]
- c. [the culprit]_j is [John t_j]

From the D-structure (20a), both S-structures (20b,c) can be derived. In the last example, the small clause predicate has been raised instead of the small clause subject. Assuming the analysis of Hoekstra & Mulder (1990), Locative Inversion constructions as illustrated in (5) are an instance of the same phenomenon.

The assumption that there is a raised predicate therefore makes it possible to generalize over all copular constructions, and potentially over all unaccusative constructions.⁸ On this assumption, expletive constructions have the following representations, before and after raising.

- (21)a. is [happiness there]
- b. there_i is [happiness t_i]

A potential problem that the expletive raising analysis faces is the following. If both locative PPs and expletives are small clause predicates, then what is the structure of a sentence like (4b)?

- (4) b. There hung a picture on the wall

The problem in (4b) is that there are two potential predicates, so either the PP is an adjunct here, or the expletive is a real expletive after all. We will return to this problem in section 6.

How does the predicate raising analysis account for the properties of expletive constructions in English and Dutch? As for English, the restriction to unaccusative verbs follows straightforwardly. Only unaccusative verbs do not assign an external theta role and therefore, by Burzio's Generalization, allow raising. Similarly, the fact that the expletive forces an existential reading is predicted by this analysis. there is a predicate, therefore it is not meaningless, and the structure (19) will not occur. Hence the expletive has scope over the associate at LF.⁹

As for Dutch, the expletive raising analysis makes a clear prediction. Since expletive constructions are not restricted to raising constructions in Dutch, we expect expletives in Dutch to not, or not always, behave like raised predicates. If the expletive raising analysis is correct, 'behaving like a raised predicate' means 'forcing an existential interpretation'. As we have seen, the existential interpretation is not generally forced in Dutch expletive constructions.

To conclude, it looks like the expletive raising analysis satisfactorily accounts for both the properties of English expletive constructions and for the fact that English and Dutch differ in this respect.

Of course, on this analysis the question rises what Dutch expletive constructions do look like. Are they completely different from English expletive constructions, or do they really comprise two types, the English type, limited to raising contexts and forcing an existential interpretation, and an additional type, lacking these properties? To answer this question, let us take a closer look at expletive constructions in Dutch.

5. The Effect of PP Extraposition

In section 3, we have seen that expletive constructions in Dutch

can be disambiguated by particular ways of distributing stress and by scrambling of the associate NP. It is well known that a scrambled NP has a specific reading in Dutch (see Kerstens 1975, Reuland 1988), and that existential constructions require non-specific NPs.¹⁰ So for all we know, it could be that there is just one type of expletive construction in Dutch, and that the ambiguity of (11b) is a function of specificity.

However, it can be shown that (11b) is truly ambiguous, and that in one of the readings the construction has exactly the properties of expletive constructions in English.

In Dutch, an SOV language, it is generally possible to have PPs in postverbal position ('extraposition').

- (22)a. dat de katten in de tuin verstoppertje speelden
 that the cats in the garden hide-and-seeK played
 b. dat de katten verstoppertje speelden in de tuin
 that the cats hide-and-seeK played in the garden

The only PPs that cannot be extraposed are small clause predicates.

- (23)a. dat de katten in de tuin waren
 that the cats in the garden were
 b. * dat de katten waren in de tuin
 that the cats were in the garden

But, surprisingly, if we turn (23) into an expletive construction, the extraposition is fine.¹¹

- (24)a. dat er veel katten in de tuin waren [= (11b)]
 that there many cats in the garden were
 b. dat er veel katten waren in de tuin
 that there many cats were in the garden

Consequently, the extraposed PP in (24) cannot be a small clause predicate. Hence, something else must be the small clause predicate, and the only candidate is the expletive er 'there'.

This hypothesis makes two very clear predictions. If er is a raised predicate in (24b), this sentence should have an existential reading only. Secondly, extraposition of PPs that look like small clause predicates should only be grammatical in expletive constructions with unaccusative verbs. Both predications are borne out.

(24b) very clearly has only one reading, the existential reading. With the stress pattern of the presuppositional reading, and with scrambling of the associate NP, the sentence becomes sharply ungrammatical.

- (25)a. * dat er VEEL katten waren in de TUIN
 that there many cats were in the garden
 b. * dat er veel katten gisteren waren in de tuin
 that there many cats yesterday were in the garden

Thus, (24b) has one of the properties typical of English expletive constructions discussed in section 1.

The other property of English expletive constructions discussed in section 1 is the restriction to unaccusative verbs. We cannot test this on (24b) directly, as the verb in this construction is unaccusative. What we expect, however, is that PP extraposition remains ungrammatical in expletive constructions with an unergative transitive verb. An unergative transitive verb necessarily assigns an external theta role, hence raising is impossible, and the expletive cannot be a raised predicate. Therefore the PP must be the small clause predicate, and extraposition is expected to be ungrammatical. The relevant

example is given in (26)-(27).

- (26)a. dat Jan [een boek op de tafel] legde
that Jan a book on the table put
b. * dat Jan [een boek t] legde op de tafel
that Jan a book put on the table
- (27)a. dat er iemand [een boek op de tafel] legde
that there someone a book on the table put
b. * dat er iemand [een boek t] legde op de tafel
that there someone a book put on the table

As can be seen, extraposition of the small clause predicate in a construction with a transitive verb does not improve when the construction is turned into an expletive construction. This shows that in Dutch, as in English, expletive constructions that have the specific property of forcing an existential reading can only take unaccusative verbs.

The facts discussed in this section show that there is a considerable overlap between expletive constructions in English and Dutch, despite appearance to the contrary. The type of construction that English and Dutch have in common has exactly the three properties listed in section 1. The facts from Dutch show that in this type of construction, the expletive must be analyzed as a raised small clause predicate. It is the other type of expletive construction in Dutch that has the properties listed in section 2. For this type of construction it must be assumed that the expletive is not a raised predicate, since the existential reading is not forced, and all types of verbs are allowed.

6. Predicates and Adjuncts

The discussion in section 6 clearly supports the expletive raising analysis of Moro (1990), sketched in section 4. Recall, however, that the type of sentence in (29b) posed a potential problem for that analysis.

- (28)a. A picture hung on the wall
b. On the wall hung a picture
(29)a. * There hung a picture
b. There hung a picture on the wall

The problem is that by the analysis of Hoekstra & Mulder (1990) on the wall is a small clause predicate in (28) and (29b). In (28b) on the wall is a raised predicate, and in both (28b) and (29b) the presence of the locative PP turns hung into an unaccusative verb. If on the wall is a predicate in (29b), there must be an ordinary expletive. On the other hand, if we want to maintain that there is a raised predicate, the PP on the wall must be an adjunct.

This latter position is taken by Moro (1991b), who provides extensive motivation for the predicate status of there, but not as much for the adjunct status of the PP. However, the adjunct status of the PP needs to be empirically supported, especially since this adjunct appears to be obligatory in (29).

Fortunately, the PP extraposition facts from Dutch, discussed in section 5, give us exactly the kind of empirical support we are looking for. Since we know that only adjunct PPs can be extraposed, the extraposed PPs in expletive constructions in Dutch must be adjuncts (see (24b), here repeated as (30)).

- (30) dat er veel katten waren in de tuin
that there many cats were in the garden

It is also possible to show adjunct island effects (Moro, pc). First consider English.

- (31)a. which room_i did you say that John walked into t_i
b. * which room_i did you say that there walked a man into t_i

The ungrammaticality of (31) follows from the hypothesis that the PP out of which which room is extracted is an adjunct, since adjuncts are islands.

In Dutch, the same effect doesn't immediately show up.

- (32)a. welke kamer_i zei je dat Jan t_i in liep
which room said you that Jan into walked
b. welke kamer_i zei je dat er veel katten t_i in
liepen
which room said you that there many cats into
walked

But this is expected, as Dutch expletives are not always raised predicates, contrary to English expletives. We therefore expect that in (32b), the PP can be the predicate, and the expletive a true expletive. The way to test this is to look at the stress pattern again, and, indeed, the stress pattern for the presuppositional reading of the associate NP is possible (33).¹² So is scrambling of the associate NP (34).

- (33) welke kamer zei je dat er VEEL katten t IN liepen

- (34) welke kamer zei je dat er veel katten gisteren t in
liepen
yesterday

(33) and (34) show that er is not a raised predicate here, and that therefore the PP must be the small clause predicate, which explains the lack of asymmetry in (32). A further problem for detecting adjunct island effects in this type of construction in Dutch is that directional postpositional PPs cannot appear in adjunct position.

- (35)a. * dat er die kamer in veel katten liepen
that there that room into many cats walked
b. * dat er veel katten liepen die kamer in
that there many cats walked that room into

Therefore extraction out of the adjunct positions in (35) cannot be tested. Non-directional locative PPs can appear in adjunct position however, as we have seen in (22b). Other examples are in (36).

- (36)a. dat er veel foto's in de krant stonden
that there many pictures in the paper stood
b. dat er in de krant veel foto's stonden
that there in the paper many pictures stood
c. dat er veel foto's stonden in de krant
that there many pictures stood in the newspaper

Extraction out of the PP in de krant in (36) gives us the same adjunct island effect as in the English examples (31).¹³

- (37)a. waar_i zei je dat er veel foto's t_i in t_i stonden
where said you that there many pictures in stood
b. * waar_i zei je dat er t_i in t_i veel foto's stonden
where said you that there in many pictures stood
c. * waar_i zei je dat er veel foto's stonden t_i in t_i
where said you that there many pictures stood in

So it appears that in cases like (29b) what looks like a small clause predicate PP in reality is an adjunct, allowing extraposition, and showing adjunct island effects.

A funny thing about this adjunct PP remains its obligatoriness in (29). The following scenario could make sense. Suppose that all that the there predicate contributes to the meaning of a clause is that its subject is said to exist. We know that certain verbs (e.g. hang) can only be unaccusative if their complement is a small clause with a locational predicate (Hoekstra & Mulder 1990). There itself is not locational, which explains the ungrammaticality of (29a).

(29a) * There hung a picture

In (29a), the verb is not unaccusative, so that raising of the small clause predicate is impossible. Suppose, however, that the small clause predicate is accompanied by a locational adjunct PP. In that case, the meaning of the sentence would be that the subject of the small clause not just exists, but exists in a certain location. Let us assume that this comes close enough to the small clause predicate actually being locational, turning the unergative verb into an unaccusative verb. Assuming that the technical details could be worked out, this would account for the obligatory presence of the locational adjunct PP in sentences like (29b).

(29b) There hung a picture on the wall

7. Summary and Conclusions

We found evidence above that a certain class of expletive constructions in Dutch has exactly the properties that all expletive constructions in English have. In these constructions, an existential reading of the associate NP is forced, and only unaccusative verbs are allowed. We also found support in the Dutch facts for the predicate raising analysis of expletive constructions, considering that these constructions feature small clauses and that what looks like the small clause predicate is really an adjunct.

The next question, which space does not permit me to extensively answer, concerns the analysis of the residue of the expletive constructions in Dutch. These constructions lack the properties of English expletive constructions. A presuppositional reading of the associate NP is possible, and the constructions allow all kinds of verbs (see section 2).

In these constructions, er cannot be a raised predicate, but looks like a true expletive in the sense of Chomsky (1986a, 1989). If this is correct, we may assume that this expletive has to be replaced at LF, yielding a structure as in (19). As argued above, the structural properties of this adjunction construction appear to allow two readings, one where the expletive takes scope over the associate and another one vice versa. This is exactly the structure that would account for the ambiguity of Dutch expletive constructions found in section 2.

To conclude, both analyses of expletive constructions considered in this article appear to be justified. However, they have a different scope than had previously been assumed. The expletive raising analysis holds for all English expletive constructions, and for part of the Dutch expletive constructions. The expletive replacement analysis holds for a residue of the expletive constructions in Dutch, but not for English at all.¹⁴

FOOTNOTES

- * Thanks to Helen de Hoop, Howard Lasnik, Andrea Moro, René Mulder, and Eric Reuland, and to the audience at ESCOL VIII. Presentation of this paper at ESCOL was made possible by a grant from the Netherlands Organization for Scientific Research (NWO).
1. The two readings can also be distinguished in terms of proportionality/cardinality (cf. Partee 1988). Thus, many in (6a) can either mean 'a great number of men' or 'many of the men', the latter being the proportional reading, which is absent in (6b). See Higginbotham (1987) for use of the term 'situation' in the paraphrases.
 2. Note that Dutch, being an SOV language, has the direct object preceding the past participle, whereas in English, an SVO language, the relevant example (3b) must have the participle preceding the direct object. The construction there was a man arrested is presumably closer to constructions of the type there was a man sick than to the Dutch example (10b) (cf. Moro 1991a, Zwart 1991). Note that the VO-OV distinction cannot explain the difference between expletive passives in Dutch and English, as the Scandinavian languages, all SVO languages, pattern with Dutch in this respect (see Vikner 1991).
 3. Similarly, both (11a) and (11b) allow the proportional reading of veel katten, sc. 'many of the cats'.
 4. Judgments are mine. De Hoop considers (14a) to be better and (14b) to be worse (cf. (19) in De Hoop 1990).
 5. In his 1991 Fall term class lectures, Chomsky assumes that movement can only take place for reasons of licensing of morphological properties, such as Case licensing. This movement can take place at S-structure as well as at LF. In expletive constructions, the associate moves and adjoins to the expletive at LF for reasons of Case licensing, while the expletive is being considered a legitimate LF object all along. I will not go into this version of the analysis here, but see Zwart (to appear).
 6. This is a general property of adjunction constructions. An element α c-commands β iff α does not dominate β and every γ that dominates α dominates β (Chomsky 1986b:8), where no α dominates β unless all segments of α dominate β (May 1985, Chomsky 1986b:7).
 7. Except, potentially, when expletive replacement doesn't take place to make the expletive legitimate, but to license the associate, see note 5.
 8. For this we would have to assume that unaccusative verbs like arrive take a small clause complement as well.
 9. In this analysis it is assumed that Case assignment to the associate takes place in an indirect way, via the raised predicate and its trace to the small clause subject (Hoekstra & Mulder 1990), so nothing forces adjunction of the associate to the expletive. As to the meaning of the 'expletive predicate', it just predicates existence of the subject of the small clause (René Mulder, pc).
 10. This may also explain the stress pattern facts, assuming that destressing of the NP takes place when the NP refers to given information (as suggested by Chris Tancredi, pc), hence when the NP is specific. In that case, only the quantifier will be stressed, whereas when the NP is stressed it refers to new information and the existential interpretation becomes possible.
 11. Thanks to René Mulder for bringing this to my attention.
 12. The stress pattern of the existential reading is also possible in (32b). This does not show that the expletive is

a raised predicate, however, because it cannot be assumed that in Dutch an existential interpretation is only then possible when the expletive is a raised predicate. For instance, expletive constructions with postpositional PPs (which cannot be extraposed) also allow an existential reading, but here the expletive cannot be a raised predicate. Cf.

- (i) dat er veel KATTEN de tuin in liepen
that there many cats the garden into walked
- (ii) *dat er veel katten liepen de tuin in
that there many cats walked the garden in

- 13. Extraction out of prepositional PPs is only grammatical if the movement goes through [Spec,PP], which is only possible if the extracted element is a pronominal with the feature [+R], (Van Riemsdijk 1978).
- 14. This leaves open the question why English and Dutch differ in this respect. At present, I have nothing but speculations to offer, so I will leave the issue aside. See Zwart (to appear).

REFERENCES

- Chomsky, N. (1986a) Knowledge of Language. Praeger, New York.
- Chomsky, N. (1986b) Barriers. MIT Press, Cambridge.
- Chomsky, N. (1989) 'Some Notes on Economy of Derivation and Representation'. MIT Working Papers in Linguistics 10, 43-74.
- Higginbotham, J. (1987) 'Indefiniteness and Predication'. In Reuland & Ter Meulen, eds.
- Hoekstra, T. & R. Mulder (1990) 'Unergatives as Copular Verbs: Existential and Locational Predication'. The Linguistic Review 7, 1-79.
- de Hoop, H. (1990) 'Restrictions on Existential Sentences and Object Scrambling: Some Facts From Dutch'. Proceedings of WCCFL.
- Kerstens, J. (1975) 'Over afgeleide structuur en de interpretatie van zinnen'. Ms, University of Amsterdam.
- May, R. (1985) Logical Form. MIT Press, Cambridge.
- Milsark, G. (1974) Existential Sentences in English. MIT Dissertation.
- Milsark, G. (1977) 'Toward an Explanation of Certain Peculiarities of the Existential Construction in English'. Linguistic Analysis 3, 1-29.
- Moro, A. (1990) 'There as a Raised Predicate'. Paper presented at GLOW, Cambridge UK.
- Moro, A. (1991a) 'The Raising of Predicates: Copula, Expletives and Existence'. MIT Working Papers in Linguistics XIII.
- Moro, A. (1991b) 'There as a Raised Predicate: Against Comparative Semantics'. Ms., University of Venice.
- Partee, B. (1988) 'Many Quantifiers'. Proceedings of ESCOL V, 383-402.
- Reuland, E.J. (1988) 'Indefinite Subjects'. Proceedings of NELS 18, 375-394.
- Reuland, E.J. & A.G.B ter Meulen, eds. (1987) The Representation of (In)definiteness. Cambridge: MIT Press.
- van Riemsdijk, H. (1978) A Case Study in Syntactic Markedness. Foris, Dordrecht.
- Vikner, S. (1991) Verb Movement and the Licensing of NP Positions. University of Geneva Dissertation.
- Williams, E. (1984) 'There-insertion'. Linguistic Inquiry 15, 131-153.

Zwart, C.J.W. (1991) 'Impersonal Passives, Head Movement, and the V-to-I Parameter'. Paper presented at Going Romance and Beyond, University of Utrecht, June.

Zwart, C.J.W. (to appear) 'Dutch Expletives and Small Clause Predicate Raising'. Proceedings of NELS 22.