# Remarks and Replies

#### On Footnote 2: Evidence for the Pronominal Status of bar in Old English Relatives

Jan Vat

## 1. Introduction

In this reply, we shall discuss some facts concerning preposition stranding and pied piping in Old English (OE) relative clauses. This issue has received considerable attention in the controversy about bounded vs. unbounded transformations. The discussion starts with Grimshaw (1974), who found the following data concerning relative clauses in Middle English (ME): there is one class of relative clauses in which we find only a wh-phrase in COMP, optionally followed by an invariable complementizer, and another class in which we find only the invariable complementizer. Bresnan (1976) states that these facts also hold for OE. We will restrict ourselves to the OE data. The facts, as given by Bresnan, can be translated as the configurations (1a-f) (where  $S' = \tilde{S}$ ): <sup>2</sup>

```
(1) a. ...NP [s'[comP] be] ... \phi...

b. ...NP [s'[comP] he] ... \phi...

c. ...NP [s'[comP] he] ... [pp P \phi] ...

d. *...NP [s'[comP] he] ... [pp P \phi] ...

e. *...NP [s'[comP] he] ... \phi...

f. ...NP [s'[comP] he] he] ... \phi...
```

In the case of relativization of PP, pied piping is obligatory when there is overt evidence of Wh Movement ((1d,f)), whereas preposition stranding is the only possibility when there is no overt evidence of movement ((1c,e)). According to Bresnan, there are two

<sup>&</sup>lt;sup>1</sup> The present reply is the result of collective work done in a seminar in the linguistics department of the University of Amsterdam. Jan Vat is a pseudonym covering the eight coauthors: Hinka Alkema, Hans den Besten, Reineke Bok, Rob Crama, Hilda Koopman, Roland Noske, Henk van Riemsdijk, and Marion Suttorp. We wish to thank Willem Koopman for checking the glosses.

<sup>&</sup>lt;sup>2</sup> The feature [±b] functions as the morphosyntactic feature [±WH] in Modern English.

types of relative clause formation, one that moves a wh-phrase into COMP and another that deletes a resumptive pronoun in its base-generated position (deletion over a variable). By assuming this analysis, she argues against Chomsky's successive cyclic Wh Movement analysis and his Subjacency Condition. Besides cases of preposition stranding with the complementizer pe, Bresnan also found cases of preposition stranding with pæt; she suggests that it is another invariant complementizer. However, in appendix 2 Chomsky and Lasnik (1977, 496, fn. 122) express their doubts as to this last suggestion and note that there are also cases of preposition stranding with pær, which "is clearly a relative pronoun". From this follows the configuration (1'), which differs from (1) in that (d) is grammatical.

```
(1') a. as in (1)

b. as in (1)

c. as in (1)

d. ...NP [_{S'}[COMP[NP + _{P}] (_{P}P _{P}P _{\Phi}] ...

e. as in (1)

f. as in (1)
```

For the sake of the discussion, Chomsky and Lasnik (hereafter, C&L) assume (1) to be correct and try an analysis for (1) compatible with their own framework. They give three possible solutions:

- (i) Free deletion of a resumptive pronoun (cf. C&L (203))
- (ii) A nonlocal filter (C&L (205))
- (iii) A local filter (C&L (207))

In the case of (i), there are two sources for relatives; (ii) and (iii) imply only one source (Wh Movement) with free deletion in COMP. As for (ii), the nonlocal filter can be formulated as (2):

(2) \*[+
$$\flat$$
 ... P t], where t is the trace of [+ $\flat$ ] (C&L (205))

For the local filter (iii), we need an extra rule assigning the feature  $[+P \_\_]$  (meaning: 'follows a preposition') to a wh-phrase in PP:

(3) 
$$[+b, NP] \rightarrow [+P] / P (C&L (206))$$

The filter can be formulated as (4):

(4) 
$$*[_{COMP}[+\bbar{p}, +P \_] ...]$$
 (C&L (207))

Because of the undesirability of nonlocal filters, Chomsky and Lasnik exclude solution (ii). As far as (i) and (iii) are concerned, they state that it is impossible to decide between the two as each requires some ad hoc complications of the grammar.

In her recent article "An Asymmetry with Respect to Wh-Islands", Maling (1978) argues in favor of the first solution; that is, she defends the unbounded-deletion position.

Maling's argument can be summarized as follows:

Chomsky and Lasnik claim that

- (5) Constructions that obey the island constraints are identified with Wh Movement. (Maling (1978, 79, (i)))
- (6) There is a unitary principle, namely Subjacency, which explains *both* island constraints, the Complex Noun Phrase Constraint (CNPC) and the Wh-Island Constraint. (Maling (1978, 79, (ii)))

## From this it follows that

... all constructions that are identified with Wh Movement ought to behave alike with respect to the island constraints: in particular, that-relatives ought to behave like wh-questions. . . . if Subjacency explains both constraints, then a given construction should either (i) be governed by both constraints, in which case it is identified with Wh Movement, or else (ii) be governed by neither constraint, in which case it is identified with an ungoverned, free deletion rule not belonging to sentence grammar. (Maling (1978, 80))

To Maling the choice between (i) and (iii) is no longer an academic question, because there is empirical evidence from four of the *modern* Scandinavian languages that *that*-relatives and *wh*-questions do not behave alike with respect to the island constraints. Therefore, she concludes that the first solution is to be preferred. However, even if the evidence from these languages is correct, this does not necessarily mean that (i) is the best solution. In fact, we believe that the evidence from OE is incorrect and that, even if it were correct, solution (iii) would be preferable. Therefore, we will examine Maling's comment on the OE data.

Maling refers to Allen (1977), who observes that in OE pied piping was obligatory in topicalized sentences. In footnote 2, Maling mentions that "Wende [1915] concludes that P-stranding was obligatory in relatives introduced by the invariable particles pe and path, and prohibited in relatives introduced by inflected (demonstrative) pronouns and in wh-questions".

In the same footnote, Maling questions the reliability of Visser's observations (Visser (1963)), to which C&L refer to support their filter solution:

... Visser states that "putting the preposition before these wh-pronouns has always been less usual" (p. 406), but the earliest example he cites is from Shakespeare; since in Wende's OE corpus, not to mention Chaucer, there are no clear examples of P-stranding in wh-questions, fronting of the preposition could hardly have been "less usual" during this period.

Finally, agreeing with C&L that stranding was also possible in relatives introduced by par 'there', she rejects C&L's observation that par was a relative pronoun:

... their claim that bar "is clearly a relative pronoun" is far from obvious. Stranding in bar-relatives was not just possible, it was obligatory (cf. Wende (1915, 36-63)); hence, bar

is usually described as a relative adverb, since it replaces an entire PP. Indeed,  $p\alpha r$  ( $p\alpha r$ ) 'there (where)' could introduce clauses without any stranded P. If the P was optional, the status of  $p\alpha r$  as pronominal object of the P can hardly be taken for granted.

However, below we will present a coherent analysis of OE in which the par in question is treated as a pronoun.

## 2. Intermezzo on Dutch

Before presenting our reanalysis of the OE data, let us briefly dwell on some aspects of Dutch syntax and of linguistic theory; Dutch syntax, because it appears to be similar to OE in one crucial aspect that we believe to hold the key to the understanding of the problematic phenomena, and linguistic theory, because both the Dutch and the OE data are best interpreted in the light of a further elaboration of the "Conditions on Transformations" theory (Chomsky (1973)).

Starting with the latter, consider again question (202) in C&L, repeated here as (7):

(7) Does Wh Movement necessarily carry along the preposition in a PP?

While C&L do not explicitly state the question in a language-specific way, we may assume that they meant it to apply to OE and Middle English, since preposition stranding is a common phenomenon in Modern English. However, it is quite possible that a universal answer might be given to (7). C&L carefully abstain from trying to answer (7), but most other writers appear to assume that there is no reason not to expect preposition stranding to be in principle possible in OE, despite the ungrammaticality (or, more properly, absence) of examples of the following form:

$$[_{COMP} wh_i(that)] \dots P[e]_i \dots$$

Recent work on the syntactic behavior of prepositional phrases shows, however, that the unmarked case is for a PP to be a binding category (cf. Van Riemsdijk (1977; 1978), Baltin (1978)). This entails that the null hypothesis with respect to PPs in any given language must be that preposition stranding is not possible. General constraints on transformations prohibit the extraction of the object of the preposition out of the PP unless an "escape route" is available. If a language makes use of such an escape hatch to strand prepositions, it is thereby marked. We will argue below that it is the remnant of the position of the object of P in the postpositional structure of Proto-Germanic that has developed into such an escape hatch position in OE and Modern Dutch. It will be seen that there are slight differences in the exact nature of the escape hatch in the languages under consideration, which are responsible in turn for some differences in the extension of preposition stranding phenomena in these languages. In order to throw these differences into relief, we will present a brief sketch of the central features of preposition stranding in Dutch.

In Dutch, the NP object of a preposition generally follows the preposition. This NP normally cannot be extracted from the PP. In particular, Wh Movement may not apply to the object of the preposition:

- (8) a. [Op wie] had je gerekend?
  on who had you counted
  'Who had you counted on?'
  - b. \*Wie had je [op e] gerekend? who had you on counted 'Who had you counted on?'

Moreover, a personal pronoun object of a preposition may not move to the position that pronouns normally appear in, viz. the position immediately to the right of the subject NP.<sup>3</sup>

- (9) a. Ik had niet [op hem] gerekend.
  - I had not on him counted
  - 'I had not counted on him.'
  - b. \*Ik had hem niet [op e] gerekend.
    - I had him not on counted
    - 'I hadn't counted on him.'

Other rules that fail to apply to the object of a preposition are Passive (NP Movement) and Extraposition. For more details on these and subsequent points, see Van Riemsdijk (1977).

There is one class of exceptions to both (8) and (9):

- (10) a. [Waarop] had je gerekend? whereon had you counted 'What had you counted on?'
  - b. Waar had je [e op] gerekend? where had you on counted
    - 'What had you counted on?'
- (11) a. ?Ik had niet [erop] gerekend.
  - I had not thereon counted
  - 'I hadn't counted on it.'
  - b. Ik had er niet [e op] gerekend.
    - I had there not on counted
    - 'I hadn't counted on it.'

A further contrast of the same sort can be found with demonstrative pronouns, which may normally move into complementizer position.

<sup>&</sup>lt;sup>3</sup> The finite verb may intervene between the subject NP and the pronoun position in root sentences.

- (12) a. [Op die] had ik niet gerekend. on that one had I not counted 'That one I hadn't counted on.'
  - b. \*Die had ik niet [op e] gerekend.
    that one had I not on counted
    'That one I hadn't counted on.'
- (13) a. [Daarop] had ik niet gerekend. thereon had I not counted 'That I hadn't counted on.'
  - b. Daar had ik niet [e op] gerekend. there had I not on counted 'That I hadn't counted on.'

Apparently, both Wh Movement and the pronoun movement rules may extract certain kinds of elements from a PP. These exceptional elements have two important characteristics: (a) they seem to replace the pronominal element that one would expect under normal circumstances (waar 'where' instead of wat 'what'); (b) when they remain inside the PP, they occur to the left of the preposition instead of to the right, i.e. they move from the canonical position of the object of the preposition leftward over the preposition. The exceptional pronominal elements have the same form as the corresponding locative PPs, as is indicated in the glosses. The replacement affects only morphologically [-human] pronouns. We will call the feature that distinguishes these special pronominal elements—locative or not—the r-feature ([ $\pm R$ ]); the rule itself may be formulated as a general suppletion rule:

(14) 
$$[+Pro, -Human] \rightarrow [+R]/[P'P]$$

This formulation assumes the following phrase structure rules (simplified).<sup>5</sup>

(15) 
$$P'' \rightarrow [+R] - Spec_{P'} - [+R] - P' \quad (P'' = PP)$$

(16) 
$$P' \rightarrow P - NP$$

There is a [+R]-position both to the left and to the right of the specifier because r-pronouns may show up in both positions: er vlak naast 'there right beside' vs. vlak ernaast 'right there-beside'.

To complete this simplified sketch of the grammar of r-pronouns in Dutch, we will posit another r-position to the right of the subject NP of the sentence.

(17) 
$$S \rightarrow NP - [+R] - VP$$

(Notice that the verb-second rule of Dutch may have the effect of moving the verb

<sup>&</sup>lt;sup>4</sup> The feature [±human] should not be taken as a semantic feature because, under certain conditions, a [-human] pronoun may refer to a semantically human NP.

<sup>&</sup>lt;sup>5</sup> R-Movement is formulated here as a substitution rule in accordance with the framework developed in Van Riemsdijk (1977). The choice between a substitution vs. an adjunction analysis has no direct bearing on the issues at hand.

between the subject NP and the r-position in root sentences.) This is the position that the locative and nonlocative r-pronouns move to. If they are either demonstrative ([+D]) or [+WH], they may also move into the complementizer position.

Given these rules, we may assume that there is an extremely simple complementizer substitution rule that affects d-pronouns and wh-pronouns and an equally simple rule of R-Movement that moves r-pronouns into r-position.

Turning back now to our initial assumption about the syntactic status of PPs, recall that we consider PP to be a binding category from which extraction is only possible through an escape hatch position. For PP, it is roughly the case that any position outside P' qualifies as an escape hatch (see Van Riemsdijk (1977) for a detailed proposal having this effect). Under this analysis, the NP object of a preposition cannot be extracted from the PP, but r-pronouns can escape since they can move through the escape hatch [+R] on the P''-level. Thus, our grammar, combined with the constraint on extraction, effectively predicts the preposition stranding phenomena in Dutch.

## 3. [±R] in Old English

We have presented a brief sketch of the role of the feature  $[\pm R]$  in the syntax of Dutch because we believe that this feature and the syntactic rules relating to it were operative in OE in a quite parallel fashion. Modern English reflects the active past of r-pronouns only in a few restricted and frozen forms such as herewith, thereby, whereabouts, etc. Wende (1915) lists a great number of cases from OE prose in which the r-pronouns her and  $p \alpha r$  (=  $\delta \alpha r$ ) are combined with what he terms a postposed preposition.

- (18) Swiðe blissiað þas word us þe her æfter filiað. very gladden the words us that here after follow 'The words which follow after this greatly gladden us.' (AE I 234,31 / Wende (1915, 25))
- (19) Her wiðufan on þyssere readinge cwæð se Hæland... here above in this lesson said the Savior 'Above in this lesson the Savior said...' (AE I 608,15 / Wende (1915, 26))
- (20) He self nanne wæsðm ðær ofer ne bireð. it self no fruit there above not bears 'It does not bear any fruit above that itself.' (C.P. 337,12 / Wende (1915, 27))
- (21) pær toeacan he ðrowade singallice untrumnissa. there in addition to he suffered incessant infirmities 'In addition to that he suffered incessant infirmities.' (AE II 120,6 / Wende (1915, 30))

While the use of wh-pronouns (more properly: hw-pronouns) was far more restricted in

OE. Wende also lists one case of the r-pronoun hwar in combination with a preposition:

(22) Hwær to beoð þas geendebyrde..? where to are these annexed 'To what shall these be annexed..?' (AE I 344,29 / Wende (1915, 31))

Wende calls her and  $\partial x$  demonstrative adverbs and hwx an interrogative adverb. While it seems reasonable enough to call these elements adverbs when they occur as locatives, independent of a preposition, as they still do in Modern English, the term adverb is quite unrevealing when applied to the cases under consideration.

The arguments that Maling presents in her footnote 2 (and which we have cited in our introduction) can be summarized as follows:

- (i) stranding is obligatory in  $p \alpha r$ -relatives
- (ii) *bær* replaces an entire PP
- (iii) the stranded preposition is optional in bar-relatives

These arguments contain some contradictions. There is a contradiction between (ii) and (iii): how can we explain the presence of the preposition if  $b\alpha r$  replaces an entire PP and therefore cannot be the object of the preposition? A possible explanation would be provided by analyzing these stranded prepositions as intransitive prepositions or verb-particles. However, this solution in cases like (23) would predict the possibility of (24), in which  $b\alpha r$  is missing:

- (23) to urum edele, pær we to gescæpene wæron to our land where we for created were 'to our land, for which we were created' (AE I 162,19 / Wende (1915, 37))
- (24) we wæron to gescæpene

However, we suspect (24) to be ungrammatical.

A second contradiction exists between arguments (i) and (iii): an element cannot be optional and at the same time obligatory.

If, notwithstanding these contradictions, we were to adopt Maling's arguments and were to assume that  $p \alpha r$  was a relative adverb in all cases, we would get into further trouble. For, how could we attribute "adverbial" meaning to all cases of  $p \alpha r$ ? In sentences like (23) we think it would be hard to interpret  $p \alpha r$  as a (locative) adverb.

But all these difficulties and contradictions disappear if we assume that par has a double role, just as the r-pronouns daar/waar have in Dutch. par is a pronoun replacing either an NP or a PP. As a (locative) pro-PP, it replaces an entire PP and there is no stranded P. This is the case in (25).

<sup>&</sup>lt;sup>6</sup> Note that *p*-pronouns do not occur exclusively as relative pronouns, but also can occur as independent pronouns, as is the case in (25).

(25) Sume ðær bidon. some there waited 'Some waited there.' (Beo 400 / Allen (1977, 65))

As a pro-NP it is the object of a P, which is either stranded as in (23), or appears immediately to its right as in (26):

(26) Hio is an lytel [sc. burg] & ðeah ic meag ðæron libban. she is a little town and yet I can therein live 'It is a little town and yet I can live in it.'

(C.P. 399,24 / Wende (1915, 27))

As Wende notes, OE was essentially prepositional in structure. He isolates exactly two constructions in which the preposition follows its object.<sup>7</sup> These two cases can be characterized as follows:

- (i) A simplex personal pronoun may precede the preposition.
- (ii) An r-pronoun must precede the preposition.

Examples for (ii) are cited above. The following are a few examples of the first case:

- (27) ða cwæð se Hæland him to ... then said the Savior him to 'Then the Savior said to him...' (AE I 166,26 / Wende (1915, 70))
- (28) He... hire mid gehæmde. he her with slept 'He slept with her.' (C.P. 415,17 / Wende (1915, 114))
- (29) Gað to ðære byrig þe eow ongean is. go to the town that you opposite is 'Go to the town that is before you.'

  (AE I 206,9 / Wende (1915, 130))

It emerges quite clearly from the data that OE is prepositional in structure and that (i)

<sup>7</sup> "Bei den echten Präpositionen ist die Nachstellung zwar nicht ausgeschlossen, aber durchweg bestimmten, beschränkenden Bedingungen unterworfen. (...) [es] bleiben im Angelsächsischen wie im Altsächsischen nur zwei Kategorien von Wortverbindungen übrig, in denen die Nachstellung der Präposition erlaubt oder geboten ist. In der einen fungiert als Beziehungswort eines der Pronominaladverbia (...), in der anderen ein Personalpronomen." 'In the case of the true prepositions the postposing [of the preposition] is not excluded, but generally subjected to certain limiting conditions. (...) In Anglo-Saxon as well as in Old Saxon only two classes of constructions remain in which the postposing of the preposition is permitted or required. In one, one of the pronominal adverbs functions as object of the preposition (...), in the other a personal pronoun does' (Wende (1915, 267)).

In section 4 of Part I Wende discusses a small number of cases in which postpositions occur with objects other than r-pronouns or personal pronouns. He succeeds in explaining away the majority of these cases. Therefore the restriction on elements occurring pre-prepositionally may be considered as firmly established.

and (ii) are exceptional in this respect. Therefore, in accordance with our previous analysis of Dutch, we may assume that r-pronouns and personal pronouns are moved into their pre-prepositional slots by a movement rule (or two). These pre-prepositional slots are characterized by the feature [+R] and whatever feature stands for personal pronouns, respectively. We may assume that these pre-prepositional slots constitute, in a sense, the remnant of the original (Proto-Indo-European (PIE)) postpositional structure.<sup>8</sup>

Van Riemsdijk (1977) argues that this remnant position has come to serve as an escape hatch and is, therefore, the source of the development of preposition stranding, which is so characteristic of most of the Germanic languages.

Interestingly, the pre-prepositional slot in OE already functions as an escape hatch. Normally the object of the preposition cannot be separated from the preposition:

"Die vorangestellte Präposition steht ... unmittelbar vor dem Rektum, ..." 'the preposed preposition stands immediately before the rectum' (Wende (1915, 15))

But it is exactly the two classes of elements that occur before the preposition (r-pronouns and personal pronouns) that can be separated from the preposition. In other words, preposition stranding is generally not allowed, but it is allowed for exactly those elements that may move into the escape hatch position.

Consider first some examples of stranding with personal pronouns:

- (30) Gif he... eow ne wille arisan togegnes... if he... you not wants rise towards 'If he does not want to rise to meet you...' (Bede 102,3 / Wende (1915, 129))
- (31) þæt him mon symle þæt tacn beforan bær that him someone often the ensign before carried 'that the ensign was often carried before him' (Bede 146,2 / Wende (1915, 129))
- (32) sua us unnytte gedohtas to cumað as us useless thoughts to come 'as vain thoughts come to us' (C.P. 273,12 / Wende (1915, 121))
- (33) Ge me noldon æt cuman. you me not-wanted to come 'You did not want to come to me.' (C.P. 247,21 / Wende (1915, 109))

<sup>&</sup>lt;sup>8</sup> It is quite generally assumed that PIE had so-called preverbs, which partly developed into postpositions. This development is reflected by the fact that the oldest offsprings of PIE such as Vedic Sanskrit (cf. Delbrück (1878)) and Hittite (cf. Friedrich (1960)) are firmly postpositional. This view is hardly challenged, but cf. Friedrich (1975). Whether Proto-Germanic was still predominantly postpositional is far less certain, but the argument regarding the remnant position resulting from the original postpositional structure is valid whether or not reanalysis to prepositional structure has already taken place at the Proto-Germanic stage.

Similarly, r-pronouns may also be separated from the preposition:

- (34) Bi pæm neahstan twæm her is æfter to cweðanne. by the next two here is after to speak 'About the next two the following can be said.' (Bede 334,28 / Wende (1915, 25))
- (35) gif þær gebedo æfter fylgeað if there prayers after follow 'if prayers follow after that' (C.P. 399,33 / Wende (1915, 26))
- (36) þær stod micel seolfren disc on. there stood large silver dish on 'On it stood a large silver dish.' (Bede 164,31 / Wende (1915, 28))
- (37) þonne gæð þær swiðe mycel hwil to.
  then goes there very big while to
  'Then a very great time will go into it (recounting all the testimonies concerning Christ).'
  (AE II 18,11 / Wende (1915, 29))

Wülfing (1894–1897) also lists a case of separation with hwær:

(38) þæt tacn nugyt is orgyte on þæs seas staðe, hwær þara wigwægna the mark still is manifest on the sea's shore where the war-chariots' hweol on gongende wæron. wheels on going were 'The marks are still manifest on the seashore on which the wheels of the war-chariots were passing.'

(Orosius 38,34 / Wülfing (1894-1897 I, 509))

Thus, the OE facts provide striking confirmation of the escape hatch theory of preposition stranding.

We are now in a position to answer (7), C&L's (202): Wh Movement necessarily carries along the preposition in a PP, unless the object of the preposition is an r-pronoun (making the natural assumption that personal pronouns cannot carry the feature [+WH]).

In the light of this state of affairs, which has been noted in the transformational literature by Allen (1977)<sup>9</sup> and in the work of traditional linguists such as Wende, it is now possible to reinterpret the facts about OE relative clauses.

<sup>&</sup>lt;sup>9</sup> Allen (1977) proposes several rules to describe the special behavior of the personal pronouns (P-Shift) and r-pronouns (Locative Replacement and Locative Shift). We return to Allen's analysis at the end of section 4

#### 4. OE Relative Clauses Reconsidered

In the following paragraphs we shall present the major facts concerning OE relative clauses; refinements and complications will be found in the footnotes. Our survey is based upon the following studies, from which we will quote examples: Wülfing (1894-1897), Grossmann (1906), Anklam (1908), Wende (1915), Visser (1970), and Sprockel (1973). Our presentation of the facts will take the following course: first, we consider relativization of subject and object NPs. This will provide us with all rules necessary for a description of OE relatives. We will then consider relativization of prepositional objects.

Old English did not yet use the hw-pronouns of the interrogatives as relative pronouns. Instead, demonstratives (henceforth: p-pronouns) were used. In order to minimize the glossing of our OE examples, we give a full paradigm of the relevant pronouns:  $^{10}$ 

		Singular	
	Masc.	Neut.	Fem.
Nom.	se	þæt	sio, seo
Gen.	þæs	þæs	þære
Dat.	þæm, þam	þæm, þam	þære
Acc.	þone	þæt	þa
Instr.		by, bon	
		Plural	
		All Genders	
Nom.		þа	
Gen.		þara, þæra	
Dat.		þæm, þam	
Acc.		þа	

As regards the relativization of subjects and objects, the following patterns can be found:

```
(39) a. NP [s'[COMP[NP + p]][s ... \phi ...]]
b. NP [s'[COMP[NP + p] pe][s ... \phi ...]]
c. NP [s'[COMP pe][s ... \phi ...]]
```

The particle be is invariant, and it is clearly a complementizer. 11

- <sup>10</sup> Cf. Wright and Wright (1925), or any other grammar of Old English.
- 11 The facts are somewhat more complicated than that. A variant pattern of (39c) is the following one:
- (i) NP  $[s'[comp \ p \ \alpha t][s \dots \phi \dots]]$

Furthermore, (ii) is a variant of (52c) below:

(ii) NP  $[s'[comP \not p at][s ... [pp \phi P] ...]]$ 

According to Wende (1915, 37), pæt combined solely with neuter antecedents. However, observations by

The following three pairs of sentences can serve as illustrations of (39a,b,c), respectively:

- (40) a. se man, se pæt swifte hors hafap the man who the swift horse has 'the man who possesses the swift horse' (Orosius 1,22 / Grossmann (1906, 33))
  - b. bearn cende þam ic blæd forgæf to-a-child gave-birth-to whom I prosperity gave 'gave birth to a child whom I gave prosperity to' (Elene 354 / Grossmann (1906, 35))
- (41) a. Her Herodes aswalt sepe Iacobum ofslog ane geare ær then Herod died who-that St. James killed one year before his agnum deape.
  his own death
  'Then Herod died who had killed St. James one year before his own death.'

(Anglosaxon Chronicle in Sprockel (1973, 7.5.3))

- b. se hæland, se be in Nazareth afeded wæs the Savior who that in Nazareth brought-up was 'the Savior, who was brought up in Nazareth' (Elene 913 / Grossmann (1906, 20))
- (42) a. Her onginneð seo boc *þe* man Orosius nemneð. here begins the book that one Orosius calls 'Here begins the book which is called 'Orosius'.'
  (Orosius 1 / Wülfing (1894–1897, vol. I, 404))
  - b. ðæt ðu ðone wisdom pe ðe God sealde, befæste that you the wisdom that to-you God gave use 'that you use the wisdom which God bestowed upon you' (C.P. 4,3 / Wülfing (1894-1897, vol. I, 404))

(iii) 
$$Y - [x_n + b] - bat - Z$$
  
 $1 \quad 2 \quad 3 \quad 4 = 0$   
 $1 \quad 2 \quad be \quad 4$ 

Note that no sequence of the form  $[x^* + b] + b\alpha t$  can be found. Thus, rule (iii) must be completed by a filter prohibiting such sequences:

This filter is made necessary by rule (iii) and by the rule dealt with in fn. 16. Cf. Bresnan (1976, fn. 2), Chomsky and Lasnik (1977, fn. 122), and Maling (1978, fn. 2).

Wülfing (1894-1897, par. 284 and par. 285), show that par combined with any gender or number. And in fact, one of Wende's own examples (Bede 320,4/Wende (1915, 55)) relates par to the masculine antecedent pone stan 'the stone, acc'. Since par is invariant for number, gender, and case, we may equate it with the subordinating conjunction par (cf. Sprockel (1973, ch. 7)), and we may assume that par is the underlying complementizer for relatives. This complementizer is optionally changed into par by the following local rule:

<sup>(</sup>iv) \*[x'' + b] pat

From this set of data we may conclude that the following rules were operative in OE relatives. First of all, there was a rule of b-Movement, comparable to Modern English Wh Movement:

## (43) *p-Movement*

This rule yields the pattern (39b) (= (41)). Furthermore, there are two local rules deleting the p-pronoun or the lexical complementizer, respectively:

## (44) *b-Deletion*

This rule replaces the unbounded relative deletion rule in Bresnan (1976), Grimshaw (1974), and Maling (1976).

## (45) COMP Deletion

These rules are optional. Application of rule (44), p-Deletion, yields pattern (39c) (= (42)). By application of the rule of COMP Deletion, i.e. (45), we derive pattern (39a) (= (40)).

These rules suffice to predict the full range of possibilities for relativization of prepositional objects, given what we know about preposition stranding in main clauses (see the discussion in section 3 above). In terms of C&L, (44) and (45) may be considered special instances of the optional free deletion rule in COMP.

As pointed out above, b-pronouns (demonstratives) serve as relative pronouns in OE. Nonlocative r-pronouns are a special case of the b-pronouns. Seven distinct patterns are now predicted.

Let us first consider the case of the [-R]p-pronouns. We know from section 3 that these pronouns could not strand their preposition. Thus, our rules predict the following two patterns:

(46) a. NP 
$$[s'[COMP[PP P [NP + p]]][s ... \phi ...]]$$
  
b. NP  $[s'[COMP[PP P [NP + p]]][s ... \phi ...]]$ 

<sup>&</sup>lt;sup>12</sup> Rules (44) and (45) apply to the  $p \alpha t$  particle mentioned in fn. 11 as well.

These patterns do indeed occur; witness examples like (47) and (48):

- (47) his Fæder, mid ðam he leofað and rixað ... on ecnysse his father with whom he lives and reigns in eternity 'his Father with whom he lives and reigns in eternity' (AE I 192,1 / Wende (1915, 54))
- (48) God, on ðam ðe Abraham gelyfde and Isaac and Iacob God in whom that Abraham believed and Isaac and Jacob 'God in whom Abraham and Isaac and Jacob believed' (AE I 464,30 / Wende (1915, 58))

Furthermore, we expect that extracting the unmarked p-pronoun from its PP results in ungrammaticality:

(49) \*NP 
$$[s'[comp[nP + p] (pe)][s ... [pP P \phi] ...]]$$

This statement seems to be basically correct. 13

For the case of nonlocative r-pronouns we expect five distinct patterns, divided into two groups, one for the case in which the r-pronoun  $p \alpha r$  pied-pipes its preposition and one for the case in which the preposition is stranded.

We know (cf. section 3) that  $p \alpha r$  does not have to leave its PP. Thus, the following two patterns are predicted:

Pattern (50a) corresponds to (46a) and is derived by means of b-Movement and COMP Deletion (rules (43) and (45)). Pattern (50b), corresponding to (46b), is derived by b-Movement only. We do not expect that rule (44), b-Deletion, can ever be applied to the PP in COMP position for reasons of recoverability of deletion.

The syntactic studies mentioned above do not provide any example of pied-piping as in patterns (50a,b) as far as the older period (before 1000) is concerned. Nevertheless, the conclusion Maling (1978, fn. 2) draws from the data presented by Wende, to the effect that "stranding in par-relatives was not just possible, it was obligatory", does not seem to us to be correct. Only in Wende (1915) have par-relatives been distinguished as such. Furthermore, Anklam (1908), who covers the period between the years 1000 and 1200, quotes examples of par-relatives with both stranded and pied-piped prepositions (postpositions). We consider that culling the older literature—this time on par-relatives—might prove worthwhile. 14

<sup>&</sup>lt;sup>13</sup> Wende (1915, 41) was able to find four exceptions that he did not want to list as a separate relativization pattern

<sup>&</sup>lt;sup>14</sup> Grossmann (1906), who covers the same period as Wende (1915), cites one example of a  $p \alpha r$ -relative, whereas Wende was able to quote fourteen examples from Anglo-Saxon prose alone. Wülfing (1894-1897) deals with OE relatives in his volume I without mentioning  $p \alpha r$ -relatives, although volume II cites three examples under the preposition on.

Although our examples belong to the older period of Middle English, we present the following examples for patterns (50a,b), for the sake of completeness:

- (51) a. and tatt we sæghenn opennligg *pærto* we wittness sindenn and that we saw plainly whereto we witness are 'and we saw clearly what we are witness to'

  (Orrmulum 16687 / Anklam (1908, 65))
  - b. ðar is ðin herte ðarof ðe ðu mæst þenkst.
    there is your heart whereof that you most think
    'Your heart is in that place which you think about most.'
    (Vices and Virtues 68, 26 / Anklam (1908, 65))

Note that pattern (50b) is practically absent, which must be related to the absence of pattern (52b) below.<sup>15</sup>

More interesting for the problem at hand is what happens when par strands its preposition. In that case, we expect to find three distinct patterns:

(52) a. NP  $[s'[COMP[NP \not p xr]][s ...[pP \not p P] ...]]$ b. NP  $[s'[COMP[NP \not p xr] \not p e][s ...[pP \not p P] ...]]$ c. NP  $[s'[COMP \not p e][s ...[pP \not p P] ...]]$ 

As noted above, pattern (52b) is absent. We will assume that there is a filter (53), and leave it at that.<sup>16</sup>

(53) \*[+R] 
$$pe$$

Pattern (52a) is derived via b-Movement (rule 43)) and COMP Deletion (rule (45)).

(i) 
$$b \alpha r - b e / b \alpha t$$
  
 $1 \quad 2 \Rightarrow$   
 $1 \quad b \alpha r$ 

This can be regarded as a reply to the remarks on  $p \alpha r$  ( $p \alpha r$ ) in the last part of fn. 2 of Maling (1978). Neither in Wende (1915), nor in Grossmann (1906), nor in Wülfing (1894-1897) do we find examples of  $NP + p \alpha r + p \alpha r$ . Anklam (1908) found some cases of  $p \alpha r$   $p \alpha r$ ,  $p \alpha r$ ,  $p \alpha r$ ,  $p \alpha r$ , and the younger  $p \alpha r$ , but these were restricted to one text, i.e. "Vices and Virtues", written in the Kentish dialect. Note that it is not necessary to change filter (53) to (ii)

(ii) 
$$*[+R]$$
 (P)  $be$ 

if we assume that [+R] percolates to the PP node along with the feature [+h] when there is pied piping.

<sup>&</sup>lt;sup>15</sup> Examples for this pattern are provided only by the text called "Vices and Virtues", written in the Kentish dialect in the second half of the twelfth century.

<sup>&</sup>lt;sup>16</sup> This proposal is corroborated by the fact that occasionally we find  $p \alpha r$  par instead of  $p \alpha r$  (Wende (1915, 36-37)). The same is true when  $p \alpha r$  is a relative PP, meaning 'where'. For examples, see Grossmann (1906, 70). Some of these examples of  $p \alpha r$  par can be interpreted as 'there where', i.e. a PP followed by a relative PP. But where an NP precedes  $p \alpha r$  par, an interpretation as 'NP there where' makes these relative structures rather heavyfooted, whereas an interpretation as 'NP + relative pronoun + COMP' is natural, especially given the fact that in the case of preposition stranding  $NP p \alpha r$  par cannot possibly be interpreted as 'NP there where'. Thus, there must have been a minor rule in OE changing the lexical complementizer to  $p \alpha r$ :

Some examples of this pattern are:

- (54) a. Her is an lytele burg swiðe neah, ðær ic mæg min feorh on generian. here is a small town quite near where I can my life in save 'There is a small town nearby where I can save my life.'

  (C.P. 399,23 / Wende (1915, 57))
  - b. þæt tacen ... þær he to starude the sign where he at gazed 'the sign which he gazed at' (Daniel 717 / Visser (1970, 397))
  - c. To bæm soðum gesælðum ic tiohige ðæt ic þe læde, þær to the true happiness I propose that I you lead where bin mod oft ymb ræsweð & eac mæt. your mind often about thinks and also dreams 'I propose that I lead you to the true happiness about which your mind is often thinking and dreaming.'

    (Boethius 51,13 / Wende (1915, 37))
  - d. to pam huse, pær he inne wunode to the house where he in stayed 'to the house in which he stayed' (AE I 108,31 / Wende (1915, 63))

These and other examples we have found in Wende (1915), Visser (1970), and Wülfing (1894-1897).<sup>17</sup>

Given the fact that p x could strand its preposition, and given the fact that there was a rule deleting p-pronouns in COMP (i.e. rule (44)), it does not come as a surprise that there is ample evidence for pattern (52c). For instance:

- (55) a. to urum eðele ..., þe we to gescæpene wæron to our country that we for created were 'to our country, for which we were created' (AE I 118,29 / Wende (1915, 59))
  - b. þære ... Rode ..., ðe ure Drihten on ðrowede the Rood that our Lord on suffered 'the Rood on which our Lord suffered' (AE II 302,27 / Wende (1915, 56))

<sup>&</sup>lt;sup>17</sup> The one example from Grossmann (1906) does not count as such, since it is also one of Wende's examples. Wende (1915) quotes thirteen examples from the prose texts plus one unclear one: three for the preposition on (pp. 57-58), three for to (p. 60), one for ymb(e) (p. 37), a single unclear one for binnan (p. 45), and five for inne (p. 63). From the poetical texts, Wende was able to cite nine examples: two with on (p. 152), four with inn(e) (p. 150 and p. 152), one with ymb(e) (p. 150 and p. 152), and two with ut (p. 149 and p. 152). To this we can add two examples with to from Visser (1970, 397) and three examples with on from Wülfing (1894–1897, 508). For the later period, we can point out two examples with inne and one with to from Anklam (1908, 65).

Returning now to the general discussion of OE relative clauses, we may conclude that our analysis of OE relatives contradicts the argument presented by Bresnan (1976). The core of this argument was the asymmetry between (1c and d), in other words the asymmetry between P-stranding with and without an overt b-pronoun in COMP. Bresnan argues that this asymmetry can be explained by the assumption that the relative movement rule cannot strand the preposition but that relative deletion can. We have presented evidence, however, that the star in (1d) must be qualified. Given the general prohibition against extracting elements from prepositional phrases, we would not expect a pattern like (1d) to occur in the first place, except for b-elements that can escape from the PP via an escape hatch. Just as in Modern Dutch, this escape hatch takes the form of an r-position. Thus, we predict that the only p-pronouns in COMP that may cooccur with a stranded preposition must be r-pronouns. The absence of non-r-pronoun cases noted by Bresnan, together with the presence of cases with r-pronouns we have presented, bears out this prediction. Therefore, the star must be removed from (1d). The existence of both (1b) and (1c) now follows from the optional application of the b-Deletion rule (45) (i.e. the optional free deletion rule in COMP) to what we now know must be a pronoun of the form [+p, +R]. There is no asymmetry to begin with, hence no argument for an unbounded deletion rule.

Before leaving the topic of OE relatives, let us consider yet another analysis: Allen (1977). As mentioned above (fn. 9), Allen had noticed the similarity between OE and Modern Dutch with respect to the pronoun system and its relationship to preposition stranding. Allen recognizes that there appears to be a general prohibition against Pstranding (at least in OE) and that there are two classes of exceptions to this prohibition: personal pronouns and r-pronouns. These are moved to pre-prepositional position by P-Shift and Locative Shift, respectively, in her analysis. Allen notes that the same correlation between PP-internal movement and extractability exists in Modern Dutch for one of the two classes, viz. the r-pronouns. 18 In Allen's analysis of OE, there is a PP-Split rule that separates the preposition from the pre-prepositional personal or r-pronoun. According to Allen, it is this rule that makes P-stranding possible in OE. While we disagree with the PP-Split rule,19 Allen's analysis clearly points in the direction of the conclusion we have presented in this article. And indeed, section 3.1.1.5 of Allen (1977) is entitled: "pær-relatives". That is, Allen in effect denies Bresnan's (1976) claim that no stranded prepositions cooccur with an overt *p*-pronoun in COMP (pattern (1d)). And yet, in fact, Allen considers that she has presented "arguments against analyzing &-relatives ... in which there is nothing on the surface which appears to have moved

<sup>&</sup>lt;sup>18</sup> In fact, Allen (1977) refers to Van Riemsdijk (1978) and to Van Riemsdijk (1975) (= 1976), which was a precursor of Van Riemsdijk (1977) (regrettably, these references do not appear in Allen's bibliography). The published version of Van Riemsdijk (1977) deals more extensively with Allen's objections to his analysis, which we adopt in this article.

<sup>&</sup>lt;sup>19</sup> One objection to PP-Split as the source of P-stranding is that it offers no possibility for explaining the correlation noted above between PP-internal movement and extractability. An escape hatch theory explains this correlation in a straightforward way.

as involving movement" (Allen (1977, 360)). The reason for this position appears to be that "this approach provides a unified explanation for the pied-piping facts in the different Germanic languages". This approach assumes that there is a "restriction against movement and deletion of NP from PP". In the unmarked case, this restriction holds in its full generality. But "if [the language learner] hears evidence only that this prohibition does not hold for deletion, he assumes that movement, but not deletion, out of PP is prohibited". In other words, Allen's approach is powerful enough to account for cases where there is an asymmetry between what at first sight looks like movement and what at first sight looks like deletion. But as we have argued—and as Allen herself has argued implicitly 20—there is no such asymmetry. The only truly unifying and explanatory account predicting the observed symmetry is one in which the relative (and other) constructions under consideration must be analyzed in terms of a movement rule together with a general free deletion rule in COMP. The framework presented in the main text of C&L provides us with such an account. For it should not be forgotten that appendix 2 of that article, save footnote 122, acts on a "for the sake of the argument", to which we return in our appendix. The main thrust of the C&L framework is that any asymmetry-on-the-surface in these constructions should be predictable from the information accessible to local filters. If this central idea can be maintained, there is no problem and appendix 2 is not needed at all. Footnote 122 of C&L suggests that it can be so maintained; and both our findings and Allen's prove that C&L's suggestion is exactly right. Therefore, Allen's argumentation in her chapter 9 against using filters to describe the fact that preposition stranding is not, in general, possible in OE may be interesting in its own right, but it is quite beside the point. A universal constraint that predicts that extraction of an NP from a PP is impossible (unless a special escape route is used) is preferable to a language-specific filter, as long as the framework can be maintained in which no unbounded deletion (or other) rules are allowed.

# Appendix: For the Sake of the Argument

In their appendix 2 C&L discuss the OE and ME data. For the sake of the argument they accept the exposition of data by Bresnan (1976). However, they note that there is a third way of describing OE. Instead of applying a nonlocal filter, one might assign the feature [+P\_\_\_] to any object of a preposition and add the following local filter, which we have transliterated into our own terminology:

(56) 
$$*[_{COMP}[+p, +P \___] - X]$$
  
(= C&L (207))

Preposition stranding was not possible in any construction in which there was no overt evidence of movement. . . . Apparent counterexamples to this claim were seen to be the result of a rule of PP-split which allowed "inverted" prepositional phrases to break up. (Allen (1977, 315))

But the PP-Split analysis (or our escape hatch theory) does not explain away the counterexample; rather, it argues that there is no asymmetry in the first place.

<sup>&</sup>lt;sup>20</sup> Apparently, the facts about r-pronouns are regarded by Allen as a counterexample to the asymmetry claim. She explains this counterexample as follows:

They admit that the use of the feature [+P \_\_\_\_] is ad hoc, as would be the application of a nonlocal filter, but they are not willing to call Bresnan's solution less ad hoc. Each solution involves an ad hoc complication of the grammar and, even if we were to rule out descriptions with nonlocal filters for reasons of principle, there would be no way to choose between the two remaining options. We feel that Maling's (1978) reply to appendix 2 adds nothing to this conclusion, although she presents an argument on the basis of the modern Scandinavian languages, which are notorious for violating the CNPC and the Wh-Island Constraint. In this reply, however, we are exclusively concerned with OE.

Maling's argument loses its importance for OE grammar, however, in light of our description in terms of b-Movement and local b-Deletion. In her fn. 2, Maling tried to set aside an observation by C&L. They had noticed the existence of bar-relatives (our (52a)) and considered that bar "is clearly a relative pronoun" (C&L, fn. 122). The significance of this remark is self-evident. If bar is a relative, then it is not quite correct to say that there was no stranding under  $bar{Wh}$  Movement (b-Movement). If so, Bresnan's argument against the  $bar{Wh}$  Movement analysis collapses. Maling argued against the nominal status of  $bar{Wh}$  in preposition-stranding relatives, contending that it is a relative adverb.

It is true that  $b \alpha r$  could also be used as a PP (adverb), meaning 'where'. In that case, there is no preposition stranding, for the simple reason that the preposition is part of the  $PP \ b \alpha r$ . On the other hand, we have argued in this reply that  $b \alpha r$  is indeed nominal if there is preposition stranding. Thus, the intuitive analysis of  $b \alpha r$  as a pronoun by C&L turns out to be correct, and Bresnan's argument against a Wh Movement analysis of OE deletion relatives has lost its force.

However, let us assume, for the sake of the argument, that we had not been able to find any convincing example of a nominal  $p \alpha r$ -relative. In that case, we would have been back at the point where we started, but not quite. Let us see what we can say now about the patterns found by Bresnan (which we have translated as (1a-f)) on the basis of our analysis of the OE pronoun system. We know from C&L that there are three ways to account for the nonexistence of pattern (1d) (cf. (49)): a deletion analysis, a Wh Movement analysis completed by a nonlocal filter, or a Wh Movement analysis completed by the local filter (56). The first two solutions are ad hoc. But given our analysis of the OE pronoun system, we can transform  $[+P \_\_\_]$  in filter (56) from an ad hoc to a principled feature.

First, let us split pattern (1d) according to whether the p-pronoun is [-R] or [+R]. We leave out pe because it is an unnecessary complication in this context:

(57) a. \*NP 
$$[_{S'}[_{COMP}[_{NP} + \mathfrak{p}, -R]][_{S} \dots [_{PP} P \phi] \dots]]$$
 (= (49))  
b. \*NP  $[_{S'}[_{COMP}[_{NP} + \mathfrak{p}, +R]][_{S} \dots [_{PP} \phi P] \dots]]$  (= \*(52a))

According to our analysis, prepositional objects cannot leave their PP unless they can go through the pre-prepositional escape hatch. The normal *p*-pronouns do not have that

option and so cannot strand their prepositions. That is all that needs to be said about (57a). Thus, all that remains to be accounted for is the nonexistence of pattern (57b), which—for the sake of the argument—we are assuming does not exist. Let us assume furthermore that the pro-PP bar 'where' is grammatical in COMP position. Now we are able to substitute the following filter for the supposedly ad hoc filter (56):

$$(58) *[_{COMP}[+N, +R] - X]$$

The main objection against filter (56) lay in the ad hoc nature of the feature  $[+P \_ ]$ . This feature expresses that an NP originates in a PP. However, this syntactic characteristic of being marked as the underlying object of a preposition is encoded in the morphology of the OE r-pronouns. That is to say: the feature [+R], our substitute for  $[+P \_ ]$ , is empirically motivated.<sup>21</sup>

#### References

Allen, C. (1977) Topics in English Diachronic Syntax, Doctoral dissertation, University of Massachusetts at Amherst, Massachusetts.

Anklam, E. (1908) Das englische Relativ im 11. und 12. Jahrhundert, Mayer & Müller, Berlin.

Baltin, M. (1978) "PP as a Bounding Node," in M. J. Stein, ed., Papers from the Eighth Meeting of the North Eastern Linguistic Society, University of Massachusetts at Amherst, Massachusetts

Bresnan, J. (1976) "Evidence for a Theory of Unbounded Transformations," *Linguistic Analysis* 2, 353-393.

Bresnan, J. and J. Grimshaw (1978) "The Syntax of Free Relatives in English," *Linguistic Inquiry* 9, 331-391.

Chomsky, N. (1973) "Conditions on Transformations," in S. R. Anderson and P. Kiparsky, eds., A Festschrift for Morris Halle, Holt, Rinehart and Winston, New York.

Chomsky, N. and H. Lasnik (1977) "Filters and Control," Linguistic Inquiry 8, 425-504.

Delbrück, B. (1878) Die altindische Wortfolge aus dem Catapatha brahmana, Waisenhausen, Halle.

Friedrich, J. (1960) Hethitisches Elementarbuch I/II, Carl Winter, Heidelberg.

<sup>21</sup> After the submission of the final version of the present article, it has come to our attention that we have been criticized in *Linguistic Inquiry* 9.3, in fn. 14 of Bresnan and Grimshaw's article on free relatives in English. For reasons of space and time we will present only the outline of a reply.

Our article has been criticized on two points. First, Bresnan and Grimshaw remark that, given our approach, one would not expect to find pe-relatives with [+HUM] antecedents, which seems to be corroborated by the fact that no examples of pe-relatives with [+HUM] antecedents are known. Second, our analysis is criticized for failing to account for what is called crucial evidence from OE topicalization, the evidence being that there is virtually no preposition stranding under topicalization. As for the first point, we refer to fn. 4 above. In Modern Dutch the relative prepositional object waar 'where' may refer to a [+HUM] antecedent, a usage that dates back to the Middle Ages (cf. Stoett (1923)). We venture to suggest that similar conditions obtained in OE. As for the second point, we fail to see why the pertinent evidence is crucial. There are at least two ways to describe OE topicalization. Either Topicalization is a rule of X'' Preposing or it is another instance of Wh Movement. Under the former option, our analysis does not fail to account for the OE topicalization facts at all, but rather predicts that topicalized prepositional objects must pied-pipe their prepositions, unless the pertinent NP is a human pronoun or an r-pronoun. Under the latter option, the topicalization facts of OE present an interesting problem but by no means a counterexample, because the observed constellation of facts is not excluded by our version of the wh theory.

- Friedrich, P. (1975) Proto-Indo-European Syntax, Journal of Indo-European Studies, Monograph no. 1.
- Grimshaw, J. B. (1974) "Relativization by Deletion in Chaucerian Middle English," in E. Kaisse and J. Hankamer, eds., *Papers from the Fifth Annual Meeting of the North Eastern Linguistic Society*, Harvard University, Cambridge, Massachusetts [also appeared in J. Grimshaw, ed. (1975)].
- Grimshaw, J., ed. (1975) Papers in the History and Structure of English, University of Massachusetts Occasional Papers in Linguistics, No. 1.
- Grossmann, H. (1906) Das angelsächsische Relativ, Weimar.
- Keyser, S. J. (1975) "A Partial History of the Relative Clause in English," in J. Grimshaw, ed. (1975).
- Maling, J. M. (1976) "Old Icelandic Relative Clauses: An Unbounded Deletion Rule," in J. A. Kegl, D. Nash, and A. Zaenen, eds., Proceedings of the Seventh Annual Meeting of the North Eastern Linguistic Society, MIT, Cambridge, Massachusetts.
- Maling, J. M. (1978) "An Asymmetry with Respect to Wh-Islands," Linguistic Inquiry 9, 75-89. Riemsdijk, H. van (1976) "Extraction from PP and the Head Constraint," unpublished manuscript, University of Amsterdam, Amsterdam.
- Riemsdijk, H. van (1977) The Binding Nature of Prepositional Phrases, unpublished manuscript, University of Amsterdam, Amsterdam. [Published (1978) as A Case Study in Syntactic Markedness: The Binding Nature of Prepositional Phrases, Peter de Ridder Press, Lisse.]
- Riemsdijk, H. van (1978) "On the Diagnosis of Wh Movement," in S. J. Keyser, ed., Recent Transformational Studies in European Languages, Linguistic Inquiry Monograph 3, MIT Press, Cambridge, Massachusetts.
- Sprockel, C. (1973) The Language of the Parker Chronicle, Volume II: Word Formation and Syntax, Martinus Nijhoff, The Hague.
- Stoett, F. A. (1923) Middelnederlandsche Spraakkunst, Martinus Nijhoff, The Hague.
- Visser, F. Th. (1963) (1970)<sup>2</sup> A Historical Syntax of the English Language, Part One: Syntactical Units with One Verb, Brill, Leiden.
- Wende, F. (1915) Ueber die nachgestellten Präpositionen im Angelsächsischen, Mayer & Müller, Berlin.
- Wright, J. and E. M. Wright (1925) Old English Grammar, 3rd edition, Oxford University Press, London.
- Wülfing, J. E. (1894-1897) Die Syntax in den Werken Alfreds des Grossen, 2 volumes, P. Hahnstein's Verlag, Bonn.

Institute for General Linguistics University of Amsterdam Spuistraat 210 Amsterdam-C., The Netherlands