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A 'CASE' FOR THE OLD ENGLISH IMPERSONAL

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0. *Introduction*

Generative grammar can be said to represent a linguistic approach that seems to inspire some linguists with dogmatic devotion, others with fierce hatred. A particularly strong example of the latter is Givón's polemic start in his book *On Understanding Grammar*: "An increasingly perverse use of key terminology such as 'data', 'empirical proof', 'theory' and 'explanation' has deprived those fundamental concepts of science of both meaning and utility in linguistics. I have been convinced for a number of years now that transformational-generative grammar... has trapped itself in a labyrinthine prison out of which no graceful exit is possible..." (Givón 1979:1-2).

Another only slightly less fiercely worded diatribe against the generative theory is directed against its potential value in the field of diachronic grammar: "I tend to believe rather that the diachronic significance of any transformational-generative foray into the field of language and grammar change, irrespective of whether the paraphernalia date from before or after Pisa, is bound to be negligible when it comes to matters of explanation: the kinds of restrictions on particular grammars in the investigation of which Chomsky Grammarians, of whatever vintage, have so far distinguished themselves are in my opinion unlikely to be profitably invoked as reasons or causes, directly or indirectly, of particular diachronic developments". (Plank 1984:306).

One striking assumption of generative grammarians, for which they are often reproached, is their insistence on the autonomy of syntax. Koster (1983:10ff) defends this position as follows: "One of the most peculiar experiences a syntactician has to undergo time and again is the reproach that he neglects semantics. At best he is reproached with indifference, at worst with dogmatism... It is clear that it is implicitly assumed that semantics and syntax are inextricably linked. Without this assumption the reproach would

make no sense. No one would for instance dream of reproaching a physician studying the role of the bronchial tubes that, by concentrating on the lungs, he neglects music for wind instruments. And yet a prerequisite for the normal production of such music is that the lungs work properly... An important difference is perhaps that we know the lungs are also used for different purposes... Playing the trumpet seems in this light more of a derived function. The question is, however, how people are so certain that matters are totally different in the relation between syntax and semantics... From biological perspectives there is no reason whatsoever to assume *a priori* that there exists a corresponding semantics for the syntactic structures provided by the brain" (our translation, OF/FvdL). This last line of Koster's is particularly revealing. It concerns the central hypothesis upheld by Chomsky c.s. that human beings are genetically endowed with a set of formal principles characterizing the set of 'possible grammars' of natural language. If they were not, so it is argued, one could not explain the facts of language acquisition, in particular the fact that language acquisition takes place on the basis of underdetermined data. Since the input data can be shown to be insufficient, the linguistic knowledge that mature language users have *must* be partially innate.

The reason why such innate knowledge must be predominantly syntactic, Koster argues, is that the interpretation of linguistic entities is largely dependent on contingent beliefs; to quote from Koster again (our translation): "Words and sentences... have no fixed interpretation but only give us access, in a more or less ordered fashion, to our contingent knowledge and belief system. That we can communicate in this way is due to the fact that we happen to share quite a number of prejudices" (Koster 1983:29). Now the contingent beliefs one has with respect to e.g. a word cannot, Koster continues, be equated with the semantics of that word (i.e. its intension). In short, the study of semantics is, to a large extent, irrelevant as far as psychological reality is concerned (with the possible exception of some areas in semantics, such as quantification). It is therefore of no immediate concern to the linguist who sets out to explain the logical problem of language acquisition in terms of biologically encoded linguistic knowledge.

Koster, it appears, bases his argument on the premise that semantics is first and foremost concerned with word meaning. In his introduction to a selection of papers by Richard Montague, Thomason (1974:48) states emphatically, however, that except for such lexical forms as are logically constant "the problems of semantic theory should be distinguished from those of

lexicography". The central goals of semantics, he continues, are to explain "how different kinds of meanings attach to different syntactic categories... (and) how the meanings of phrases depend on those of their components". Fleetinglly referring to the "schematic interpretation" of sentences, Koster (1983:28-9) dismisses the above conception of semantics as too minimal to be of real interest. If one agrees with Montague, however, that the investigation of the meaning of syntactic functions is what semantic theory is about, then semantics is a legitimate domain of linguistic study even from a psychological point of view. If generative theory is, moreover, to be exonerated from the arbitrariness of many of its claims, semantics can also be seen to be essential. Such syntactic principles as are postulated for the sake of a uniform account of certain syntactic facts, should be motivated independently, in terms of their semantic properties. That is, a purely abstract syntactic principle should on the whole not be considered to be sufficiently vindicated by the mere stipulation that it has universal status. By committing oneself to the semantic import of a syntactic principle, one automatically delimits its field of application, rather than that it can be made to apply whenever its suits one's own purposes.

With respect to historical change the necessity of providing semantic motivation for one's syntactic notions becomes especially clear. Accounting for syntactic changes in terms of rule addition, rule re-ordering or rule loss (as in the earlier generative accounts) or in terms of parametric change (as is the fashion in the present-day approach) does in itself not provide more than a description of the change and often, as we will see below, it leads to adhoc or circular reasoning.

In the following we will attempt to show that the phenomenon of Case alternation exhibited by certain Old English (OE) constructions cannot be properly understood unless the semantics of the OE Case system is taken into account. We also hope to show that our interpretation of OE Cases leads to a better understanding, not only of the OE constructions themselves, but of the form they adopted at a later stage as well.

The structure of this article is as follows. We first summarize an earlier article of ours on (the history of) OE impersonal constructions and a number of alternative analyses; we conclude that none of the analyses presented, including our own, is fully satisfactory (section 1). Next we discuss an article on Case alternation in OE with personal verbs; its conclusion can, it is shown, be in part extended to Case alternation in OE with impersonal verbs (section 2). After this, Chomsky's purely syntactic theory of Case and

Kuryłowicz' theory of Case, which crucially distinguishes between syntactic and semantic Case, are reviewed, followed by a new proposal of our own (section 3). We subsequently discuss Gruber's localistic approach to Case and propose lexical entries for verbs which are based on Gruber's theory and which we claim can account for Case alternation; we then suggest an interpretation of the opposition argument/non-argument, derived from Kuryłowicz' opposition of syntactic and semantic Case, such that it both explains the systematic semantic differences observed for Case alternation and the new forms OE constructions changed into once the morphological Case system had collapsed (section 4). We end the article with a summary of our findings.

1. *The case of the OE impersonal*

1.1 In an article in *Journal of Linguistics* 1983 we have given a description of the OE impersonal construction and an explanation for its demise, which in our view was more adequate than the accounts of the case given earlier by among others Jespersen (1927), Lightfoot (1979, 1981) and McCawley (1976). We argued as follows. For OE three constructions must be distinguished in which the so-called impersonal verbs could occur.¹ We termed these configurations 'impersonal constructions' (cf. (1)), 'cause-subject constructions' (cf. (2)) and 'experiencer-subject constructions' (cf. (3)). We will illustrate these three constructions with the verb *ofhreowan* (the examples are taken from Anderson 1986).

- (1) *him(DAT) ofhreow þæs mannes(GEN)*
 to him pity was because of the man
 'he was sorry for the man'

This type, the impersonal proper, lacks a grammatical subject. There is no agreement between the verb and a NP in the clause. The experiencer role is found most typically in the dative (as here), but the accusative Case also occurs. The cause is found in the genitive or as a PP, once or twice we have come across an accusative cause.

- (2) *þa ofhreow þam munece(DAT)*
 then caused pity to the monk
hleoflian mægenleast(NOM)
 the leper's febleness
 'then the leper's febleness made the monk feel sorry'

In this 'cause-subject' construction the cause bears nominative Case and shows agreement with the finite verb. The role of experiencer is again, as in the above construction in the dative or accusative Case.

- (3) *se mæssepreost(NOM) þæs monnes(GEN) ofhrew*
 the priest because of the man took pity
 'the priest took pity on the man'

In the 'experiencer-subject' construction it is the experiencer which takes nominative Case and is grammatically the subject of the clause.² The cause is found in the genitive or as a PP, accusative Case is not attested.

Concerning the demise of the impersonal construction, we noted first of all that it is only construction (1) which disappeared in the course of the Middle English (ME) period, constructions (2) and (3) remained. The difference with all previous explanations and ours is that we recognize no constructional change (neither syntactic nor semantic), only a loss of one or two constructions with their concomitant meanings. Thus, for all verbs, the non-nominative construction (1) was lost, most verbs remained in either a type (2) or a type (3) construction, usually not in both. For the details why sometimes (2), sometimes (3) survived, we refer to our article.

Our explanation for this loss ran as follows. We started from the notion that there was only one lexical entry and not three for impersonal verbs in OE. The implication of three separate lexical entries per verb would be that the regular appearance of these verbs in the above three construction types is purely idiosyncratic in nature rather than that it reflects an underlying productive system. The lexical entry we proposed looked as follows:

- (4)
$$\left[\begin{array}{l} \text{NP NP} \quad - \quad (\bar{S}) \\ \quad \text{NP: dative/accusative} \quad \theta\text{-role:experiencer} \\ \quad \left\{ \begin{array}{l} \text{NP: genitive/PP} \\ \bar{S} \end{array} \right\} \quad \theta\text{-role:cause} \end{array} \right]$$

The entry specifies the arguments of the verb with their respective semantic functions (or 'thematic roles' in the terminology of Chomsky (1981)) and the lexical Cases which these verbs typically assign to their arguments.³ The curly brackets indicate that the θ -role of 'cause' may be assigned to a NP or a \bar{S} . If the cause is realized as \bar{S} , the related NP can only be lexicalized if interpretable as a provisional non-argument (in accordance with the θ -criterion, which requires that there be a unique mapping between θ -roles and arguments, see Chomsky (1981:36)). In order to account for the three constructions in which the impersonal verbs could occur, we proposed that

this class of verbs had the following marked morpho-syntactic property: members of this class *optionally* assign the lexical Cases specified in their lexical entries, whereas non-impersonal verbs *obligatorily* assign the lexical Cases for which their entries are marked. If lexical Case was not assigned, the NP would receive structural Case in subject position.⁴

The demise of the impersonal construction was accounted for by the fact that the language by the late ME period lost the ability to assign lexical Case due to the collapse of the inflexional system (the language no longer showed overt Case). Case was now structurally assigned, and the verb could only assign one structural Case. Consequently the other verb arguments had to receive Case from somewhere else, the only possibility being from Tense. This meant that the nominative slot was now obligatorily filled so that a distinction could no longer be made between the subjectless construction (1) and the ones with a subject (2) and (3); effectively, (1) was lost.

1.2 Recall now that for OE we assumed that constructions (2) and (3) were the result of non-assignment of lexical Case (which was optional) to the cause or experiencer respectively, which resulted in either the cause or the experiencer argument moving to the empty subject position in order to receive Case. We did not state why Case marking was optional (or under which conditions nominative Case appeared). In a footnote (p. 357, note 11), we tentatively suggested it had something to do with the semantics of impersonal verbs, a topic we reserved for later investigation.

Van Kemenade (1985) points out that this is a weakness in our account and comes up with a syntactic motivation for the optionality of nominative Case assignment. Her argument is based on two elements; the first is the presence or absence of a feature called AGR (agreement) in tensed clauses. This feature, which governs the subject NP and gives it Case, makes it possible for nominative Case to be assigned at all. The second element in her argument concerns a generalization first formulated by Burzio (1981), which has the following content: a verb assigns Case to a NP that it governs only if it assigns a θ -role to its subject. As we will see, van Kemenade argues that this explains why nominative Case appears.

According to Chomsky (1981), the feature AGR is only found in tensed clauses (it replaces the original feature TENSE). It is nominal in nature: it possesses features like number and person; as mentioned above, AGR governs the subject position and gives it Case. AGR is furthermore

sylfan gelicode

selves pleased

'then they wanted to settle where it pleased themselves'

(*Chron E.* (Plummer) 1048.23; Healey & Venezky 1980)

In both of these examples, the antecedent of the 'reflexive' pronoun is not to be found in the same clause as the pronoun, but in a superior clause. The latter clause functions, in other words, as the mgc of the 'reflexive' pronoun. If we assume that the node AGR is absent in the minimal S containing the 'reflexive' pronoun, this clause cannot function as the mgc of the pronoun and the Binding Condition on anaphors correctly predicts that the antecedent may be found in the superior clause, which does contain AGR (there is an explicit subject showing agreement with the finite verb). In other words, the occurrence of so-called 'long reflexivization' (a reflexive pronoun with an antecedent outside its apparent mgc) in connection with non-nominative impersonals is explained by the absence of AGR in such impersonal constructions, whereas the fact that reflexivization is 'normal' in nominative impersonal verb constructions shows that for these we must assume AGR to be present.

We have to note, however, that OE does not have distinct reflexive forms (cf. Quirk & Wrenn 1957:72). Thus, the pronoun *ðin* is the genitive form of the personal pronoun *ðu* 'you' (sg) but it can, witness example (5)a, also be used reflexively. The *sylf-* forms are used in combination with personal pronouns for the sake of emphasis; such a combination may but need not be used reflexively.⁵ Therefore we cannot be certain that sentences (5)b and c really constitute examples of long reflexivization; alternatively, these *sylf-* pronouns might be analysed as personal pronouns used emphatically. In fact, we have also found examples with *sylf-* pronouns whose antecedent is in the higher clause although the embedded clause has a personal verb showing agreement, cf.:

- (6) a *Soð ic eow secge þæt ge me sylfum dydon þas*
 truth I you tell that you to me self did the
foresædan ðing,...
 above mentioned things
 'I tell you truly that you did the above mentioned things to me'
 (*AEHom* 11 426; Healey & Venezky 1980)
- (6) b *And þæt is swyðe god spell, þurh Godes tocyme*
 and that is very good message through God's coming

us to gehyrenne þæt we habban moton þa heofonlican
 to us to hear that we have may that heavenly
wununge mid him sylfum æfre,...
 home with him self ever

'and that is a very good message that we through God's coming hear that we may attain that heavenly home with him himself for ever'

(*AEHom* 8.3; Healey & Venezky 1980)

Notice that we can only explain these examples by assuming that the *sylf*-pronouns are instances of personal pronouns, used emphatically. However, this means there is no longer any compelling reason to argue differently with respect to (5)b and c. This, in turn, means of course that we can no longer draw conclusions with respect to the presence or absence of AGR in the various constructions featuring impersonal verbs. In other words, the AGR argument has lost its force; it can only be maintained on an adhoc basis. Moreover, even if AGR could be independently motivated, we would still wonder *why* it could be present or not; *why* OE impersonal verbs have this characteristic in contrast to all other verbs. Van Kemenade has solved the optionality of lexical Case assignment by placing this optionality higher up, i.e. under the presence or absence of the node AGR.

Turning back to the second point, Burzio's generalization is used to explain why a nominative not only can but also *must* appear in constructions (2) and (3). The argument is as follows: since the impersonal verb does not assign a θ -role to its subject (this is fairly uncontroversial) it cannot assign structural Case to either of its two NP arguments. Thus, if one of the NP arguments does not receive lexical Case (this being optional), it cannot get structural accusative Case from the verb either, due to Burzio's generalization; hence it can only receive Case by moving into subject position, where it gets structural nominative Case (from INFL). This is possible because, unlike in (1), AGR is present in (2) and (3). The problem with this second part of the analysis is that no motivated reason is given why the two NPs in (2) and (3) (neither of which can get structural Case due to Burzio's generalization) do not always both get lexical Case in position. In short, there still is no motivation for there being a choice available between nominative and non-nominative Case. The question that forces itself upon us is, what in fact lexical Case constitutes as opposed to structural Case. Only when an answer to this question is given can one motivate why one or the other Case is assigned.

1.3 In another Government-Binding (GB) account of the OE impersonal construction, Roberts (1984), the demise of this construction is linked with that of impersonal passives; Roberts argues that the loss of both constructions is dependent on the rise of prepositional passives in ME.

These changes all depend on a parametric change taking place in the history of English involving the loss of oblique Case.⁶ In order for a language to trigger the Oblique Case Parameter (OCP), Roberts claims, it has to show (i) the presence of overt oblique Case; if the language has no overt Case system, it is negatively marked with respect to this parameter *unless* (ii) the prepositions of that language *always* assign oblique Case.

The first condition is clear enough because the triggering mechanism can be seen to be present. Condition (ii) is a problem precisely for this reason. One has to show that prepositions assign oblique Case even if this oblique Case is not visible at surface structure. The danger of adhoc reasoning looms large.

Roberts explains the emergence of the prepositional passive (which triggers the loss of impersonal passives of type (1)) as follows. In OE, Case absorption (cf. Chomsky 1981) accounts for the movement of the object of a passive verb to subject position. In the case of prepositional objects, absorption could not take place because in OE word order (which is SOV) the preposition and the passive affix were not adjacent, and adjacency is a prerequisite for absorption; (7) illustrates this situation:



According to Roberts this is no longer the case in ME, which has SVO word order, cf.:



In (8) V and P are adjacent and therefore absorption is possible. In this particular case, it entails that *these* prepositions cannot any longer assign Case (their Case is absorbed, other prepositions still assign oblique Case); consequently, part (ii) of the triggering mechanism for the OCP no longer obtains. Since ME is also negatively marked with respect to (i), English is now negative with respect to this parameter.

The upshot of this, Roberts argues, is that impersonal passives and type (1) impersonal constructions are likewise no longer possible. They cannot be generated by the grammar because they depend on the assignment

of oblique Case.

This looks straightforward enough, but there are a great many problems with this account, of which we will only mention a few here. First of all, it does not take account of the available data. Roberts ignores the fact that impersonal verbs also appear in subject constructions.⁷ Secondly, his theory predicts that by the time prepositional passives appear, the other two constructions should be no longer possible. According to Denison (1985), the first prepositional passives occur in the 13th century, unambiguous examples of re-analysed impersonal passives are not found before the 15th century. Roberts' theory does not account for this gap. Similarly, it should be impossible for one and the same author to use prepositional passives and the two older constructions side by side. Chaucer uses all three.⁸

Far more serious is that Roberts changes the mechanism triggering the OCP to suit his own case, a clear example of ad hoc argumentation. In its first formulation, the experience necessary to trigger the OCP requires the presence of "Prepositions which assign oblique Case" (Roberts 1984:11). As we indicated above, Roberts proposes to explain the rise of prepositional passives and the loss of type (1) impersonals and impersonal passives in terms of a single parametric change, due to the loss of oblique Case assignment. This cannot be done on the basis of the above formulation. Without further motivation, Roberts reformulates it as the above mentioned condition (ii), which we repeat: "A language has oblique Case iff Prepositions *always* assign oblique Case" (p. 12; our emphasis, OF/FvdL). The new formulation is, in short, fitted to explain the facts. This is only possible because (ii) deals with a totally abstract notion of oblique Case, which cannot be falsified. We conclude that an explanation solely motivated by the facts it has to explain does not provide any insight into the reason why the changes in question took place.

1.4 An example of circular argumentation in connection with the impersonal can be found in a typological account of this case presented in Von Seeffranz-Montag's study on the development of subjectless constructions in a number of (mainly) Indo-European languages. In this study the notion of subject is defined in such a way that subjectless constructions, in e.g. OE, in fact already had a 'subject'.⁹ Thus, the change does not involve the development of a subject (as was the traditional account) but rather the development of a number of morpho-syntactic features (such as nominative Case, verb agreement, initial position) for this so-called 'subject'. According to von Seeffranz-Montag, this typically happens in languages which

move from a system with purely semantic verbal arguments to one with syntactic verbal arguments. This drift in fact provides the 'explanation': the experiencer argument — which is Von Stefranz-Montag's subject — becomes morpho-syntactically the subject. In order for this proposal to work, she must explain away the presence of impersonal verb constructions with a syntactic subject in OE, i.e. constructions (2) and (3) (cf. also note 2). Not surprisingly, therefore, she has nothing to say on what the presence or absence of nominative Case entails. For her this is only a morpho-syntactic development, involving no changes in syntactic or semantic function.

1.5 We hope to have shown that in the above cases the explanations given are marred by a lack of restrictiveness within the theory of grammar used. The notions of subject and oblique Case were not well defined, it is not clear what the feature AGR represents and what the status is of lexical Case compared to structural Case. All three studies represented (autonomous) syntactic solutions. Another study, Anderson (1986), has reacted to our 'impersonal' article from a Case grammar point of view.

This has nothing new to offer on the two questions posed in the above, i.e. (i) what is the rationale for the optionality of subject assignment for impersonal verbs¹⁰ and (ii) what semantic differences exist between the three impersonal verb constructions? He does, however, offer an interesting discussion on another point.

He argues that the lexical entry which we proposed for impersonal verbs (see (4) above) is redundant and that it can simply be replaced by the following entry:

- (9) \Rightarrow experiencer, cause (\Rightarrow ='takes as an argument')

He points out that it is not necessary to specify in the lexical entry what categorial status the arguments may have (NP or S); nor what Cases are assigned to the experiencer and the cause argument: this follows automatically from the OE Case system; nor, finally, that both arguments can become subject. He also shows that not every impersonal verb is associated with these two thematic roles and therefore suggests the following alternative entries:

- (10) a \Rightarrow experiencer (cause)
 b \Rightarrow theme (experiencer)

The first of these entries accounts for verbs with an experiencer argument and an optional cause argument (e.g. *me hyngrode*) and the second for

assigned; similarly, *efenlæcan* translates as 'resemble' and 'imitate' respectively, cf.:

- (12) a *him(DAT) folgiþ fuglas(NOM)*
 him follow birds
 'the birds follow him' (Plank 1981:20)
- (12) b *ond ða folgode(SING) feorhgeniþan (ACC PL)*
 and then pursued deadly foes
 'and then he pursued his deadly foes' (Plank 1981:20)
- (13) a *He(NOM) geeuenlæcð Gode(DAT)*
 he resembles God (Plank 1983:247)
- (13) b *þæt þa unandgytfullan(NOM) hine(ACC) geefenlæcen*
 that the unintelligent him imitate
 (Plank 1983:247)

Plank draws two conclusions from data like the above: (i) The choice of the accusative Case in combination with the nominative Case by the speaker indicates his/her point of view that the situation depicted by the sentence involves two participants playing roles that are in polar opposition with respect to each other; to use Plank's own words: "the two antagonists are... represented as maximally unlike (but nevertheless as dependent upon) each other with regard to their involvement in the situation identified by the predicate" (Plank 1981:31). The choice of the dative Case in combination with the nominative Case reveals, on the other hand, the point of view on the part of the speaker that the situation involves two participants who are "less than diametrically opposed" (p.31) There is, Plank adds, in the latter case also a participant more actively involved and one less actively involved but there is no relation of polar opposedness between the two. (ii) Since a large number of verbs in OE allows of a free choice between dative and accusative Case and since the differences in verbal meaning corresponding to the different object encodings can be shown to be systematic rather than varying from verb to verb, it is reasonable to conclude that the verbs in question "have relatively unspecific lexical meanings, these core meanings being what is invariant throughout all their occurrences, and that it is the alternative object encodings themselves which are responsible for rendering the verb meaning more specific" (Plank 1981:26). Plank concludes that we cannot speak of lexically governed dative Case in the above and like examples, a conclusion which appears to us to be fully warranted in view of the large number of convincing data he adduces. Lexical Case is,

after all, idiosyncratic Case, as it is specified in the lexical entry of the individual verb; consequently, the language learner acquires lexically governed Case per individual verb. Plank's observations entail, however, that once the basic unspecific meaning of the verb has been acquired, as well as the systematic contribution of the dative versus the accusative Case, the language learner need not memorize whether the verb allows of a choice between the two Cases or whether only the dative Case or only the accusative Case is permitted; this will depend on whether the verb meaning is such that the object may, may not or must not be understood as playing the role of a 'diametrically opposed' participant in relation to the role played by the nominative NP. Plank's account does full justice to the productivity of the system; the lexical Case approach does not.

So far we have worded Plank's conclusions only with respect to dative and accusative Case alternation. His data also includes examples showing alternation between genitive and accusative Case and he observes that this alternation follows the same lines as that between dative and accusative Case; genitive Case does not, accusative Case does induce the interpretation of a 'diametrically opposed' participant role on the part of the referent of the object. For examples, see Plank (1981, 1983).

Although in our earlier work on impersonals we noted a correspondence between such Case alternation with personal verbs as the above and Case alternation with impersonal verbs, we did not appreciate the fact that Plank's observations about the non-lexical nature of the alternation between dative/genitive and accusative Case could and should be extended to the alternation with nominative Case for impersonal verbs. The optionality of genitive and dative Case that we thought set the class of OE impersonal verbs apart as a special group,¹³ does not appear to be such an exclusive feature after all; the main difference between the personal and impersonal verbs is that the alternation with nominative Case is not available with personal verbs (in active constructions), simply because this Case is used up by another NP.

With respect to Plank's notion of 'diametric opposition' we notice, however, that it cannot be extended to the class of impersonal verbs, because the notion simply does not apply unless there is a combination of nominative and accusative Case enabling the respective NPs to be in opposition with each other.

What all this comes down to is that we still have no answer to the question how nominative and accusative Case on the one hand differ from

dative and genitive Case on the other, nor to the question how the (syntactic and semantic) differences between these Cases can be accounted for.

3. *Theories of Case*

3.1 In this section we will survey (the different versions of) the formal theory of abstract Case developed in Chomsky's GB theory. Chomsky (1980) suggests that Case assignment obeys the following principles:

- (14) (i) NP is oblique when governed by P and certain marked verbs
 (ii) NP is objective when governed by V
 (iii) NP is nominative when governed by Tense

Oblique Case, it is assumed, is assigned at D-structure, non-oblique Case at S-structure. Case as referred to in these principles should be understood as abstract Case. As Vergnaud (1979) explains, abstract Cases are syntactic features, which characterize the grammatical relation between the NP bearing this syntactic Case feature and the element assigning the Case. The morphological Case form (if any) is the overt manifestation of such a grammatical relation; it is possible that "in a given language, the morphological Case does not necessarily correspond to the syntactic Case assigned... In German, for instance, a NP with the feature [objective] (i.e. a direct object) will in general be accusative, but may also be in the dative or in the genitive after certain verbs. This is obviously due to a lexical property of the verb in question" (Vergnaud 1979:15; our translation, OF/FvdL).

It looks as if we here have a straightforward definition of lexical Case: syntactically objective, morphologically oblique. This implies that there are also syntactically oblique objects (cf. (14(i))); Vergnaud assumes indirect objects to fit in this slot. Den Besten (1981) interprets (14) differently. He analyses both indirect objects and objects with lexical (i.e. dative or genitive) Case in German as syntactically oblique. Only NPs with accusative Case are direct objects (i.e. have syntactically objective Case) in his theory.¹⁴ Notice that both Vergnaud and den Besten, though interpreting lexical Case differently, analyse NPs with lexical Case as *objects*. The importance of this will become clear later.

The Case-assignment properties that Chomsky (1981:170ff) proposes as fundamental for Case theory are the same as far as (14)(ii) and (iii) are concerned but (14)(i) is now split up as follows:

- (15) (i) NP is oblique when governed by P
 (ii) NP is inherently Case-marked as determined by properties of its V/P governor

He suggests that Case types (14)(ii) and (iii) and (15)(i) are 'structural', this as opposed to 'inherent' Case in (15)(ii); he characterizes the difference as follows: "Structural Case in general is dissociated from θ -role; it is a structural property of a formal configuration. Inherent Case is presumably linked to θ -role" (Chomsky 1981:171).

Inherent Case, vaguely defined as "presumably linked to θ -role", is now apparently proposed as a separate syntactic Case (though we are no nearer to an answer to the question what it is in fact supposed to stand for; all that seems to be clear is that such Case is lexically determined). Notice that the interpretation of oblique Case as structural implies that in this new proposal oblique Case is no longer assumed to be assigned at D-structure, as was the case in Chomsky (1980).

Yet other changes in the Case system are proposed, though in terms which are as arbitrary as they are obscure (Chomsky's own words, which we quote at some length, make this quite clear). Thus Chomsky says on p. 172 that he has "tentatively been adopting Kayne's proposal that the Case system has in part been lost in English even at the level of abstract Case, so that prepositions assign objective rather than oblique Case", adding that "In languages with richer Case systems, assignment of Case by inherent properties of the governor would require a much more extensive analysis". When following up Kayne's (theory-internal) arguments at a later stage, Chomsky becomes even harder to follow: "Suppose we assume... that "inherent Case," including now the Case assigned by prepositions, is assigned at D-structure and that "structural Case," including the Case assigned by verbs in the unmarked case, is assigned at S-structure. Suppose further that English has lost the inherent Case system; thus prepositions do not assign inherent oblique Case but rather structural objective Case, as do verbs" (Chomsky 1981:292). On the next page, the position is slightly modified again, to the extent that "the Case system is lost in English only within VP, whereas PPs that are immediate constituents of S have inherent Case-marking".

Hoekstra (1984:47) aptly summarizes the highly tentative state of the art as follows: "It has been proposed that prepositions assign oblique Case, while verbs assign objective Case... Furthermore there might be categories that determine what is called inherent Case".

Notice that in its present state the GB theory of Case does not provide a very solid foundation on which to base an account of the (history of the) impersonal construction. Notice furthermore that, due to the insistence on the autonomy of syntax, this approach is forced to postulate that all Cases are syntactically motivated, therefore in terms of either structural or lexical government. As we already pointed out, OE dative/genitive Case cannot be classified as lexical; if accusative Case is accounted for by structural government, this option is not available for dative/genitive Case either. In short, it looks as if Chomsky's government system cannot account for these Cases at all.

3.2 In this section we will discuss Kuryłowicz (1949, 1964), who proposes that Case theory should basically distinguish between syntactic and semantic Case. He divides Indo-European Case into three basic categories, i.e. the Case of the subject (morphologically: nominative Case), adverbial Case ('Case subordinate to V'; morphologically: accusative Case and a number of oblique, i.e. non-nominative, non-accusative, Cases) and adnominal Case ('Case subordinate to N'; which we will here ignore). He furthermore classifies Cases into two types, depending on what their primary function is. The primary function of a Case can be either purely syntactic, so-called grammatical Case, or semantically autonomous, so-called concrete Case.

Accusative Case, having no semantic contribution of its own, is of the former type. As Kuryłowicz (1964:181) puts it, "the acc. of the direct object is defined on purely syntactical grounds. The definition takes care of the *primary* function of the acc., viz. of its syntactical function. The acc. of the direct object is independent of the *semantic* context: there is no common meaning or semantic common denominator to all transitive verbs except that they are just transitive, i.e. *govern* the acc. of the direct object". The verb is said to *directly* govern the NP.

Oblique Cases, which in their primary function have their own autonomous semantic value, are examples of concrete Case. Its function is *adverbial*, i.e. the semantic function of the NP is established independently of the verb.¹⁵ Kuryłowicz refers to this type of Case as *independent* Case, there being no relation of government between the verb and the NP with concrete Case. He distinguishes the instrumental, the dative, the ablative and the locative Case for Indo-European; they answer the question *with whom (what)?*, to *whom (what)?*, *whence?* and *where?* respectively.

The function of nominative Case as Case-form of the subject is, evi-

dently, syntactic and it is therefore to be classified as grammatical Case.

Leaving aside nominative Case, the accusative and oblique cases have, Kuryłowicz observes, a secondary function as well. Where the primary function of grammatical Case is syntactic, its secondary function is semantic in nature, therefore adverbial. The reverse applies to concrete Case, it has a primary adverbial and a secondary grammatical function.

Examples may help to clarify the Indo-European Case system as envisaged by Kuryłowicz. Consider the following usages of the accusative Case in Latin:

- (16) a *occidere hostem(ACC)* ‘kill the enemy’
 b *Romam(ACC) ire* ‘go (to) Rome’
 c *triginta annos(ACC) vivere* ‘live (for) thirty years’

In the first example the accusative Case is used in its primary, purely syntactic, function, with the verb *directly governing* the NP. In the other two examples, however, the accusative Case, assimilating to the movement/duration character of the verbs *ire* and *vivere* respectively, expresses the semantic value similar to that of an adverb of goal/duration. Consequently, Kuryłowicz concludes, the accusative Case is here used in its secondary adverbial function. This semantic function of the accusative is contextually determined (e.g. the accusative of duration can only occur with durational verbs) which according to Kuryłowicz means that the verb governs the accusative NP. We will refer to this type of government as *indirect government* i.e. the verb governs the NP but the NP is *not* the *object* of the verb.

Concrete Case, though also like an adverb in its primary function, is not contextually determined but *independent* of the verb. Moreover, it can, and that is where it differs from true adverbs, also be used in a secondary, non-adverbial but purely syntactic function.

What happens is that certain verbs come to *require* e.g. the instrumental Case, but an instrumental Case that has been voided of its semantic contents. Under such conditions the Case endings “are apt to become mere signs of syntactical dependence, i.e. allomorphs of the acc. of the direct object” (Kuryłowicz 1964:193). These are combinatory variants of the direct object, being conditioned by “the semantic groups of verbs which govern the Case in question” (Kuryłowicz 1949:138; our translation, OF/FvdL). We will refer to this type of government as *lexical government*. The Latin verb *nocere* ‘harm’, is said to be an example of lexical government (cf. *nocere bovi(DAT)* ‘harm the ox’ vs *videre bovem(ACC)* ‘see the ox’).

The following diagram summarizes Kuryłowicz' system of adverbial and subject Case sketched in the above:

(I)

Category	Syntactic type	Function (i) = primary (ii) = secondary	Morphological type
Case of the subject	grammatical	syntactic	nominative
adverbial Case	grammatical	(i) syntactic (direct government)	accusative
		(ii) adverbial (indirect government)	
	concrete	(i) adverbial (independent Case)	oblique
		(ii) syntactic (lexical government)	

So far we have only dealt with Kuryłowicz' analysis of the relation (or non-relation) between the verb and NPs in the verb phrase and we have made no mention of prepositions and their connection with Case. Kuryłowicz treats NPs with oblique Case and NPs functioning as the object of a preposition as representing the same Case type; the first is simply a synthetic, the second an analytic example of concrete case.¹⁶ What the two have in common is that their primary function is *adverbial*, i.e. the semantic function of the NP bearing oblique Case or functioning as object of a preposition is established *independently* of the verb. Like its synthetic sister, the PP has a secondary function which is, in Kuryłowicz' terminology, syntactic; a PrE example of this secondary function is for instance *she looked after the girl*, in which the preposition *after* has lost its autonomous semantic value (compare this to *they sent him after the girl*). In short, in its primary function the NP bearing oblique Case or functioning as object of a preposition is *not* an object of the verb; rather, the oblique Case-form and the preposition are the respective overt indicators of the semantic function

of the NP. Only in its secondary function is the NP an object of the verb.

3.3 It is of course widely recognized that there is a general semantic difference between NPs with, to continue using Kuryłowicz' terminology, grammatical Case and those with concrete Case. Thus, Zubizarreta (1985:250) remarks that "There is another distinction involving the arguments of a verb... The semantic role of an argument that is realized in a prepositional phrase is restricted by the preposition: the object of *to* must be the Goal... the object of *in* must be a Location etc. On the other hand, an argument that is realized as object of the verb or as subject is semantically unrestricted". There is, in short, nothing spectacular in Kuryłowicz' approach in this respect; there is, however, one crucial difference between Kuryłowicz' assumptions and those of other approaches we are familiar with: Kuryłowicz claims that NPs with oblique Case are *adverbial* in function and not *syntactically subordinate* to the verb. A NP that is syntactically subordinate to the verb is, or so we interpret Kuryłowicz, an *argument* with respect to the verb; NPs functioning adverbially have no argument status. It is here that we differ from what is commonly assumed, i.e. that all non-adjuncts are arguments of V, subdividing into (cf. Marantz (1984)) direct arguments (objects and subject) and indirect arguments (e.g. the object of the preposition to in *Elmer gave a porcupine to Hortense*).

We can summarize our proposal as follows. In their primary function, grammatical and concrete Case stand for argument status (subject/object) and non-argument status of their NPs respectively. The reverse is the case with respect to the secondary function of these Cases. From now on, we will restrict this discussion to the primary function of each of the two types of Cases; for PrE for instance, this means we will ignore examples like *stay the night* and *look after the child*, grammatical and concrete Case in secondary function respectively. Under this restriction, the difference between arguments and non-arguments can be defined as follows: a non-argument NP is a NP whose semantic role is made overtly visible (either by a morphological Case ending, or by a preposition, or possibly both) and an argument NP is a NP whose semantic role is not made overtly visible. In section 4.2 we will go into the question how argument NPs receive their interpretation, and how exactly argument NPs differ semantically from non-argument NPs. We will furthermore distinguish between non-argument NPs whose semantic function must be compatible with the meaning of the verb (they correspond to Marantz' indirect arguments) and those functioning as a pure

adjunct, compatible with any verb. The former non-arguments are what are traditionally regarded as VP constituents.¹⁷ What they have in common, we claim, with true arguments is that they are part of the same thematic pattern as arguments; pure adjuncts are peripheral thematically.

For OE we assume that NPs with dative and genitive Case represent non-arguments (answering the questions to *whom/what?* or *where?* and *whence?* respectively) and that NPs with nominative or accusative Case represent argument NPs, because the semantic roles to be associated with each of these two Cases differs systematically (cf. section 4.2) from the type of semantic roles to be associated with dative and genitive Case.¹⁸ For PrE we assume NPs functioning as the object of a semantically independent preposition to be non-arguments with respect to the verb, whereas bare NPs are arguments.¹⁹

In order to avoid confusion between morphological and syntactic Case, we distinguish the following three syntactic Case types: subjective, objective and adverbial. In OE these correspond to morphological nominative, accusative and various oblique Cases respectively. In PrE accusative and oblique Cases have merged into one morphological form; we will refer to this morphological Case as non-nominative. We assume the following Case principles, where (18)(i) and (ii) apply to PrE and OE alike, (18)(iii)a to PrE and (18)(iii)b to OE (as before, we ignore Case in its secondary function):

- (18) (i) If NP bears subjective Case it is governed by [_{INFL} [+tense]]
 (ii) If NP bears objective Case it is governed by and adjacent to V²⁰
 (iii)a If NP bears adverbial Case it is governed by P
 (iii)b If NP bears adverbial Case it is governed by V or P or it is not governed at all

The notion of Government that we assume is that of Chomsky (1981:163):

- (19) In the configuration [_{β...γ...α...γ...β}], α governs γ, iff
 (i) α is a governor (X⁰ and [_{INFL} [+tense]]) potential governors)
 (ii) every maximal projection dominating γ also dominates α
 (iii) α is an immediate constituent of β

We will furthermore assume that PrE and OE differ as far as the directionality of government is concerned: PrE governs to the right, OE to the left.

The above principles guarantee that a NP bearing a certain syntactic

Case may only occur in certain syntactic positions; for OE, for instance, they stipulate that a subjective NP must be a sister to tensed INFL, an objective NP must be an adjacent sister to V and an adverbial NP may be a sister to V or P or it may occur in adjunct (i.e. ungoverned) position (and in no other position). We propose that the above conditions are complemented by semantic conditions,²¹ stating how NPs bearing any of the three syntactic Cases are to be interpreted. Thus the difference between a NP bearing objective Case and one bearing adverbial Case is that the former is interpreted in terms of the verb and the latter independently of the verb (in section 4.3 we explain what it takes for a NP to be interpreted in either the one or the other way). Whether these semantic conditions are met depends on the meaning of the verb as specified in its lexical entry as well as on a number of other factors, some of which are discussed in section 4.3.

Notice that in this approach one's analysis of a syntactic Case must be corroborated by semantic facts (however subtle these may be). In other words, the claim that a certain NP has objective rather than adverbial Case must be substantiated by its interpretation (i.e. in terms of the verb rather than independently); our approach guarantees, then, that one cannot simply make stipulative statements about Case to suit one's own case, since the interpretation facts cannot be manipulated.

4. *Case and the lexicon*

4.1 The Case alternations exhibited by both impersonal and personal verbs in OE are, in view of what we argued above, alternations between argument and non-argument NPs. Gruber (1976) accounts for precisely such alternations, albeit in PrE. He develops a theory of thematic relations which offers a straightforward account for the relationship between the following pairs of sentences:

- (20) a The busdriver told the police a different story
 b The busdriver told a different story to the police
- (21) a The police blamed the accident on the busdriver
 b The police blamed the busdriver for the accident

In Gruber's theory, the a-sentences are associated with the same thematic structure as their b-congeners, with the lexical entry of the verb functioning as mediator.

Let us give a brief explanation of the basic idea underlying Gruber's

(localistic) theory of thematic relations. This can be said to be the following: the actual world as perceived is a model for the way human beings conceive things and this is reflected in language. Roughly speaking, we perceive in the world entities that move from one position to another or else we perceive entities as located somewhere or other. The fact that verbs naturally classify into motional and non-motional underlines the plausibility of a theory which claims that we structure the sentences of our language along the same lines.

With motional verbs Gruber associates a thematic core pattern of theme, source and goal; with non-motional verbs one of theme and location. The theme is whatever is conceived of as moving somewhere or as located somewhere, the source is where the motion originates, the goal where the motion is directed to and the location where the theme is located.

If the classification into motional and non-motional verbs (the latter subclassifying into durational and punctual) is to be exhaustive — and Gruber intends it to be — it follows that the notion of motion is not to be restricted to concrete or physical motion. Gruber distinguishes four different modes, each of which represents a more abstract type of motion than the preceding one: positional, possessional, identificational and circumstantial. The following sentences from Gruber exemplify the possessional mode (example (22)a and b), the identificational mode (example (23)) and the circumstantial mode (example (24)) ('T', 'S', 'G' and 'L' indicate the thematic roles of theme, source, goal and location respectively; 'A' stands for agent, a role that is external to the thematic core pattern as it causes the motion rather than taking part in it):²²

- (22) a John(G/A) obtained a book(T) from Mary(S)
 b John(S/A) gave a book(T) to Bill(G)
- (23) John(A) translated the letter(T) from Russian(S) into English(G)
- (24) John(A) reported to Mary(G) from Bill(S) that he wished to see her (the clause functions as T)

On the basis of the above examples Gruber then rationalizes his theory as follows: "We will consider ourselves justified in using the term 'abstract motion' or 'abstract transition' because of the similarity in the senses of what is expressed and because of the identity of the prepositions used in all these senses" (Gruber 1976:38).

Gruber assumes a level of prelexical structure which is the input for

This entry is to be interpreted as follows. The verb expresses a transition of possession. The role external to VP, i.e. the subject, functions as source, and optionally as agent as well (examples like *the news gave me pleasure*; *cows give milk* are evidence that the agent role is optional).²³ The theme role can only be assigned to a subject or object since NPs functioning as the object of a preposition by definition locate the theme as source, goal etc. The theme can, in other words, only have argument status.²⁴ With *give* the subject position is already filled, so the theme role is assigned to the direct object.²⁵ The theme role is explicitly mentioned in the entry because even if it is given no overt form (e.g. in *he gave freely to the poor*) it is understood.²⁶ The goal role is optionally assigned by the verb. We indicate obligatory assignment of a θ -role by a verb by italicizing the role in question, and optional assignment by brackets. What the latter means is (but cf. note 26) that this role may also be realized in an alternative way, i.e. (in PrE) by a preposition; in this specific case by the preposition *to*. If a PP with *to* as head of the phrase is generated in the VP, then it is this preposition, and not the verb, which assigns the role of goal. Our claim is, in other words, that the goal can be assigned independently of the verb. That *give* can only occur with *to* and not with other prepositions also associated with the goal role, e.g. *into*, follows from the fact that the verb is subclassified as POSSESSIONAL. With a transfer of possession the goal is viewed as non-dimensional, a point. The preposition typical for direction to a point is *to* (cf. Close 1975:24). The choice of preposition is in other words predictable.

The above entry explicitly accounts for the fact that the following two sentences have the same thematic structure:

- (26) a John gave the book to Peter
 b John gave Peter the book

It also accounts for the two possible surface realizations. In the second example the NP *Peter* is assigned its θ -role directly by the verb and therefore it has the form of a bare NP. In the first example the preposition is responsible for assigning the goal role to the NP *Peter*, independently of the verb.

Let us now consider the lexical entry for the verb *obtain*:

- (27) *obtain* +V MOTIONAL goal [_{VP}---theme; source]
 POSSESSIONAL \pm agent

The crucial difference between the two entries is that in the latter the source role cannot be assigned by the verb, only by a preposition (*from*);

the absence of italics in the entry is intended to indicate this.

The most important point about our analysis is, then, that we claim that a verb selects θ -roles which do not necessarily have argument status with respect to this verb. Thus the source role with the verb *obtain* is selected by the verb though not assigned by the verb, so it never has argument status. We furthermore do not wish to exclude the possibility that other θ -roles, not mentioned in the entry of a verb, may also figure in VP. Thus in example (24) (from Gruber), *John reported to Mary from Bill that he wished to see her*, a source role crops up in the VP, i.e. *Bill* in the PP *from Bill*. The verb *report* is not regularly associated with such a source role, but the role creates no problems as far as the interpretation of the sentence is concerned because its meaning is compatible with the meaning of the verb. We will assume that PPs whose NP object bears a θ -role other than the one(s) explicated in the entry (recall that the criterion for the latter is that these roles are always understood, even if not made overt) are generated freely in the VP provided they are compatible with the semantic and thematic information in the entry of the verb. Since the PP is a sister to V, it can be assumed to have access to this information. PPs that have no selectional relation with V at all (e.g. the PP in *John is writing letters in the garden*) is not generated as a sister to V, but adjoined as a sister to the VP.

We can now extend our analysis to the OE examples of Case alternation. First, consider the verb *folgian*. We propose that this is associated with the following lexical entry:

- (28) *folgian* +V MOTIONAL *theme* [_{VP}(*location*) ----]
 POSITIONAL \pm *agent*
 (IN THE REAR)²⁷

The subject of *folgian*, the moving entity, is analysed as theme and can (presumably) at the same time be agent. The NP in the VP has the function of locating the entity in whose rear the theme moves. The verb may assign the role of location to this NP directly. In that case the NP bears objective Case (which in OE is morphologically realized as accusative Case), to signal that it is an argument of the verb. However, if the NP does not receive its θ -role from the verb (the lexical entry makes this alternative available), the NP must bear adverbial Case, to signal its non-argument status; this corresponds morphologically to the dative Case in OE, since this expresses the role of location. Notice that in the latter case, the NP is interpreted independently of the verb.

The OE verb *wunian* 'dwell'/'inhabit' can occur with an accusative NP, with a dative NP or with a PP (cf. Plank 1981:22) and is, we assume, associated with the following lexical entry:

- (29) *wunian* +V NON-MOTIONAL theme [_{VP}(location) ----]
POSITIONAL

If the verb assigns the θ -role to the NP in VP, this NP bears the sign of its argument status, i.e. objective Case (morphologically accusative). The NP may also function adverbially, the dative Case inherently expressing the role of location; if a more specific aspect of the location is to be given, prepositions like *in* or *on* can be generated. These prepositions can then be looked upon as assigning the NP its θ -role.

A double object verb like *læran* 'teach' expresses a transfer of knowledge; since it may occur with two accusative NPs (i.e. both arguments) or with a dative and an accusative NP, it can be associated with the following entry:

- (30) *læran* +V MOTIONAL source [_{VP}(goal); theme ----]
POSSESSIONAL \pm agent
(KNOWLEDGE)

Finally, an impersonal verb like *ofhreowan* 'feel/cause pity', which may co-occur with a dative and a genitive NP or with one of the two NPs in the nominative (cf. our examples (1)-(3)), can be associated with a lexical entry in which the theme is incorporated (PITY) and in which either of the roles of source and goal can be assigned by the verb. If the verb assigns a θ -role to one of the two NPs and if this NP is generated with subjective Case, then it must move into subject position so as to satisfy the condition that subjective NPs are governed by tensed INFL. The other NP may then bear adverbial Case, i.e. with a morphological Case that is inherently characteristic for its θ -role.²⁸ Thus the lexical entry for this verb looks as follows:

- (31) *ofhreowan* +V MOTIONAL [_{VP}(goal); (source) ----]
POSITIONAL
(PITY)

Two questions arise now. The first of these is connected with Case alternation in general, i.e. how is the interpretation of a NP affected by its having or not having argument status with respect to the verb? The second question concerns the impersonal alternations in particular; alternations, on the whole, between adverbial and subjective rather than objective Case.

What, we need to know, is the difference in interpretation between a NP with subjective Case and one with objective Case? We turn to these questions in the following section.

4.3 On the basis of what we have argued in the previous section, we can give the following definition of the notion *argument*:

- (32) If a NP receives its θ -role directly from the verb, this NP is an *argument* with respect to the verb

It is NPs bearing subjective or objective Case which receive their θ -role directly from the verb. For OE this means that NPs with Case that is morphologically nominative or accusative have argument status, whereas non-prepositional NPs with dative or genitive Case as well as NPs functioning as object of a preposition do not have argument status. In PrE subject and bare object NPs have argument status, and NPs functioning as object of a (semantically autonomous) preposition have no argument status.

Now it is our claim that there is the following difference in the interpretation of argument NPs and non-argument NPs: rules of interpretation identify the referent of an argument NP in terms of the verb, whereas the referent of a NP that has no argument status is interpreted independently of the verb. That is, we assume that rules of interpretation are compositional in nature; the difference between an argument NP and its alternate non-argument NP is due to the difference in identification from a compositional point of view.²⁹

It is perhaps easiest to explain that we mean with the help of some examples. Consider the following cases of PrE alternation:

- (33) a Who has taught French to you?
 Who has taught you French?

The first sentence can simply be interpreted as a request for information about the name of the French teacher, without its implying that the addressee has actually learnt any French. Sentence (33)b can, on the other hand, be understood as asking how it is that the addressee knows French. We explain this difference as follows. In the case of (33)a the addressee is identified solely in terms of its θ -role, i.e. goal; in (33)b the addressee is identified as 'the entity taught French'. To be identifiable as 'the entity taught French' implies that one has participated in the teaching process, i.e. by learning. If the NP is solely identified as goal, i.e. in (33)a, the sentence as a whole implies that the teaching has reached the goal (i.e. this must be the case for

the sentence to be true), but it does not imply that the NP (or rather its referent) must also have participated in the process by learning. In other words, argument NPs must be identifiable as playing participant roles, non-argument NPs can be said to play outsider roles. Now the meaning of the PrE verb *teach* is such that it is compatible with both a participant goal and an outsider goal, since teaching may but need not go hand in hand with learning. Incorporating such information in the lexical entry of the verb (cf. section 4.2) is, then, accounting for this specific aspect of the meaning of the verb.

A verb like *distribute* can only occur with a *to* NP, not with an indirect object NP, cf.:

- (34) a John distributed the books to the students
 *John distributed the students the books

There is, as far as the distribution process is concerned, no role attributable to the goal NP which makes it a participant in the process, presumably because the distributional process is necessarily concerned with the whole set of books, whereas what each student receives is only a subset of the set of books. The NP *the books* can, in other words, be identified as 'the entities distributed to the students' but the NP *the students* is not identifiable as 'the entities distributed the books'. Again, the lexical entry of the verb can take care of such facts.

However, sometimes the choice of object or subject is decisive for the interpretation possibilities, rather than the verb itself. Consider for instance the following pair of sentences (from Green 1974:84):

- (35) a Mary gave John an idea
 b Mary gave an idea to John

The notion of 'participant' versus 'outsider' role neatly explains the different interpretations that can be associated with these sentences. In (35)a the NP denoting *John* is interpreted as participating in the process and therefore can be seen as the conceiver of the idea, with the referent of *Mary* providing the inspiration. In (35)b we cannot interpret the referent of *John* as the conceiver of the idea, since it cannot be interpreted as participating in the process; here the idea is presented to John, ready made as it were. This also explains the difference in grammaticality between the following examples:

- (36) a David's words gave Roger a brilliant idea
 b *David's words gave a brilliant idea to Roger

(36)b is strange because the subject NP must be understood as the presenter of the idea, which is not possible for this particular subject.

Having suggested in which respect argument and non-argument NPs differ in general, let us see how we can characterize the different argument roles themselves. As mentioned above, we distinguish three argument roles, i.e. subject, direct object and indirect object. Assuming the compositional nature of interpretive rules, we can identify the three argument NPs in for instance (35)a as follows: the direct object as 'the entity given', the indirect object as 'the entity getting an idea' and the subject as 'the entity giving John an idea'. In (35)b, the NP *John*, not functioning as an argument with respect to the verb, is identified as 'goal', the direct object as 'the entity given to John' and the subject as 'the entity giving an idea to John'. In general we can say that we regard the subject of an (active) verb as an active participant, the direct object as a passive participant, and the indirect object as an indirectly active participant.

Let us consider one other PrE example of alternation, to show that the above suggestions apply to a wider area than only the alternation between indirect objects and PPs:

- (37) a We blamed John himself for his lack of success
 ?We blamed John's laziness for his lack of success
 c We blamed his lack of success on John himself
 d We blamed his lack of success on John's laziness

The NPs in the PPs in these sentences are identified in terms of their θ -roles ('source' in the case of *for* and 'location' in the case of *on*) and the direct objects as 'the entity blamed for his lack of success' and 'the entity blamed on John himself/John's laziness' in the a,b and the c,d sentences respectively. Notice that in the first two sentences the verb can be closely paraphrased as 'hold responsible' (which is why the b sentence is somewhat peculiar, indicated by the question mark) but that this paraphrase is not applicable to the other two sentences; here the verb can be paraphrased as 'put the blame for'. In other words, the conclusion that Plank (1981:26) draws with respect to Case alternation in OE, i.e. (we repeat part of the quote) that the verbs "have relatively unspecific lexical meanings... and that it is the alternative object encodings themselves which are responsible for rendering the verb meaning more specific" applies to PrE alternations as well.

Notice, too, that Plank's notion of 'polar opposition' between NPs with accusative and nominative Case in OE and the lack of such opposition between NPs with dative and nominative Case follows naturally once one

assumes that NPs with nominative Case and those with accusative Case are arguments of the verb in the sense discussed above and that a NP with dative Case is no such argument. Since argument NPs are identified in terms of the verb, they are identified as playing complementary roles in the verbal process; the dative NP is seen as playing an outsider role in this process.

Let us now see what light our suggestions about argument/non-argument status of NPs throws upon OE constructions featuring impersonal verbs and their renderings in PrE. In the case of an impersonal verb accompanied by a dative and a genitive NP (or PP), there is, according to our theory, no NP with argument status i.e. no NP which is identified as playing a participant role. The closest PrE rendering of such a construction seems to be an adjectival construction in combination with a PP, because, since a subject (nominative NP) is obligatory in PrE, the thematically empty verb *be* makes it possible for the subject to be interpreted as a non-participant. Thus our first example, *him*(DAT) *ofhreow þæs mannes*(GEN), has 'he was sorry for the man' as its PrE congener.³⁰ In our second example, *þa ofhreow þam munece*(DAT) *þæs hleoflian mægenleast*(NOM), the source NP is in the nominative and the causative interpretation is induced due to the active participant role interpretation on the part of the subject; the closest paraphrase is therefore something like 'then the leper's feebleness caused pity to the monk'. Our third example, *se mæssepreost*(NOM) *þæs monnes*(GEN) *ofhreow* comes closest to 'the priest took pity on the man', since now the goal NP is interpreted as the active participant. Lastly, consider another example:

(38) *hreaw hine*(ACC) *swiðe þæt...* (*Gen*; van der Gaaf, 1904:6)

The goal NP being in the accusative, it functions as an argument with respect to the verb and is to be interpreted as a passive participant. A straightforward paraphrase seems therefore to be 'he was much grieved that...'. The PrE adjectival-passive expression is one predictable congener of (38): in both the goal NP is 'the entity grieved', but in PrE the nominative slot must be filled and the above expression is one way to do that (an alternative is *it grieved him much that...*). Other examples with the goal NP in the accusative, which can be translated in a similar way, are for instance:

(39) *þæt hi*(ACC PL) *þæs metes*(GEN) *ne recð*(SING)
 that them the food not care is
 'that they are not interested in the food' (*Bo*; Sedgefield, 1899:171)

- (40) *and þæs(GEN) us(ACC) ne scamað na*
 and that us not shame is not
 ‘and we are not at all ashamed of that’ (*Wulfstan*; Whitelock, 1967:91)

Notice, finally, that if our analysis of examples like the last three is correct, they form straightforward counterexamples to Burzio’s generalization (which is crucial in van Kemenade (1985)): OE impersonal verbs assign Case to a NP they govern without assigning a θ -role to their subject.

5. Conclusion

In this article we have made an attempt (i) to explain why dative and genitive Case are optional with OE impersonal verbs, alternating (mainly) with nominative Case and (ii) to account for such Case alternations in terms of lexical entries that do not show the redundancy commented on by Anderson (1986) with respect to the all over grammatical system. In addition, our present account enables us to refine our earlier explanation concerning the loss of the impersonal construction proper in LME.

In order to achieve this, we developed a theory of OE Case, claiming that there is a crucial difference between nominative/accusative Case and dative/genitive Case. The NPs bearing the former Cases are *not* independently associated with θ -roles (the θ -roles in question are assigned by the verb itself), whereas NPs bearing the latter Cases *are* associated with independent θ -roles (these θ -roles are *not* assigned by the verb). We argued that the argument status of nominative/accusative NPs versus the non-argument status of dative/genitive NPs accounts for the different interpretations of the NPs: in terms of the verb or independently. We proposed that the lexical entry of a verb characterizes the various Case possibilities of the NPs thematically associated with the verb; if a verb can occur without a nominative NP, it does not have a θ -role external to the VP. The fact that Case alternations are accounted for at the level of the lexical entry reflects our view that the degree of semantic specificity of each verb is ultimately responsible for differences in possible surface realizations. OE impersonal verbs form a class from a semantic point of view in that they do not require θ -role bearing NPs which are directly involved in whatever the predicate expresses (McCawley 1976 speaks of unvolitional involvement); it is a class of verbs, in short, which can do without even one NP having argument status. OE personal verbs are, on the other hand, verbs whose meaning is

such that direct, active involvement is required on the part of at least one NP, i.e. a nominative NP.

The lexical entries we propose account for part of the meaning of the verb by specifying how the verb relates to its θ -roles (internal versus external and direct versus indirect θ -roles). We claim, in other words, that for the language learner part of the business of acquiring the basic meaning of the verb consists in learning how its θ -roles may/must be assigned. We do not suppose, then, that the presence/absence of a nominative NP in tensed clauses is due to the presence/absence of some extra syntactic feature (as does van Kemenade 1985); rather, we simply look upon tense as a necessary but not a sufficient condition for nominative Case.

It furthermore follows from our theory of Case that the loss of certain OE non-nominative constructions is due to the LME syntactic loss of adverbial Case on bare (i.e. non-prepositional) NPs (in its turn due to the morphological loss of oblique Case inflexions). This worked in combination with the late 12th century change in word order from SOV to SVO, which effected a change in the directionality of government from left to right. The loss of adverbial Case had the effect that 'NP-V-NP' strings had to be analysed as SVO if they were to fit in the ME grammatical system.³¹ Now by re-analysing impersonal verbs as personal (which involved a change in the lexical entry from two internal θ -roles to an external and an internal θ -role), the language learner could fit the relevant data into the ME grammatical system without further difficulty. The occurrence of impersonal passives led to re-analysis of the entry of the verb for similar reasons: the bare NP in impersonal passives could no longer be analysed as having adverbial Case, but was analysed as nominative.³²

The loss of *these* non-nominative constructions can therefore be straightforwardly traced back to the loss of adverbial Case on bare NPs, which triggered re-analysis of the lexical entries of the verbs involved.³³ The fact that other non-nominative constructions like *seemed that S* also disappeared from the language (i.e. that *it*-insertion became obligatory here) is not predicted by our theory of Case. We assume that this can be accounted for in terms of a change in sentential phrase structure:

OE: S \rightarrow (NP) VP

PrE S \rightarrow NP VP

The re-analysis of both active and passive impersonal verbs as personal, apparently led to such a reduction in the occurrence of non-nominative con-

structions that the language learner adopted the new pattern, positive pieces of evidence to the contrary being too far and few between to lead her/him to different conclusions.

NOTES

1) We only considered the group of impersonal verbs which McCawley (1976:194) characterized as a class of verbs that allows of a human experiencer 'unvolitionally/unselfcontrollably' involved in a situation, and therefore typically in the dative. We did not discuss the so-called weather verbs, which could also lack a grammatical subject but which did not appear with an experiencer argument.

2) Plural examples of both construction (2) and (3) exist in OE (see Fischer & van der Leek 1983, 1985). These show even more clearly, by verb agreement, the subject status of the nominative NP. Von Seeffranz-Montag (1983) ignores this evidence for (2): she believes that the nominative here is not a subject (p.109), whereas she has no explanation for the appearance in OE of (3) (p.123), which in her view should occur much later.

3) If the cause argument appears as a PP, the Case form depends on the preposition used.

4) Here we follow the notion of structural and lexical (inherent) Case as given in Chomsky (1981:171). One of the problems we were confronted with in the course of this paper is that these notions are not well-defined. The consequences of this will be shown in our discussion of van Kemenade (1985) and Roberts (1984).

5) The 'sylf-' forms in OE can function as emphatic personal pronouns in the same way that certain *-self* pronouns in PrE can, cf.:

- (i) She was beautiful, two years younger than himself

In this example, which is from Poutsma (1916), the pronoun *himself* cannot be analysed as other than an (emphatic) personal pronoun, since it has no antecedent in the sentence at all (cf. van der Leek 1980).

6) By *oblique Case* Roberts presumably means 'inherent' (Chomsky 1981:171) or lexical Case (cf. his remarks on p.9), the way it also seems to be used by Chomsky. In the course of the paper this becomes less than clear, however, since on p.9 he mentions that inherent Case is "structure determined", and on p.12, that oblique Case is "*frequently inherent*", in other words it can also be non-inherent (italics ours). Thus, it is not clear what the status of oblique Case is since it seems it can be assigned at DS (if inherent) as well as at SS (if structure determined).

7) Roberts sees these nominative constructions as a *result* of the change whereas they already existed before. He also accepts the rather dubious semantic shift, which all these impersonal verbs were said to undergo, i.e. from a causative meaning to a receptive meaning; e.g. in the case of *lician*, from causative 'please' to receptive 'like'. For an argument why this change is highly unlikely, see Fischer & van der Leek (1983:352ff.).

8) Examples from Chaucer are the following: The whiche thing only, how worthy it *es to ben wondrid upon*, thou considerest it wel thiselve certeynly. (*Boethius*, Robinson 1957:358) For which *hym likede* in his songes shewe/ T'encesoun of his wo... (*TC*, Robinson 1957:466) ...*hym was boden* make thilke tweye. (*LGW*, Robinson 1957:491)

9) Von Seefranz-Montag follows Vennemann & Harlow (1977) in this: the subject is the last noun phrase to bind an argument place of the verb. For the impersonal verbs this is the experiencer argument.

10) Anderson refers to this in note 3 (p.172). He mentions that it is not clear what non-ad hoc mechanism there is available for this optionality. He adds "on the interpretation of types (b) and (c) (our type (2) and (3) respectively) but not (a) (our (1)) as involving alternative (derivative) subject-assignments proposed below, this restriction follows from the unitary character of subject-selection". We are not at all clear as to what this means. What is clear, however, is that subject-assignment is simply seen as derivative, i.e. no semantic distinction is seen to exist between the three constructions (cf. also Anderson's note 5, p.173).

11) Elmer explicitly states that *behofian* 'need' belongs to the DESIRE class of verbs (1981:65). Anderson observes that *behofian* does not occur in type (3) constructions, which entails that he follows Elmer in his distinction between two verbs *behofian*, since *behofian* 'need' clearly occurs frequently in type (3) constructions.

12) Cf. the Dutch verb *behoeven* which is etymologically related to OE *behofian*. The Dutch verb is also used in both meanings:

- (i) *deze man behoeft hulp*
this man has need of help
- (ii) *u behoeft dat niet over te vertellen*
you are required that not again to tell
'you are not required to say that again'

13) In our 1983 article we treated occurrences of accusative Case with impersonal verbs on a par with dative and genitive Case, i.e. as lexical Case which was optional (cf. entry (4) above). We assumed accusative Case to be structural (i.e. non-lexical) when it occurred with personal verbs. As will become clear, we no longer distinguish two separate accusatives and in our present account accusative Case is never grouped with dative/genitive Case anymore. To avoid confusion, we ignore our earlier position here. Also compare note 28 below.

14) Den Besten wishes to explain the absence of passives in connection with indirect object NPs and NPs with lexical Case in German, arguing that verbs with syntactically oblique objects do not passivize.

15) The term *adverbial* should not be confused with *adverbal*. The latter term is to be interpreted as in opposition with *adnominal* whereas the former is used to indicate the function of the NP in question as *semantically independent* (which is why Kuryłowicz uses *adverbial* in opposition with *syntactic*).

16) Kuryłowicz is of course neither the first nor the last linguist to claim an analogy between Case and prepositions. Hjelmslev (1935-7) makes mention of Bernhardt (1805) in this connection. Case grammarians like Anderson and Fillmore also consider Case in this light. Thus Anderson (1971:10-11) states that Case is "represented superficially in various fashions, including inflexionally and by pre- and postpositions" and Fillmore (1968:15) suggests that "the discussion of case could be seen in a somewhat better perspective if the assignment of case forms were viewed as exactly analogous to the rules for assigning prepositions in English, or postpositions in Japanese".

17) Despite the current popularity of the so-called Small Clause theory, which analyses the NP and PP following the verb in a sentence like *John put the car in the garage* as a syntactic unit

of the category PP, we accept Williams' (1983) arguments against this theory and adhere to the traditional analysis of VP constituents.

18) Kuryłowicz seems unable to make up his mind about the status of dative Case in OE, regarding it as concrete Case while keeping open the option that indirect object datives may represent grammatical Case. In view of Plank's observations of dative/accusative alternation (including double object constructions) we see no reason to treat indirect object datives in OE differently from other datives.

19) The notion of 'semantically independent' is problematic with respect to active/passive pairs like *no one slept in this bed/this bed has not been slept in*. We ignore this problem here.

20) Double object constructions form an obvious problem with respect to adjacency to the verb. We will not discuss this problem here.

21) Kuryłowicz' claim that adverbial Case (primary function) is always un governed seems to clash with our account. The difference is that we employ a purely syntactic notion of government, following Chomsky (1981). As far as the *interpretation* of adverbial Case is concerned we follow Kuryłowicz: this is independent of the verb (and in that sense 'ungoverned').

22) With some verbs the theme role is not explicit but appears to be incorporated in the verb. Thus we assume that the verb *blame* incorporates a theme, BLAME. This assumption enables us to account for the correspondence in thematic meaning between sentences like the following:

- (i) John blamed Mary for the accident
- (ii) John blamed the accident on Mary
- (iii) John put the blame for the accident on Mary

In the third sentence the theme is lexicalized, in the other two it is incorporated in the verb.

23) In view of the division of thematic roles with verbs like *contain* vs *surround* - with *contain* the subject functions as location, the direct object as theme, with *surround* it is the other way round (Gruber (1976:47-8) argues this in view of data like the following: *the circle contains the dot/the dot is contained in the circle* vs *the circle surrounds the dot/the circle is around the dot*) - we consider the specification of the subject role in the lexical entry to be unavoidable, this contrary to the claims made by Anderson (1986).

24) The only preposition that can appear with a theme role (but not in connection with verbs, only with nouns and adjectives) is the preposition *of* (in *his gift of ten dollars to the club*). This preposition is meaningless and presumably the NP following it has argument status with respect to the (verbal) noun *gift*.

25) In section 4.2 we provide semantic reasons why PrE indirect objects must be assumed to have argument status. As arguments, they are special in that unlike subjects and direct objects they have an *invariable* θ -role, i.e. goal. It follows therefore that indirect objects are not available for the theme role. Notice by the way that we do not consider OE dative 'indirect objects' (non-arguments according to us, cf. note 18) on a par with PrE indirect objects, but as equal to *to*-NPs. The same point is made by Bennett (1980), though on different grounds.

26) This means we assume that the question whether an object is omissible or not is not accounted for in the lexicon (nor, for that matter, elsewhere in the grammar). Rather, we assume that something like Grice's Co-operative Principles (Grice 1975) can account for such matters. The difference in acceptability between e.g. the following two sentences is, we feel, due

to the fact that the second sentence is, unlike the first, totally uninformative (one can resemble anything):

- (i) John resembles his mother
- (ii) ??John resembles

Sentence (ii) violates Grice's Principle of Quantity (i.e. the speaker should be as informative as is required).

27) IN THE REAR is intended as a restrictive modifier indicating the manner of the motion, cf. Jackendoff (1976).

28) We have as yet no suggestion how the entry can formally account for the fact that with some verbs the goal NP ('experiencer' in our earlier terminology), unlike the source NP ('cause'), also occurs with accusative Case. In section 4.3 we suggest a systematic difference in interpretation between nominative and accusative NPs. We assume that such interpretation possibilities are to be held ultimately responsible for the nominative/accusative options for the goal role and the absence of source roles in the accusative.

29) The principle of compositionality ('Frege's Principle') can be stated as follows: "The meaning of the whole is a function of the meaning of the parts *and their mode of combination*" (Dowty et al. (1981:8); emphasis ours, OF/FvdL). The compositional structure of the following two sentences differs, as their syntactic structure differs:

- (i) John gave a dollar to Mary
- (ii) John gave Mary a dollar

We assume that (i) is built up as follows: *to + Mary* combines into a unit; this unit combines with *give* (ignoring tense) into a new unit, 'give to Mary'; this in its turn is combined with *a dollar* into the predicate 'give a dollar to Mary'. The sentence as a whole is true if the referent of *John* satisfies this compositional predicate. Sentence (ii), we assume, is built up differently: *a dollar + give* combines into the unit 'give a dollar'; this combines with *Mary* into 'give Mary a dollar'. The sentence as a whole is true if the referent of *John* satisfies this slightly different compositional predicate.

30) PrE evidence for the subtle yet real difference in interpretation between an adjectival and a verbal construction is, for instance:

- (i) he was hungry
- (ii) he hungered for love

The second example conveys, we think, a much more direct involvement on the part of the subject NP than the former.

31) Unless Case inflexions explicitly spoke to the contrary, as in *me thinks that S*; such expressions became idiomatic and finally disappeared.

32) This effected a change in the entry of the verb. The internal θ -role was re-analysed as directly assigned by the verb; in active constructions this NP was now predicted to have objective Case, and in passive constructions it was now predicted to have subjective Case, in accordance with the system.

33) The rise of prepositional passives can be explained by the fact that morphologically accusative and oblique Cases merged into one form, so that syntactically adverbial Case could be re-analysed as objective Case. Notice that this change is not a necessary one.

REFERENCES

- Anderson, J.M. 1971. *The Grammar of Case: Towards a Localistic Theory*. Cambridge: Cambridge University Press.
- 1986. 'A Note on Old English Impersonals'. *Journal of Linguistics* 22. 167-177.
- Bennett, P.A. 1980. 'English Passives: A Study in Syntactic Change and Relational Grammar'. *Lingua* 51. 101-114.
- Besten, H. den 1981. 'Government, syntaktischen Struktur und Kasus'. *Sprache: Formen und Strukturen* ed. by M. Kohrt & J. Lenerz, 97-107. Tübingen: Niemeyer.
- Burzio, L. 1981. *Intransitive Verbs and Italian Auxiliaries*. Ph.D. Dissertation, MIT.
- Chomsky, N. 1980. 'On Binding'. *Linguistic Inquiry* 11.1. 1-46.
- 1981. *Lectures on Government and Binding*. Dordrecht: Foris.
- Close, R.A. 1975. *A Reference Grammar for Students of English*. London: Longman.
- Denison, D. 1985. 'Why Old English Had No Prepositional Passive'. *English Studies* 66.3. 189-204.
- Dowty, D.R., R.E. Wall & S. Peters 1981. *Introduction to Montague Semantics*. Dordrecht: Reidel.
- Elmer, W. 1981. *Diachronic Grammar; The History of Old and Middle English Subjectless Constructions*. Tübingen: Niemeyer.
- Fillmore, C.J. 1968. 'The Case for Case'. *Universals in Linguistic Theory* ed. by E. Bach & R.T. Harms, 1-88. New York: Holt, Rinehart & Winston.
- Fischer, O.C.M. & F.C. van der Leek 1983. 'The Demise of the Old English Impersonal Construction'. *Journal of Linguistics* 19, 337-368.
- 1985. Review of von Seeffranz-Montag 1983. *Journal of Linguistics* 21. 497-503.
- Gaaf, W. van der 1904. *The Transition from the Impersonal to Personal Construction in Middle English*. Heidelberg: Winter.
- Givón, T. 1979. *On Understanding Grammar*. New York: Academic Press.
- Green, G.M. 1974. *Semantics and Syntactic Regularity*. Bloomington: Indiana University Press.
- Grice, H.P. 1975. 'Logic and Conversation'. *Syntax and Semantics 3: Speech Acts* ed. by P. Cole & J.L. Morgan, 41-58. New York: Academic Press.

- Gruber, J.S. 1976. *Lexical Structures in Syntax and Semantics*. Amsterdam: North Holland.
- Healey, A. & R.L. Venezky (eds.) 1980. *A Microfiche Concordance to Old English*. The Dictionary of Old English Project. Centre for Medieval Studies, University of Toronto.
- Hjelsmlev, L. 1935-7. 'La catégorie des cas'. *Acta Jutlandica* 7.1. i-xii, 1-184; 9.2. i-vii, 1-78.
- Hoekstra, T. 1984. *Grammatical Relations in Government-Binding Theory*. Dordrecht: Foris.
- Jackendoff, R. 1976. 'Toward an Explanatory Semantic Representation'. *Linguistic Inquiry* 7.1. 89-150.
- Jespersen, O. 1927. *A Modern English Grammar on Historical Principles*. Vol. 3. London: Allen & Unwin.
- Kemenade, A. van 1985. 'Casusabsorptie in Oudengelse onpersoonlijke constructies'. Paper given for the Linguistics in the Netherlands conference, January 1985. Unpublished.
- Koster, J. 1983. 'De ontsemiotisering van het wereldbeeld'. *Tilburg Papers in Language and Literature* 40.
- Kuryłowicz, J. 1949. 'Le problème du classement des cas'. J. Kuryłowicz 1960. *Esquisses linguistiques*, 131-150. Wrocław-Kraków: Zakład Narodowy Imienia Ossolińskich Wydawnictwo Polskiej Akademii Nauk.
- 1964. *The Inflectional Categories of Indo-European*. Heidelberg: Winter.
- Leek, F.C. van der 1980. 'Reflexive or Non-Reflexive?'. *Dutch Quarterly Review of Anglo-American Letters* 10.2. 124-146.
- Lightfoot, D.W. 1979. *Principles of Diachronic Syntax*. Cambridge: Cambridge University Press.
- 1981. 'The History of Noun Phrase Movement'. *The Logical Problem of Language Acquisition* ed. by C.L. Baker & J.J. McCarthy, 86-119. Cambridge, Mass.: The MIT Press.
- McCawley, N. 1976. 'From OE/ME 'Impersonal' to 'Personal' Constructions: What Is a 'Subjectless' S?'. *Papers from the Parasession on Diachronic Syntax* ed. by S.B. Steever et al. 192-204. Chicago: Chicago Linguistics Society.
- Marantz, A. 1984. *On the Nature of Grammatical Relations*. Dordrecht: Foris.
- Plank, F. 1981. 'Object-Encoding in Old English'. Unpublished ms.
- 1983. 'Coming into Being among the Anglo Saxons'. *Current Topics in*

- English Historical Linguistics* ed. by M. Davenport et al., 239-278. Odense: Odense University Press.
- . 1984. 'The Modals Story Retold'. *Studies in Language* 8.3. 305-364.
- Poutsma, H. 1916. *A Grammar of Late Modern English*. Part II, iB. Groningen: Noordhoff.
- Quirk, R. & C.L. Wrenn 1957. *An Old English Grammar*. 2nd ed. 1973. London: Methuen.
- Roberts, I. 1984. 'Oblique Case in the History of English'. Unpublished ms. 1-16.
- Robinson, F.N. 1957. *The Complete Works of Geoffrey Chaucer*. 2nd ed. London: Oxford University Press.
- Sedgefield, W.J. 1899. *King Alfred's Old English Version of Boethius' De Consolatione Philosophiae*. Oxford: Clarendon Press.
- Seefranz-Montag, A. von 1983. *Syntaktische Funktionen und Wortstellungsveränderung: die Entwicklung 'subjektloser' Konstruktionen in einigen Sprachen*. München: Wilhelm Fink Verlag.
- Stowell, T. 1981. *Origins of Phrase Structure*. Ph.D. Dissertation, MIT.
- . 1983. 'Subjects across Categories'. *The Linguistic Review* 2. 285-312.
- Thomason, R.H. (ed.) 1974. *Formal Philosophy. Selected Papers of Richard Montague*. New Haven: Yale University Press.
- Vennemann, Th. & R. Harlow 1977. 'Categorial Grammar and Consistent Basic VX-serialization'. *Theoretical Linguistics* 4. 227-254.
- Vergnaud, J.R. 1979. 'Quelques éléments pour une théorie formelle des cas'. Unpublished ms.
- Whitelock, D. 1967. *Sweet's Anglo-Saxon Reader*. Oxford: Clarendon Press.
- Williams, E. 1983. 'Against Small Clauses'. *Linguistic Inquiry* 14.2. 287-308.
- Zubizarreta, M.L. 1985. 'The Relation between Morphophonology and Morphosyntax: The Case of Romance Causatives'. *Linguistic Inquiry* 16.2. 247-289.