

# **The Synchrony and Diachrony of the English Prepositional Passive: Form, Meaning and Function**

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2000

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THE SYNCHRONY AND DIACHRONY OF THE ENGLISH  
PREPOSITIONAL PASSIVE: FORM, MEANING, AND FUNCTION

DISSERTATION

Presented in Partial Fulfillment of the Requirements  
for the Degree Doctor of Philosophy  
in the Graduate School of The Ohio State University

By

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\*\*\*\*\*

The Ohio State University

2000

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## ABSTRACT

The English language has been examined by scholars more than practically any other language, and both its synchronic and diachronic aspects are relatively well-known. Despite this intense scholarly activity, though, there are some areas of the syntax of English that remain as puzzles.

One such area is the prepositional passive (P-Passive), in which the passive subject corresponds to the object of a preposition (P) in the active (e.g., *He was laughed at*). This syntactic construction is noteworthy in many respects. In particular, it is cross-linguistically rare and even in English, it is not found before Middle English (ME). Furthermore, many non-syntactic factors affect the P-Passive, thus presenting analytic challenges to most current syntactic theories. For these reasons, the P-Passive and the changes it has undergone constitute an important topic in English synchronic and diachronic linguistics which can provide valuable insights into the general nature of language, and into the form and causes of language change.

This study, which is aimed at showing how form, meaning, and function interact with one another in the synchrony and diachrony of language, pursues the following two primary goals: (a) to present an overall picture of the changes in the English P-Passive, showing the effects of various system-internal and system-external factors in bringing them about, and (b) to provide a new analysis of this syntactic construction in contemporary English which incorporates both formal and functional aspects of the construction.

Specifically, this study proposes that the advent of the prepositional passive was a long-term, multi-faceted morphosyntactic change that was eventually triggered by a

'subject-requirement constraint' and the consequent obligatoriness of NP-movement out of PP in passive structures, which resulted in the syntactically-triggered incorporation of P into verb (V). In particular, it is shown that although both the P-Passive and the so-called reanalysis of V and P, in their periphrastic forms, began to develop in ME, their advent cannot be considered innovative purely within the ME period because they already had OE antecedents in disguised forms, which played significant roles in their emergence.

As for the P-Passive in contemporary English, a set of new proposals are made to deal with not only the P-Passive type involving a complement PP (e.g., *It was looked into*) but also the type involving an adjunct PP (e.g., *The bed was slept in*). In particular, this study argues against both the Reanalysis Hypothesis and the No-Reanalysis Hypothesis about the unification of V and P into a single structural unit and proposes obligatory syntactic incorporation of P into V which is triggered by passive morphology. This study also explains what really determines the passivization possibilities of prepositional objects by proposing one formal and two functional factors (i.e., complementhood, affectedness, and characterization). Finally, a set of formally adequate formulations of the proposals made for the P-Passive are provided within the Head-Driven Structure Grammar framework, showing that the alternative account can be given a coherent treatment within a current theoretical framework.

In conclusion, the results of this research demonstrate the interdependence between various components of the grammar by showing that a typical 'syntactic' change is not purely syntactic in nature, but rather requires input from practically every domain of the grammar in order to be fully understood. Further, the analysis proposed for the P-Passive in contemporary English illustrates how formal and functional factors interact with each other to form a major syntactic construction and to determine its grammaticality and acceptability.

Dedicated to my parents

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## PUBLICATIONS

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5. Goh, Gwang-Yoon. "What diachrony says about the English *tough*-construction", *The Coyote Papers for the 18th WCCFL Conference*. (2000).

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#### FIELDS OF STUDY

Major Field: Linguistics

English Linguistics; Historical Linguistics, Syntax, Morphology, and Pragmatics

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## LIST OF SYMBOLS AND ABBREVIATIONS

»	more oblique than (for OH); immediately precedes (for LP rules)
(( ))	potential (for OE morphological case features)
*	ungrammatical or unattested (before a linguistic form)
+	marked case
?	marginally grammatical or acceptable
??	hardly acceptable
ℓ	(unmarked) potential case
—	(unmarked) negative case
ACC	object case in ModE
acc	accusative
BT	Bosworth & Toller's (1898) <i>Anglo-Saxon dictionary</i>
BTs	Toller's (1921) <i>Supplement</i> to Bosworth & Toller (1898)
case <sub>i</sub> / case <sub>j</sub>	case <sub>i</sub> or case <sub>j</sub>
case <sub>i</sub> , case <sub>j</sub>	case <sub>i</sub> and case <sub>j</sub>
COD	complement object deletion
COE	Toronto OE Concordance by Venezky & Healey (1980)
DAT	prepositional or periphrastic dative in ModE (i.e., <i>to</i> +NP or <i>for</i> +NP)
dat	dative
DO	direct object
DPO	displacement of PO from PP and its occurrence in a non-canonical position
*DPO	constraint against DPO

fem	feminine
GB theory	Government and Binding theory
GEN	prepositional or periphrastic genitive in ModE (i.e., <i>of</i> -NP)
gen	genitive
HPSG	Head-Driven Phrase Structure Grammar
<i>i, j</i>	coreferential index
instr	instrumental
IP	indirect passive
IQPH	Implied Quality Predication Hypothesis
LP rule	linear precedence rule
masc	masculine
ME	Middle English
MI	morphological incorporation
ModE	Modern English
N	noun
neut	neuter
nom	nominative
NP	noun phrase
O	object
OE	Old English
OH	obliqueness hierarchy
OT	Optimality Theory
P	preposition
P-Passive	prepositional passive
P-Stranding	prepositional stranding
P-V CV	preposition-verb compound verbs

P-V Passive	passivization of PO through MI of P into V (i.e., P-Passive in disguise)
pl	plural
PO	prepositional object
PP	prepositional phrase
pres	present
pret	pretirrit(e)
ptc	participle
RHR	Righthand Head Rule
S	subject (for an NP); strong verb (with a number that indicates verb class)
sb	somebody/a person
sg	singular
SI	syntactic incorporation
sth	something/a thing
SUBCAT	subcategorization
TC	<i>tough</i> -construction
V	verb
V <sub>i</sub>	intransitive verb
VP	verb phrase
V <sub>t</sub>	transitive verb
W	weak verb (with a number that indicates verb class)

## CHAPTER 1

### INTRODUCTION

#### 1.1. Problems and the Purpose of the Study

A preposition (P) in Modern English (ModE), as in most other languages which have prepositions, is normally followed by its object and occurs right before it, as in (1a); this is also true even when the preposition is in a non-canonical position, as in (1b):

- (1) (a) I am very grateful for your help.  
(b) For your help I am very grateful.

In addition, the subject in a passive clause, again as in most other languages, usually corresponds to the direct object (DO) of a verb (V) in the corresponding active clause, as in (2):

- (2) (a) The butler murdered the detective.  
(b) The detective was murdered (by the butler).

Contrary to the expectations from these observations, however, both **prepositional stranding** (P-Stranding), the phenomenon in which a preposition is not followed by its

object,<sup>1</sup> and the **prepositional passive** (P-Passive), the passive type in which the subject of the passive corresponds to the object of a preposition in the active, are possible in ModE, as in (3) and (4), respectively:

- (3) (a) He is someone on whom you can always rely.  
(b) He is someone whom you can always rely on.  
(4) (a) Everybody stared at her.  
(b) She was stared at by everybody.

When viewed from a cross-linguistic perspective, the facts in (3) and (4) take on a special significance, for P-Stranding and the P-Passive are extremely rare among languages of the world (Croft 1990, Denison 1993). Moreover, from a diachronic perspective, these facts are also striking, because Old English (OE) was different with regard to these syntactic phenomena, having no P-Passive in any form and only a highly restricted form of P-Stranding, as in (5) and (6):

- (5) heo wæs swiþe fæger an to locianne  
it was very beautiful at to look  
'it was very beautiful to look at' (Or 74. 11)  
(6) is stow elreorðe men beoð on  
is place barbarous men are in  
'there is a place barbarous men live in' (Marv 18. 1)

<sup>1</sup> In general, the object of a preposition takes a non-canonical position (usually, the initial position of the clause), leaving the preposition stranded or "deferred" (in the terminology of Quirk et al. (1985)) at the end of the clause.

From synchronic and theoretical standpoints, the analysis of P-Passive has been one of the most difficult problems in current syntactic frameworks because of its cross-linguistic rareness and its sensitivity to various non-syntactic factors. Note, for instance, the following passive examples which interestingly differ in acceptability even though the two passive sentences of each pair share the same verb phrase (i.e., *sleep in* and *sat on*, respectively) and would therefore both be expected to be of equal acceptability:<sup>2</sup>

- (7) (a) The bed was slept in. (cf. We slept in the bed.)  
 (b) \*Columbus was slept in. (cf. We slept in Columbus.)
- (8) (a) The bench is to be sat on.  
 (b) ??The bench was sat on (by John). (cf. John sat on the bench.)

Note that a link between the P-Passive and the phenomenon of P-Stranding is highly likely since P-Stranding occurs necessarily in the P-Passive. Thus, for the reasons we have considered so far, the P-Passive and other related constructions involving P-Stranding and the changes they have undergone constitute an area of considerable interest in English diachronic and synchronic syntax, as the rather large literature on the topics indicates (see next section).

This thesis is aimed at providing a thorough investigation of the English P-Passive, and solving the diachronic and synchronic puzzles it poses. In particular, this study pursues the following two main goals: (a) to present an overall, accurate picture of the changes in the P-Passive and related constructions, showing how various factors worked together to bring about the changes, and (b) to provide a theoretically well-informed

<sup>2</sup> The following system of marking grammaticality or acceptability is used throughout this study: Asterisk (\*) = ungrammatical; double question mark (??) = hardly acceptable; single question mark (?) = marginally grammatical.

analysis of the P-Passive in contemporary English that improves upon existing treatments by incorporating both formal and functional aspects of the construction.

## 1.2. Overview of Previous Studies and Outstanding Questions

As is well known, OE did not have the passive type *He was laughed at*. This type of passive, called the prepositional passive or pseudo-passive began to appear in the early 13th century, but remained rare until the end of the 14th century (Mustanoja 1960: 440-1, Denison 1985, 1993: ch.7).<sup>3</sup>

- (9) Bot nu þan am i after send  
 but now when am I after sent  
 'But now when I am sent for'  
 (a1400 (a1325) *Cursor* 14216 [Denison 1993: 126])
- (10) Litel is he louid or lete by þat suche a lessoun techip  
 little is he loved or thought of who such a lesson teaches  
 'He is little loved or valued who teaches such a lesson'  
 (c1400(a1376) *PPI. A* (1) 11.29 [Denison 1993: 126])

The P-Passive is not found in what Denison (1993: 125) calls "Standard Average European", though there is something similar in mainland Scandinavian languages. P-Stranding, of which the P-Passive is one special kind, is extremely rare crosslinguistically and also freer in modern English than in most other European languages, as we have already considered in the previous section. Thus, the advent of the English P-Passive, along with the changes in P-Stranding, constitutes an interesting question in English

<sup>3</sup> Another type of passive that OE didn't have is the indirect passive (IP), which takes as its subject an NP (BENEFACTIVE) corresponding to the indirect object in the active (e.g., *I was given the book*). It became a feature of English usage in the 15th century (Mustanoja 1960).

historical syntax and has been the main focus of many studies in English historical linguistics; consequently, various proposals have been made, considering almost every identifiable important factor involved for a more satisfactory account of the change. In this section, I will re-examine major proposals from the earlier works in order to see what indispensable insights we can derive from them and what (logical) gaps still need to be filled.<sup>4</sup>

Some studies attribute the advent of the P-Passive to a change in the nature of the English passive rules or in the scope of their application. Lightfoot (1979) claims that OE and Middle English (ME) had only a lexical passive rule but English came to have a transformational passive in the early ModE period (15th to 16th century).<sup>5</sup> Lightfoot (1981a) says that OE had no P-Passive (or indirect passive (IP)) because the movement for such a passive would cause a conflict in the case of the moved noun phrase (NP) (i.e., base-assigned oblique case vs. structurally assigned nominative case) and that the loss of base-generated oblique case in ME made the P-Passive possible. Even if the problems with his dates and 'catastrophic' explanation could be ignored and his rules and case distinction are taken for granted,<sup>6</sup> Lightfoot still has to explain why OE (and even ME, according to his claim) only had a lexical passive (as in Lightfoot (1979)) and why even the impersonal P-Passive didn't occur in OE (cf. Mitchell 1985: §855), since this passive form would not create the case conflict assumed in Lightfoot (1981a).<sup>7</sup>

On the other hand, Bennett (1980) claims that English has always had both rules for lexical and transformational passives but that the scope of the relation "direct object" was

extended to some POs.<sup>8</sup> Above all, though, he has to answer why and how POs came to be regarded as "direct objects". That is, what brought about the changes in the rules or their application posited as the cause of the appearance of the P-Passive? Without a suitable answer, any argument along these lines would be circular.

P-Stranding has also been proposed as the cause or a main factor of the advent of the P-Passive. Thus, van der Gaaf (1930: 8) and Mustanoja (1960: 113, 441) claim that P-Stranding in V-P word order is significant for the origin of the P-Passive and its subsequent development. However, as Denison (1985: 197) notes, the P-Passive in early examples occurred also with P-V order.

On the other hand, Allen (1980a, 1980b) connects the change in P-Stranding with the advent of the P-Passive as follows. First, OE had a constraint on movement out of prepositional phrase (PP), which made P-Stranding caused by processes other than deletion impossible.<sup>9</sup> Then, the superficial similarity among relative clauses in the ME period prompted speakers to extend P-Stranding from *pe*-relative clauses to other *wh*-relative clauses, and finally, the P-Stranding with *wh*-relatives spread to other prepositional constructions like the P-Passive.

The fact that *which* was virtually indeclinable seems to be in accord with the claim that *which*-relative clauses (and later *who*-relative clauses as well) acquired P-Stranding by analogy with *pe*- or *that*-relative clauses.<sup>10</sup> Note, however, that the distinction between the two types of relatives has been very clear since OE, because pied-piping has never been allowed for relative *that* (or its OE counterpart *pe*)<sup>11</sup> and also because *which* has

<sup>4</sup> For previous analyses of the P-Passive in contemporary English, see Chapter 6.

<sup>5</sup> A lexical passive is derived by a local rule which permits only the verbal argument NP (= DO) to be moved into the subject position, whereas a transformational passive is derived by a more general syntactic process that moves an NP from anywhere within the VP into the subject position.

<sup>6</sup> The dates suggested by Lightfoot (1979) do not correspond to the rise and development of the P-Passive (and IP) (Lieber 1979, Denison 1993: 156). Moreover, his 'catastrophic' explanation, which predicts near-simultaneity in the developments of the new passives, is not compatible with their gradual development.

<sup>7</sup> In the impersonal P-Passive, the prepositional object remains within PP without becoming the passive subject. This type of passive is found in some languages including German, Icelandic, and Old Norse.

<sup>8</sup> Note that OE also had certain [V+P] collocations in which the [V+P] combination expresses a single predicate and governs a DO-like PO (Visser 1963-73: 391).

<sup>9</sup> Allen assumes that OE had relative clauses via deletion (e.g., with *pe*) or movement (e.g., with *se* (*pe*)).

<sup>10</sup> *Hwilec* 'which' in OE was declined like an adjective but in ME its declension reduced to simple singular  $\emptyset$  vs. plural *-e*. Thus, ME *which* could hardly be said to show features such as case, number, and gender.

<sup>11</sup> Pied-piping is the phenomenon in which P is moved along with its complement (*wh*-)NP to the front of clauses. More generally, in pied-piping, the movement of  $\alpha$  in the structure [ $\beta$  . . .  $\alpha$  . . .] causes the movement of  $\beta$  (Culicover 1997: 392).

never been used as a complementizer. Therefore, the basis for the proposed analogy may not be solid enough. Furthermore, Allen's spreading scenario is not compatible with the dates of earlier examples: the P-Passive and new P-Stranding patterns began to appear almost at the same time and remained rare until the end of the 14th century (Denison 1993: 125, 132, Fischer 1992: 390, Mustanoja 1960: 440-1). At best, this means that P-Stranding began to spread to the P-Passive as soon as it began to be allowed in *wh*-relative clauses and long before it was fully established in any new P-Stranding constructions. In short, although changes in P-Stranding are clearly related to the advent of the P-Passive, how they are related is yet to be explained.

Many studies (e.g., Hornstein & Weinberg 1981, Fischer & van der Leek 1981, and Kemenade 1987) posit the mechanism of *reanalysis*, adopted from Chomsky (1965, 1974) by van Riemsdijk (1978: 218-26), to explain the P-Passive synchronically and/or diachronically.<sup>12</sup> This process of reanalysis makes a unit of the contiguous V and P, which are "listed in the lexicon as semantic units", by optionally introducing "an extra pair of V-brackets" (van Riemsdijk 1978: 222). Applying the insight concerning the reanalysis of V and P to an account of the rise of the P-Passive seems to be promising, and even necessary for later stages at least, since sufficient evidence for the unification of V and P is found in the ModE P-Passive construction.<sup>13</sup>

For this process to be fully justified as a major factor in the advent of the P-Passive, however, some significant aspects need to be better explained. Above all, we must answer

<sup>12</sup> The proposal of reanalysis was envisioned much earlier by Jespersen (1909-49: part III, vol. II. 15.74) who said "... nothing hinders us from saying that *take notice of* is a verbal phrase governing an object (*me*), which can be made into the subject if the whole phrase is turned into the passive". Generative linguists provide a formal model of what Jespersen's reanalysis would entail.

<sup>13</sup> For example, V and P of prepositional verbs in the P-Passive form a single cohesive unit which cannot be broken up by other material, whereas other material can intervene in the active form, as follows:

- (i) a. The committee agreed unanimously on the resolution.  
       b. \*The resolution was agreed unanimously on by the committee. (Radford 1988: 428)
- (ii) a. Napoleon slept fitfully in that bed.  
       b. \*That bed was slept fitfully in by Napoleon. (van Riemsdijk 1978: 222)

what made such a reanalysis possible and why it happened in ME. Furthermore, we have to explain why OE didn't have a similar reanalysis since combining V and P in OE can be considered much easier in that OE had so many morphosyntactically and semantically transparent compounds which consist of a prepositional prefix and a simplex verb (P-V compounds, e.g., *ofer-climban* 'to climb over'). In fact, many OE P-V compounds are much closer to their later English V+P phrasal counterparts than to the corresponding later English P-V compounds. That is, their meanings and argument structures can be compositionally reconstructed and they often have highly interchangeable synonymous V+P phrasal counterparts. (Kim 1997; Goh 1999, 2000; see Section 5.3). Thus, this consideration makes us wonder whether the reanalysis of V and P is indeed an innovation purely of the ME period.

The lexicalization of V and P collocations has also been proposed as the cause of the P-Passive. For example, Fischer (1992: 386-7) says that after most OE prefixes disappeared, many OE P-V compounds with an inseparable prefix (e.g., *be-sprecan* 'to speak about') were simply replaced in ME by a new V-P combination, thereby making the semantic function of the new PO identical with that of a verbal DO and facilitating the lexicalization of the new V-P combinations.

Although the lexicalization of some V-P collocations may have been helpful for the reanalysis of V and P and the emergence of the P-Passive, invoking it also leaves some important questions untouched. First, OE also had V-P collocations whose prepositional objects are parallel to verbal DOs in semantic function (e.g., *blissian on* 'to rejoice in', *wundrian ymb* 'to be astonished at', *wynsumian on* 'to rejoice in'; Visser 1963-73: 391, Denison 1985: 193). Why then is it that English didn't have the P-Passive at all, including the impersonal P-Passive, until ME? Moreover, not only is it the case that many unlexicalized combinations of V and P can be used in the P-Passive (e.g., *The bed was slept in*) but it is also true that some combinations of that kind (e.g., *run at*, *waded over*,

*spat upon*, etc.), which are difficult to regard as lexicalized, were used even in early examples (Denison 1985: 193). Finally, although it seems reasonable to argue that the semantic affinity of some V-P collocations with certain individual verbs (e.g., *look into* vs. *investigate*) helped the reanalysis of V and P and NP movement out of PP, why is the evidence of reanalysis found only in passive? All this means that lexicalization may be necessary but not sufficient for the advent of the P-Passive (see Section 6.3).

The loss of case inflection and the subsequent reanalysis of a dative object as a passive subject have been proposed as a cause of the rise of the P-Passive as well as of the IP (van der Gaaf 1930, Lightfoot 1981, van Kemenade 1987, etc.). On the one hand, this position does not seem to be easy to maintain because OE had no impersonal P-Passive (Denison 1985: 195-6).<sup>14</sup> So a sentence equivalent to *\*Her was talked to* is not attested in OE. However, the loss of case inflection seems to have played an important role in the advent of the P-Passive by eliminating the formal distinction among NP objects of different morphological cases, thereby motivating the change in the way of representing and maintaining relative obliqueness among NP arguments, as will be discussed later in Chapters 3 to 5.

Besides those we have considered so far, many other factors, e.g., semantic roles or types (e.g., Denison 1985, 1993: 140-141, Thornburg 1985; cf. Vestergaard 1977, Couper-Kuhlen 1979), social variations and borrowing (e.g., Wurff 1992a), and fixing of SVO word order among others, have been proposed.<sup>15</sup> One common feature of most earlier studies is their emphasis on isolated aspects of and factors responsible for the given change. Despite the potentially significant role of each, however, none of the generally accepted main factors are sufficient on their own to explain the advent of the P-Passive. Thus, the problem is that few previous studies have shown how these main

factors can be logically and coherently put together to bring about the new passive. Furthermore, even after we succeed in refining and integrating these main factors, we may need other complementary factors to fill some significant logical gaps in the resultant integrated account – gaps which are difficult to identify until a well-woven overall picture of the change is drawn.

As for P-Stranding, on the other hand, most previous studies (especially in the framework of generative syntax) have centered on the theoretical analyses of P-Stranding constructions. Among major proposals are the movement of a null operator in *pe*- and *that*-relative clauses (Chomsky 1977a, Chomsky & Lasnik 1977), the process involving the inversion of P and PO (= movement of PO to the left of P as an escape-hatch), *wh*-fronting, and the deletion of *pe* or *pær* (Vat 1978), *wh*-movement for P-Stranding through an escape hatch and NP-movement for the P-Passive through the reanalysis of V [P NP] to [V P] NP (Riemsdijk 1978), unbounded deletion of PO under identity (Maling 1978, Allen 1980a, 1980b), the extension of reanalysis of V and P (in the P-Passive) to P-Stranding by *wh*-movement (Koma 1981), and the movement of PO as an empty clitic pronoun *pro* to the left of P and to COMP (Kemenade 1987).

The problem with these studies is that they often ignore or neglect the motivations underlying the linguistic phenomena involved and their changes. Thus, they generally ascribe the given changes to 'changes in rules' without explaining why 'rule changes' occur(red) at all.

In short, most previous studies have focused on some subset of factors involved in the advent of the P-Passive and the changes in P-Stranding, thereby failing to show why OE differed from ModE with regard to these linguistic phenomena and why the OE situation would have begun to change, to give the constructions found in later English. In particular, they fail to provide an overall, accurate picture of the changes which shows how relevant system-internal and -external factors worked together to bring them about.

<sup>14</sup> Though the impersonal P-Passive is theoretically possible in OE and is actually found, e.g., in German.

<sup>15</sup> Denison (1985, 1993: ch.7) has a good summary along with some relevant comments.



### 1.3. Historical Syntax, Explanations, and Evidence

Despite considerable recent research and its success in identifying various changes and their theoretical analyses in English historical syntax, there is good reason to believe that the question of what really caused the changes has not been sufficiently addressed. In particular, recent studies in (English) historical syntax have heavily centered on exploring the theoretical implications of particular formal approaches to (English) grammar by applying relevant formal accounts to certain diachronic facts. Thus, they have often been employed to support (a particular position of) the given syntactic theory rather than to actually account for the relevant linguistic changes, sometimes even tailoring historical changes and their accounts to the expectations from principles of grammar (e.g., Lightfoot 1981b, 1991).

This study, which is intended to differ from such studies in generative syntax and to remedy the situation caused by them, will focus more on the actual changes themselves and what is behind the changes rather than on their formal/theoretical accounts within a particular theory of syntax.<sup>16</sup> In particular, the discussions and results of this research are intended to be dependent on as few theory-specific assumptions as possible so that they can stand alone, regardless of the particular theoretical framework for syntactic analysis one might subscribe to, since experience has shown that the usefulness of highly technical, theory-bound arguments is likely to be short-lived. Thus, my approach will mainly be descriptive, rather than formalistic, often opting for a straightforward use of traditional terminology, in order to make this study accessible to scholars working within any formal

<sup>16</sup> As Harris & Campbell (1995: 5) put it, the primary concern of this study will not be how historical facts can be accommodated within a particular theory, but rather what the given historical facts tell us about language change and linguistic theory.

or informal framework. Following Mitchell (1985: vii), my concern will be “to describe and appreciate the tomato rather than to label it ‘fruit’ or ‘vegetable’”.

As for explanations of linguistic or syntactic changes, this study will pay more attention to historical changes than to their results. One notorious example of looking at the aftermath of diachronic changes for their accounts is the so-called ‘rule change’ as an account of language change. This position, which has been quite widely held especially in generative studies, takes as its starting point the results of diachronic changes rather than the changes themselves and is more attentive to abstract underlying forms than surface forms which are usually more accessible to speakers. Above all, it often ignores or neglects the motivations underlying the linguistic phenomena involved and their changes. Furthermore, it is quite doubtful whether this ‘rule change’ can constitute a true explanation of any linguistic change by itself, because one should still answer what really brings about the change in rules. Thus, ‘rule change’ needs to be further explained before it can be considered a reasonable account of language change (Hock 1991: 254-60; Joseph 1992a, 1997).

This study is first aimed at providing a thorough study of the linguistic phenomena involved and their underlying motivations, which is indispensable for an account of what actually happened and how and why it happened. I believe that if we hope to provide a complete diachronic account of the changes, this type of study must precede an economy-oriented, synchronic account of the relevant linguistic phenomena or an ‘unjustified’ account of the change by ‘rule change’.<sup>17</sup>

Regarding the evidence for studies of diachronic syntax (cf. Harris & Campbell 1995, Faarlund 1990, Kemenade 1987, Joseph 1983, Allen 1980a), the lack of a native speaker’s intuitions, above all, causes a problem, often making attested data of relevant

<sup>17</sup> For example, Chomsky’s (1989: 69) Economy Principle, which seeks to minimize the theoretical and descriptive apparatus in syntactic description, requires derivations and representations to be minimal, with no superfluous steps or symbols.

constructions the single most reliable source of evidence for any linguistic change. Whereas this problem cannot be completely overcome, it does not seem to render diachronic studies in syntax totally impossible or invalid. In particular, as Faarlund (1990: 16-18) and Harris & Campbell (1995: 11-12) point out, our indirect access to grammatical judgments, especially through the negative evidence of absence of a given construction and cross-linguistic evidence for constraints on possible syntactic constructions, enables us to obtain substantial insight into many significant aspects of morphosyntax at earlier stages. That is, if a well-attested earlier language does not show any example of a particular construction which is regularly used in the modern counterpart of the earlier language, then we can reasonably assume that the given construction was ungrammatical or unacceptable in that earlier language. Such an assumption of the negative data about the grammaticality of given constructions will be more plausible if the earlier language is well attested, as is the case with OE for which very extensive materials are available. This study will maintain this 'assumption of negative evidence', along with additional justifications where necessary, throughout our discussions of OE and ME syntactic constructions.

Finally, this study will generally focus on system-internal factors including functional factors in its discussions and accounts of the given morphosyntactic constructions and their changes. By this emphasis on system-internal factors, however, I do not intend to imply that system-external factors such as social factors and language contact or contact among speakers of different dialects play a relatively trivial part in the origin and development of certain changes.<sup>18</sup> No doubt, such factors have played a significant role in many changes including those in the P-Passive and other related (P-

<sup>18</sup> Few surveys of dialectal differences in syntax are currently available (cf. Fischer 1992). For example, although the *Linguistic Atlas of Late Medieval English* (McIntosh et al. 1986) has an extensive survey of dialectal variations in phonology, morphology and vocabulary, it does not provide any dialectal evidence of syntactic variants.

Stranding) constructions. However, the roles of such factors are relatively more difficult to identify, especially in syntactic changes which occurred a long time ago.

#### 1.4. Database and the Organization of the Study

A fact-oriented diachronic study crucially depends on a broad-based consideration of data — textual examples of relevant sentences — from various periods in the history of English. Because sufficient examples for many specific constructions are difficult to amass solely through reading primary sources, the main sources of the historical data for this research will be not just primary sources but also many secondary sources containing collections of relevant examples. In particular, Visser's *Historical Syntax* (1963-73), Jespersen's *Modern English Grammar* (1909-49), and *The Oxford English Dictionary* (Murray et al. 1933, 1990) provide many good examples for all periods, while Allen (1980a) is a good source of relevant diachronic data as well as an excellent diachronic study of English P-Stranding in general. Thus, in addition to the data collected from my reading of primary texts, much OE data has been obtained through the OE concordance of Venezky & Healey (1980) and the Toronto OE corpus of Healey (1998) which contain almost all the extant OE data, Bosworth & Toller's *Anglo-Saxon Dictionary* (1898), and its supplement (Toller 1921), augmented by other secondary sources. ME examples, on the other hand, come mainly from Visser (1963-73) and Kurath et al.'s *Middle English Dictionary* (1952 et seq.), along with various concordances and primary and secondary sources.

The present study is divided into two main parts in addition to this introductory chapter. The first part consisting of the first two main chapters (Chapters 2 and 3) features a synchronic study of morphosyntactic constructions and phenomena in OE

related to the P-Passive. This first part is intended to provide the background knowledge and basis for our arguments about the P-Passive and its changes in the following chapters.

Chapter 2 is devoted to a descriptive analysis of OE prepositional constructions containing P-Stranding possibilities, with special emphasis on the P-Passive. This part will provide the necessary background of the historical stages before and around the changes, without which a complete account cannot be successful. Although P-Stranding itself is allowed also in OE, the possible types of P-Stranding are clearly distinguished from the unacceptable types in that the PO of a stranded P never occurs in the given P-Stranding sentence. This distinction in P-Stranding will lead to the formulation of a constraint on P-Stranding in OE.

Chapter 3 discusses the role of relative obliqueness in OE grammar, especially in the case government and subcategorization inheritance of OE verbs, prepositions, and P-V compounds. Specifically, on the basis of the distinctions in passivization possibilities in OE, I propose an 'obliqueness hierarchy' among OE NP arguments, which results in an enriched interpretation of the case features of OE verbs, and then show that relative obliqueness plays a central role in the case government of OE verbs. I also show that a new understanding of the case-assigning properties of the head in OE P-V compounds enables us not only to explain the limited contribution of the nonhead but also to improve upon the argument attraction process as an account of subcategorization inheritance.

The second part comprising Chapters 4 to 6 explains the diachrony and synchrony of the P-Passive on the basis of the discussion in the first part and is intended to illustrate how form, meaning, and function interact with one another in bringing about the changes in the P-Passive and in determining the acceptability of the P-Passive in contemporary English.

Chapter 4 explains the motivation for the OE constraint on P-Stranding, which leads to an account of why OE had no P-Passive at all. It is argued that there are two key

factors underlying the constraint. First, there is a high degree of obliqueness of OE prepositional arguments, which was rigidly marked and represented by P as an 'obliqueness marker'. A second crucial factor is the representation and maintenance of relative obliqueness among OE NP arguments, which, because of the highly flexible word order in OE, can be successfully achieved only by means of the constraint on P-Stranding.

As for the absence of a P-Passive in OE, on the other hand, two main reasons are proposed: first, OE POs were too oblique to be fully passivized for the personal P-Passive, and second, most not-too-oblique POs that could result in the impersonal P-Passive occurred as composed verbal arguments of transparent P-V compounds through preposition incorporation and subcategorization inheritance.

In Chapter 5, I present an alternative, unified account of the changes in the P-Passive and other P-Stranding constructions, giving priority to two poorly treated questions: (a) how various factors worked together to bring about the changes, and (b) what determines relative chronology of new types of P-Stranding including the P-Passive. In particular, it will be proposed that the advent of the P-Passive was a long-term, multi-faceted morphosyntactic change which was preceded by many related changes in other parts of the language system. Eventually it was triggered by a 'subject-requirement' constraint and the consequent obligatoriness of the separation of PO from P (i.e., NP-movement out of PP) in passive structures. These factors resulted in the syntactically-triggered incorporation of P into V, which already had a precedent in OE.

Chapter 6 presents an alternative synchronic analysis of the P-Passive in contemporary English which incorporates both formal and functional factors in order to deal with examples of the P-Passive involving not only complement PPs but also adjunct PPs. In particular, I argue against both the Reanalysis Hypothesis and the No-Reanalysis Hypothesis about the unification of V and P into a single structural unit by showing that although English has syntactic incorporation of P into V, it occurs only in the passive and

not in the active. I also explain what really determines the passivization possibilities of POs by proposing one formal and two functional factors (i.e., complementhood, affectedness, and characterization). Finally, I provide a set of formally adequate formulations of the proposals made for the P-Passive within the Head-Driven Phrase Structure Grammar framework, showing that the alternative account can be given a coherent treatment within a current theoretical framework.

Finally, Chapter 7 concludes this dissertation by commenting on the implications that the results of the study have.

In short, this study will demonstrate the interdependence between various components of the grammar by showing that a typical 'syntactic' change is not purely syntactic in nature, but rather requires input from practically every domain of the grammar in order to be fully understood. Further, the analysis proposed for the P-Passive in contemporary English will illustrate how form, meaning, and function interact with one another to form a major syntactic construction and to determine its grammaticality and acceptability.

PART I

OLD ENGLISH CONSTRUCTIONS  
RELATED TO THE PREPOSITIONAL PASSIVE

CHAPTER 2

PREPOSITIONAL STRANDING IN OLD ENGLISH <sup>1</sup>

2.1. The Prepositional Passive and Prepositional Stranding

OE had a syntactic passive like ModE.<sup>2</sup> The norm for this OE passive is for the accusative object of the active verb to become the subject of the passive, as in (1) and (2), which is called the personal passive.

- (1) *he mid eotenum wearð on feonda geweald forð forlacen*  
he [nom] among giants became into enemy's power further betrayed  
'among the giants, he was well betrayed into the power of the enemy'

(Beo 902-3)

- (2) *þu eart betwux wifum gebletsod.*  
you [nom] are among womankind blessed  
'you are blessed among womankind'

(Lk 1.42)

<sup>1</sup> A similar (sub)set of the facts about P-Stranding in OE presented in this chapter has been discussed in previous studies including Allen (1980a, 1980b), van Kemenade (1987) and Fischer (1992) among others. Their major concern, however, seems to have been a theoretical analysis of the P-Stranding constructions and its relevance in a particular syntactic theory, thereby missing certain significant relevant facts. For example, no previous studies, including those by Allen (who is generally known to be especially precise and comprehensive), seem to mention the fact that P-Stranding was possible in OE comparative constructions, whereas no P-Stranding is attested in OE exclamations. Thus, I will here discuss every available OE prepositional construction which contains P-Stranding possibilities in a more descriptive way.

<sup>2</sup> OE has two ways to represent the passive. That is, besides the syntactic passive, OE had one verb which had a synthetic passive, that is, *hatte* 'is/was called'. Furthermore, impersonal *man* for indefinite agency was often used in the nominative singular with an active verb form as an equivalent of the passive voice.

Otherwise, the impersonal passive was the rule, in which there is no (nominative) subject. That is, when an active verb takes a dative or genitive NP, the NP remains in the oblique case without becoming a subject of the passive, as in (3), (4), and (5):

- (3) forðam him bið geðenod mid his ðearfena þenunge,  
for him [dat] is served by his poor men's service  
'for he will be served by serving his poor' (ÆCHom I. 514. 6-7)
- (4) Ac ðæm mæg beon suiðe hraðe geholpen from his larowe,  
but him [dat] may be very quickly helped by his teacher  
'But he may be helped very quickly by his teacher.' (CP 225. 22-3)
- (5) Forðæm se ðe his ær tide ne tiolað,  
because he who his [gen] before time not provide (for)  
þonne bið his on tid untilad,  
then (it) is his [gen] on time unprovided  
'For he who does not provide for himself beforehand,  
it will be unprovided for him when the time comes.'  
(Bo 67. 11 [Mitchell 1985: §849])<sup>3</sup>

Unlike later English, however, OE had no (personal or impersonal) P-Passive, and this type of passive began to appear in the early 13th century, as we have already seen in Section 2.1. The following is one of the earliest examples of the P-Passive in ME.

- (6) þer wes sorhe te seon hire leoflich lich faren so reowliche wið  
there was sorrow to see her dear body dealt so cruelly with'  
'there was sorrow to see her dear body so cruelly dealt with'  
(c1225 St. Juliana (Roy) 22.195 [Denison 1993])

<sup>3</sup> Example (5), which Mitchell provides as an example of the impersonal passive for the genitive object, is problematic because the word *untilad* 'unprovided' can be regarded as an adjective rather than a past participle form. See footnote 16 in Chapter 3.

On the other hand, the *tough*-construction (TC, e.g., *This sonata<sub>i</sub> is difficult to play*     <sub>j</sub>) is attested in OE as well as in later English. In this construction, the syntactic subject of the main clause is usually considered semantically (and sometimes even syntactically) connected to the gap in the infinitival clause through coindexation and/or so-called *tough*-movement.<sup>4</sup> The following are some examples of the TC in OE:

- (7) se deada byð uneaðe ælcon men on neaweste to hæbbenne  
the dead is difficult each man [dat] in neighborhood to have  
'the dead man is difficult for everyone to have nearby' (BlHom 59.14)
- (8) þæt him wære easelic se wifhired to healdanne & to rihtanne  
that him was easy the nunnery to hold and to rule  
'that the nunnery was easy for him to lead and rule' (GD i. 27.4)

Again, unlike later English, OE had no examples of the TC in which the *tough*-subject is interpreted as the missing PO in the infinitival phrase after the *tough*-adjective, as in *Such a loss is not easy to compensate for*. This type of TC began to appear in late ME, as follows (Wurff 1990, 1992a):

- (9) the grete Roches, þat ben stronge and daungerouse to passe by  
'the great rocks, that are strong and dangerous to pass by'  
(?a1425[c1400] Mandev. 29.10)
- (10) þe gospel ... is most gsi to wynne heuene by  
'the gospel ... is most easy to reach heaven by'  
(c1430[c1383] Wycl. Leaven Pharisees 2.22)

<sup>4</sup> *Tough*-movement is a transformational rule in early generative transformational grammar which moves an NP out of the predicate of a complement phrase/clause.

Note that both of the unattested passive type and TC type in OE (i.e., the P-Passive and the TC with a prepositional gap) necessarily involve P-Stranding, thereby making P-Stranding a necessary condition for the two constructions to be licensed in OE. In fact, P-Stranding, although attested in OE, was highly restricted and many OE prepositional constructions involving P-Stranding were not allowed in OE. All this strongly suggests that P-Stranding is likely to be linked to unattested OE prepositional constructions in a certain way. This again suggests that a complete understanding of why some prepositional constructions such as the P-Passive were not allowed in OE and what brought about them in ME requires a thorough understanding of P-Stranding possibilities in OE. Thus, this chapter will be devoted to a descriptive analysis of prepositional constructions containing P-Stranding possibilities in OE.

## 2.2. Attested Types of Prepositional Stranding <sup>5</sup>

A preposition in ModE normally occurs with its complement immediately preceding it but this does not occur in some cases, either because the complement must occupy the initial position in the clause or because it is absent. Thus, P-Stranding is possible in many ModE constructions including *wh*-questions, relative clauses, (pseudo-) cleft constructions, complement object deletions, comparative constructions, topicalizations, exclamations, the prepositional passive, *tough*-constructions, as in (11) to (19):

<sup>5</sup> In the discussions of the following sections of this chapter, many OE examples are freely cited from various previous studies including Bosworth & Toller (1898), Toller (1921), Allen (1980b), Fischer (1992), and Traugott (1992). I checked most of the cited examples with the relevant published editions of the manuscripts.

### (11) *Wh*-questions

- (a) Which computer did you install the program in?
- (b) I asked them what they based their predictions on.

### (12) Relative clauses

- (a) The old house which I was telling you about is empty.
- (b) This is the man whom we sold our house to.
- (c) The building that you're standing beside was designed by my grandfather.
- (d) There are many other places the same kind of animals live in.<sup>6</sup>
- (e) They ate what(ever) they paid for.
- (f) This is a good instrument (\*which) to measure vibration with.

### (13) (Pseudo-)cleft constructions <sup>7</sup>

- (a) It is this house that he has lived in.
- (b) What is not worth listening to is his advice.

### (14) Complement object deletions

- (a) Cinderella in that new dress was beautiful to look at.
- (b) This paper is terribly flimsy to write on.

### (15) Comparative constructions

- (a) This is the same sort of house as I live in.
- (b) He owns more houses than I have ever lived in.

<sup>6</sup> It is sometimes possible to delete P altogether, thereby making such examples as ... *places the same kind of animals live*  $\emptyset\emptyset$  grammatical, although it is often very difficult to delete P, as in \**There are many homes (that) the same kind of animals live*  $\emptyset\emptyset$ . Furthermore, in some relative clauses, the deletion of P is not only possible but also obligatory (e.g., *a reason to stay* (\**for*)). Note that what determines the deletion possibility of P is neither syntactic nor semantic because two contrasting examples (e.g., *a place to eat* vs. \**a location to eat*) often have the same syntactic structure and nearly synonymous heads (i.e., *place* and *location*). At least several factors, including the NP head to be relativized and P of the relative clause (e.g., *the place to sleep (at)* vs. *the place to sleep \*(beside)*), seem to be involved in the acceptability of the resultant sentences or the possibility of deletion. For discussions about such deletion of P involving bare-NP adverbials, see Larson (1983, 1985, 1987).

<sup>7</sup> Although cleft sentences and pseudo-cleft sentences are similar to restrictive relative clauses and free relatives, respectively, their precise internal structures are far from clear (cf. Radford 1988: 493).

(16) Topicalizations

- (a) That tiny a palace, I could never live in.  
(b) That tunnel over there, we drove our car through.

(17) Exclamations

- (a) What a wonderful house you live in!  
(b) I can't believe what a mess you've got into!

(18) Prepositional passive

- (a) The city's accounts were thoroughly looked into (by a financial controller).  
(b) The affair was talked about (by all the people in the county).

(19) *Tough*-constructions

- (a) Bill is easy/hard/difficult/impossible to deal with.  
(b) That mountain is pleasant to camp on.  
(c) His advice is not worth listening to.

Note that although Ps (to be stranded) can normally precede their complements so that their stranding is optional in many of the above ModE constructions, there are circumstances in which this cannot happen. Thus, in *that*-relatives, zero relatives, free relatives, pseudo-cleft constructions, complement object deletion constructions, comparative constructions, exclamations, the P-Passive, as in (12c), (12d), (12e), (13b), (14), (15), (17), and (18), respectively, P-Stranding is obligatory and the alternative co-occurrence of P and its object is not allowed in a given sentence, as follows:

- (20) (a) \*The building beside that you're standing was designed by my grandfather.  
(b) \*There are many other places in the same kind of animals live.  
(c) \*They ate for what(ever) they paid.<sup>8</sup>

<sup>8</sup> Since the verb of the main clause here takes the free relative *whatever* (modified by the following adnominal relative clause) as its object, it seems that the preposition *for* does not even have a chance to appear in the given position. Pseudo-cleft constructions are similar in this respect (cf. Quirk et al. 1985: 1056-61).

- (21) (a) \*To what is not worth listening is his advice.  
(b) \*For what I paid is your education.

- (22) (a) \*To write on this paper is terribly flimsy.<sup>9</sup>  
(b) \*It is terribly flimsy to write on this paper.

- (23) (a) \*This is the same sort of house in as / as in I live.  
(b) \*There are more problems with than / than with we can deal today.

- (24) (a) \*In what a wonderful house you live!  
(b) \*I can't believe into what a mess you've got!

- (25) (a) \*Into the city's accounts was/were thoroughly looked (by a financial controller).  
(b) \*About the affair was talked (by all the people in the county).

On the other hand, P-Stranding was not allowed in all the OE prepositional constructions corresponding to the ModE P-Stranding constructions. In fact, OE shows a very rigid contrast between two groups of prepositional constructions with regard to P-Stranding possibilities and P-Stranding is generally attested in six prepositional constructions.<sup>10</sup> Above all, P-Stranding in OE was possible in four types of relative clauses: *pe*-relative clauses, which roughly correspond to *that*-relative clauses in later English, zero relative clauses, free relative clauses, and infinitival relatives, as follows:<sup>11</sup>

<sup>9</sup> Examples in (22) are not facts about prepositional stranding but rather are relevant to the fact that the adjective involved is not a *tough*-type (with a subject complement clause).

<sup>10</sup> For some apparent exceptions and their explanations, see Section 2.4.

<sup>11</sup> OE *þæt* which is used invariantly as a relativizer, unlike the neuter nominative/accusative pronominal *þæt*, also required P-Stranding (Traugott 1992: 227). Note that the invariant *þæt* can easily be distinguished from the neuter pronoun *þæt* because neither the antecedent nor the relativized NP is neuter nominative/accusative singular.

(i) þurh þa halgo rode þæt Crist wæs on þrowod  
through that holy cross [fem/acc] that Christ was on tortured  
'through the holy cross that Christ suffered on' (Chron E (Plummer) 963.63)



(26) (a) ... nyhst þæm tune      ðæ se deada man on lið  
 ... next that homestead that the dead man in lies  
 '... next to the homestead that the dead man lies in' (Or 20.30)

(b) He wæs swyðe spedig man on þæm æhtum  
 he was very wealthy man in those possessions  
þe heora speda on beoð ...  
 that their wealth in is ...  
 'He was a very wealthy man in those possessions  
 that their wealth lies in ...' (Or 15.7)

(27) ðonne is oþer stow elreordge men beoð on  
 then is other place barbarous men are in  
 'then, there is (an)other place barbarous men live in' (Marv 18.1)

(28) (a) and se þe rapust com on þone mere æfter þæs wæteres styrung  
 and he that quickest came into the lake after the water's stirring  
 wearð gehæled fram swa hwilcere untrummysse swa he on wæs;  
 was healed from so which infirmity [dat] as he in was  
 'and he who came most quickly into the lake after the stirring of the water  
 was healed from whatever infirmity he was in' (Jn 5.4)

(b) And heo gefret softnysse oððe sarnysse, swa hwæðer swa  
 and it feels softness or pain so which [acc] as  
 heo on bið  
 it in is  
 'And it feels softness or pain, whichever it is in' (ÆHom 11.218)

(29) (a) ðeah he nu nanwuht elles næbbe ymbe to sorgienne  
 though he now nothing else not-have about to worry  
 'though he now has nothing else to worry about' (Bo 24.15)

(b) Eanflæd seo cwen ... bæd Osweo þone cyning ðæt he þær  
 Eanflæd the queen ... bade Osweo the king that he there  
 forgefæ stowe mynster on to timbrebbe þæm foresprecenan  
 gave place minster on to build to the afore-mentioned  
 Gode þeowe Trumhere  
 God's servant Trumhere  
 'Queen Eanflæd bade king Osweo to give the afore-mentioned  
 Trumhere, God's servant, a place to build an abbey on' (Bede 3.18.238.21)

Note that in each of the above OE relative constructions, P-Stranding was necessary because the alternative co-occurrence of P and its PO within the same prepositional phrase (PP) (i.e., .. [PP P NP] ...) was not possible, as we can see through the corresponding ModE ungrammatical strings in (20) above, whereas P-Stranding itself was not prohibited in OE.

One might want to argue that the relativizer *þe* is a PO which is separated from its governor P. However, the *þe*-relative, which is often considered to correspond to the relative *that* in later English, has never been allowed to occur after P as a PO, making a construction such as \*... *mid þe we* ... ungrammatical in OE.<sup>12</sup> In fact, there is no evidence that the OE relativizer *þe* is the PO of the stranded P. Above all, except for the dative and accusative forms of the second person, personal pronoun *þu* 'you', which has nothing to do with relative pronouns, it is not identical in form with any pronoun. Furthermore, it was indeclinable, whereas virtually every pronoun (and noun) in OE was declinable. Note

<sup>12</sup> At least in ModE, a resumptive pronoun as a PO can sometimes occur after P in *that*-relative clauses, as Jespersen (1939 III. 5.6i) observes, as follows:

(i) (a) By force of argument, *that* you being licentiate should stand *vpon* 't. (Marl F 206)  
 (b) They cure a lot of folks *that* you regular docs can't seem to find out  
 what's the matter *with* 'em. (Tarkington MA 163)

Note, however, that the addition of a resumptive pronoun is not natural unless the clause is long. Furthermore, there is no clear evidence that this construction involving a resumptive pronoun after P in *þe*-relative clauses was grammatical in OE. Thus, although it might be a conceivable alternative to the P-Stranding in *þe*-relative clauses to consider, it is hypothetical at best.

also that it was mainly used as a complementizer in various subordinating clauses. Therefore, the status of the OE relativizer *pe* was clear,<sup>13</sup> unlike its later English counterpart *that*, which is identical in form with the demonstrative pronoun *that* but is still analyzed as a complementizer rather than a relative pronoun in many theoretical frameworks including Government-Binding (GB) theory.<sup>14</sup>

In the case of zero relatives, free relatives, and infinitival relatives, neither piping nor having P and its object NP within the same PP is possible since there is no overt NP in the relative clause which can occur with P. Note, in particular, that the free relative in (28) at least syntactically belongs to the main clause, not to the relative clause. This is clear from the fact that the *wh*-pronoun or demonstrative head of the free relative takes the case assigned by the verb (or preposition) of the main clause and that the PO is absent at surface structure. For example, *wh*-pronoun head *hwæðer* of *swa hwæðer swa* in (28b) takes accusative but not dative, which is normally expected to be assigned by the P *on* in the given relative clause. Thus, even if the free relative might be considered the PO (semantically), its co-occurrence with the stranded P within the same PP will be ungrammatical.

On the other hand, OE didn't allow a relative pronoun to be used with infinitival relatives. Thus, no examples such as *a book about which to talk* are found until Chaucer's period (Allen 1980b: 275). Except for this difference, English, ever since OE, has been the same in the P-Stranding possibilities in all the above relative constructions.

<sup>13</sup> Note that there are some periods in which the relativizer *pe* or *that* could occur together with a relative pronoun, a fact which strongly suggests that *that* is not a relative pronoun but a complementizer. Thus, the co-occurrence of the relativizer *that* and a relative pronoun was very common in late ME, as follows:

(i) ... the Minotaur, which that he slough in Crete.  
'... the Minotaur, which he had slain in Crete'

(Chaucer, Knight Tale 122)

<sup>14</sup> Unlike the OE relativizer *pe*, the status of the ModE relativizer *that* is highly controversial. See van der Auwera (1985) for a discussion of various arguments for the status of the ModE relativizer *that*. He proposes to treat it as a "highly pronominal relativizer" and claims that the reason why it is not fully pronominal is due to its non-pronominal origin.

Another OE prepositional construction in which P-Stranding was allowed is the so-called complement object deletion (COD) construction, which involves a special group of adjectives followed by an infinitival phrase (e.g., *The flower is pretty to look at*), as follows:

- (30) (a) heo wæs swiþe fæger an to locianne;  
it was very beautiful at to look  
'it was very beautiful to look at' (Or 74.12)
- (b) heo is gesundful and myrige on to wunienne  
it is healthy and pleasant on to live  
'it is healthy and pleasant to live on' (ÆCHom i.182.33)

Although the subject NP in each of the above examples has the same reference or index with the missing PO, it is the base-generated subject of the main clause since it occupies a so-called argument position and its theta-role is assigned by the adjective in the main clause, while the theta-role of the missing PO is assigned by the infinitival phrase. Thus, it can reasonably be argued that P-Stranding is necessary also in this construction.

Finally, P-Stranding was also possible in comparative constructions, as in (31), below. Note that the PO in the clause after *þonne* is missing, thus making P-Stranding in that clause is obligatory:

- (31) (a) ... ne geortriewe ic na Gode þæt he us ne mæge  
... not distrust I never God that he us not can  
gescildan to beteran tidun þonne we nu on sint.  
shield for better times than we now in are  
'I never doubt that God can protect us for better times  
than we are now in' (Or 86.4-5)

- (b) seo is bradre bonne ænig man ofer seon mæge  
 it is broader than any man across see may  
 'it is broader than any man can see across'

(Or 1 1.19.18 [Traugott: 1992: 225])

In short, in all the OE P-Stranding constructions considered so far, P-Stranding was necessary in that no alternative structure which can obviate P-Stranding in a given sentence through pied piping or the co-occurrence of P and its object NP within the same PP was possible in any of the given constructions. Note that none of these P-Stranding types involve the displacement of PO from PP and its occurrence in a non-canonical position (DPO, i.e., ... NP<sub>i</sub> ... [PP P t<sub>i</sub>] ...).<sup>15</sup> That is, the overt NP which should be the PO of the stranded P is missing in every case of OE P-Stranding.

### 2.3. Unattested Types of Prepositional Stranding

Except for the above six cases we have considered in the previous section, no other type of P-Stranding is attested in OE. In particular, none of Modern English P-Stranding types involving DPO (i.e., *wh*-questions, *who*- and *which*-relatives, topicalizations, exclamations, the P-Passive, and the TC) were possible. Therefore, the alternative of P occurring with its PO within the same PP, through pied piping or impersonal constructions, both of which strategies would avoid DPO, had to occur if this alternative was not prohibited otherwise in OE. Thus, pied piping, as the only possible alternative in *se* *pe*- or *se*-relative clauses, as in (32) and (33), in *wh*-questions, as in (34),

<sup>15</sup> In the terminology of transformational grammar, the DPO would be described as NP movement out of PP. Note that for the purpose of this study, it doesn't matter whether the non-canonical positioning of the PO is a result of movement or base-generation. What is relevant here is that it is there, not how it got there.

and in topicalizations, as in (35),<sup>16</sup> was obligatory, whereas the P-Passive and exclamations involving pied piping were not allowed, as in ModE.

- (32) (a) Eala ðu wundorlice rod, on ðære ðe crist wolde ðrowian.  
 hail thou wonderful cross on which that Christ would suffer  
 'Hail, you wonderful cross, on which (that) Christ deigned to suffer'

(ÆLS 27.115)

- (b) Wa ðam men ðurh ðone ðe byð mannes sunu belæwed  
 woe the man through whom that is man's son betrayed  
 'Woe to the man through whom (that) the son of man is betrayed'

(Mt 1561)

- (33) (a) Gehyr ðu arfæsta God mine stefne, mid ðære  
 hear thou merciful God my voice with which  
 ic earm to ðe cleopie.  
 I poor to thee cry  
 'Hear you, merciful God, my voice, with which I, poor one, cry to you'

(BlHom 89.13)

- (b) and het getimbrian medomlic hus, on ðæt  
 and ordered to build small house in which  
 nænig wer næfde inagang  
 no man not-had admittance  
 'and ordered a small house built, in which no man had admittance'

(Mart 106. 5)

- (34) (a) To hwær locige ic butan to ðæm eaðmodum?  
 to whom look I but to the humble  
 'To whom shall I look but to the humble?'

(CP 299.19)

- (b) Ic nat ful geare ymb hwæt þu giet tweost  
 I not-know full entirely about what you still doubt  
 'I do not fully understand what you still doubt about'

(Bo 12.26)

<sup>16</sup> Some types of topicalizations could contain P-Stranding in OE but this does not necessarily argue against the generalization to be made in this section. See Section 2.4.

(35) (a) On þisne enne god we sceolon geleafan  
 in this one God we must believe  
 'In this one god, we must believe' (ÆLS 1.38)

(b) For ðæs lichaman life, þe langsum beon ne mæg,  
 for the body's life, that long be not may,  
 swincað menn swide,  
 toil men greatly  
 'For the life of the body, that cannot last eternally, men toil greatly'  
 (ÆHom 6.145-6)

Furthermore, although the TC itself was possible also in OE, as in (36) below, no example of the TC that involves P-Stranding was allowed in OE<sup>17</sup> whereas impersonal constructions with or without a dummy subject as an alternative to the TC of this type are well attested in OE, as in (37)-(39):<sup>18</sup>

(36) ðis is me hefi to donne  
 this is me hard to do  
 'this is hard for me to do'  
 (Mart 5 (Herzfeld-Binz) 2035 (SE 16/A/14) [Wurff 1992a: 64])

(37) Hit bið swiðe unieðe ægðer to donne, ge wið ðone  
 it is very difficult both to take and against him  
 to cidanne ðe yfel ded, ge eac sibbe wið to habbenne  
 to contend by evil deed and also peace with to have  
 'It is very difficult to take, to contend against by evil deed,  
 and also to have peace with him' (CP 355.41)

<sup>17</sup> Even though several studies including Allen (1980b: 283, fn. 25) and Wurff (1990, 1992a) have observed the absence of the TC involving P-Stranding in OE, its relevance to the changes of P-Stranding and to the (synchronic) analysis of the TC has not been sufficiently discussed in any previous studies.

<sup>18</sup> There is considerable controversy about the correct (syntactic) analysis of the TC. In this study, I follow many previous studies such as Rosenbaum (1967), Postal (1971), Berman (1973), and Comrie & Matthews (1990) and assume that the subject of the main clause in the TC is generated as a PO and moved to the subject position. Thus, the TC with P-Stranding, for it to be possible, must involve DPO.

(38) þam broþrum was symble swyðe gewinnful & unecaðe  
 for the brothers was always very troublesome and hard  
 niþer to astigenne to þam wæterseaðe  
 down to go to the water-well  
 'it was always very troublesome and hard for the brothers to go down to the well'  
 (GD ii. 112.15)

(39) Eaðere ys olfende to faren þurh næðle byrel,  
 easier is for a camel to go through needle's eye  
 'It is easier for a camel to go through a needle's eye'  
 (Mk. Bos 10.25 [BT: 236])

Note that none of the unattested types of P-Stranding were necessary in that the alternative co-occurrence of P and its PO within the same PP was available in the given sentences. Moreover, all the unattested (potential) types of P-Stranding must have DPO in OE, and no attested type of P-Stranding in OE involved DPO while P-Stranding was not prohibited otherwise in OE. All this strongly suggests that DPO was strictly prohibited in OE, allowing for the formation of an OE constraint against DPO: \*... NP<sub>i</sub> ... [pp P t<sub>i</sub>] .... I refer to this constraint as \*DPO.<sup>19</sup>

Finally, the absence of the P-Passive in OE can be explained in the same way. The personal P-Passive has to involve DPO because it requires the underlying PO to be in the passive subject position.<sup>20</sup> Moreover, the personal P-Passive was not necessary because

<sup>19</sup> A similar observation about the impossibility of movement out of PP (and the obligatoriness of pied piping) in the above OE constructions has often been made, PP in OE being suggested as an island (out of which no movement is allowed), in many previous studies within derivational frameworks (e.g., van Riemsdijk 1978; Allen 1980a, 1980b; Hornstein & Weinberg 1981; Kayne 1981a, 1981b; Lightfoot 1981a; Bennis & Hoekstra 1984). Most previous studies, however, put their emphasis on the analysis of the constraint against movement out of PP in OE mainly from a theoretical standpoint and ignore why OE had such a constraint and what made it change in ME, aspects which are indispensable for a complete account of the changes in P-Stranding.

<sup>20</sup> Even in the theoretical frameworks which do not assume movement or transformation (e.g., such lexicalist approaches as Head-Driven Phrase Structure Grammar by Pollard & Sag (1987, 1994)), the PO or verbal object in the active is considered to correspond to the subject in the passive.

OE could have resorted to an alternative, impersonal P-Passive, which does not violate \*DPO since the impersonal construction allows P to co-occur with its PO within the same PP. In fact, an impersonal P-Passive in OE was not only theoretically possible but also very plausible in several respects. Above all, OE didn't always require a nominative subject and therefore had the impersonal passive as well as many other impersonal constructions. Furthermore, the impersonal P-Passive is actually found in some Germanic languages such as Old Norse, Icelandic and German, as follows:

- (40) (a) Meine Mutter sorgt für die Kinder.  
       'My mother is taking care of the children.'  
       (b) Für die Kinder wird gesorgt.  
       'The children are being taken care of.'  
       (c) Es wird für die Kinder gesorgt.  
       'The children are being taken care of.'
- (41) (a) Ich arbeite unter dieser Brücke.  
       'I work under this bridge.'  
       (b) Unter dieser Brücke wird gearbeitet.  
       'This bridge is worked under.'  
       (c) Es wird unter dieser Brücke gearbeitet.  
       'This bridge is worked under.'

However, if even this potential alternative was prohibited for some independent reason, it must be that OE could not have any form of P-Passive. This line of reasoning will be developed later in Chapter 4.

In short, the following generalization about P-Stranding in OE can be made: first, DPO was strictly prohibited in OE; second, P-Stranding was allowed only when it did not violate \*DPO and was syntactically 'necessary' in that the alternative co-occurrence of P and its overt PO within the same PP in a given sentence was not available; finally,

the co-occurrence of P and its overt PO within the same PP through pied piping or an impersonal construction, an alternative to the prohibited P-Stranding involving DPO in a given sentence, was obligatory unless it was unavailable or prohibited otherwise.

## 2.4. Apparent Counterexamples

There are some examples which, at first glance, might look like counterexamples to the above generalization about P-Stranding in OE. Above all, although pied piping was clearly possible in topicalizations, as in (35) above and (42) below, and therefore P-Stranding was not necessary, P-Stranding is well attested, as in (43):

- (42) To ðæm soðum gesælðum ic tiohige ðæt ic ðe læde  
       to the true happiness I intend that I thee lead  
       'To the true happiness I intend to lead you' (Bo 51.12)
- (43) (a) And me com ðær-rihte to godes engel mid rode.  
       and me came directly to God's angel with cross  
       'And to me one of God's angels came directly with a cross' (ÆLS 7.356)
- (b) & him þa sþþian se feondscipe wæs betweonum weaxende  
       and them then afterwards the enmity was between growing  
       'and then later between them the enmity was growing' (Or 232.25)

Furthermore, P-Stranding often occurs also in clauses containing (relative) pronoun ðær, as in (44) and (45) below, even though each clause has the (overt) PO (i.e., ðær) present and therefore pied piping should be obligatory as an alternative to P-Stranding:

(44) (a) ... ðæt ðær wæs butan seo swaðu on  
 ... that there was but the mark on  
 '... that only the mark was (on) there' (Mart 102.22)

(b) & ðær ðonne befeolle on oððe oxa oððe esol  
 and there then fell in either ox or ass  
 'and either an ox or an ass fell in there' (CP 459.24)

(45) (a) and on oðerre wæs an gewrit, ðær wæron on awriten  
 and in another was a letter where were in written  
 ealra ðara ricestena monna noman  
 all the richest men's names  
 'and in another (place) was a letter where all the richest men's  
 names were written (in)' (Or 258.14)

(b) And se stede æfre syððan wæs æmtig ðær heo ær on stod  
 and the place ever after was empty where it earlier on stood  
 'And the place where it had earlier stood (on) was empty ever after'  
 (Angl. Hom. V.86 [Allen 1980b: 292])

However, there is good reason to believe that the above facts do not necessarily argue against our generalization about the necessity of P-Stranding in OE. In particular, it has been noted that P-Stranding in topicalizations is allowed mainly when the topic is a personal or locative pronoun, but extremely rare with topicalized full NPs. Furthermore, unlike full NPs, P and its object pronoun can commonly be inverted and separated from each other in simple sentences (Allen 1980b: 287, Kemenade 1987: 114-9, 145-6, Fischer 1992: 389), as follows:<sup>21</sup>

<sup>21</sup> Bob Kasper, in personal communication, called my attention to the fact that such a difference between full NPs and pronouns is not restricted to OE, because pronouns have different linear ordering possibilities also in both ModE and German.

(46) (a) Ða hydas ða spræcon him betweenan,  
 the shepherds then spoke them among  
 'The shepherds then spoke among themselves' (ÆCHom i. 40.4)

(b) gehyrde myccle menigo him beforan feran  
 heard great multitude him before go  
 'he heard a great multitude go before him' (BiHom 15.14)

(47) (a) Crist of heofonum me spræc to,  
 Christ from heaven me spoke to  
 'Christ spoke to me from heaven' (ÆCHom i. 380.1)

(b) þa sende him god to micelne wind and hreohnysse  
 then sent them God to great wind and tempest  
 'then God sent them a great wind and tempest' (ÆCHom i. 244.29)

This means that the case of P-Stranding with a topicalized pronoun or a (relative) pronoun ðær can be considered the result of the different behavior of pronominal rather than a counterexample to the generalization about the necessity of P-Stranding in OE.<sup>22</sup>

Another apparent counterexample to the necessity of P-Stranding in OE is found in certain examples of free relative clauses, in which pied piping is possible, as follows:

(48) (a) And to swa hwilcere leode swa we cumað,  
 and to so which people [dat] as we come  
 we cunnon ðære gereord.  
 we know their language  
 'And whatever people we come to, we know their language'  
 (ÆCHom ii. 474.2)

<sup>22</sup> Allen (1980b: 286-294) explains the different behavior of pronouns by means of inversion rules and PP Split rule for personal and locative pronouns, which, before topicalization, optionally invert (and split) P and its pronominal object, making them a non-constituent, so that they can separate from each other.

On the other hand, van Kemenade (1987) argues that OE personal and locative pronouns are syntactic clitics and that OE P-Stranding is allowed only when a clitic element moves to a non-argument position.

(b) Ond ðurh swa hwelces bene swa he gehæled sy,  
 and through so which prayer [gen] as he healed is  
 ðisses geleafa & wyrtnis seo lefed God onfegne.  
 his belief and works be believed to God acceptable  
 'And whoever's prayer he is healed through, let his faith  
 and works be believed acceptable to God.' (Bede 2.2.98.31)

(49) (a) and se þe rapust com on þone mere æfter þæs wæteres styrunge  
 and he that quickest came into the lake after the water's stirring  
 wearð gehæled fram swa hwilcere untrummysse swa he on wæs;  
 was healed from so which infirmity [dat] as he in was  
 'and he who came most quickly into the lake after the stirring of the water  
 was healed from whatever infirmity he was in' (Jn 5.4)

(b) And heo gefret softnysse oððe samysse, swa hwæðer swa  
 and it feels softness or pain so which [acc] as  
 heo on bið  
 it in is  
 'And it feels softness or pain, whichever it is in' (ÆHom 11.218)

The pied piping in (48) above may appear to contradict the conclusion about the necessity of P-Stranding since we have observed that P-Stranding is necessary in OE free relative clauses, as in (49) (= (28)). However, a closer look at (48) will again demonstrate that P-Stranding in OE is allowed only when it is necessary and that an alternative construction is obligatory unless prohibited otherwise. Note that unlike the examples in (49), each *wh*-pronoun in the free relatives in (48) is clearly a PO which belongs to the subordinate (relative) clause, not to the main clause. In this case, it is possible for the PO to follow its governor P, making P-Stranding unnecessary because pied piping, as an alternative, is possible. In fact, no P-Stranding is attested in such constructions as (48) in OE.

Finally, one may want to argue that P-Stranding in such sentences as those in (50) below is not necessary because parallel impersonal sentences as alternatives to the given sentences, whose ModE counterparts are *(it) was very pleasant to camp in the dwelling* and *it was very terrible to look at it*, might have been possible, thereby making P-Stranding in such sentences optional.

(50) (a) Wæs seo wunung ðær swyðe wynsum on to wicenne.  
 was the dwelling there very pleasant in to camp  
 'The dwelling there was very pleasant to camp in' (ÆLS 30.315)

(b) Heo wæs swiðe egeslic on to beseonne.  
 it was very terrible on to look  
 'It was very terrible to look at' (ÆHom 21.536)

In fact, OE shows examples in which an adjective seems to appear both in a *tough*-sentence and its parallel impersonal construction, as in (51) below. Furthermore, we can even find examples of prepositional constructions in which the same adjective occurs both in the corresponding P-Stranding construction and in the parallel impersonal construction(s) without P-Stranding, as in (52):

(51) (a) þæt treow wæs god to etanne  
 the tree was good to eat  
 '(the fruit of) the tree was good to eat' (Gen 3.6)

(b) hit is god godne to herianne & yfelne to leanne  
 it is good good (man) to praise and bad (man) to blame  
 'it is good to praise a good man and to blame a bad man'  
 (BedePref 2.10 [Wurff 1992b: 215])

- (52) (a) *pa stanas sint ealle swiðe gode of to drincanne*  
 the stones are all very good from to drink  
 'the stones are all very good to drink from'

(Lch II (2) 64.3.2 [Wurff 1992b: 216])

- (b) *god is to getriwenne on drihten panne to getriwenne on mæn*  
 good is to trust in Lord than to trust in man  
 'it is better to trust in Lord than to trust in men'

(PsGIE (Harsley) 117.8 [Wurff 1992b: 221])

However, while the existence of such sentences with or without a nominative dummy subject, as in (52b) in OE seems evident, so that they could serve as an alternative construction to those sentences involving P-Stranding such as (52a), it is not entirely clear whether the two types of OE sentences containing the same adjective *god*, i.e., (a)-type with P-Stranding and (b)-type without P-Stranding, are really synonymous with each other. To see the point, consider the following examples:

- (53) (a) This well is hard to drink from.  
 (b) It is hard to drink from this well.  
 (c) To drink from this well is hard.  
 (d) (\*)This well is hard.
- (54) (a) That mountain is beautiful to look at.  
 (b) \*It is beautiful to look at that mountain.  
 (c) \*To look at that mountain is beautiful.  
 (d) That mountain is beautiful.
- (55) (a) This place is pleasant to camp in.  
 (b) It is pleasant to camp in this place.  
 (c) To camp in this place is pleasant.  
 (d) This place is pleasant.

Unlike sentence (53a) which exemplifies the so-called *tough*-movement and is generally regarded as synonymous with (53b) and (53c), but not with (53d), sentence (54a) is considered to have a different syntactic structure from (53a) and to be semantically different from either of the sentences (54b) and (54c) if they are acceptable at all. In addition, unlike (53a) and (53d), it is less easy to avoid entailment relationship between (54a) and (54d) (Quirk et al. 1985: 1229). Such a difference between (53) and (54) is generally believed to come from the difference between the two adjectives involved: the semantic role assigned by the adjective *hard* mainly concerns the whole infinitival clause (i.e., *to drink from this well*), while the adjective *beautiful* assigns the semantic role to the subject (i.e., *that mountain*). Let us call them *hard*-type and *beautiful*-type, respectively.<sup>23</sup>

On the other hand, unlike either of the two types of adjectives in (53) and (54), the adjective *pleasant* in (55a) can be considered to be able to assign the semantic role either to its syntactic subject or to the whole infinitival clause following it. Thus, (55a) can be interpreted to be synonymous with (55b) or (55c), just as in (53), or to have the same structure as (54a) so that the adjective *pleasant* assigns the semantic role to its syntactic subject rather than to the infinitival clause. Here, we have another type of adjective which can be located somewhere between the two contrasting types: *hard*-type and *beautiful*-type. This can be explained by assuming that we actually have two (semantically and syntactically) different types of adjectives, that is, *pleasant*<sub>1</sub> (i.e., *hard*-type) and *pleasant*<sub>2</sub> (i.e., *beautiful*-type).<sup>24</sup> When we have *pleasant*<sub>1</sub>, (55a) is synonymous with (55b) and (55c), whereas with *pleasant*<sub>2</sub>, (55a) cannot be replaced by (55b) or (55c), as in

<sup>23</sup> The *beautiful*-type was generally called (Complement) Object Deletion in many relevant studies including Lasnik & Fiengo (1974) and Joseph (1978/1990).

<sup>24</sup> One may want to deal with this problem differently. For example, we seem to be able to assume that the adjective has two types of semantic role assignment property. However, how to analyze such an adjective is not a main concern here and doesn't seem to make much difference in the current argument.



(54), and therefore neither (55b) nor (55c) can serve as an alternative construction to (55a).

The same argument can be extended to the OE examples in (51) and (52) above. That is, the adjective *god* in (51a) and (52a) is of the *beautiful*-type, while the adjective *god* in (51b) and (52b) belongs to the *hard*-type. Note that the presence of the adverbial phrase *ealle swiðe* 'all very' in (52a) supports our two-adjective-type interpretation but contradicts the alternative single-adjective-type interpretation. This is because trying to interpret (52a) as a TC and to replace it by the potential alternative, impersonal construction with or without the dummy *it*, as in (52b), would give us an undesirable result due to the lack of agreement in number between the singular subject or verb and the word *ealle*. Thus, (51b) and (52b) cannot be considered to represent alternative constructions to (51a) and (52a) because (a)-type and (b)-type involve different adjectives and therefore they are semantically (and syntactically) different.

Furthermore, our argument is compatible with the fact that only the adjectives which can be considered to be similar to the ambiguous *pleasant*-type sometimes occur in both types of prepositional constructions with P-Stranding and without P-Stranding, whereas most other adjectives, which seem to clearly belong to either the *hard*-type or the *beautiful*-type, occur only in one of the two types of constructions (cf. Allen 1980b, Wurff 1992b).<sup>25</sup>

In short, although a counterargument based on such examples as (51) and (52) might be logically possible, it is not strong enough to invalidate the conclusion made about the necessity of P-Stranding in OE. Thus, as long as no reliable evidence is found that, unlike ModE examples, the two corresponding constructions (with and without P-Stranding, respectively) involved in the adjective *god* were semantically the same in OE, there is no

<sup>25</sup> Neither Allen (1980b) nor Wurff (1992b) make such an observation but all their examples support the above conclusion.

reason to consider the two OE constructions to be interchangeable and to regard the construction without P-Stranding, as in (52b), as an alternative to the construction with P-Stranding, as in (52a).

## 2.5. Summary and Conclusion

In this chapter, we have discussed the OE prepositional constructions mainly from a descriptive point of view, focusing on what really distinguishes between the two contrasting types of prepositional constructions regarding P-Stranding possibilities. Above all, we have seen that every case of P-Stranding in OE at surface structure was necessary in that no alternative construction was available while P-Stranding itself was allowed unless otherwise prohibited. Furthermore, no instances of P-Stranding in OE involved DPO (i.e., the displacement of PO from PP) and no ModE types of P-Stranding which have to involve DPO were allowed. This means that DPO was strictly prohibited in OE, which enabled us to derive \*DPO (i.e., a constraint against DPO).

No matter how such a prohibition is theoretically analyzed, it seems clear that OE had some sort of constraint on P-Stranding. In the next two chapters (i.e., Chapters 3 and 4), I will now address the issue of what motivates the constraint by explaining what made DPO so difficult in OE. I will propose, in particular, that what was behind the constraint is a high degree of 'obliqueness' of OE prepositional arguments, which was rigidly marked and represented by P as an 'obliqueness marker', and the representation and maintenance of relative obliqueness among OE NP arguments. This will eventually enable us to explain why OE had no P-Passive.

## CHAPTER 3

### RELATIVE OBLIQUENESS AND CASE GOVERNMENT IN OLD ENGLISH<sup>1</sup>

This chapter discusses the role of 'relative obliqueness' in OE grammar, especially in the case government and subcategorization inheritance of OE verbs, prepositions, and preposition-verb compound verbs (P-V CVs). In particular, I consider what really distinguishes each OE morphological case and answer two main questions: first, what, besides grammatical roles or functions, determines the case government of OE verbs, and second, how can we explain the contribution of the nonhead P to the subcategorization of the whole CV while maintaining the traditional priority of the head V?<sup>2</sup>

#### 3.1. The Subcategorization Inheritance in Old English P-V Compounds

##### 3.1.1. The head of Old English P-V compounds

In order to explain the relation between a word and its parts, linguists have generally made the assumption that words have, as phrases do in syntax, a head or a central element. In general, the head of a word is defined as one of the constituent elements of the word which determines the properties of the whole word. In OE P-V CVs, the right-hand

member V determines most important properties of a whole compound, including categorial features and morphological classes, as follows:<sup>3</sup>

#### (1) Category of Old English P-V compound verbs

[[æfter]p-[hyrigean]v]v	'to follow an example'
[[from]p-[swican]v]v	'to desert from'
[[geond]p-[drencan]v]v	'to drink excessively'
[[þurh]p-[drifan]v]v	'to drive through'
[[under]p-[þegnian]v]v	'to serve under'
[[wiþ]p-[standan]v]v	'to hinder, withstand'
[[ymb]p-[sælan]v]v	'to tie around'

#### (2) Morphological class of Old English P-V compound verbs<sup>4</sup>

	Infinitive	1st (sg.) pret.	2nd (pl.) pret.	Past ptc.	Class
(a) (i)	hieran 'to hear'	hierde	hierdon	hiered	W1
(ii)	ofer-hieran 'to overhear'	ofer-hierde	ofer-hieron	ofer-hiered	W1
(b) (i)	bregdan 'to pull'	brægd	brugdon	brogden	S3
(ii)	ofer-bregdan 'to cover'	ofer-brægd	ofer-brugdon	ofer-brogden	S3
(c) (i)	faran 'to go'	for	foron	faren	S6
(ii)	ofer-faran 'to go over'	ofer-for	ofer-foron	ofer-faren	S6

As we can see in (1), the categorial feature percolates to the mother (i.e. the whole compound) from V. In the same way, examples in (2) show us that although all the CVs share the same preposition, they are different in their morphological classes from one another and have the same verb class as their corresponding simplex verb, which means that V determines the morphological class of the whole CV. Furthermore, as is well known, the right-hand member of the CVs determines many other inherent features such

<sup>1</sup> This chapter is based on Goh (1999, 2000).

<sup>2</sup> P represents a preverb (e.g., *wiþ* of OE *wiþcweðan* or *over* of ModE *overcome*) which is assumed to be originally a preposition in its underlying representation, whereas V indicates a simplex verb (e.g., *cweðan* of *wiþcweðan* or *come* of *overcome*).

<sup>3</sup> Kim (1997) identifies the head of OE P-V CVs in a similar way.

<sup>4</sup> I follow the classification of Mitchell & Robinson (1992: 36). W and S indicate weak and strong verbs, respectively, while the numbers after them represent verb classes, e.g., W1 = weak verb, class 1.

as tense, aspect, person, and number; the left-hand member P does not influence the determination of those features. Therefore, we can reasonably assume that the right-hand member V is the head of OE P-V CVs and expect that this head will also determine other important features like the subcategorization of the whole compound.<sup>5</sup>

### 3.1.2. Contribution of nonheads in Old English P-V compounds

One conspicuous difference between OE and ModE is that CVs in OE can be made very freely by combining a preposition and a verb. Moreover, unlike ModE in which the meanings of P-V CVs (e.g., *override*, *withdraw*) are not usually obtained from their components in a compositional way,<sup>6</sup> most OE P-V CVs are more transparent so their meanings can be derived from the meanings of their parts. One may observe in this regard that many OE CVs behave compositionally in their argument subcategorization as well, that is, the prefix P as well as the head V contributes to the argument structure of the CV. Thus, unlike our general expectation about the behavior of the head and a nonhead, many OE P-V CVs show that although the head V determines most of the morphosyntactic features of the whole CV, the valence of the CV is jointly determined by the head V and the nonhead P. This point is well demonstrated by the comparison of the respective case government of P-V CVs and their component V and P (Kim 1997).<sup>7</sup> Consider the following examples:

<sup>5</sup> By identifying V as the head of P-V CVs, I don't intend to mean that all words have a head or that there is a unique way to identify its position within (complex) words.

<sup>6</sup> Thus, the meanings of *override* and *withdraw* are difficult to reconstruct from the meanings of their components (i.e., *over* and *ride* for *override*; *with* and *draw* for *withdraw*).

<sup>7</sup> Campbell (1959: §72 fn.1) seems to be the first to observe the contribution of the prepositional prefix to the subcategorization of the whole compound verb in OE. This observation was also made by other studies such as de la Cruz (1973), Mitchell (1985: §§1065-6), and Kim (1997).

### (3) *gan* and *ymb-gan*

- (a) se þe fylgeþ me ne gæþ he on þeostro  
 he who follows me not goes he into darkness  
 'he who follows me shall not go into darkness' (BiHom 103.31)

- (b) *Ymb-eode* þa ides Helminga duguþe ond geogope  
 around-went then lady of-Helmings veterans and youths  
dæl æghwylcne.  
 part each [acc]  
 'Then the lady of the Helmings went around every group  
 of the veterans and the youths' (Beo 620-1)

### (4) *ymb*

- (a) Aras þa se rica, *ymb hine* rinc manig,  
 rose then the noble around him [acc] man many  
 'The noble and many a man around him rose up' (Beo 399)

- (b) He ferde eft siððan *embe sumere neode*  
 he went again afterwards about some need [dat]  
 'Afterwards he went again about some need' (ÆCHom ii. 508.15)

*Gan* in (3a) is an intransitive verb which does not take any object, whereas *ymb-gan* in (3b) is a transitive verb which takes an accusative object. Note that the preposition *ymb* takes an accusative or dative object in (4). The observation about the case government in (3) and (4) shows us that the subcategorization of the P percolates up to become that of the whole CV. Furthermore, in these examples, we can see that the meaning of the CV is so transparent that it can be compositionally obtained from its constituent parts. Thus, the meaning of *ymb* 'around' combines with the meaning of *gan* 'to go' to produce the compositional meaning of the whole CV *ymb-gan* 'to go around'. The phenomenon, in which nonheads, along with the head, can participate in determining the argument structures of (OE) P-V CVs, is common also in ModE and many other

languages such as Greek, Latin, and German and goes against our expectation about the behavior of the head and a nonhead.

The following examples are more interesting because they show that a preposition combines with a transitive verb which can take its own NP object and that both the head and the nonhead contribute to the argument structure of the whole CV.

(5) *cweðan* and *wip-cweðan*

- (a) in leohte him þa word *cweþað*  
 in light him [dat] those words [acc] speak  
 'they will speak those words to him in glory' (Christ 401)

- (b) gif inc hwa ðæs *wip-cweþe*  
 if you-two [dat] anyone that [gen] contradicts  
 'if anyone contradicts you about that' (BIHom 71.1)

*Wip-cweðan* 'to refuse, contradict, (literally) speak against' in (5b) is a ditransitive and takes dative and genitive at the same time, whereas *cweðan* 'to speak' can take either dative and accusative at the same time or accusative alone but never takes genitive. Therefore, we can infer that the genitive case would come from P and this is confirmed by the following examples showing the case government of *wip* 'against', which takes genitive, dative, or accusative:

(6) *wip*

- (a) micel liget fleah of ðære dune swilce flān  
 great lightning flew from the mountain like arrows  
*wið* þæs hæðenan folces  
 against the heathen folk [gen]  
 'great lightning flew from the mountain like arrows  
 against the heathen folk' (ÆCHom i. 504.29)

- (b) se dæg cume þe he sceole wið þæm lichomon hine gedælon  
 the day come that he must against the body [dat] him separate  
 'the day shall come that he must separate himself from the body'

(BIHom 97.20)

- (c) he forgiþeþ eall swa hwæt swa þes middangeard ær  
 he forgives all whatsoever this world previously  
*wip* hine æbyligða geworhte  
 against him [acc] offenses made  
 'he shall forgive all offenses whatsoever this world has previously  
 committed against him' (BIHom 9.12)

Our observation so far is verified by the case government patterns of verbs and prepositions, as shown in Bosworth & Toller (1898) and Mitchell (1985: §§1092, 1178). The general subcategorization pattern of the above CV, the simplex verb, and the preposition can be described as follows:

(7) Subcategorization of *wip-cweþan*, *cweþan*, and *wip*<sup>8</sup>

- (a) *wip-cweþan* [dat, (gen)] 'to contradict a person [dat] with regard to a thing [gen]'  
 (b) *cweþan* [acc, (dat)] 'to say, speak a thing [acc] to a person [dat]'  
 (c) *wip* [acc / dat / gen] 'against'

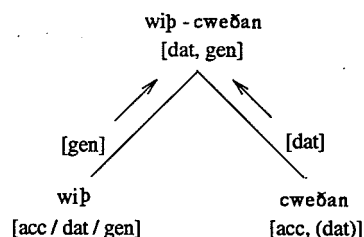
The above subcategorization pattern, as well as the examples considered so far, shows that the CV *wip-cweþan*, as a ditransitive, takes dative and genitive at the same time and that the genitive case does not come from the simplex *cweþan* but from the preverb *wip*. This means that the nonhead P as well as the head V participates in the determination of the argument structures of the P-V CVs in OE, and as seen earlier with

<sup>8</sup> V [case<sub>1</sub>, case<sub>2</sub>] (= V [COMPS<NP[case<sub>1</sub>], NP[case<sub>2</sub>]>]) indicates that the verb takes two NP arguments whose cases are [case<sub>1</sub>] and [case<sub>2</sub>], respectively, whereas V [case<sub>1</sub>/case<sub>2</sub>] means that the verb takes either an NP [case<sub>1</sub>] or an NP [case<sub>2</sub>].

*ymb-gan*, this is quite different from our expectation based on the traditional notion of the head.

Furthermore, what is more interesting here is that even though the nonhead prefix *wip* as a preposition takes accusative, dative, or genitive, the head V inherits only genitive from the nonhead prefix *wip* and dative and genitive case assignment percolates to the whole CV, resulting in a seemingly peculiar case government pattern for the CV. This suggests that the contribution of nonheads is possible but allowed only in some limited or constrained way:

(8) Limited inheritance of case features in Old English P-V compounds



Thus, our discussion so far raises two interesting questions that need to be answered by any reasonable morphological theory which assumes the notion of the head. First, how can we explain the contribution of the nonhead P to the subcategorization of the whole compound in general and the limited inheritance of case features in particular? Second, why is a certain case used for a P-V compound when more than one case is logically possible? In particular, some well-attested, ditransitive P-V compounds such as *wip-cweðan*, *wip-bregdan*, and *wip-standan* take only [dat, gen], although other combinations are logically possible out of the two cases from a head verb (i.e., [acc] and

[dat]) and the three cases from the nonhead P *wip* (i.e., [acc], [dat], and [gen]): [acc, acc], [acc, dat], [acc, gen], [dat, acc], and [dat, dat].<sup>9</sup>

In the remainder of this chapter I will first show that no previous studies or definitions of the head available in current morphological theories provide a satisfactory account of the common but hard-to-handle, limited contribution of nonheads to the subcategorization of OE P-V CVs and such case government as in *wip-cweðan*. Then, I will present a new account of the case-assigning properties of the head and address the issue of what, besides grammatical roles or functions, determines the case government of OE verbs. This will enable us to explain the contribution of nonheads under the traditional notion of the head without weakening the priority of the head by redefining it in an ad hoc way. It will also allow us to improve upon the argument attraction process which has been proposed as an account of the subcategorization inheritance in OE P-V compounds.

## 3.2. Previous Studies

### 3.2.1. Observations about subcategorization inheritance

There have been several studies which note the prepositional function of the prefix P in OE P-V CVs, that is, the contribution of the nonhead P to the subcategorization of the whole CV, in which P brings about and is responsible for the difference in valence or subcategorization between a simplex V and the corresponding P-V CV. Thus, Campbell (1959: §72 fn. 1) says that “prepositional adverbs” (i.e., prefixes of P-V CVs) can “have a function approximating to that of prepositions, the object being under their government”. De la Cruz (1973: 161, 164) also observes that both P-V CVs and prepositional verbs in OE and ME can permit a difference of object with respect to the simplex. Mitchell (1985:

<sup>9</sup> See Bosworth & Toller (1898), Visser (1963-73: §677), and Mitchell (1985: §§1092, 1178) for the subcategorizations of the above three P-V CVs with the P *wip*. Kim (1997) discusses many OE P-V CVs including the three and other similar examples from Greek and Latin.

§§1065-6) makes a similar observation about the behavior of prepositional prefixes of P-V CVs and explains what sort of verb results from the combining of the two elements (P and V).

Although their observations seem to be quite reasonable and correctly point out the contribution of the prefix to the argument structure of P-V CVs, none of them provide any generalization or explanation beyond the observation. Furthermore, their observations miss the prepositional function of a prefix when it combines with a (mono)transitive verb to form a ditransitive verb, as in *wip-bregdan*, *wip-cweðan*, and *wip-standan*.

### 3.2.2. Maintaining the priority of the head

Many studies have attempted to account for the relationship between a complex word and its head, which can be applied to the explanation of the argument structures of (P-V) compounds and their subcategorization inheritance. They can be divided into two main groups, depending on how the priority of the head is maintained. The first group, including Williams (1981), Lieber (1983), Selkirk (1982), Di Sciullo & Williams (1987), and others, attempts to keep the priority of the head mainly by redefining the notion of the head. Their basic idea in 'headness' is that the head of a word determines the properties of the whole word by allowing its properties to percolate up to the word, whereas a nonhead does not have any such influence. In contrast, the second group, including Toman (1987), Lieber (1992), and Kim (1997), tries to accommodate the contribution of nonheads by employing a (formal) mechanism which can make the head have control of the subcategorization inheritance.

#### 3.2.2.1. Redefining the notion of the head

Williams (1981: 248) proposes the Righthand Head Rule (RHR) to define the notion of the head. According to his RHR, the head is always the rightmost constituent of the morphologically complex word. Thus, the category of each compound (e.g., [sweet<sub>A</sub> talk<sub>N</sub>]<sub>N</sub>) is determined by the right-hand member (e.g., [talk<sub>N</sub>]). However, we can easily find many counterexamples to this RHR. For example, in [be-[witch]<sub>N</sub>]<sub>V</sub>, [be-[guile]<sub>N</sub>]<sub>V</sub>, [en-[large]<sub>A</sub>]<sub>V</sub>, and [en-[able]<sub>A</sub>]<sub>V</sub>, the left-hand member determines the category, or more precisely, the right-hand member does not determine the category.<sup>10</sup>

Similarly, Lieber (1983) says that the right-hand stem determines not only the category but also the argument structure of the compound, while the left-hand member does not pass any of its features up to the compound, only satisfying its own argument structure within the compound. Again, it is clear that this claim is not valid: in many OE P-V CVs and even in many similar ModE P-V CVs (e.g., *overcome*, *overlay*, *overlap*), not only the right-hand member (V) but also the left-hand member (P) participates in determining the argument structure of the whole compound.

In order to resolve this problem, Selkirk (1982: 20) provides a revised RHR, in which the notion of head is defined in terms of types and feature complexes rather than the position of a constituent, so that category-changing prefixes can be treated as heads. The point is that the head should have a complex of all relevant features shared by the mother.

<sup>10</sup> Williams (1981: 250) does note the presence of *en-X* compounds (e.g., *en-rich* and *en-slave*) but simply treats them as systematic exceptions to the RHR.

(9) Righthand Head Rule (revised)

In a word-internal configuration,



where X stands for a syntactic feature complex and where Q contains no category with the feature complex X,  $X^m$  is the head of  $X^n$ .

On the other hand, Di Sciullo & Williams (1987) replace the original notion of the head of a word by a so-called "relativized head" in order to avoid the problem in Williams (1981). Now, the head is defined as the rightmost constituent of a word which is specified for the property in question. This new notion is basically the same as Selkirk's (1982) revised RHR in that it allows any element (notably, the left-hand member) relevant to the given property to let its property percolate to the mother.<sup>11</sup>

In the case of P-Vi CVs (e.g., *be-gangan*, *ymb-gan*, etc.), either of the two revised approaches (i.e., Selkirk 1982, Di Sciullo & Williams 1987) seems to work, since the feature (i.e., argument) of the left-hand member can percolate to the mother (CV) and determine the argument structure of the whole CV. However, in the case of P-Vt CVs such as *wip-cweðan*, in which the argument structure is determined by both of the members, no approaches so far considered can explain the subcategorization inheritance of CVs. That is, no matter how we define the notion of the head, both P and V in P-V CVs cannot be the head at the same time, unless more than one head is allowed or the whole P-V CV is treated as the head.<sup>12</sup>

<sup>11</sup> See Anderson (1992: 310-19) for several other problems which the relativized head has.

<sup>12</sup> Multiple heads have been proposed for some problematic cases such as so-called 'dvandva' compounds and coordinating compounds (e.g., *hydrogen-oxygen* in *hydrogen-oxygen mixture*), in which more than one participant in a compound is assigned head status. However, the OE P-V CVs in question don't need to be treated as such a case at all, because the two components in OE P-V CVs are very different in their status: V is dominant in almost every respect. Furthermore, note that such a proposal, even for 'dvandva' cases, brings about complications in other parts of the description or the theory, as pointed out in Zwicky (1993: 292).

### 3.2.2.2. Accommodating nonhead contribution through a formal mechanism

Instead of proposing a new definition of the head, Lieber (1992), following Toman (1987), distinguishes "percolation", the passing of morpho-syntactic features between two different nodes, from "inheritance", an operation within the argument structures of a nonhead and the head. In this mechanism, the head (V) can inherit the argument of the nonhead (P) and then percolate it to the mother (CV).

Kim (1997) makes a similar proposal for OE P-V CVs. Her observation about the case government of OE P-V CVs is correct, especially in that the CVs must assign the case which comes from the simplex V, with the case coming from the P as optional (pp. 44-56). Furthermore, she provides a way of making the head control the subcategorization inheritance by adopting the mechanism of argument attraction, which is proposed by Hinrichs & Nakazawa (1989, 1994) within the framework of Head-Driven Phrase Structure Grammar.

Although the approaches in this line of reasoning allow us to accommodate the contribution of the nonhead by means of a formal device such as argument attraction, they are not without problems. Above all, the case government of OE P-V CVs raises a difficult problem for their approaches. For example, as we have considered in Section 3.1, some well-attested, ditransitive P-V compounds such as *wip-cweðan* and *wip-bregdan* take only [dat, gen], although other combinations, as is expected from Kim's (1997) proposal, are logically possible out of the two cases from each head verb (i.e., [acc] and [dat]) and the three cases from the nonhead P *wip* (i.e., [acc], [dat], and [gen]): Specifically, [acc, acc], [acc, dat], [acc, gen], [dat, acc], and [dat, dat] might all be expected. How is it, then, that some CVs take a particular (set of) case(s) when more than

one case is logically possible? That is, why does the head V inherit a specific case when more than one case is available from the nonhead P?

None of the previous studies including Lieber (1992) and Kim (1997) explain this limited inheritance of case features in OE P-V CVs. This means both Lieber (1992) and Kim (1997) still have to explain what makes the inheritance (or argument attraction) possible and what controls it. Thus, their account is not yet complete. That is, although their (formal) mechanism enables the head to appear to be in control of the subcategorization inheritance, it gives us little explanation of why the theory of subcategorization inheritance is constituted in the way it is.

So far, we have considered various approaches which are relevant to the subcategorization inheritance of OE P-V CVs and found that there is no previous study which can satisfactorily account for or be applied to the question at issue. In the following section, I will present an alternative account of the subcategorization inheritance in OE P-V CVs, in which, without any ad hoc redefinition, the head in the traditional sense is still in complete control and determines the contribution of nonheads. First, I will motivate and propose an 'obliqueness hierarchy' (OH) among the NP arguments of OE verbs and prepositions. Then, in order to represent the information about the OH in the subcategorization of the head, I will enrich, but not try to redefine, the notion of the head with respect to case features. This enriched interpretation of case features based on the relative obliqueness of NP arguments will help us resolve the problem of the limited case feature inheritance and improve upon the formal mechanisms for subcategorization inheritance proposed by some previous studies, thereby enabling us to provide a principled account of the contribution of nonheads to the subcategorization inheritance in OE P-V CVs.

### 3.3. An Obliqueness Hypothesis

#### 3.3.1. What really distinguishes Old English morphological cases?

There have been many studies which attempt to explain the syntactic and semantic contribution of OE morphological cases and most of those studies have tried to explain what the OE cases encode on the basis of traditional notions of case government. Thus, OE cases might be explained in terms of the grammatical relations they encode, that is, the nominative encodes subjects, the accusative direct objects, and the dative indirect objects. However, few of the accounts based on this traditional view have been very successful in explaining what OE cases really encode, because although such accounts may be appropriate in many cases, they are inappropriate in many other instances, making it difficult to formulate a generalization which can be applied to various uses of OE non-subject cases. In particular, the object marking of many OE verbs is so variable that we can easily find such alternative case markings, as in (10), and they are often found in the same text or context, as in (11), or even in the same sentence, as in (12):

- (10) (a) *ond ða folgode feorhgeniðlan*  
and then followed deadly-foes [acc]  
'and then he pursued his deadly foes' (Beo 2928)

- (b) *him folgiap fuglas*  
him [dat] follow birds  
'birds follow him' (Phoen 591)

- (11) (a) *he þæt eal wiþsacan wolde*  
he that [acc] all refuse wanted  
'he wished to refuse all that' (COE: LS 35 (VitPatr) 85)



- (b) hwaðer he ealles bæs      wipsacan wolde  
 whether he all      that [gen] refuse      wanted  
 'whether he wished to refuse all that'      (COE: LS 35 (VitPatr) 81)

- (12) (a) se fæder wiðsoc      his beame,      and þæt bearn wiðsoc  
 the father renounced      his child [dat] and that child rejected  
þone fæder,      and æt nextan ælc freond wiðsoc oðres,  
 the father [acc] and at last      each friend refused      another [gen]  
 'the father renounced his child, and the child rejected  
 the father, and then all friends refused each other'

(ÆLS 23. 110)

- (b) gefylgdon hine      vel him  
 followed him [acc] or him [dat]  
 'they followed him or him'      (Lindisf. Gosp. [Plank (1983)])<sup>13</sup>

The above examples clearly show that a verb varies in assigning a case to its direct object without involving any important difference in grammatical relationship and meaning in kind. How can we explain these alternative case markings for the same verb? Should we say that it is just a free variation which doesn't make any significant difference? One might argue that such alternations in OE object case marking come from uncertainties in the use of OE object cases and that they especially reflect the loss of case distinction in relatively late texts. However, this does not seem to be the case, since such variation in object cases is extremely pervasive in the early OE period and characteristic even of other early Germanic languages (Plank 1983: 246).<sup>14</sup>

Although grammatical roles and functions are variably encoded in OE cases, there are two rigid distinctions among OE NPs with respect to their cases and governors.

<sup>13</sup> Note that (12b) is a different kind of example from (12a). (12b) is a glossator's comment on usage, not an actual example.

<sup>14</sup> Plank (1983) proposes "semantic opposedness" to explain what OE morphological cases really encode. Unfortunately, his claim provides little linguistic argument. On the other hand, Goh (in press) provides a system-internal and -external argument for how such alternative case markings should be interpreted in OE texts.

Above all, there is a strict distinction among the NP arguments of a verb, especially between accusative NPs and NPs in other cases, which can be clearly seen in their behavior in passivization.<sup>15</sup> In the OE syntactic passive, as we have already seen in Chapter 2, only an accusative object of the active can become the (syntactic) subject of the passive for the personal passive, as in (13a), whereas a dative or genitive object has to remain in its oblique case without becoming the subject of the passive for the impersonal passive, as in (13b) and (13c):

- (13) (a) he      mid      eotenum      wearð      on      feonda      geweald  
 he [nom] among      giants      became      into enemy's      power  
 forð      forlacen  
 further      betrayed  
 'among the giants, he was well betrayed into the power of the enemy'  
 (Beo 902-3)

- (b) Him      weorpeð      blæd      gifen!  
 him [dat] became      glory      given  
 'To him was given glory'      (Christ 877)

- (c) Forðæm se ðe his      ær      tide ne      tiolað,  
 because he who his [gen]      before time not      provide (for)  
 þonne bið his      on tid      untilad,  
 then (it) is his [gen]      on time      unprovided  
 'For he who does not provide for himself beforehand,  
 it will be unprovided for him when the time comes.'

(Bo 67. 11 [Mitchell 1985: §849])<sup>16</sup>

<sup>15</sup> This strict distinction between accusative and other cases can also be applied to NP arguments of prepositions since OE P-V CVs such as *ymb-sprecan*, *ymb-locian*, *wip-springan*, *wip-sleogan*, etc. whose sole arguments come from the prefix will show the same difference in passivization. That is, even though a prepositional argument cannot be passivized at all in OE, an inherited argument (from P) in P-V CVs does not have any problem with passivization even in OE.

<sup>16</sup> Although the OE verb *ti(o)lian* 'to strive after, provide (for)' takes genitive, example (13c), which Mitchell provides as an example of the impersonal passive for a genitive object, may be problematic because the word *untilad* 'unprovided' can be regarded as an adjective rather than a past participle. Unlike the impersonal passive for the dative object, clear examples of the impersonal passive for the genitive object seem to be rare (McLaughlin 1983: 62). This rareness is compatible with the distinction between the dative case and the genitive case, which is reflected in the obliqueness hierarchy proposed in (18).

This distinction between accusative NPs and dative or genitive NPs must have been extremely strong since no evidence has been found that this rule has exceptions. Thus, OE does not even have the indirect passive (i.e., the passive type *I was told a story*). Clear examples of the indirect passive begin to appear in the late 14th century and they remain rare until late in the 15th century (Mustanoja 1960: 400-1, Denison 1993: ch. 6), as in (14):

- (14) (a) Item as for the Parke she is a lowyd Every yere a dere and xx Coupull of Conyes and all fewell Wode to her necessarye To be Takyn in a Wode callidde Gredene Wode.

'Item: as for the park, she is allowed a deer each year and twenty pairs of rabbits and all fuel wood [= firewood] necessary for her, to be taken in a wood called Greendene Wood'

(1375 *Award Blount* in *ORS* 7.205.30 [Denison 1993: 110])

- (b) playnly þu art forbodun boþe  
plainly you are forbidden both

(?c1450 (?a1400) *Wycl. Clergy HP* 383.34 [Denison 1993: 111])

This distinction is also maintained even when one and the same verb has two different sets of NPs as its arguments, as in the examples below. Note that the different argument structures are associated with different meanings of the verb, which are illustrated in (15) and (16), respectively.<sup>17</sup>

<sup>17</sup> The examples are from Mitchell (1985: §858) but the ModE translation is mine.

- (15) *ofteon*<sub>1</sub> 'to take/deny a thing [acc] from/to a person [dat]'

(a) ... þæt ðam godum þe hit gehealdan willað,  
... that to the good [dat] who it to hold wish,  
ne sy *oftogen* seo gastlice deopnyss  
not may-be denied the spiritual profoundness [nom]  
'... that to the good (people) who wish to hold it,  
the spiritual profundity may not be denied' (ÆCHom ii. 96.4)

(b) ðe bið *seo bodung* *oftogen*  
you [dat] is the message [nom] denied  
'the preaching shall be denied to you' (ÆCHom ii. 530.30)

- (16) *ofteon*<sub>2</sub> 'to deprive a person [dat] of a thing [gen]'

(a) ... ac him wæs ða *oftogen* ælcas fodan six dagas  
... but them [dat] was then deprived every food [gen] six days  
'... but then they were deprived of all food for six days' (ÆCHom i. 570.30)

(b) Blind sceal his eagna polian,  
blind must his eyes dispense with,  
*oftigen* biþ him torhtre gesihþe  
deprived is him [dat] clear vision [gen]  
'A blind man must dispense with his eyes,  
(and) he is deprived of clear vision' (Max i. 39)

On the other hand, OE has another conspicuous distinction between verbal arguments and prepositional arguments, which is also clearly revealed in passivization. That is, passivization in OE is allowed only for a verbal argument. In other words, there is no P-Passive in OE, at least, not in the same form as the ModE P-Passive. Thus, OE does not have the passive type *He was laughed at*. This type of passive begins to appear about 1225, but remains rare until the end of the 14th century (Denison 1985, 1993: ch.7).

- (17) (a) how worthy it es to ben wondrid uppon  
 how worthy it is to be wondered at  
 (?a1425 (c1380) Chaucer, *Bo.* 4.pr1.22 [Denison 1993: 126])
- (b) 3if þe wardeyns of þat 3eer ben sent after  
 if the Wardens for that year are sent for  
 (1389 *Lond. Gild. Ret. in Bk. Lond. E.* 52.52 [Denison 1993: 126])

In sum, there are two strict distinctions among OE NPs: one is among the NP arguments of the same head or governor with respect to their cases and the other is between verbal arguments and prepositional arguments. Specifically, accusative NPs are easier to be passivized than dative or genitive NPs, whereas verbal arguments are always easier to be passivized than prepositional arguments.

### 3.3.2. An obliqueness hierarchy among Old English NP arguments

Note that the distinctions among OE NP arguments so far considered are based on passivization possibilities and that passivization possibilities in turn are often related to the notion of 'obliqueness' in such a way that the easier it is for an (object) NP to be passivized, the less oblique that NP is. For instance, Head-Driven Phrase Structure Grammar assumes that passive is an operation on grammatical relations that demotes (the least oblique) subject arguments and, in many cases, additionally promotes more oblique syntactic dependents (e.g., the second least oblique, primary objects in English) to subject status (Pollard & Sag 1994: 119).<sup>18</sup>

<sup>18</sup> Although the notion of obliqueness has been quite widely assumed or employed in many linguistic studies, its definition does not seem to have been clearly given in any previous studies. This nebulous notion of obliqueness, which is often just assumed to be a ranking of subcategorized constituents, can roughly be defined as follows: the less oblique an NP argument is, the more central it is for the meaning or

This relational view of passivization is shared by many theoretical frameworks such as Lexical Functional Grammar (Bresnan 1982a, 1982b), Generalized Phrase Structure Grammar (Gazdar 1982, Gazdar et al. 1985) and Categorical Grammar (Dowty 1982a, 1982b). Similarly, Relational Grammar (Perlmutter & Postal 1977, 1983) and Arc Pair Grammar (Johnson & Postal 1980, Postal 1986) also view passivization as an operation on the relation between the subject and the direct object, although they define passive as 2 (= direct object) advancing to 1 (= subject) out of a transitive clause, thereby leaving the "demotion" of the subject a secondary after-effect of other principles.

Note also that one crucial factor which determines the acceptability of the passive is the "affectedness" of the passive subject by the action expressed by the predicate (Bolinger 1975, Riddle, Sheintuch, & Ziv 1977, Davison 1980, Quirk et al. 1985: 1164-5) and that this affectedness can easily be related to the concept of "(semantic) opposedness" (Plank 1983, Goh in press). Since obliqueness is often assumed to refer to the opposition between the subject and other non-subject arguments, it seems quite reasonable to represent the distinctions in passivization possibilities among OE NP arguments by means of relative obliqueness.

Thus, in terms of the notion of obliqueness, the distinctions among OE NPs can be described as follows: first, accusative NPs are less oblique than dative NPs, which are less oblique than genitive NPs, and second, regardless of cases, verbal arguments are less oblique than prepositional arguments. On the basis of this generalization about OE NPs and their relative obliqueness, I propose an obliqueness hierarchy among OE NP arguments with respect to their cases and governors, as follows:<sup>19</sup>

relationship expressed by the head (i.e., verb) of the relevant VP and the more likely it is for it to be selected by the head.

<sup>19</sup> The representation of the grammatical relation by means of relative obliqueness, often with a different name such as "accessibility hierarchy", can be found in many studies including Keenan & Comrie (1977, 1979), Comrie (1981: 148-55), and Pollard & Sag (1987: 67-72, 117-121, 1994). Note, however, that their hierarchies, mainly based on grammatical functions, are difficult to properly apply to NP arguments which have the same grammatical function (i.e., the direct object) but alternative case markings, as is shown in

(18) An obliqueness hierarchy of morphological cases for Old English NP arguments<sup>20</sup>

(a) Nom (subject) < Acc < Dat ≤ Gen

(b) Verbal arguments < Prepositional arguments

### 3.3.3. *An enriched interpretation of case features for Old English verbs*

As we have already observed in Section 3.1.2, unlike ModE P-V compounds (e.g., *override*, *undergo*) whose meanings and argument structures are not usually obtained from their components in a compositional way, most P-V compounds in OE are more transparent so their meanings can be derived from the meanings of their parts and behave compositionally in their argument subcategorization as well. This compositionality of OE P-V compounds in their semantics and subcategorization, above all, means that the relationship between the arguments of a verb and the argument of a preposition are highly likely to be maintained even after the verb and the preposition combine with each other to become a P-V compound.<sup>21</sup>

Note now that although the encoding of kinds of meaning or grammatical relationship in OE object cases is inconsistent, as is shown in (10), (11), and (12), the

(10)-(12). Thus, relative obliqueness here is defined with respect to the morphological cases of NP arguments rather than their grammatical roles or functions.

<sup>20</sup> "Case<sub>1</sub> < Case<sub>2</sub>" means that Case<sub>1</sub> is less oblique than Case<sub>2</sub>. The distinction in obliqueness between dative and genitive is not as clear as the distinction between accusative and other object cases. The hierarchy "Dat ≤ Gen" mainly reflects the relative passivization possibility. This also seems to be the case between dative NPs and genitive NPs of Modern German, whose grammar is known to be more similar to OE grammar than to ModE grammar.

On the other hand, one may wonder why I do not choose to employ the distinction of structural vs. lexical case, which is widely assumed in derivational syntactic theories such as Government-Binding Theory. Above all, the structural vs. inherent case distinction cannot distinguish between different inherent cases (i.e., dative and genitive) nor between verbal arguments and prepositional arguments.

<sup>21</sup> This parallelism between morphology and syntax in OE of P-V compounds and their V+P phrasal counterparts has been assumed and demonstrated by many previous studies about OE P-V compounds (e.g., Ogura 1995, Kim 1997). By arguing for the given parallelism involving OE P-V compounds, however, I don't intend to equate syntax and morphology in general.

distinction among cases of NPs or the relative obliqueness of NPs encoded in cases is very systematic and regular, because this difference in obliqueness among NPs is exceptionlessly applied in determining the passivization possibilities of NP arguments. This strongly suggests that the relative obliqueness of NPs is more likely to be maintained in P-V compounding than any other semantic information in kind.

In particular, the obliqueness of an NP is encoded in its morphological case and the obliqueness hierarchy among NP arguments of the same governor is determined solely by their morphological cases, whereas a verbal argument is less oblique than a prepositional argument, regardless of their morphological cases. Thus, if an argument of P is inherited into the new argument structure of a P-Vt compound, then the obliqueness hierarchy between the (less oblique) original verbal argument and the (more oblique) original prepositional argument should be maintained in the new argument structure and, therefore, the case selected for the inherited prepositional argument should be one which does not change the original relative obliqueness between the two NP arguments.

Most importantly, all the characteristics of OE NPs and their behavior considered so far are determined and controlled by the head (V). This is because it is the head itself that represents and encodes the syntactic and semantic relationship among its arguments by selecting relevant arguments of particular cases. This suggests that the case-government of these compounds and the limited contribution of nonheads can be explained by more properly reflecting the properties of the head as they are.

As for OE morphological cases and their inheritance in P-V compounds in particular, if a certain case is not marked for a verb in its subcategorization and is less oblique than the case marked for the same verb in the lexicon, then the case in question is very likely to be negative in the sense that it does not occur with the given verb even through P-V compounding, as long as the compounding does not involve any significant change in the original fundamental syntactic and semantic relationship between the NP

arguments involved. This is mainly because P-V compounding can help a relevant verb to inherit only a more oblique prepositional argument.<sup>22</sup> Thus, I propose the following enriched interpretation of the notion of the head with respect to case features, as follows:

(19) An enriched interpretation of case features for Old English verbs

Any morphosyntactic case (of an argument of a verb) which is unmarked in the subcategorization of a verb is *negative* if it is *less oblique*, and *potential* if it is *more oblique* than the morphosyntactic case of an argument which is specified as a marked value in the subcategorization of the given verb.

This interpretation of the notion of the head, along with the obliqueness hierarchy in (18), enables us to propose an informal reinterpretation of the argument structures of OE verbs, as in (20) below. The double parentheses indicate that relevant case features are specified but unmarked, the inverted question mark ( $\zeta$ ) means that relevant cases are not realized yet but are potential (with ( $\zeta$ ) easier to inherit than ( $\zeta\zeta$ )), and finally, the plus (+) and minus (-) indicate marked and negative cases, respectively:

(20) An informal reinterpretation of argument structures of Old English verbs<sup>23</sup>

- (a) Auxiliary verb [SUBCAT < NP [+nom], +VP >]
- (b)  $V_i = V$  [SUBCAT < NP [+nom] >]  
 $= V$  [SUBCAT < NP [+nom], ((NP [ $\zeta$ acc /  $\zeta$ dat /  $\zeta$ gen])) >]

<sup>22</sup> In this connection, note that although a prepositional dative (e.g., *to NP* [DAT]) can be added to the ModE structure "V + accusative NP" (e.g., *told the story* [ACC]), as in *John told the story to Mary*, the accusative *the story* cannot be added to the ModE structure V + prepositional dative (e.g., *spoke to Mary* [DAT]), as in *\*I spoke to Mary the movie*, in which the prepositional genitive *about the movie* [GEN] is acceptable, as in *I spoke to Mary about the movie*.

<sup>23</sup> For the representation of the subcategorization list of OE verbs, I generally follow the framework of Head-Driven Phrase Structure Grammar (HPSG) in the version of Pollard & Sag (1987, 1994). Note that although HPSG has no treatment of 'potential (case) features', there is nothing in that framework which is incompatible with such a proposal.

- (c)  $V[acc] = V$  [SUBCAT < NP [+nom], NP [+acc] >]  
 $= V$  [SUBCAT < NP [+nom], NP [+acc], ((NP [ $\zeta$ dat /  $\zeta$ gen])) >]
- (d)  $V[dat] = V$  [SUBCAT < NP [+nom], NP [+dat] >]  
 $= V$  [SUBCAT < NP [+nom], NP [+dat], ((NP [-acc,  $\zeta$ gen])) >]
- (e)  $V[gen] = V$  [SUBCAT < NP [+nom], NP [+gen] >]  
 $= V$  [SUBCAT < NP [+nom], NP [+gen], ((NP [-acc,  $\zeta$ dat])) >]
- (f) Impersonal verb [SUBCAT < (NP [-nom, + $\alpha$ ]) >]  
 $= V$  [SUBCAT < (NP [-nom, + $\alpha$ ]), ((NP [- $\beta$ ,  $\zeta$  $\delta$ ])) >],  
 where [ $\beta$ ] < [ $\alpha$ ] < [ $\delta$ ].

In the next section, I will demonstrate that my proposal, which is based on relative obliqueness and the enriched interpretation of case features for OE verbs, is strongly supported by the extant OE data. In particular, I will show how my proposal can answer several interesting questions about the behavior of OE CVs, including the case government in *wip-bregdan*, *wip-cwepan*, and *wip-standan*, which do not seem to be answered satisfactorily in any previous studies.

### 3.3.4. Evidence for the role of relative obliqueness

One clear prediction from my proposal is that if a simplex verb subcategorizes for only dative or genitive in the lexicon, then it will not inherit accusative through compounding. Thus, a P-V CV formed by that verb and a preposition will not take accusative either even if the prefix (P) as a preposition can take accusative, because accusative is less oblique than either dative or genitive.

In order to verify this prediction, I have examined the OE simplex verbs which govern dative or genitive. My list of dative- or genitive-governing verbs is based on

Mitchell (1985: §1092), which is generally considered to be most complete. I have considered every genitive- or dative- governing simplex verb in the list and checked all the relevant verbs in order to see if any of them combines with a preposition to form a CV which takes a less oblique case than the case specified for the original simplex verb.

In particular, among about 180 verbs which are known to take dative or genitive, there are 112 simplex verbs (i.e., 37 verbs [gen] and 75 verbs [dat]), as given in (21) and (22) below. I have checked all those simplex verbs against Bosworth & Toller (1898), Toller (1921), Campbell (1972), and Hall (1960). The result: none of them make a P-V CV which takes a less oblique case than the case specified for the original simplex verb.

(21) Genitive-governing simplex verbs and their derivational complex verbs <sup>24</sup>

anþracian; basnian (ge-); blinnan (a-, ge-); blissian (efen-); boetan; bon; dwellan (a-, ge-, ofa-); efestan; elcian; faestan (a-, ge-); (ge-)felan; (ge-)feon (efen-); frasian (ge-); friclan; giernan; gilpan (for-); habban; hentan (ge-); hlosnian; latian (a-, ge-); locian (ge-); ge-nugan (be-nugan); nyttian (ge-); pleon; ge-restan; romian; sætan, sætian (be-, for-); sætnian (ge-); sciran (a-); sinnan; slæpan (ge-, on-); picgan (a-, ge-); porfnian; wædlian; wafian; wandian (a-, for-, un-); weddian (ge-).

(22) Dative- or genitive-governing verbs and their derivational complex verbs

andwyrðan (ge-); bicnan, bicanian (and-, ge-); bisenian, bysnian (ge-, mis-); brycian, brycsian (ge-); campian (ge-); cidan (be-, ge-, ofer-); gecflifian; cweman (ge-, mis-); ge-dafenian; derian (a-, ge-); dryman; dugan, dygan; earmian (of-); efnetan; eglian, eglian (æt-, ge-); fægnian, fagnian (ge-, on-); feligea; ge-feolan (æt-, be-, wiþ-); framian, fremian, fromian (forþ-); frodian; (ge-)fultuman, -ian (to(-ge)-); (ge-)fylstan (to-); geocian (un-); gitsian (ge-); godian; gramian; hearmian (of-); (ge-)helpan (a-, to-); hiersumian (ge-); (ge-)hlýstan (under-); hreman; hwopan; hyrian (æfter-, of-, on-);

<sup>24</sup> The derived complex verb(s) is/are given in the parentheses following each simplex verb. For relevant OE examples for the genitive- or dative-governing verbs, refer to Bosworth & Toller (1898), Visser (1963: 73), and COE (= Venezky & Healey 1980), which contains all surviving OE material except some variant texts.

lapiān (a-); (ge-)leogan (a-, for-, of-); libban (mis-, ofer-); (ge-)lician (mis-, of-, un-ge-); (ge-)limpan (a-, be-, mis-); linnan (a-, ge-, be-, of-); losian (ge-); lyffettan; magan; (ge-)metgian; migan (ge-); (ge-)miltian; missan; (ge-)neþan; (ge-)nyhtsumian; ge-ortrewan; ge-ortruwian; plihtan; racian; (ge-)rædan (a-, be-, for-, mis-, wiþ-); (ge-) sælan (to-); sceadan; scrifan (ge-); spiwan, spiwian (a-); (ge-)spowan (mis-); stefnian (ge-); stelan (be-, ge-, for-); sweltan (a-, ge-, for-); (ge-)swican (a-, be-, from-); tidan (ge-, mis-); ge-timian (mis-); trucian (ge-); (ge-)þancian; þegan; þegnian (ge-, under-); þeowan, þeowian (be-, ge-, ni(e)d-); (ge-)þingian (for(e)-, of-); (ge-)þwærian (a-, mid-); (ge-)þyncan (mis-, of-, on-); (ge-) unnan (of-); (ge-)wifian; wrixlan (be-, ge-).

As for the question of what prefixes should be treated as prepositions, I assume that the prefix (P) of a P-V CV is a preposition when it has the same form as an independent preposition and its meaning is closely related to that of the corresponding preposition. Thus, although I generally follow the criteria suggested in de la Cruz (1975) and Mitchell (1978) in this matter, I sometimes differ from them about the status of some individual prefixes or prepositions, especially when the given prefix shows the same or similar semantic and syntactic contribution as the corresponding preposition.

For instance, although the prefix *on-* is often meaningless and mostly corresponds to Old High German *int-* (or German *ent-*), which expresses the idea of escaping, going away, or removing something (Hall 1960, Bosworth & Toller 1898), we can also find many instances of the prepositional prefix *on-* with the meaning of the preposition *on* '(up)on, onto, against, toward, in respect to, or according to' (e.g., *on-a-sendan* 'to send into', *on(be)blawan* 'to blow upon/into', *on-bugan* 'to yield to, bow to', *on-hlinian* 'to lean on', *on-sawan* 'to introduce into', *on-sittan* 'to seat oneself in', *on-wadan* 'to penetrate into', etc.).

Similarly, although *be-* is often treated as an inseparable, non-prepositional prefix since it often gives an intensification to a verb or has a privative sense, the prefix shows the same or similar semantic and syntactic contribution as the corresponding preposition

*be* 'by, around' in many instances (e.g., *be-bindan* 'to bind about', *be-cidan* 'to complain of', *be-faran* 'to go around', *be-licgan* 'to lie around', *be-sittan* 'to sit around', *be-smeagan* 'to consider about', etc.). Thus, I will treat *on-* and *be-* as prepositional prefixes when it is clear that they are closely related to the corresponding prepositions in their semantics or when the complex words (i.e., *be-V* or *on-V*) have the synonymous phrasal counterparts (i.e., *V+be* or *V+on*).

Some interesting results from the investigation of the target data are the following. First, most of the target verbs do not form many compound or complex verbs. Thus, as the lists given in (21) and (22) show, they usually have no more than one or two derivational complex verbs, which in most cases are not P-V CVs but just combinations of an inseparable prefix (e.g., *a-*, *ge-*, *mis-*, etc.) and a given simplex verb. Note that this unproductivity in compounding is well predicted by the proposed interpretation of case features, because dative- or genitive-governing simplex verbs have only genitive or dative as their potential case(s), as is shown in (20). This becomes more interesting if we note that many intransitive or accusative-governing simplex verbs form a lot of complex verbs, many of which are P-V CVs, as follows: <sup>25</sup>

(23) Old English intransitive verbs and their derived complex verbs

(a) *cuman* 'to come'

*a-*, *an-*, *be-*, *for-*, *fore-*, *forþ-*, *ge-*, *in-*, *of-*, *ofer-*, *ofer-be-*, *on-be-*, *ongean-*, *purh-*, *to-*, *to-be-*, *under-*, *up-cuman*

(b) *cwēpan* 'to say, speak' (also as a transitive verb)

*a-*, *æfter-*, *be-*, *bi-*, *for-*, *fore-*, *ge-*, *hearm-*, *on-*, *onbe-*, *onge-*, *to-*, *wip-*, *wearg-*, *wiper-*, *yfel-cwēpan*

<sup>25</sup> The productivity of a Vi and Vt in compounding is also predicted by the given proposal. For example, a Vi has as its SUBCAT value "V [SUBCAT < NP [+nom], ((NP [<sub>i</sub>acc / <sub>i</sub>dat / <sub>i</sub>gen])) >]" and so it has an accusative, dative or genitive NP as its potential argument, which can be provided by almost any OE preposition and its object NP without destroying the original relative obliqueness among the NP arguments involved.

(c) *faran* 'to travel'

*a-*, *be-*, *for-*, *forþ-*, *ge-*, *geond-*, *in-*, *of-*, *ofer-*, *on-*, *op-*, *purh-*, *to-*, *ut-*, *wip-*, *ymb-faran*

(d) *gangan* 'to go'

*a-*, *æt-*, *be-*, *bi-*, *for-*, *fore-*, *forþ-*, *ful-*, *ge-*, *in-*, *of-*, *ofer-*, *on-*, *ongean-*, *purh-*, *to-*, *under-*, *up-*, *ut-*, *wip-*, *ymb-*, *ymb-gangan*

(24) Old English monotransitive verbs and their derived complex verbs

(a) *don* 'to do, make'

*a-*, *be-*, *for-*, *ge-*, *in-ge-*, *of-*, *of-a-*, *ofer-*, *on-*, *on-ge-*, *op-*, *to-*, *to-ge-*, *un-*, *under-*, *up-a-*, *ut-a-*, *wel-*, *yfel-don*

(b) *habban* 'to have'

*a-*, *æt-*, *be-*, *for-*, *ge-*, *of-*, *on-*, *wip-*, *wiper-*, *ymb-habban*

(c) *healdan* 'to hold'

*a-*, *æt-*, *an-*, *be-*, *for-*, *ge-*, *mis-*, *of-*, *ofer-*, *on-*, *op-*, *to-*, *ymb-healdan*

(d) *settan* 'to set, place'

*a-*, *an-*, *be-*, *bi-*, *for-*, *fore-*, *ge-*, *in-*, *of-*, *ofer-*, *on-*, *to-*, *un-*, *wip-*, *ymb-settan*

Second, none of the P-V CVs which come from the given dative- or genitive-governing verbs take a less oblique case (i.e., accusative) than the case specified for the relevant simplex verb. For example, *ge-feolan* 'to stick to', which is one of the dative-governing OE verbs, has *be-feolan* 'to apply oneself to' as a derived complex verb and this complex verb *be-feolan* never takes an accusative NP object but always takes a dative NP object, as in (26):

(25) *ge-feolan*

(a) *Swa mycele ma he gefealh mid geomnysse þam gebedum*

so much more he stuck to with zeal the prayers [dat]

'Thus, he stuck to the prayers much more zealously' (GD i. 74.14)

(b) he þa se halga wer gefealh his gebede mycle geornlicor,  
 he then the holy man stuck to his prayer [dat/gen] much more zealously  
 þonne he ær gewunode  
 than he before got used  
 'then he adhered to his prayer much more zealously  
 than before he got used to it' (GD ii. 125.28)

(26) *be-feolan*

- (a) Ne mæg ic ðære stiðnyssæ *be-feolan*, þe ðu  
 not can I the severity [dat] apply myself to, to which you  
 me totihst;  
 me urge  
 'I cannot submit to the strictness to which you urge me' (ÆCHom ii. 374.15)
- (b) eall sio gioguð ðe nu is on Angeleynne friora monna,  
 all the youth who now is in England of free men  
 ðara ðe ða speda hæbben ðæt hie ðæm *be-feolan*  
 who the riches have that they it [dat] devote themselves to  
 mægen sien to liornunga oðfæste,  
 can be to learning set  
 'all the young people who are now in England of free men, who are rich  
 enough to be able to devote themselves to it, should be set to learning'  
 (CP 7.11)

The case government of *be-feolan* is interesting because although its prefix *be-* as a preposition can take an accusative NP object, along with a dative object, as in (27) below—and therefore its government of accusative case is expected—the complex verb itself never takes an accusative object.

(27) *be*

- (a) Gregorius awrat *be* sumum geþyldigan were, Stephanus gehaten,  
 Gregory wrote about some patient man [dat] Stephen called  
 'Gregory wrote of a patient man, named Stephen' (ÆCHom ii. 546.14)

- (b) Nu is to besceawigenne humeta se Ælmihtiga God,  
 now is to consider why the Almighty God  
*be* his gecorenan and ða gelufedan ðenas, ... geðafað þæt hi  
 about his chosen and the beloved servants [acc] allows that they  
 mid swa micclum witum beon fommene and tobrytte ...  
 with so many pains be destroyed and broken ...  
 'Now it is to be considered why the Almighty God allows that his chosen  
 and beloved servants, ... be destroyed and broken with so many pains ...'  
 (ÆCHom i. 486.17)

One may want to argue that the limited case government in which *be-feolan* never takes an accusative object is due to the fact that the preposition *be* doesn't often take an accusative object (Mitchell 1985: §1183). However, such an argument will be difficult to maintain if we consider the case government of other P-V CVs derived from *ge-feolan*. In fact, *ge-feolan* has two other derived P-V CVs *æt-feolan* 'to adhere to' and *wip-feolan* 'to devote oneself to' and both of them always take a dative NP object, as in (28) and (29), respectively:

(28) *æt-feolan*

- (a) *Æt-feole* min tunge fæste gomum  
 adhered to my tongue firmly entertainment [dat]  
 'My tongue firmly adhered to entertainment' (PPs 136.5)
- (b) Eow is micel ðearf ðæt ge swa *æt-feolan*,  
 to you is much necessary that you so apply yourselves to  
 ut ðære lare,  
 outwardly the teaching [dat]  
 'It is very necessary that you so apply yourselves  
 outwardly to the teaching' (CP 375.5)



(29) *wip-feolan*

Ða he ða ongeat ðæt he ðære godspellican lare  
 when he then perceived that he the evangelical teaching [dat]  
 georne *wip-fealh*  
 eagerly applied himself to  
 'When he perceived that he eagerly devoted himself to  
 the evangelical teaching [dat/gen]' (BT 1253: *wip-feolan*)<sup>26</sup>

Note that although neither of the above two P-V CVs take an accusative object, both prefixes *æt-* and *wip-* of the two P-V CVs as prepositions can take an accusative NP object, along with other cases, as in (30) and (31) below. Moreover, their accusative case government is well attested.

(30) *æt*

- (a) Ic het eow mine frynd, forðan ðe ic eow cydde  
 I called you my friend because I to you made known  
 ealle ða ðing þe ic *æt* minum Fæder gehyrde.  
 all the thing that I from my Father [dat] heard  
 'I have called you my friends, because I have made known unto you  
 all the things that I have heard from my Father' (ÆCHom ii. 524.8-9)
- (b) þæt seo is nu get *æt* þisne andweardan dæg  
 that it is now yet at this present day [acc]  
 mid manegum godcumdum wuldrum swiþe healice geweorþod  
 with many divine glories very highly honored  
 for mana eagum.  
 before men's eyes  
 'that at this present day it is still very highly honored  
 with many divine glories before the eyes of men' (BiHom 125.16-8)

<sup>26</sup> COE (= Venezky & Healey 1980), which is known to contain almost all surviving OE material, does not have any example of this CV. The sole example in which the CV takes dative is from BT (Bosworth & Toller 1898).

(31) *wip*

- (a) Ac hwæt is þæt þam men sy mare þearf to þencenne  
 but what is that for the man is more needful to think  
 þonne embe his sawle þearfe, & hwone se dæg cume  
 than about his soul's need and when the day comes  
 þe he sceole *wið* þam lichomon hine gedælon,  
 that he must from the body [dat] himself separate  
 'But what is more needful for a man to think of than about his soul's need  
 and of the day that comes when he must separate himself from the body?'  
 (BiHom 97.18-21)
- (b) and he genealæhte þam lifleasan men, and hine unwurðne  
 and he approached the lifeless man and him unworthy  
 of deaðe arærde, þurh his ðingrædne *wið* þone soðan God  
 from death raised through his intercession with the true God [acc]  
 'and he approached the lifeless man and raised him unworthy  
 from death through his intercession with the true God'  
 (ÆCHom ii. 504.35)

The case government of the three derived P-V CVs of the dative-governing verb *gefeolan* will be more interesting if we note that many P-V CVs formed by an intransitive simplex verb and a preposition often take an accusative NP object. Thus, the P-V CV *forfaran*, which comes from the preposition *for* [dat/acc] 'before' and the intransitive verb *faran* 'to go', takes an accusative NP object, as in (32), and the P-V CV *þurh-creopan*, which comes from the preposition *þurh* [dat/acc] 'through' and the intransitive verb *creopan* 'to creep', takes an accusative NP object, as in (33).

(32) *faran* and *for-faran*

- (a) hyra gehwylc *faran* scolde to læranne  
 their each go should to teach  
 'each of them should go to teach' (BIHom 229. 5)
- (b) wolde *hine* *for-faran* geome  
 would him [acc] destroy (< before-go) eagerly  
 '(he) wished to destroy him eagerly' (WHom 222. 48)

(33) *creopan* and *purh-creopan*

- (a) he næfþ his fota geweald and onginþ *creopan* on þone ilcan weg  
 he not-has his feet control and begins to-creep in the same way  
 'he does not have the control of his feet and begins to creep in the same way'  
 (Bo 107.13)
- (b) ðæt melo *purh-crypp* ælc þyrel  
 the meal through-creeps each hole [acc]  
 'the meal passes through each hole' (BT 1078: *purh-creopan*)

This fact, together with the finding that the P-V CVs formed by a genitive- or dative-governing simplex verb and a preposition do not take an accusative NP object, shows that the OH plays an important role in OE P-V compounding.

Third, there are a few derived complex verbs or P-V CVs which may appear to take a case which is less oblique than the case specified for the given genitive- or dative-governing simplex verb. However, none of them is problematic, because their simplex verbs take genitive or dative only when they have a special (non-default) meaning while with a default meaning, they are mainly used as a transitive verb [acc], which in fact participates in the compounding in question. Consider the following examples, in which the simplex verb *picgan* 'to partake of' takes genitive, as in (34a), while the complex verb *op-picgan* 'to take a thing from a person' takes accusative and dative at the same time, as in (34b):

(34) *picgan* and *op-picgan*

- (a) Ic þe æne abealh, ece drihten, þa wit Adam  
 I thee once offended eternal the Lord when we two Adam  
*twa eaples* *þigdon* þurh næddran nið, ...  
 two apples [gen] partook of through serpent's evil ...  
 'I angered Thee, once, eternal God, when Adam and I  
 ate two apples through the serpent's malice, ...' (Christ & Satan 408-10)
- (b) *Him* on leodscære frumbearnas *riht* freobroðor *op-þah*  
 him [dat] in nation first-born child's right [acc] own brother took  
 'His own brother took his birthright in the nation from him' (Ex 337-8)

This may seem to be a counterexample since the complex verb takes less oblique cases than the genitive case specified for the simplex verb. However, the simplex *picgan* takes genitive only when it means 'to partake of' but, with the (default) meaning 'to take', it is used as a transitive verb [acc], as in (35) below. Note that the accusative NP argument of the complex verb comes from the latter use of the simplex verb, which is clear from the meaning of *op-picgan* 'to take a thing [acc] from a person [dat]'.

(35) *picgan* 'to take'

- (a) He him brad syleþ lond to leane he *hit* on lust *þigeþ*  
 he him broad gives land as gift he it [acc] in pleasure takes  
 'He gives broad land to him as gift, (and) he takes it with pleasure'  
 (Fort 75-6)
- (b) Cwæþ he his sylfes suna syllan wolde ...  
 said he his own son give would ...  
 Hie *ða læc* hraðe *þegon* to þance  
 they the gift [acc] soon took thankfully  
 'He said he would give his own son ...  
 they immediately accepted the gift thankfully' (And 1112)

Another interesting point in this connection is that the OH is also generally observed in most complex verbs which are not P-V CVs but come from the combination of an inseparable prefix and a genitive- or dative-governing simplex verb. That is, as long as the basic semantic relationship expressed by the simplex verb is maintained after compounding, those complex verbs avoid taking a less oblique case. Thus, the complex verb *mis-limpan* 'to turn out badly for someone', which comes from the dative-governing simplex verb *limpan* 'to befall someone', always takes a dative NP, as in (37):

(36) *(ge-)limpan*

(a) Hu *lomp* *geow* on lade leofa Biowulf ... ?  
 how befell you [dat/acc] upon voyage dear Beowulf  
 'How did you fare, dear Beowulf ... ?' (Beo 1987)

(b) *Him* ðær wirse *ge-lamp*  
 him [dat] there worse befell  
 'Something worse happened to him there' (Sat 24)

(37) *mis-limpan*

(a) Ac se þe geð into fihte wip-ute heretoche  
 but he who goes into fight without leader  
*him* mai sone *mis-limpe*  
 him [dat] may soon turn out unfortunately  
 'But he who goes into fight without a leader,  
 it may soon turn out badly to him' (Lamb.Hom 243.18)

(b) Æfter ðæm ðe *him* swa oftrædlice *mis-lamp*  
 after him [dat] so frequently went amiss  
 hie angunnan hit witan  
 they began it to know  
 'After it turned out badly to him so often, they began to know it'  
 (Or 164.24)

In short, the results of the investigation of the relevant OE verbs considered thus far support my proposal based on the OH. They show that no OE verbs [dat/gen] combine with a preposition [acc] to form a P-V CV [dat/gen, acc]. Such results will not be very surprising because relative obliqueness, which is the distinction among OE NPs with respect to the potential for passivization, was most systematically encoded in OE morphological cases.

One might justifiably argue that not only do we not have intuitions about OE, but also that the extant OE data are not complete enough to prove the obliqueness hypothesis we have proposed. In fact, the data in Mitchell (1985) and Visser (1963-73), even though they are among the most extensive collections of the relevant data at present, would not exhaust any type of OE verbs which we must examine for verifying the proposed hypothesis. However, the negative evidence provided in this section is strong enough for us to conclude that the OH is at least a strong tendency in OE verbs and their case government because it turns out to be valid for quite a large set of OE verbs which are available at the present.

### 3.4. How to Explain the Contribution of Nonheads

#### 3.4.1. *P-Vi compound verbs*

Many OE P-V compounds are formed from a preposition and an intransitive verb (e.g., *geond-flowan*, *geond-scinan*, *geond-yrnan*, *ofer-faran*, *ofer-gan*, *ofer-glidan*, *ymb-gan*, *ymb-sittan*, *ymb-sprecan*, etc.). In fact, this kind of P-V compound is not unique to OE because ModE and other languages also have many P-V compounds of this type (e.g., *overcome*, *overlap*, *overshine*, *undergo*, *underlie*, *underline*, *underpass*, *underwrite*, etc.). In this case, Selkirk (1982) and Di Sciullo & Williams (1987) would say that P is the head

since they define the head as the rightmost constituent of a word which is specified for the property in question (i.e., the subcategorization of the NP object and its case), whereas Lieber (1992) and Kim (1997) would have V inherit the argument from P and let it percolate to the CV, thereby maintaining the head status of V.

On the other hand, according to the obliqueness hypothesis proposed in the previous section, the head is still the simplex verb, as in Lieber (1992) and Kim (1997), but the contribution of a nonhead is explained by the subcategorization of the head verb, which originally has the potential of inheriting an argument which is more oblique than the markedly specified argument. Thus, in the case of P-Vi CVs, the Vi subcategorizes for some potential but unrealized argument as well as the marked subject NP [nom] and when it is required to inherit an additional argument through compounding, it chooses a potential argument of a certain morphological case from the nonhead P, mainly depending on the grammatical function and meaning it encodes. Note that the obliqueness hypothesis is not only fully compatible with Lieber (1992) and Kim (1997) but also explains why and how the head can inherit an additional argument from the nonhead.

The account of the subcategorization inheritance in P-Vi CVs may not seem to be very interesting since at first glance there may appear to be little difference between the obliqueness hypothesis and other headness-based approaches. That is, Selkirk (1982) and Di Sciullo & Williams (1987) may also seem to explain the contribution of a nonhead (more precisely, the 'head' for them). However, there are some serious problems in their approaches. Above all, their approaches are based on the ad hoc redefinition of the head, which would very conveniently identify the head of one and the same complex word in several different ways depending on the relevant features. The definition of the head in this way may turn out to be a circular argument.<sup>27</sup> Furthermore, it will bring about other

<sup>27</sup> Note that it cannot explain our intuition about headness that no matter which element decides some specific feature(s) in P-V CVs or in spite of some contribution of nonheads, it is still the simplex verb that is the head and the preposition is still just a nonhead prefix.

subsequent problems such as the percolation of the head features from a different head depending on the relevant feature(s).

Note that although the approaches in Lieber (1992) and Kim (1997) do not have the same problems as Selkirk (1982) and Di Sciullo & Williams (1987), their mechanisms of making the head control subcategorization inheritance are rather artificial and do not explain why and how the head can inherit an (additional) argument from a nonhead and select a particular case feature for the inherited argument. This means that their mechanisms still need to be more constrained or complemented in such a way that they can explain even more difficult cases such as P-Vt CVs, in which both members of the CV contribute to subcategorization inheritance, often showing an apparently peculiar case government pattern for a given OE P-V CV.<sup>28</sup>

### 3.4.2. *P-Vt compound verbs*

The explanation of ditransitive P-Vt CVs which are formed from a preposition and a monotransitive simplex verb is more interesting. Even though this type of CV does not seem to be very common in OE, OE does have instances of such ditransitive P-Vt CVs and other languages including Greek and Latin show similar examples. Thus, the Greek verb *συμ-πέμπω* 'to send a person with another' in (38) below comes from the preposition *σύν* 'with' and the simplex verb *πέμπω* 'to send a person/thing', and similarly, *ἐπι-βουλεύω* 'to plot against a person (< to plan (a thing) against a person)' comes from the preposition *ἐπί* 'against' and the simplex verb *βουλεύω* 'to plan a thing'.

<sup>28</sup> Note that Lieber's (1992) inheritance mechanism or Kim's (1997) proposal adopting argument attraction cannot be properly applied to the complex verbs which have a non-prepositional, valence-changing prefix because there is no argument attraction from a nonhead (i.e., inseparable prefixes such as *a-*, *ge-*, *to-*) involved in such complex words. In this connection, it is important to note that as long as the original semantics of the simplex verb is not altered, the relative obliqueness among NP arguments tends to be maintained even when a simplex verb combines with an inseparable, non-prepositional prefix (e.g., *a-bitan* or *on-bitan* 'to taste of a thing [gen]' from *bitan* 'to bite/tear a thing [acc]').

(38) The contribution of nonheads in Greek P-V compound verbs (cf. Smyth 1956)

- (a) *σύν* [dat] 'with' + *πέμπω* [acc] 'to send a person/thing'  
 → *συν-πέμπω* [acc, dat] 'to send a person [acc] with another [dat]'
- (b) *ἐπὶ* [acc] 'against' + *βουλεύω* [acc] 'to plan a thing'.  
 → *ἐπι-βουλεύω* 'to plot against a person [dat]'  
 (< to plan (a thing) against a person)

Such P-Vt CVs present a problem for most previous approaches including Lieber (1992) and Kim (1997) but they provide interesting positive evidence for the obliqueness hypothesis. Consider the following examples for *metan* and *wip-metan*:

(39) *metan*

- (a) Hu micle mare is ðonne þæs monnes lichoma to metenne wip  
 how much more is then the man's body [nom] to measure with  
 ðæt mod þonne seo mus wip ðone mon.  
 that mind [acc] than the mouse [nom] with the man [acc]  
 'The man's body is compared with his mind (just) as the mouse  
 is compared with the man' (Bo 36.2)
- (b) Ne sint hi no wið eow to metanne  
 nor are they [nom] not with you [acc/dat] to compare  
 'They are not to be compared with you' (Bo 29.3)
- (c) þu gedydest ðæt we mætan ure land mid rapum,  
 you caused that we measure our land [acc] with cords [dat]  
 'you caused us to measure our land with cords' (Ps 15.6)

(40) *wip-metan*

- (a) hwylcum bigspelle wip-mete we hit?  
 which parable [dat] compare we it [acc]  
 'which parable shall we compare it with?' (Mk 4.30)

- (b) *Drihten* nis na oðrum mannum to wið-metenne.  
 the Lord [nom], is-not no other men [dat] to compare-with  
 'The Lord is not to be compared with other men' (ÆCHom ii. 230.24-5)

The examples in (39) show that *metan* 'to measure, compare' usually takes an accusative NP and often occurs with a preposition *wip* or *mid* 'with' and a prepositional object NP, which is usually accusative or dative. When the simplex verb *metan* combines with the preposition *wip* to make a P-Vt CV, the whole P-Vt CV *wip-metan* 'to compare/measure one thing [acc] with/by another [dat]' becomes ditransitive and always takes accusative and dative, as in (40). Note that one of the two (non-subject) NP arguments of *wip-metan* comes from P (nonhead) and that this prepositional argument is the dative NP but not the accusative NP, because it is what something is compared with. Here, we have to explain why the P-V CV *wip-metan* only takes accusative and dative on its two objects, although the prefix *wip* as a preposition takes accusative, dative, or genitive, as is shown in (6) of Section 3.1.2.

None of the previous approaches we have considered in Section 3.2 provide a reasonable account of this limited subcategorization inheritance in *wip-metan*. For example, Lieber (1992) and Kim (1997) would say that the dative NP comes from P (*wip*) and it is inherited or composed by the head V (*metan*) of the whole CV. However, they would not be able to explain why the P-V CV only takes [acc, dat] even though [acc, acc] is also logically possible. This means that there is something important yet to be explained about the mechanism of subcategorization inheritance in OE CVs, e.g., how the subcategorization inheritance is constrained and what role the head plays in that process.

According to the obliqueness hypothesis, on the other hand, the simplex verb *metan* [acc], whose case feature can be described as V [+nom, +acc, ((<sub>i</sub>dat/<sub>i</sub>gen))], has the potential for inheriting a more oblique argument than its original accusative argument, and

thus it comes to choose dative from among the actually possible options (i.e., [acc] and [dat]).<sup>29</sup>

Consider the following examples, in which some specific case taken by a complex verb does not seem to come from either the simplex verb (V) or the prefix (P):

(41) *on-cweðan*

- (a) *þæt hio þære cwene on-cweðan meahton*  
 that they the woman [dat] speak-with-respect-to could  
*swa tiles, swa trages.*  
 such good [gen], such bad [gen]  
 'that they could answer the woman with respect to  
 either such a good thing or such a bad thing' (El 324)

- (b) *He stille gebad ares spræce and*  
 he quietly waited for angel's speech and  
*þam engle on-cwæð.*  
 to the angel [dat] spoke-in-response  
 'He quietly waited for the angel's speech and spoke to the angel' (Gen 2910)

(42) *cweðan*

- (a) *in leohte him þa word cweþað*  
 in light him [dat] those words [acc] speak  
 'they will speak those words to him in glory' (Christ 401)
- (b) *þa cueð ðaem eorð-crypple*  
 then spoke to the crippled [dat]  
 'then (he) said to the crippled man' (Mt 9.6)
- (c) *Ac cweð þin word and min cniht byð gehæled;*  
 but say the word [acc] and my servant shall be healed  
 'But say the word, and my servant will be healed' (Lk 7.7)

<sup>29</sup> The extant OE data seem to show that when the proposition *wip* occurs with *metan*, it only takes accusative or dative but does not take genitive even though genitive is possible with other verbs.

*On-cweðan* 'to respond to somebody [dat] with respect to something [gen]' takes dative and genitive at the same time or dative alone, as in (41), whereas the simplex verb takes accusative and dative at the same time or separately, as in (42), but does not take genitive. In the same way, *on-leon* 'to give somebody [dat] the loan of something [gen]' in (43) takes dative and genitive while the simplex *leon* does not take genitive but does take accusative and dative, as in (44):

(43) *on-leon*

- (a) *ða metod on-lah Medum and Persum aldordomes ymb lytel fæc,*  
 the Lord lent Medes and Persians [dat] power [gen] after little interval  
 'the Lord granted power to the Medes and Persians for a short period'  
 (Dan 680)
- (b) *Me lifes on-lah se þis leoht onwrah,*  
 me [dat] life [gen] granted he who this light revealed  
 'He who revealed (to us) this light granted life to me' (Rim 1)

(44) *leon*

- (a) *Næs þæt þonne mæstost mægen-fultuma,*  
 not-was that then the least mighty aid  
*þæt him on ðearfe lah ðyle Hroðgares;*  
 that [acc] him [dat] in need lent spokesman of Hrothgar  
 'Then it was not the least of the might aid,  
 that Hrothgar's spokesman lent him in need' (Beo 1455-6)
- (b) *& gaeð to him æd middernæht & cuoeðes him la freond*  
 and goes to him at midnight and says to him oh friend  
*lih & sel me ðreo hlafas.*  
 lend and give me [dat] three breads [acc]  
 'and (he) goes to his friend at midnight and says to him,  
 behold! friend, lend and give me three loaves of bread' (Lk 11.5)

Thus, we have to explain why the genitive case is used in both P-V CVs. One might expect that the genitive case for *on-cweðan* comes from the prefix *on-*. However, the government of genitive by the preposition *on*, which normally takes dative or accusative, is not well attested.<sup>30</sup> According to the obliqueness hypothesis, the genitive case alone is allowed in both complex verbs *on-cweðan* and *on-leon* because only genitive is more oblique than the dative case which is specified for each of the simplex verbs involved.

Finally, consider another more interesting case of such limited subcategorization inheritance in OE P-Vt CVs. In Section 3.1.2, we have seen that a particular case is used in a P-V CV when more than one case is logically possible. In particular, the head V of *wip-cweþan* inherits only genitive from the nonhead prefix *wip-* even though the nonhead prefix *wip* as a preposition takes accusative, dative or genitive. In fact, other OE P-V CVs such as *wip-bregdan* and *wip-standan* show similar case government and limited inheritance of subcategorization, as the following informal argument structures show:

(45) Case government of *wip-cweþan*, *wip-bregdan*, and *wip-standan*<sup>31</sup>

- (a) *wip-bregdan* [dat, (gen)] 'to restrain a thing [dat] from another [gen]'
- wip-cweþan* [dat, (gen)] 'to refuse a thing [gen] to another [dat]'
- wip-standan* [dat, (gen)] 'to hinder a thing [dat] with respect to another [gen]'
- (b) *bregdan* [acc/dat] 'to draw, bend'
- cweþan* [acc, (dat)] 'to say, speak'
- standan* [(dat)] 'to stand, become'
- (c) *wip* [acc/dat/gen] 'against'

<sup>30</sup> But see Mitchell (1979: 40, fn. 2) for two examples in which *on* might be considered to take genitive.

On the other hand, one may want to treat *on-* here as a non-prepositional, inseparable prefix (cf. de la Cruz 1975). However, the prefix *on-* here seems to have the same semantic contribution as the corresponding preposition *on* '(up)on, in respect to, or according to', whereas the inseparable prefix *on-* is often meaningless or expresses the idea of escaping or removing something. Furthermore, note that even if it turns out to be a non-prepositional prefix, we still have to explain why the two complex verbs take not only dative but also genitive which does not come from the given simplex verbs.

<sup>31</sup> This is based on Mitchell (1985: §§1092, 1178), Visser (1963-73: §677), Bosworth & Toller (1898), Toller (1921), and Campbell (1972). For a detailed discussion of OE P-V CVs including these three, see Kim (1997).

The case government patterns and subcategorization inheritance observed in the above OE *wip*-CVs are interesting. When they are used ditransitively, all the three CVs in (45) take only [dat, gen] but they fail to take other combinations of cases, even though these are logically possible: [acc, acc], [acc, dat], [acc, gen], [dat, acc], and [dat, dat]. That is, the head V of each CV has a dative NP as its original argument and inherits an additional, genitive argument from the nonhead P, thereby making the mother CV govern two arguments [dat, gen] through the percolation of both the original and inherited arguments. What is peculiar here is that the additional argument inherited from the nonhead P is always genitive, although the prefix P *wip* as a preposition can take any of accusative, dative or genitive case, thereby providing two other options (i.e., accusative and dative) for the case of the inherited prepositional argument.

Although Lieber (1992) and Kim (1997) can maintain the head-to-mother percolation of the subcategorization list by making the nonhead's subcategorization list always be inherited by way of the head, such limited subcategorization inheritance and the resultant case government pattern of the P-V CVs in (45) cannot be explained by the proposed mechanism itself.

According to the obliqueness hypothesis, however, no CVs can take an argument whose morphosyntactic case is negative in the subcategorization of its head (simplex verb) through compounding. Thus, even if the nonhead P originally governs a certain case, if that case is less oblique than the marked case specified for the head, then it is negative and therefore cannot be inherited by the head or be percolated to the mother (CV). Note that in all three CVs in (45), the dative case comes from the verb part (V), which is clear from the relevant meaning and the fact that the remaining case is genitive, which can be taken only by the P *wip*. Note also that V [dat] is equal to V [+dat, ((-acc, ↓gen))] in our reinterpretation of the case feature, given in (20). Therefore, the only possible option for

the second argument that comes from the nonhead P should be the genitive case, which gives the argument structure V [dat, gen] for each P-Vt CV.

Then, why don't the above CVs take [acc, acc], [acc, dat], [dat, dat] or [acc, gen]? This can also be easily explained. Consider the following example again:

(46) *cweðan* and *wip-cweðan* (repeated from (5))

(a) in leohte him      þa word      *cweþað*  
in light him [dat] those words [acc] speak  
'they will speak those words to him in glory' (Christ 401)

(b) gif inc      hwa ðæs      *wip-cweþe*  
if you-two [dat] anyone that [gen] contradicts  
'if anyone contradicts you about that' (BiHom 71.1)

The argument structures for *cweðan* and *wip-cweðan* are "addressee [dat], what-is-said [acc]", and "addressee [dat], what-is-spoken-about [gen]", respectively, which is apparent from the above examples in (46). Note that an addressee generally takes dative. Thus, once the case of the first NP (i.e., the original verbal argument) is determined as dative, the only remaining choice becomes genitive since genitive alone is more oblique than dative and potential in the case feature of the head verb. Also note that all three *wip-*CVs have similar semantic and syntactic structures with a little difference in meaning in the verb part. Thus, even though more than one morphological case is logically possible, we can predict the right choice.

So far, we have considered how the obliqueness hypothesis can explain the (limited) contribution of nonheads to the subcategorization inheritance in OE P-V compounds, which previously has not been fully addressed. In fact, the obliqueness hypothesis not only provides a reasonable account of the question at issue but also can be easily incorporated into the overall system of a well-established theory, enabling us to improve

upon the formal mechanisms proposed in some previous studies such as Lieber (1992) and Kim (1997). Thus, I will now consider how the obliqueness hypothesis can be interpreted in current morphosyntactic theory, especially in the framework of Head-Driven Phrase Structure Grammar (HPSG, Pollard & Sag 1994). In particular, I intend to demonstrate that a formal account, if built upon a well-motivated and sufficiently justified proposal, can be made not only more intuitive but also more principled.

### 3.5. A Lexicalist Account of Subcategorization Inheritance in Old English P-V Compound Verbs

Kim (1997: 57-62) accounts for the contribution of the nonhead in the subcategorization inheritance of OE P-V CVs by adopting the mechanism of argument attraction which is proposed by Hinrichs & Nakazawa (1989, 1994) within the framework of HPSG. Consider the following feature structure for the bound-stem *-bregdan* which is proposed by Kim (p.62):

(47) Partial feature structure description of *-bregdan* <sup>32</sup>

$$\text{bound-stem} \left[ \begin{array}{l} \text{SYNSEM|LOC|CAT} \left[ \begin{array}{l} \text{HEAD} \text{ verb } [\text{VFORM inf}] \\ \text{COMPS } (\boxed{1}) \oplus \\ \text{<NP[dat] , P [LEXEME L, COMPS } \boxed{1}] > \end{array} \right] \end{array} \right]$$

$L \in \{\text{æt, on, wiþ ...}\}$

In the above feature structure, the complement (COMPS) list of the head (i.e., *-bregdan*) is specified by appending the COMPS list of the nonhead P and the original

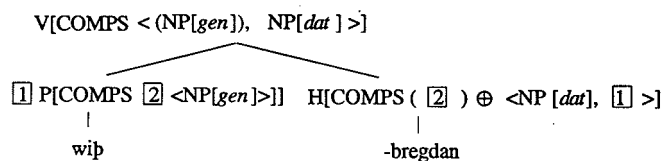
<sup>32</sup> NP [CASE [x]] abbreviates "NP [SYNSEM|LOC|CAT|HEAD|CASE[x]]", while the symbol  $\oplus$  represents the functor *append* and thus  $\text{<X}_0 \oplus \text{<X}_1, \text{X}_2, \dots, \text{X}_n \text{>}$  is equal to  $\text{<X}_0, \text{X}_1, \text{X}_2, \dots, \text{X}_n \text{>}$ .



COMPS list of the head V. In this mechanism of argument attraction or composition, the argument of the nonhead is attracted to or composed into the argument list of the head, and the structure sharing (by means of the coindexation of the first argument of the append operation and the COMPS list of the nonhead P, with the same tag [1] in (47)) in the COMPS list of the head V achieves the effect of the inheritance of the subcategorization value of the nonhead P. Furthermore, with the Valence Principle (Pollard & Sag 1994: 348),<sup>33</sup> the nonhead P is canceled from the COMPS list of the head V, thereby making the remaining elements of the COMPS list match those of the whole phrase.

The actual inheritance of the prepositional argument and the percolation of both arguments of the head (i.e., the original verbal argument and inherited prepositional argument) to the whole compound verb can be explained as follows:

(48) COMPS inheritance in P-Vt compounds



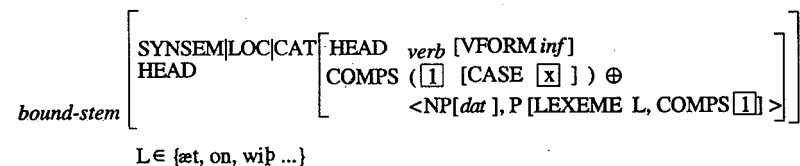
Here, although the actual element inherited is the COMPS list of the nonhead, with the tag [2], the inheritance mechanism above enables the head to be in control of the inheritance, making the CV *wip-bregdan* have the COMPS list of  $\langle \text{NP}[\text{gen}], \text{NP}[\text{dat}] \rangle$  (or  $\langle \text{NP}[\text{dat}] \rangle$ ).

<sup>33</sup> The Valence Principle can be restated as follows: in a headed phrase, for each valence feature F (i.e., the COMPS value here), the F value of the head daughter is the concatenation of the phrase's F value with the list of SYNSEM values of the complement daughters.

However, the problem is that even though the nonhead *wip* as a preposition governs an NP[dat] or an NP[acc] as well as an NP[gen], the head *bregdan* always inherits an NP[gen] from the nonhead. This selective inheritance of case features and the resultant case government of the whole compound cannot be explained by the given formal mechanism itself. This means that although Kim (1997) may maintain the head-to-mother percolation of the subcategorization list by rather artificially making the inheritance of the subcategorization list of the nonhead always be by way of the head, she still has to explain what really controls the subcategorization inheritance, resulting in the peculiar case government pattern of the P-V CV. Note that Lieber's (1992) proposal of inheritance and percolation can be formalized in a similar way and will have the same problem because her proposal cannot explain why the head inherits an NP argument of a particular case, either.

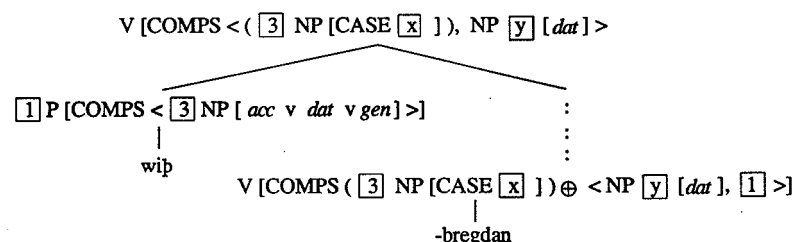
This problem can be easily resolved by incorporating the obliqueness hypothesis into the given formal mechanism. Thus, let us consider how the obliqueness hypothesis enables us to improve upon Kim's (1997) argument attraction mechanism for OE P-V CVs. Above all, note that the morphological case of the inherited argument should remain undetermined because most prefixes as a preposition can govern more than one case (e.g., the nonhead P *wip* as a preposition governs the accusative, dative, or genitive). Thus, the partial feature description for the head Vt of OE P-Vt CVs should be revised so that the case of the prepositional argument, with the tag [1], can be any of the logically possible cases. This can be done by assigning the variable tag [x] to the case feature of the prepositional argument as follows:

(49) Partial feature structure description of -Vt (revised)



The actual subcategorization inheritance and percolation in the P-Vt CV *wip-bregdan* which has < NP [dat], (NP [gen]) > as its complements can be formalized as follows:

(50) COMPS inheritance in P-Vt compounds (revised)



In the above tree diagram, the head Vt has its own argument [dat], with the tag [y], and inherits a second argument, with the tag [3], from the nonhead P. Note that the second inherited argument can be assigned any of accusative, dative, and genitive since any of the three cases are logically possible from the case government of the nonhead P *wip*. Thus, the complement of the nonhead should have [acc v dat v gen], not [gen], as its case feature value. In addition, the case feature value of the inherited argument by itself

cannot be determined to be [gen], as in Kim (1997), because the subcategorization inheritance mechanism by means of argument attraction has nothing which can change any feature(s) of the inherited argument. Here, we have to explain what really controls the subcategorization inheritance, bringing about the limited inheritance of the case feature. This can be achieved by proposing a constraint on case feature inheritance which reflects the relative obliqueness among OE NP arguments and the enriched interpretation of case features, given in (19) and (20) in Section 3.3.3.

According to the obliqueness hypothesis, a verbal argument is always less oblique than a prepositional argument and this relative obliqueness is maintained through P-V compounding. Furthermore, the relative obliqueness among NP arguments of the same governor is determined solely by their morphological cases. Thus, when an argument of P is inherited into the new argument structure of a P-Vt CV, the case selected for the inherited prepositional argument should be one which does not change the original relative obliqueness between the (less oblique) original verbal argument and the (more oblique) original prepositional argument. Such relative obliqueness and its maintenance in P-V compounding enables us to propose the following constraint on the relationship between the case of the inherited argument (i.e., [x]) and that of the original verbal argument (i.e., [y]) in the subcategorization inheritance of OE P-V CVs:

(51) A constraint on case feature inheritance <sup>34</sup>

$$R(\overline{x}, \overline{y}) \text{ iff } (\overline{x} \gg \overline{y}) \ \& \ (\overline{x} \neq \overline{y})$$

The constraint requires that the case of the second argument (with the tag [x] in the above tree diagram in (50)) which is inherited from the nonhead P should be more oblique

<sup>34</sup> Case<sub>1</sub> » Case<sub>2</sub> means Case<sub>1</sub> is more oblique than Case<sub>2</sub>.

than the case of the original verbal argument (with the tag [y]). Thus, the head V *bregdan* of *wip-bregdan* will inherit genitive out of the three logically possible cases (i.e., accusative, dative, and genitive) which are provided by the nonhead *wip*. With this constraint, the subcategorization inheritance mechanism, given in (50), not only will enable us to maintain the head-to-mother percolation of the subcategorization list but will also make it possible for the head to inherit a particular case from the nonhead and percolate it to the whole CV when more than one case is provided by the nonhead P, thereby explaining the seemingly peculiar case government pattern of the P-V CV involved.

### 3.6. Summary and Conclusion

So far, I have shown that relative obliqueness is a main factor which, along with grammatical roles or functions, determines the case government in OE verbs. In particular, I have proposed a principled account of the case government and subcategorization inheritance of OE verbs which is based on the OH (obliqueness hierarchy) and the resultant, enriched interpretation of OE case features. Although the nonhead as well as the head participates in the determination of the argument structure in OE P-V CVs, the contribution of the nonhead is constrained, resulting in the limited inheritance of case features and a peculiar case government pattern for a given P-V CV. This limited contribution of the nonhead is problematic for previous studies but it has provided an insight for a better account of subcategorization inheritance, leading to the obliqueness hypothesis, based on the relative obliqueness among NP arguments in OE. Furthermore, we have seen that the obliqueness hypothesis can be incorporated into a formal inheritance mechanism, thereby leading to an improvement upon previous proposals.

In conclusion, despite some contribution of a nonhead, the head is still in complete control of the subcategorization inheritance and case government in OE P-V CVs. The obliqueness hypothesis proposed here explains, without any ad hoc definition, how the head in the traditional sense determines the contribution of nonheads by filtering the features to inherit. This result seems to suggest that problems (in morphology) can often be better resolved by a deeper understanding of the properties of given types of words rather than appealing to a new definition or device which might lack sufficient justification. It also suggests an answer to the question of why argument composition, which is used in many recent morphosyntactic studies (e.g., Hinrichs & Nakazawa 1989, 1993, 1994; Kathol 1994; Pollard 1994), is possible and how it is constrained. Finally, the results of the discussion in this chapter, especially the observation about relative obliqueness among NP arguments, if they can be applied more generally, should eventually contribute to a better understanding of OE morphosyntax by accounting for many elusive grammatical relationships in which OE NPs and CVs are involved.

**PART II**

**SYNCHRONY AND DIACHRONY  
OF THE ENGLISH PREPOSITIONAL PASSIVE**

**CHAPTER 4**

**WHY OLD ENGLISH HAD NO PREPOSITIONAL PASSIVE**

The investigation of OE prepositional constructions in Chapter 2 has shown that DPO (the displacement of PO from PP and its occurrence in a non-canonical position) was strictly prohibited, and no matter how such a prohibition is theoretically analyzed, it seems clear that OE had some sort of constraint against DPO. In this chapter, I will address the issue of what motivates the constraint by explaining what made DPO so difficult in OE. This will lead to an account of why OE had no P-Passive at all.

In particular, on the basis of the discussion about relative obliqueness given in Chapter 3, I will propose that what was behind the constraint is both a high degree of obliqueness of OE prepositional arguments, which was rigidly marked and represented by P as an 'obliqueness marker', and the representation and maintenance of relative obliqueness among OE NP arguments. As for the absence of a P-Passive in OE, it will be argued that POs in OE were 'too oblique' to be fully passivized for the personal P-Passive and that most 'not-too-oblique' POs could be passivized as composed verbal arguments of transparent P-V compounds through incorporation of P into V.

**4.1. Prepositions as Obliqueness Markers in Old English**

In Chapter 3, we have seen that there was a very rigid distinction among OE verbal arguments with regard to their morphological cases, especially between accusative NPs

and NPs of other cases, which is clearly revealed in their passivization possibilities: personal passive for accusative NPs versus impersonal passive for NPs of other object cases. Since this distinction is based on passivization possibilities and passivization possibilities in turn are often related to the notion of obliqueness in the way that the easier it is for an (object) NP to be passivized, the less oblique that NP is, the distinction has enabled us to propose the following OH (obliqueness hierarchy):

(1) Obliqueness hierarchy for Old English verbal arguments

Accusative < Dative ≤ Genitive

In addition, the investigation of OE P-V CVs and their case government in Chapter 3 has shown that relative obliqueness exists between verbal arguments and prepositional arguments and that it is systematically maintained in the subcategorization inheritance through OE P-V compounding. That is, when a prepositional argument is composed as a verbal argument, it always takes a case which is more oblique than the case of the original verbal argument. This means that OE prepositional arguments are always more oblique than verbal arguments, regardless of the morphological cases involved. Thus, the following extended OH including prepositional arguments has been given:

(2) Obliqueness hierarchy among Old English NP arguments

(a) Nom < Acc < Dat ≤ Gen

(b) Verbal arguments < Prepositional arguments

In fact, the relative obliqueness between verbal and prepositional arguments is expected because the OH among verbal arguments is originally based on their potential for

passivization and also because passivization in any form (i.e., personal or impersonal) was not allowed for OE prepositional arguments.<sup>1</sup>

The high degree of obliqueness of OE prepositional arguments is well supported by the productivity of OE P-V compounding. As we have already seen in Chapter 3, OE had very productive compounding of P and V. Thus, many CVs of the form P-V such as the following examples are found in OE, even for those prepositions that are no longer used as prefixes in ModE.

(3) *æt* + V

*æt-beran* 'to carry to', *-feolan* 'to stick to', *-fon* 'to seize upon', *-gangan* 'to go to', *-sittan* 'to sit by', *-slæpan* 'to sleep beside', *-spornan* 'to strike against', *-stæppan* 'to step up to', *-standan* 'to stand at', *-wenian* 'to wean from', etc.

(4) *in* + V<sup>2</sup>

*in-beslean* 'to hack into', *-blawan* 'to breath upon', *-bredan* 'to burst in upon', *-cuman* 'to come in', *-erdian* 'to dwell in, inhabit', *-feran* 'to enter in', *-feallan* 'to fall in', *-gan* 'to go in', *-gangan* 'to go in', *-geotan* 'to pour in', etc.

(5) *purh* + V

*purh-blawan* 'to inspire', *-borian* 'to bore through', *-breccan* 'to break through', *-creopan* 'to creep through', *-delfan* 'to dig through', *-drifan* 'to drive through', *-dufan* 'to dive through', *-etan* 'to eat through', *-faran* 'to pass through', *-fleon* 'to fly through', *-gan* 'to go through', *-gledan* 'to heat through', *-hiernan* 'to run through', *-ræsan* 'to rush through', *-secan* 'to search through', *-sceotan* 'to shoot through', *-scinan* 'to shine through', *-seon* 'to look through', *-stingan* 'to pierce through', *-swimman* 'to swim through', *-wadan* 'to go through', *-wilitan* 'to look through', *-wundian* 'to pierce through', etc.

<sup>1</sup> Such relative obliqueness between verbal arguments and prepositional arguments is not at all unusual, and this is suggested by the fact that although passive constructions have been reported in all the main language families, the P-Passive is found in only a very small number of languages of the world (Siewierska 1984: 23).

<sup>2</sup> Although they are not productive, a few traces of "in- and a verb" still remain (e.g., *income*, *incoming*).

This unusual productivity of OE P-V compounding, together with the highly transparent argument structures of many OE P-V CVs (Kim 1997, Goh 1999), suggests that most selected prepositional arguments in later English may have occurred as a verbal argument of P-V CVs in OE. This likelihood is also supported by the fact that in the ME period English lost most OE P-V CVs: many of the P-V CVs (and some simplex verbs) were replaced by (new) V-P phrases or prepositional verbs of new or the same components (Fischer 1992: 386). Through this process, many verbal arguments, which could be passivized (personally or impersonally) in OE, changed to prepositional arguments, thus maintaining the passivizable degree of obliqueness.<sup>3</sup> Thus, many early examples of the P-Passive in ME have prepositional verbs or V-P phrases whose OE counterparts in the respect of form or meaning are P-V CVs, as follows:<sup>4</sup>

(6) OE *be-ligan* 'to lie or sleep by/with/around' > ME *liggen bi*

þis maiden ... feled also bi her þi | þat sche was yleven bi  
 this maiden ... felt also by her thigh that she had-been lain by  
 'this maiden felt by her thigh that she had been lain with'

(c1330 (?a1300) *Arth. & M.*(Auch) 849)

<sup>3</sup> The passive subject *þæt scyp* in (i) below is originally a PO which has been inherited as a verbal object from the nonhead P *ofer*. Note that the P-V CV *ofer-geotan* has the corresponding V+P phrase, as in (ii):

- (i) swa þæt þæt scyp wearð ofer-goten mid yþum  
 so that the ship became over-poured with water  
 'so that the ship was being covered (< poured over) with water' (Mt 8.24)
- (ii) þa wæs wopes hring hat heafodwylm ofer hleor goten  
 then was of weeping sound hot tears over cheek poured  
 'then there was the sound of weeping and hot tears poured over the cheek' (El 1131-3)

<sup>4</sup> ME examples are from Denison (1993). By providing these examples, I don't mean to imply that prepositional verbs are functional replacements of OE P-V CVs, as is suggested in de la Cruz (1973).

(7) OE *ymb-sprecan* or *be-sprecan* 'speak of/about' > ME *spoken of*

And þe comaundment ys brokun, | And þe halyday, byfore of spokun.  
 and the commandment is broken and the holy day previously of spoken  
 'And the commandment was broken, and the holy day previously spoken of'  
 (a1400 (c1303) Mannyng, *HS* 1033)

(8) OE *on-spætan* or *be-spætan* 'spit upon' > ME *spitten (up)on*

and aftyr he was turmentyd, and aftyr he was spyt vpon  
 and afterwards he was tormented and afterwards he was spat upon  
 (a1425 *Wycl.Serm.* I. 39.26)

In short, unlike the prepositional arguments of later English, OE prepositional arguments were absolutely as well as relatively more oblique than OE verbal arguments. Thus, 'true' prepositional arguments in OE were always too oblique to be subcategorized for by a verb and therefore to be passivized.<sup>5</sup> Note that this high degree of obliqueness of prepositional arguments was systematically represented by prepositions. It is in this very sense that OE prepositions can be called 'obliqueness markers'.<sup>6</sup>

#### 4.2. Flexibility of Surface Word Order in Old English

Although many studies, including generative ones such as Koopman (1985, 1990a, 1990b, 1992, 1995, 1997), Pintzuk (1991), and Pintzuk & Kroch (1985, 1989), have tried to show that there is a general tendency, especially at a deep level, towards SXV or SOV in OE word order, the surface word order is very flexible and, in many cases, can hardly be conclusive for determining the grammatical relationships among NPs in an OE

<sup>5</sup> For the relationship between subcategorization and passivization possibilities, see Chapter 6.

<sup>6</sup> Both morphological case endings and prepositions can be called 'obliqueness markers' in the sense that the relative obliqueness among OE NP arguments is consistently represented and maintained by means of those two types of markers. In particular, OE prepositions can be called 'absolute obliqueness markers' since any NP arguments marked (i.e., governed) by them are always too oblique to be passivized.

sentence. In fact, most of the efforts to establish basic word orders in OE are mainly concerned with the relative order of subject and verb or with the position of the verb, often ignoring a large body of exceptions, many attested order possibilities, and some evidence of non-homogeneity within OE (Denison 1993: 27-9; Fischer 1992: 370-2; Mitchell 1985: ch. IX, 1992: 63).<sup>7</sup>

For example, most transformational generative studies of OE syntax assume that the verb is generated in final position, although verb-final is not the most common of attested word orders (Denison 1993: 35). Note that for determining the grammatical relationships involved in a sentence, the information about the relation between the object NP and other NPs (i.e., subject or other object NPs), which has hardly been dealt with in most studies of word order in OE, is indispensable. As Denison (1993: 28) notes, the use of blanket labels like SVO or SOV, no matter how necessary for cross-linguistic comparison, is hardly practicable for OE. Thus, without the information encoded in the case endings, word order in OE still cannot do much to account for the determination of grammatical or semantic relationships in a sentence and this will be more than appropriate in the pre-OE or early OE period in which the main body of OE grammar must have been shaped.

In particular, an NP argument often doesn't seem to have any special restriction in its position with respect to other NP arguments in a sentence. Thus, an object NP could occur almost in any place in a sentence: it could follow the subject and V, precede the subject and V, or occur between the subject and V, as follows:

- (9) (a) We willap secgan ew sum byspel  
 we wish to say you a parable  
 'we want to tell you a parable' (ÆCHom i. 212.6)

<sup>7</sup> The order of sentential elements in OE was determined by a complex of grammatical, semantic, pragmatic, and discourse factors. In particular, although grammatical relations were important for the relative positions of subject and object, they played a less important role in determining the order of two objects (Allen 1995: 30-50).

- (b) Geseah ic wuldres treow wædum geweorðod  
 saw I of glory tree with garments adorned  
 'I saw the tree of glory adorned with garments' (Dream 14)
- (c) for þan þe he tæhte him þa gastlican lare  
 for he taught them the spiritual learning  
 'for he taught the spiritual learning' (ÆCHom i. 186.22)
- (10) (a) hine geswencte seo wædlung  
 him afflicted the poverty  
 'poverty afflicted him' (ÆCHom i. 332.9)
- (b) and treowa he deþ færllice blowan  
 and trees [acc] he causes suddenly bloom [inf]  
 'and he causes trees to burst into bloom'  
 (HomU 34 (Nap 42) 196.1 [Denison 1993: 174])
- (c) þeah hit him man secge  
 though it him one says  
 'though people say it to him' (WHom 4.77)
- (11) (a) Ic þe geþyldlice geyrde  
 I you patiently hear  
 'I will hear you patiently' (ÆCHom i. 590.2)
- (b) þæt he mehte his feorh generian  
 that he could his life save  
 'so that he could save his life' (Or 48.18)
- (c) and þæt he him and his geferan bigleofan þenian wolde  
 and that he him and his companions food serve would  
 'and that he would serve him and his companions food' (ÆCHom ii. 78.198)

Furthermore, no matter whether it is in poetry or prose, some adverbial phrase or clause could occur between V and its complement, especially an object, without causing any serious problems, as follows:

- (12) (a) *Geseah he in recede rinca manige,*  
saw he in the building warriors many  
'He saw many warriors in the building' (Beo 728)

- (b) *Ond hiene þa Cynewulf on Andred adræfde,*  
and him then Cynewulf in Andred drove out  
'And then Cynewulf drove him out from Andred' (Chron 755.4)

This flexibility in surface word order in OE can be considered possible because like many other highly inflected languages, OE maintained the grammatical relationships among sentential elements mainly by encoding the various kinds of grammatical information in case endings and prepositions governing oblique prepositional arguments.

On the other hand, there was one conspicuous exception to such general flexibility in word order, that is, the relative word order of P and its object NP. P in OE could occur in one of the two positions with respect to its object NP: it could precede (as a preposition) its pronominal or non-pronominal object NP or follow (as a post-position) its pronominal object NP, as in (13) and (14), respectively (Mitchell 1985: §§1061-2):

- (13) (a) *se fæder þurh hine gesceop us*  
the father through him created us  
'the father created us through him' (ÆCHom ii. 3.11)

- (b) *Symon me mid his englum gebiwde*  
Simon me with his angels threatened  
'Simon threatened me with his angels' (ÆCHom i. 378.1)

- (c) *Hu Moyses lædde Israhela folc from Egyptum*  
how Moses led Israelite people from Egypt  
*ofer þone Readan Sæ,*  
over the Red Sea  
'How Moses led Israelite people from Egypt over the Red Sea' (Or 1. 16)

- (14) (a) *gehyrde myccle menigo him beforan feran*  
heard great multitude him before go  
'he heard a great multitude go before him' (BlHom 15.14)

- (b) *Him to genealæhton his discipuli*  
him to approached his disciples  
'His disciples approached him' (ÆCHom i. 548.25)

Thus, although surface word order in OE was highly flexible, it was much more difficult in OE to separate P and its object NP from each other than in ModE, which has a fixed word order, to the extent that this difficulty constitutes a rare constraint on the otherwise flexible word order in OE. Note that such rigidity in the relative position of P and its governing NP is very commonly observed in most languages with a highly flexible word order, for example, Japanese and Korean, in which the representation of grammatical relationships among NP arguments heavily depends on the relevant case markers.<sup>8, 9</sup>

#### 4.3. Motivations for the Old English Constraint on Prepositional Stranding

In spite of the high degree of flexibility of surface word order in OE, one constraint on syntactic operations which seems to be generally (although often implicitly) assumed

<sup>8</sup> 'Case markers' may be postpositions but nothing crucial hinges on this. Thus, 'case markers' here are used in a broad sense since in many languages such as Korean and Japanese they can encode almost any oblique relation and be attached even to a clausal argument, as in the following Japanese sentence:

(i) Hanako-wa [s Taroo-ga zibun-o zibun-no hihan-kara mamorikir-e-nakatta]  
Hanako-TOP Taroo-NOM self-ACC self-GEN criticism-FROM defend-could-not  
koto-o sitteita.  
COMP-ACC knew

'Hanako knew that Taroo couldn't defend her/himself against her/his own criticism'

<sup>9</sup> Note that ModE allows parentheticals between P and PO, as in *John left his money to, for all intents and purposes, the whole family*. However, there is no evidence that such a parenthetical insertion is possible in OE as it is not in Japanese or Korean.



can be applied also to OE syntax: no matter what syntactic operation sentential elements undergo, it should not create any (serious) confusion in the grammatical relationships.<sup>10</sup>

In particular, such a constraint seems to be most relevant in the case of DPO since DPO is very likely to cause a confusion in grammatical relationships, especially relative obliqueness, which was very rigidly maintained in relevant morphosyntactic operations such as passivization and subcategorization inheritance. Note that case endings cannot play a decisive role for the distinction in the relative obliqueness between verbal and prepositional arguments. This is because both verbal and prepositional arguments mostly take accusative or dative in OE and therefore P is the only distinctive obliqueness marker. In this situation, DPO in a language with a high degree of flexibility of surface word order will make it very difficult to distinguish between verbal and prepositional arguments.

Thus, if a PO is displaced from PP and occurs in a non-canonical position, even general grammatical relationships as well as relative obliqueness will be very difficult to maintain, and therefore there wouldn't be any reasonable way to get the intended meaning of the relevant sentence. For example, if a PO is separated from its governor P in examples (13) and (14) above, it would be very difficult to decide whom the father created through whom in (13a), whom Simon threatened with whom in (13b), who led whom and how in (13c), and who went before whom in (14a). In spite of the general flexibility of word order in OE, therefore, the PO, with its governor P, should remain in its canonical position (i.e., within PP). There is therefore some functional motivation for why DPO was so difficult in OE.

Still, there may have been more to \*DPO than just functional concerns. For speakers of such languages as German, Japanese and Korean, which have prepositions or postpositions as periphrastic case markers, separating an obliqueness marker such as a case

<sup>10</sup> Note that although such a general constraint on syntactic operation is probably not part of OE grammar, it is derivable from functional considerations.

marker and a preposition or post-position from its host or argument is hardly tolerable; in fact, it is judged totally unacceptable, regardless of the comprehensibility of the given sentence. Thus, there seems to be a purely syntactic side to \*DPO. Moreover, DPO would entail the effacing of an inherent property (i.e., a certain degree of obliqueness) from the argument. Thus, \*DPO seems to reflect a tendency for speakers to reject the separation of an obliqueness marker from an oblique argument.

In short, the (relative and absolute) obliqueness of OE NP arguments was most systematically encoded through case endings and P as their obliqueness markers and could be best represented and maintained only when each obliqueness marker remained in its original form (for case endings) and canonical position (for P). In particular, DPO could bring about a serious problem in maintaining the grammatical and semantic relationships by altering or confusing relative obliqueness among NP arguments or at least by eliminating the absolute obliqueness of the prepositional argument. This is what motivated \*DPO, and the changes related to this factor can be seen to have played a significant role in the advent of new P-Stranding patterns and the P-Passive.

#### 4.4. Why Did Old English Have No Prepositional Passive at all?

##### 4.4.1. *Questions to ask*

Earlier studies essentially ask why OE had no P-Passive. It is fair to consider why we have to ask this question. First, most previous studies have put their main emphasis on an abstract analysis of the P-Passive and other (new) P-Stranding constructions mainly from a theoretical standpoint (e.g., generative studies such as Lightfoot 1979, 1981a; Allen 1980a, 1980b; and Kemenade 1987) or on the account of some selected aspects involved (e.g., most earlier works such as van der Gaaf 1930, Jespersen 1909-49, Visser 1963-73, and de la Cruz 1973) from a traditional descriptive viewpoint. Second, the

answer to the question “what was behind \*DPO or the loss of \*DPO?” doesn’t directly explain the advent of the P-Passive, although it may be used to account for the development of other new P-Stranding constructions. This is because, unlike other P-Stranding constructions, the P-Passive requires some additional condition(s) besides “no \*DPO”. To see why this is so, consider the following examples:

- (15) (a) This is the long river which we slept beside last night.  
 (b) Which river did you sleep beside last night?  
 (c) This cold river is very difficult to sleep beside.  
 (d) The long river is very beautiful to sleep beside.  
 (e) \*This long river was slept beside last night (by us)

In the above examples, the sentence (15e), which has the preposition *beside* stranded in the P-Passive, sounds very odd at best, while the preposition can freely be stranded in other prepositional constructions, as shown in (15a-d). This difference between the P-Passive and other P-Stranding constructions, under the assumption that \*DPO prohibited the P-Stranding in the above constructions (15a-c) in OE, tells us that the simple loss of the constraint by itself is not sufficient for the advent of the P-Passive.

Few previous studies, except for Denison (1985), have tried to directly deal with the question of why OE had no P-Passive. Denison claims that OE differs from ME quantitatively rather than qualitatively in that OE also had the purely syntactic factor of P-Stranding but other factors (e.g., decay of OE case system, obsolescence of OE prefixal system, increased use of prepositions, lexicalization and semantic function, etc.) were “simply less strongly operative in OE” (p. 203).

However, it is not clear whether his account really addresses the issue of why OE had no P-Passive. Although OE might also have (the purely syntactic factor of) P-Stranding and while it might have been that the factors of the P-Passive were less strongly

operative in OE, the kinds of P-Stranding allowed in OE are clearly distinguished from the new P-Stranding patterns in later English since P-Stranding involving DPO was never allowed in OE. Thus, the issues should be why OE had no P-Stranding with DPO, even in non-passive constructions which seldom require the additional factor(s) of the P-Passive, and how English came to have the (syntactic) factor(s) of the new P-Stranding patterns involving DPO, if the change in P-Stranding is significant for the advent of the P-Passive at all. Furthermore, although his claim that some factors promoting the P-Passive were “simply less strongly operative in OE than in ME” may be compatible with the general gradualness of language change, it does not sufficiently explain why OE had no P-Passive at all, including the potential impersonal P-Passive, which doesn’t need DPO.

Thus, what we really need for a complete account of why OE had no P-Passive and how the P-Passive came into being in ME is not just the lack of stronger operation of the factors promoting a P-Passive in OE. Rather, we need to bring other crucial factors into consideration. Above all, we must explain what, despite some already existing factors which could have facilitated a P-Passive but were never sufficiently developed so as to allow it, actively prevented the P-Passive from actually being allowed. Moreover, we have to answer what, under the ripened linguistic circumstances, actively triggered DPO in the passive construction.

#### 4.4.2. *Why Old English had no personal prepositional passive*

Before the question of why OE had no P-Passive at all is answered, several assumptions about passivization need to be made clear. The first assumption is that an (NP) object should be ‘not-too-oblique’ in order to be passivized. Since the concept of ‘obliqueness’ doesn’t seem to be clearly defined in any previous studies, let us say that an NP argument is too oblique if it is not subcategorized for by the given verb in the

lexicon.<sup>11</sup> Thus, the difference in the acceptability between the following ModE examples of the P-Passive can be ascribed to whether the PO (which corresponds to the passive subject) or the PP including the PO in each of the corresponding active sentences is subcategorized for by the given verb or not:

- (16) (a) The document has been closely looked at.  
 (b) Federal benefits have been desperately asked for by many poor people.  
 (c) This conclusion was finally arrived at after a long discussion.  
 (d) The boat was decided on.
- (17) (a) \*Columbus was finally arrived at.  
 (b) \*Columbus was died in by many people.  
 (c) \*His mother was traveled with by John. (Riemsdijk 1978: 220)  
 (d) \*Many hours were argued for. (Riemsdijk & Williams 1986: 147)

Second, I assume that the PO needs to be composed as a verbal argument in order to be passivized and that such argument composition is made possible by morphological incorporation (MI) or syntactic incorporation (SI), in which a verb incorporates a preposition to make a complex verb and the former prepositional argument becomes the

<sup>11</sup> Among generally favored criteria for the passivization of POs (Radford 1988: 430) are: being a complement of a verb or being in a c-command relationship (Chomsky 1965: 105-6, Hornstein & Weinberg 1981: 58-59) with the verb, forming a "semantic unit" (Chomsky 1977b: 87), and making a "natural predicate" (Riemsdijk & Williams 1986: 188). Nonetheless, there are many grammatical examples of the P-Passive in ModE, in which the passive subject NP or the relevant PP including the NP is difficult to consider as subcategorized for by the verb, as follows:

- (i) (a) The bed was slept in.  
 (b) The bridge was walked under by many great people such as George Washington, Abraham Lincoln, Napoleon Bonaparte, Isaac Newton, Albert Einstein, and so on.

One crucial factor for the acceptability of the P-Passive is related to the "affectedness" of the passive subject by the action expressed by the predicate (Bolinger 1975), which goes beyond the domain of syntax. However, this factor doesn't need to be considered in explaining the advent of the P-Passive since few early examples of the P-Passive concern such an aspect; still, it may reflect some significant on-going changes in the English passive and therefore should ultimately be considered in a complete diachronic and synchronic account of the passive construction. See Chapter 6 for the discussion of non-syntactic factors influencing the acceptability of the P-Passive.

composed argument of the V-P complex verb.<sup>12</sup> The reason the P-Passive needs incorporation can be explained as follows: passivization must only be a change in the viewpoint for the semantic relationship expressed by the verb and, like most other syntactic operations, it must not involve a change in the complementhood of the involved arguments.<sup>13</sup> I propose that incorporation is responsible for a change in the grammatical function at a certain level.<sup>14</sup>

One logical conclusion from the discussion in Chapter 2 is that if a type of P-Stranding violates \*DPO and is not necessary because some alternative construction is theoretically possible in the language system, then the given type of P-Stranding must be prohibited and the alternative must be obligatory. However, if even the theoretically possible alternative was not allowed for some independent reason, then it must be that OE couldn't have any such construction.

Thus, the answer to the question of why OE had no P-Passive at all can be given in two steps. The first step requires us to explain why OE had no personal P-Passive. First, POs in OE were 'too oblique' to be 'fully' passivized for the personal passive. That is, the personal P-Passive was impossible in OE because a prepositional argument in OE was always more oblique than a verbal argument, regardless of the morphological cases involved and because the rigid norm of the OE syntactic passive for any oblique object

<sup>12</sup> The reason I prefer to use the term **incorporation** rather than **reanalysis** is that OE also had a morphological mechanism which is analogous to the syntactic reanalysis of ModE in that the original prepositional argument can be composed as a verbal argument through the incorporation of P into V coupled with subcategorization inheritance; also the existence of this MI is closely related to the absence of P-Passive in OE and to the advent of the P-Passive and SI. See Section 5.3.

<sup>13</sup> A similar but often more general assumption can be found in many syntactic frameworks. For example, the Projection Principle of Government-Binding theory requires lexical properties to be projected to all levels of syntactic representation (Horrocks 1987: 99).

<sup>14</sup> Radford (1988: 432) posits that the reanalysis of V and P must apply in the *Base*, after lexicalization and before transformations. I believe that the level at which such an incorporation occurs is somewhere in the lexicon rather than the syntax, which can be well accommodated in a lexicalist approach such as Head-Driven Phrase Structure Grammar (Pollard & Sag 1987, 1994). See Chapter 6.

was the impersonal passive.<sup>15</sup> Thus, if any form of syntactic passive were possible for a PO in OE, it would have to be the impersonal passive at best.

Second, the personal P-Passive had to require the P-Stranding involving DPO, which is clear since the passive subject (in the P-Passive) corresponds to the PO in the active in that they are assigned the same theta-role by the same head. Since no P-Stranding through DPO was allowed in OE, the personal P-Passive could not be allowed either.<sup>16</sup>

Finally, the personal P-Passive was not 'necessary' in OE because it had a potential alternative construction, that is, the (theoretically possible) impersonal P-Passive. However, no evidence has been found that OE had an impersonal P-Passive.<sup>17</sup> Note that the potential impersonal P-Passive does not violate \*DPO. Furthermore, OE had not only many examples of the impersonal passive (for oblique verbal objects) but also many prepositional constructions which have a dummy subject or no nominative subject, which made P-Stranding unnecessary. This means that in principle OE could have had the impersonal P-Passive. Thus, if OE had no impersonal P-Passive at all, then there must have been some other factors which prohibited the construction. Thus, the more suitable question to ask should be why OE had no impersonal P-Passive.

<sup>15</sup> Recall that we have posited one construct (i.e., obliqueness) and made one assumption (i.e., prepositional arguments are always more oblique than verbal arguments in OE) in Chapter 3. These have been successfully used in accounting for case government and subcategorization inheritance in OE verbs. The same construct and assumption enable us to explain the absence of the P-Passive in OE.

<sup>16</sup> The correspondence between the relevant passive subject and active object is generally accepted in many syntactic frameworks, including those which don't assume movement. For example, Pollard & Sag (1994: 121) explains the passive by means of a lexical rule, in which SUBCAT lists of an active transitive verb form are permuted so that the passive subject and active object correspond to each other.

<sup>17</sup> This does not necessarily mean that OE had no impersonal P-Passive at all. Note that the impersonal P-Passive is not very common even in languages such as German in which the impersonal P-Passive is allowed. Thus, the unavailability of the evidence of the impersonal P-Passive in OE might be a gap in data.

#### 4.4.3. *Why Old English had no impersonal prepositional passive*

Why then did OE essentially have no impersonal P-Passive? First, recall that OE had extremely productive P-V compounding. Thus, it is very likely that most not-too-oblique POs occurred as a composed verbal argument of P-V CVs through the MI of P into V and subcategorization inheritance. Thus, we can find OE passive examples in which the original PO, composed as a verbal argument, becomes the passive subject. Interestingly but not very surprisingly, the meaning of the P-V CV *under-etan* 'to eat under, undermine' in (20) is quite different from that of its corresponding ModE CV *undereat*.

- (18) hie þeah swa ondrædendlice gebidon þæt se ege ofer-gongen wæs,  
they however fearfully awaited that the terror over-gone was  
'however, they fearfully awaited for the terror to be passed over'  
(Or 160.30-1)

- (19) ... þæt min freond siteð under stanhlife storme behrimed,  
... that my lover sits under cliff by storm covered with hoar-frost  
wine werigmod, wætre be-flowen on dreorsele.  
lord disconsolate, by water around-flowed in the hall of sorrow.  
'... that my lover, my disconsolate lord, sits under a rocky cliff,  
covered with frost by the storm, surrounded by water in the hall of sorrow.'  
(Wife 47-50)

- (20) scearde scurgeorge scorene gedrorene ældo under-eotone  
cut down buildings torn collapsed by old age under-eaten  
'buildings (were) cut down, torn, collapsed, undermined by old age'  
(Ruin 5-6)

Supportive also is the fact that many early examples of the P-Passive in ME have prepositional verbs or V-P phrases whose OE counterparts in the respect of form or meaning are P-V CVs, as in the following examples (= (6)-(8)):

- (21) OE *be-licgan* 'to lie or sleep by/with/around' > ME *liggen bi*

þis maiden ... feled also bi her þi | þat sche was yleven bi  
 this maiden ... felt also by her thigh that she had-been lain by  
 'this maiden felt by her thigh that she had been lain with'

(c1330 (?a1300) *Arth. & M.*(Auch) 849)

- (22) OE *ymb-sprecan* or *be-sprecan* 'speak of/about' > ME *speken of*

And þe comaundment ys brokun, | And þe halyday, byfore of spokun.  
 and the commandment is broken and the holy day previously of spoken  
 'and the commandment was broken, and the holy day previously spoken of'

(a1400 (c1303) Mannyng, *HS* 1033)

- (23) OE *on-spætan* or *be-spætan* 'spit upon' > ME *spitten (up)on*

and aftyr he was turmentyd, and aftyr he was spyt vpon  
 and afterwards he was tormented and afterwards he was spat upon

(a1425 *Wycl.Serm.* I. 39.26)

Second, another reason, which is rather hypothetical since it is difficult to prove, is that OE only had MI but didn't have the mechanism of SI, which, under the assumptions made above, enables the prepositional argument to be composed as a verbal argument and then passivized, thus taking a detour around \*DPO. Regardless of the plausibility of the claim that the mechanism of SI came into being in the ME period and of the general acceptance of the evidence of SI, the existence of the extremely productive MI of P into V in OE is very likely to have considerably alleviated or even obviated altogether the need for SI; such a situation will make the claim of no SI in OE much more plausible.

## CHAPTER 5

### THE ADVENT AND DEVELOPMENT OF THE PREPOSITIONAL PASSIVE

#### 5.1. The Advent of the Prepositional Passive

In Chapter 2, we have observed that all cases of P-Stranding in OE had their own necessity and that such necessity was always compatible with the prohibition against DPO. What then will become of the grammar if, for some reason, the compatibility between the necessity and the prohibition collapses and they begin to conflict with each other? More specifically, if the previously unavailable P-Stranding in a certain prepositional construction becomes necessary due to some change(s) in the language system, still with no alternative construction available and \*DPO still strong, then what kind of result will the conflict bring to the relevant construction? Will one simply win over the other? Can the P-Stranding in that construction become acceptable unless, of course, it is prohibited for other reasons? In this section, I will argue that this is what really happened in the history of English and that such a conflict was resolved through the 'optimal' choice available, one which made it possible to detour around the apparent dilemma without immediately destroying the balance between the necessity and the constraint.<sup>1</sup>

<sup>1</sup> By using the term 'optimal', I don't assume any particular theoretical framework, although this is in the spirit of Optimality Theory (OT). OT differs from most other rule-based theories in that it does away with rules in favor of constraints. Unlike rules in a rule-based theory, constraints in OT are violable and thus, when two constraints push in opposing directions, one which turns out to be stronger generally wins out. Another important characteristic of OT is that what determines the correct outcome is not the serial

How then did English come to have the new P-Passive in ME? Above all, the advent of the P-Passive in ME was a morphosyntactic change which was gradually nurtured by significant changes in other parts of the language system. In particular, almost every component of the grammar contributed to the advent of the P-Passive by jointly or independently, enabling the English grammar to be equipped with the factors promoting the P-Passive, which were previously unavailable or insufficient.

#### 5.1.1. *Change in sound and morphology*

##### 5.1.1.1. *Sound change and leveling of inflectional endings*

As is well known, various sound changes around the ME period were simple but far-reaching. In particular, the weakening and reduction of (unstressed) final syllables reduced a number of previously distinct grammatical endings, including dative and accusative case endings, to a uniform *-e* [ə], which, along with the operation of analogy, brought about the leveling of inflectional endings. Thus, the OE case system was beginning to decay already in the OE period and by the early ME, English came to lose the accusative and dative distinction. Traces of this reduction of inflectional endings are found even in OE documents as early as the tenth century and by the end of the twelfth century, this change for the most part was completed (Baugh & Cable 1993: 155, Allen 1995).

In fact, the loss of inflectional endings in ME has often been connected in one way or another with the advent of the P-Passive as well as the indirect passive (van der Gaaf 1930, de la Cruz 1973, Lightfoot 1981a, etc.). We have already seen, in Section 1.2, that

ordering of rules but the rankings (i.e., relative strengths) of the constraints. Thus, a constraint is not absolute, but can be violated when a higher-ranked constraint applies to the same input. Furthermore, constraints in OT are considered universal and the difference in grammar of languages is proposed to be due to the difference in rankings of constraints (Archangeli & Langendoen 1997).

the reanalysis of a prepositional dative object as passive subject is not tenable because of the apparent nonexistence of the impersonal P-Passive in OE. Denison (1985: 193) argues that the loss of case distinctions increased the number of V and P collocations which, as a semantic unit, govern an NP as an affected DO, thereby making it eligible for passivization. However, note that, other things being equal, the loss of the formal distinctions in case itself cannot make the PO (semantically) less oblique and thereby increase the pool of eligible collocations. At best, it only means the increase of accusative POs, which already existed in OE (van der Gaaf 1930, Visser 1963-73: 391).

The loss of case distinctions, indeed, played a significant role in the advent of the P-Passive but its contribution lies in a different place. OE morphological cases, together with prepositions, were 'obliqueness markers', which systematically encoded and represented relative obliqueness among NP arguments. The loss of case distinctions brought about the loss of the morphological way of representing and maintaining relative obliqueness, making it necessary for English to have a different mechanism, since relative obliqueness of NP arguments has always been one of the most significant grammatical or semantic relationships, underlying both the rigid maintenance of the OH in the subcategorization inheritance of P-V CVs and the prohibition against DPO in OE.

Note that one main motivation for this prohibition was the maintenance of grammatical or semantic relationships, especially relative obliqueness. Now, due to the loss of the distinctions in case endings as obliqueness markers, English began to depend increasingly on fixed word order until it became the sole means of representing and maintaining relative obliqueness. This means that \*DPO weakened considerably, making DPO relatively easier. Thus, around the 13th century, the new types of P-Stranding that involve DPO began to appear. However, we should say \*DPO was still quite strong since the new P-Stranding types remained rare until the end of the 14th century.

#### 5.1.1.2. Loss of P-V compound verbs

Another important change in morphology which contributed to the advent of the P-Passive is the loss of OE P-V CVs. As is well known, the productive OE prefixal system began to decay around the end of the OE period and English lost most P-V CVs in conjunction with the disappearance of many OE prefixes and appearance of a number of new prepositions (Fischer 1992: 386-7, de la Cruz 1973, Mustanoja 1960: 345-427). What is interesting here is that the loss of many OE P-V CVs is not solely due to the disappearance of prefixes or prepositions or their replacement by new prepositions. This is clear because English also lost most of the OE P-V CVs whose components have survived into ModE, as in (1)-(4), as well as the P-V CVs whose component P or V has been lost or replaced, as in (5) and (6). Note also that most P-V CVs which have survived into ModE are semantically not very transparent in ModE, as in (7) and (8) below, and that they are generally expected from ordinary compounding rather than a process of reanalysis or incorporation:<sup>2</sup>

##### (1) *ofer-V*

*ofer-beon* 'to be over', *ofer-climban* 'to climb over', *ofer-faran* 'to go over',  
*ofer-gan* 'to go over', *ofer-glidan* 'to glide over', *ofer-hleapan* 'to jump over',  
*ofer-lihtan* 'to light upon', *ofer-ridan* 'to ride across', *ofer-rowan* 'to row over',  
*ofer-sawan* 'to sow over', *ofer-settan* 'to set over', *ofer-standan* 'to stand over',  
*ofer-swimman* 'to swim over', *ofer-wadan* 'to wade over'.

<sup>2</sup> The OE words and definitions are based on Hall (1960). Note the difference between the CVs in (1) and (2) and those in (3) and (4): the preverbs *ofer-* and *under-* in (1) and (2) are still alive as both a prefix and a preposition, whereas *æt-* and *þurh-* in (3) and (4) are alive only as prepositions.

(2) *under-V*

*under-beran* 'to support', *under-crammian* 'to fill underneath', *under-delfan* 'to dig under', *under-don* 'to put under', *under-etan* 'to eat underneath',  
*under-flowan* 'to flow under', *under-gestandan* 'to stand under', *under-gan*  
'to undermine', *under-stredan* 'to strew under'.

(3) *æt-V*

*æt-beran* 'to carry to', *æt-clifian* 'to cleave to', *æt-gangan* 'to go to', *æt-sittan*  
'to sit by', *æt-slæpan* 'to sleep beside', *æt-standan* 'to stand at', *æt-stæppan*  
'to step up to', *æt-wenian* 'to wean from'.

(4) *purh-V*

*purh-blawan* 'to inspire', *purh-borian* 'to bore through', *purh-breccan* 'to break  
through', *purh-brengan* 'to bring through', *purh-creopan* 'to creep through',  
*purh-delfan* 'to dig through', *purh-drifan* 'to drive through', *purh-etan* 'to eat  
through', *purh-faran* 'to pass through', *purh-fleon* 'to fly through', *purh-gan*  
'to go through', *purh-secan* 'to search through', *purh-sceotan* 'to shoot through',  
*purh-scinan* 'to shine through', *purh-seon* 'to look through', *purh-stingan*  
'to pierce through', *purh-swimman* 'to swim through', *purh-wadan* 'to go  
through', *purh-wundian* 'to pierce through'.

(5) *ofer-V*

*ofer-geotan* 'to pour upon', *ofer-leoran* 'to pass over', *ofer-mæstān* 'to over-  
fatten', *ofer-magan* 'to prevail', *ofer-ricsian* 'to rule over', *ofer-stigan* 'to climb  
over', *ofer-swiðan* 'to overpower', *ofer-teldan* 'to cover over', *ofer-teon* 'to draw  
over', *ofer-weorpan* 'to throw over, overthrow', *ofer-wreon* 'to cover over'.

(6) *under-V*

*under-bugan* 'to submit to', *under-hnigan* 'to submit to', *under-iernan* 'to run  
under', *under-lutan* 'to bend under', *under-smugan* 'to creep under', *under-ðenian*  
'to serve under'.

(7) *ofer-V*

*ofer-cuman* 'to overcome' (ME *ofercomen* > ModE *overcome*)  
*ofer-don* 'to do to excess' (ME *oferdon* > ModE *overdo*)  
*ofer-drincan* 'to drink too much, get drunk' (ME *oferdinken* > ModE *overdrink*)  
*ofer-growan* 'to overgrow' (ME *ofergrowen* > ModE *overgrow*)  
*ofer-go* 'to pass over' (ME *ofergon* > ModE *overgo* 'to get the better of')  
*ofer-libban* 'to survive' (ME *oferliven* > ModE *overlive*)  
*ofer-seon* 'to see over, overlook' (ME *ofersen* > ModE *oversee*)

(8) *under-V*

*under-don* 'to put under' (ME *underdon* > ModE *underdo*)  
*under-gan* 'to undermine, ruin' (ME *undergo(o)n* > ModE *undergo*)  
*under-leccan* 'to support' (ME *underleyen*, *underleggen* > ModE *underlay*)  
*under-licgan* 'to be subject to' (ME *underlig(g)en*, *underlien* > ModE *underlie*)  
*under-standan* 'to perceive' (ME *understanden* > ModE *understand*)  
*under-writan* 'to write at the foot of' (ME *underwriten* > ModE *underwrite*).

Why then is it that English also lost most P-V CVs whose components continue to exist with their forms and meanings generally maintained? The answer to this question is closely related to the fact that those OE P-V CVs were not compounds in the ModE sense. In fact, the status of OE P-V CVs was very different from that of ModE P-V CVs: first, P-V compounding in OE was extremely productive; second, OE P-V CVs were semantically and morphosyntactically very transparent. Note that both of the features can be expected mainly for V+P phrases or prepositional verbs in ModE.

Furthermore, most of the transparent OE P-V CVs in (1)-(4), although they were lost, are still alive or have their counterparts in the form of V+P phrases or prepositional verbs in ModE. This strongly suggests that P-V compounding in OE was a morphosyntactic way of incorporating P into V as well as a part of ordinary compounding which is considered to be involved in such OE P-V CVs, as in (7) and (8),



and also in most compounds in ModE. Thus, OE had at least two kinds of P-V compounds: first, those more transparent P-V compounds which are highly likely to have resulted from morphological incorporation (MI), and second, the more opaque ones which were the result of ordinary compounding.<sup>3</sup>

Given this, the loss or change of OE P-V CVs can be explained as follows: first, most 'true' compounds (from ordinary compounding), if their components are alive, have survived in later English, as in (7) and (8);<sup>4</sup> second, English lost most of the P-V CVs whose components were lost, as in (5) and (6); and finally, English also lost most P-V CVs whose components are still alive and whose phrasal counterparts are found in ModE, as in (1)-(4). Note that the first and second cases are naturally expected, whereas the third case is quite exceptional. Now if we assume that the third group was the result of the MI of P into V and that English lost the mechanism of MI, then the loss of the third group can also be well explained.

Although the loss of MI is related to the general trend of change in English, from synthetic to analytic, it also has much to do with the loss of formal distinctions in case as an 'obliqueness marker'. With a prohibition against DPO, flexible word order, and productive P-V compounding, one optimal choice in English for the composition of the prepositional argument as a verbal argument would be through MI by P-V compounding. In this case, the relative obliqueness between verbal and prepositional arguments can be maintained only by the morphological cases as obliqueness markers. Now, the loss of case inflections brought about the loss of the overt obliqueness markers, putting the

<sup>3</sup> Productivity and (semantic) compositionality are among the most commonly cited criteria for distinguishing syntactic rules and lexical rules (Wasow 1977). Considering that unlike the P-V CVs in (7) and (8), the P-V CVs in (1)-(4) are very productive and morphosyntactically and semantically transparent, their formations are more (morpho)syntactic rather than purely lexical.

<sup>4</sup> More precisely, they may in some cases have been 're-compounded' with a new compounding process at work. For example, although *underetan* had a derivation of [under + V] = 'V under' in OE, its ModE counterpart *undereat* is probably derived by the productive compounding process of [under + V] = 'V less than needed or expected'. That is, it is very likely that the OE verb did not change its meaning but rather was supplanted by a newly-created *undereat* with a different meaning.

representation and maintenance of (relative) obliqueness in danger. In this situation, an attempt to compose the prepositional argument as a verbal argument through MI will be fatal to the maintenance of relative obliqueness. Furthermore, along with the general trend of change in English grammar, relative obliqueness among NP arguments now came to be maintained mainly by fixed word order. Thus, MI would have become a very unfavorable option for the argument composition of the prepositional argument.

In short, the loss of OE P-V CVs means that English lost the productivity of P-V compounding, which was responsible for the mechanism of MI of P into V as well as ordinary compounding. The loss of MI, in particular, is demonstrated by the loss of P-V CVs, which belong to the third group, exemplified in (1)-(4), and their replacement by the corresponding prepositional verbs or V+P phrases in later English. This strongly suggests that the appearance of the so-called reanalysis of V and P or SI (syntactic incorporation) in ME is not new at all (see Section 5.3.1 for further discussion).

### 5.1.2. Change in semantics

The loss of OE P-V CVs or complex verbs consisting of a (non-)prepositional prefix and a simplex verb and their replacement by corresponding V+P phrases affected the semantics of prepositional objects in general. As we have already seen in the previous section, many OE P-V CVs and other complex verbs were replaced by corresponding V+P phrases. However, the replacement of P-V CVs by V+P phrases was often semantic rather than just functional since many replacing V+P phrases had different P or V components from their corresponding OE P-V CVs (e.g., *ymb-sprecan* > *spoken of*).

Now no matter what the general characteristics of the replacement were, it is clear that the transitivity function of those compound verbs, along with the loss of many OE (non-)prepositional prefixes, came to be fulfilled by other means, especially by V and P

collocations (Denison 1985: 193). This means that many concepts previously expressed by those P-V CVs came to be represented by V+P phrases of new or same components, in which process former verbal arguments, which could be passivized, became prepositional arguments, maintaining the passivizable degree of obliqueness of the original verbal arguments. I suggest that this is one of the main sources which brought about not only Bennett's (1980) extension of the scope of the relation "direct object" but also the lexicalization of some V and P sequences (cf. Denison 1985: 193 and Fischer 1992: 386-7). Thus, we can find many OE P-V CVs which were replaced by V+P phrases with or without the change in their components and some are found even in early examples of the P-Passive, as follows (= (6)-(8) in Chapter 4):

- (9) OE *be-licgan* 'to lie or sleep by/with/around' > ME *liggen bi*

pis maiden ... feled also bi her pi | pat sche was yleven bi  
 this maiden ... felt also by her thigh that she had-been lain by  
 'this maiden felt by her thigh that she had been lain with'

(c1330 (?a1300) *Arth. & M.*(Auch) 849)

- (10) OE *ymb-sprecan* or *be-sprecan* 'speak of/about' > ME *speken of*

And þe comaundment ys brokun, | And þe halyday, byfore of spokun.  
 and the commandment is broken and the holy day previously of spoken  
 'And the commandment was broken, and the holy day previously spoken of'

(a1400 (c1303) Mannyng, *HS* 1033)

- (11) OE *on-spætan* or *be-spætan* 'spit upon' > ME *spitten (up)on*

and after he was turmentyd, and after he was spyt vpon  
 and afterwards he was tormented and afterwards he was spat upon  
 'and afterwards He was tormented and then He was spat upon'

(a1425 *Wycl.Serm.* I. 39.26)

All of this means that at least some English prepositional objects became less oblique or 'not-too-oblique' enough to be passivized and that the overall obliqueness of the English prepositional objects decreased. Thus, although the relative obliqueness between verbal arguments and prepositional arguments was always maintained in OE, as can be seen in the regularity of passive for verbal arguments versus no passive for prepositional arguments, the relative obliqueness between the two now became valid only for the same verbal head in the same sentence.

There was another semantic change which is significant for the advent of the P-Passive. In OE, prepositions were one of the two obliqueness markers and just like the other obliqueness marker (i.e., morphological case endings) they couldn't be overtly separated from their host NP objects; thus, remaining in their canonical position was the best way to prevent any potential change or confusion in the absolute obliqueness of POs and the relative obliqueness between verbal and prepositional arguments (see Section 4.3). However, along with the change in the means of maintaining relative obliqueness among NP arguments (i.e., from "obliqueness markers and the prohibition against their separation from their host NPs" to "rigid syntactic word order"),<sup>5</sup> the status of prepositions changed and their function as (absolute) obliqueness markers became trivial at best. Thus, prepositions in later English are now mainly used to express the relationship between the prepositional argument and other NPs (e.g., *put* NP<sub>1</sub> *on* NP<sub>2</sub>) or extra shades of meaning of the verb (e.g., *look at* vs. *look for*).

Although prepositions in later English often indicate a high degree of obliqueness (especially, in an adjunct PP), such is not always the case because at least some

<sup>5</sup> In general, relative obliqueness among NP (object) arguments in ModE can be expressed in terms of word order as follows: the nearer an (NP) argument is to the verb, the less oblique it is. This relationship between relative obliqueness and word order is generally accepted in many syntactic frameworks. For example, in Head-Driven Phrase Structure Grammar, the relative obliqueness of complements is modeled by position on the list for the SUBCATEGORIZATION value of the head (Pollard & Sag 1987: 70-1, 1994: 2-3), which generally represents the surface word order.

prepositional arguments are not very different from verbal arguments (e.g., *look into* NP vs. *investigate* NP, *look for* NP vs. *seek* NP). Furthermore, even the relative obliqueness between a prepositional argument and a verbal argument in the same clause can now be represented by word order alone. Thus, now DPO no longer causes any serious problem in maintaining relative obliqueness or general grammatical relations, as long as the PO is located in a legitimate position after DPO (i.e., its separation from its head P within PP).

In short, because of the change in the status of prepositions as obliqueness markers, the positions of P and PO became much more restricted, whereas DPO came to be more permissible—the opposite of the OE situation. This change in the semantics of prepositions, along with the change in the obliqueness of prepositional arguments, is one of the main factors which contributed to the weakening of \*DPO.

### 5.1.3. *Change in syntax*

The most important syntactic change which contributed to the advent of the P-Passive is the establishment of fixed word order.<sup>6</sup> It is generally agreed that the loss of oblique case inflection and the fixing of SVO word order went together and that there is a correlation between these two, although the cause and effect relationship is not very clear. In addition, as we have considered above, the loss of case inflections as obliqueness markers and the replacement of their function of maintaining relative obliqueness by rigid word order are mutually supportive.

Most importantly, through the fixing of word order, English came to have a syntactic way of representing and maintaining relative obliqueness among NP arguments,

<sup>6</sup> The fixing of English word order began around the beginning of the ME period and at least the prose of the ME period has much the same word order as ModE prose (Pyles & Algeo 1993: 162). On the other hand, Mitchell (1985: §3951) says that the SV(O) order was inevitable even before Norman influence began.

which was morphosyntactically achieved by obliqueness markers (i.e., cases and Ps) and \*DPO in OE. Note that both OE morphosyntactic and later English syntactic ways of maintaining relative obliqueness are complemented by the incorporation of P into V: OE had visible MI through P-V compounding and later English came to have invisible SI.

The core insight in this account of the change in the means by which relative obliqueness was maintained is that the establishment of fixed word order, along with the loss of case inflections, contributed to the weakening of the motivation behind \*DPO. That is, without the prohibition against DPO, it was very difficult to maintain relative obliqueness between NP arguments in OE which had a high degree of flexibility in word order. Furthermore, once the prepositional argument was composed into the argument structure of a verb, morphological cases were the only means to distinguish relative obliqueness. The SI of P into V, or DPO with fixed word order, however, hardly causes any confusion in relative obliqueness as long as PO is located in a legitimate position after its separation from P, since relative obliqueness is sufficiently represented and maintained by the relative word order and the well constrained reordering of relevant arguments.

### 5.1.4. *Syntactic incorporation*

Another important change for the advent of the English P-Passive is the rise of the reanalysis of V and P, the evidence for which seems to be quite generally accepted, no matter whether the mechanism itself is accepted or not.<sup>7</sup> As we have discussed in Section 1.2, many studies posit this mechanism of reanalysis, which I call 'syntactic incorporation' (SI), to explain (the advent of) the P-Passive. Although several questions are still to be answered before we can accept the existence of SI, correlating SI with (the

<sup>7</sup> For arguments against the reanalysis hypothesis, see Postal (1986), Koster (1987), and Baltin & Postal (1996).

advent of) the P-Passive doesn't seem to encounter any serious logical problems. First, there is no clear evidence that OE had a similar type of SI. The presence of SI in OE is at best suspicious since OE clearly had functionally similar MI and this must have obviated the necessity of SI. Second, there isn't any evidence that languages show similar evidence of SI without the P-Passive. Finally, the evidence for SI is found only in the P-Passive construction.<sup>8</sup> Thus, it seems fair to assume that the P-Passive always involves SI and that whenever we have SI, we also have the P-Passive; the priority relation between these two, however, is not easy to determine.

However, although applying the insight concerning SI to the account of the rise of the P-Passive seems to be essential, some serious questions need to be answered in order for this process to be fully justified as a major promoting factor for the advent of the P-Passive. Why and how, above all, did English come to have SI in ME, if we assume that SI made the P-Passive possible? Why didn't OE have a similar mechanism? It is crucial to answer such questions because otherwise a satisfactory diachronic explanation of the P-Passive will be lacking, even if synchronic accounts may be possible for the relevant construction at the beginning and endpoint of the change.

Furthermore, the evidence of SI seems to be found only with the personal P-Passive; there is no similar evidence from any impersonal P-Passive. Thus, even though German can have the impersonal P-Passive, as in (12), P-Stranding is not allowed at all and the passive verb does not occur immediately adjacent to the preposition:

- (12) (a) Meine Mutter sorgt für die Kinder.  
           'My mother is taking care of the children.'  
       (b) Für die Kinder wird gesorgt.  
           'The children are being taken care of.'

<sup>8</sup> See Section 6.3 for arguments for and against SI (i.e., reanalysis of V and P) in the P-Passive of contemporary English.

- (c) Es wird für die Kinder gesorgt.  
       'The children are being taken care of.'  
       (d) \*Die Kinder werden gesorgt für / für gesorgt.

Thus, the question of why English came to have SI is closely related to the question of why the evidence for reanalysis/SI is found only in the (personal) passive and why English came to have the personal P-Passive only. Why then did English come to have SI and the personal P-Passive without having the impersonal P-Passive?

#### 5.1.5. Subject requirement as the trigger

The changes in sound, morphology, syntax and semantics considered so far influenced the English prepositional constructions and the potential for DPO in those constructions. The following table in (13) shows four main reasons why OE had no P-Passive at all; newly-developed, promoting factors in the advent of the P-Passive; and what still has to be explained:

(13) New promoting factors and what yet to be explained

Reasons for no P-Passive	New promoting factors	What to be explained
Lack of necessity		<b>Necessity</b>
<b>*DPO</b>	Weakened *DPO	<b>Still strong *DPO</b>
Too oblique PO	New passivizable PO	
MI but no SI	(Loss of MI)	<b>Development of SI</b>

Above all, the various changes contributed considerably to the weakening of \*DPO. The main motivation for \*DPO was the high degree of obliqueness of the prepositional argument and the maintenance of relative obliqueness among NP arguments. Given this, the loss of P-V CVs and their replacement by V+P phrases, the development of less oblique DO-like prepositional arguments, the loss of the case inflections, the fixing of word order, and the consequent change in the means of maintaining relative obliqueness must have decreased the possibility of confusion in relative obliqueness which could be caused by DPO.

Note that despite the significant contribution of those factors to the weakening of \*DPO, the constraint was still strong, since the new P-Stranding patterns involving DPO remained rare for a long period after the advent of the P-Passive. Moreover, although English lost MI along with the loss of OE P-V CVs, the passivization possibilities of previously verbal but now DO-like prepositional arguments must have been maintained without any significant change. In such a situation, one good option would be the impersonal P-Passive, which is quite plausible since it can satisfy the still strong \*DPO as well as the increased passivization possibility of the prepositional argument. However, there is no evidence that English has had the impersonal P-Passive in any period.

What then made the advent of the personal P-Passive possible, leaving the impersonal P-Passive impossible? This, along with the question of why English came to have SI of V and P, suggests that despite all the major factors considered so far, there is still a logical gap which must be filled for a complete account of the advent of the P-Passive. More than anything else, we have to explain what, despite the still active \*DPO, actively triggered the advent of the previously unnecessary, personal P-Passive over the impersonal P-Passive, bringing about SI.

Along with other conspicuous changes in the language system, especially the establishment of the fixed SVO word order, English came to require an overt subject in

virtually every sentence and construction,<sup>9</sup> a constraint which can be called the 'subject requirement' (SubjR). I claim that this SubjR, which began to be dominant in English around the early ME period, triggered the long-prepared advent of the P-Passive, making the personal P-Passive virtually the only practical option. That is, the SubjR was what made DPO obligatory in the passive, changing P-Stranding in the P-Passive construction from unnecessary to necessary.<sup>10</sup>

Note that \*DPO was still very strong in the early ME period. Thus, the emerging SubjR must have brought about a serious conflict between the newly developed necessity of DPO and the still strong \*DPO. Because the developing SubjR required the (nominative) subject even in passive sentences and also because an indefinite dummy subject has not been allowed in English except for a limited number of impersonal verbs and in the expression of indefinite agency, the passivization of PO would have had to have become obligatory, making the previously impossible DPO necessary and the potential impersonal P-Passive even theoretically implausible and thus unavailable.

In such a dilemma between the necessity of DPO and the still active \*DPO, SI must have been the 'optimal' choice. Above all, SI can break the apparently deadlocked situation with DPO, because it can nicely satisfy not only the obligatoriness of DPO but also the still strong \*DPO by enabling the prepositional argument to detour around the barrier PP. Under the assumptions we made in Section 4.4.2, passivization requires the composition of the prepositional argument as a verbal argument, as a way of maintaining

<sup>9</sup> The actual status and content of this constraint are far from being obvious. In particular, there are sentences without overt subjects such as imperatives, although some are trivial cases (e.g., coordination) while some may be somehow phonologically induced, as in *gotta go!* for *I've gotta go*.

<sup>10</sup> Although the SubjR (cf. Perlmutter 1971: 100) is widely assumed or implied in most diachronic and synchronic studies of English, what brought about the SubjR into the grammar of English has hardly been made clear. See Kim (1996: 182-7, 234-55) for a useful discussion of the SubjR in English. Although Kim makes reference to such a constraint (i.e., "Prototypical Subject Requirement") and uses it in her account of the shift from pro-drop to non-pro-drop of the referential NP and of the changes with impersonal verbs, she does not explain what caused the SubjR to come into being in English, either. I suspect that the loss of case distinctions and (analogical) reanalysis of (dative) objects or complements as nominative subjects, which was influenced by the predominant personal constructions, played a significant role.

the complementhood of the prepositional argument in passivization. In fact, SI provides a good means for argument composition, enabling V to compose the original prepositional argument as its own argument so that the passivized argument in the P-Passive can not only maintain its complementhood in passivization but also avoid \*DPO (cf. Baker 1988, Sternefeld 1990).

Furthermore, SI of V and P is not completely new, because English already had the functionally similar MI in OE. OE had a morphological way of incorporating P into V, which allowed the original prepositional argument to be inherited or composed by V through P-V compounding. English lost MI and many transparent P-V CVs came to be replaced by V+P phrases in ME, and a syntactic motivation for the incorporation of P into V was newly developed by the SubjR and supported by other relevant changes. In this situation, the rise of some compensatory means of SI in an analytic language would not be implausible, since "loss or attrition in one component of the grammar tends to be compensated for in another component" (Hock & Joseph 1996: 211).

The SubjR as a trigger for the advent of the P-Passive can explain why the evidence for SI of P into V is found only in the passive, in spite of there being no significant semantic difference between the two active and passive V+P phrases. This is because it is only in the passive that the SubjR requires the PO to become the nominative passive subject and motivates SI to make the consequent obligatory DPO possible. This also explains why English came to have only the personal P-Passive and also why similar evidence for SI is not found in company with the non-existent impersonal P-Passive which would not need a nominative subject if it existed.

In short, the advent of the English P-Passive was a morphosyntactic change, long in preparation and nurtured by the relevant changes in other parts of the language system. In particular, the change was triggered by the SubjR, which made DPO and the consequent P-Stranding in the P-Passive necessary and the impersonal P-Passive unavailable, and

thus led to the deadlock between the necessary DPO and the still active \*DPO. This apparently contradictory situation could be saved by the help of SI of P into V, whose rise was not totally new but rather is very reminiscent, in almost every respect, of the MI of P into V through P-V compounding in OE.

## 5.2. New Types of Prepositional Stranding and their Relationship

In the ME period, as is well known, P-Stranding became much more common and many new types of P-Stranding began to develop in various prepositional constructions that did not allow P-Stranding in OE (cf. Denison 1993; Fischer 1992). First of all, P-Stranding in the passive, which resulted in the advent of the P-Passive, came to be allowed in the early ME period. Thus, early examples of the P-Passive begin to be found in the early 13th century, as follows:

- (14) þer wes sorhe te seon hire leoflich lich faren so reowliche wið  
 there was sorrow to see her dear body dealt so cruelly with  
 'there was sorrow to see her dear body so cruelly dealt with'  
 (c1225 St. Juliana (Roy) 22.195 [Denison 1993])

Second, at about the same time, P-Stranding also began to appear in *wh*-relative clauses and in *wh*-questions, as follows:<sup>11</sup>

<sup>11</sup> Even in the above ME constructions, however, P-Stranding is not found when P is not directly dominated by the VP (as in ModE *What train did Tom arrive by?*) (Fischer 1992: 388). Note that the PP *by what train* (which is not directly dominated by the VP) can be considered more oblique than other PPs such as those in (15) and (16), thereby making the separation of the P from the PP relatively more difficult. Thus, the lack of P-Stranding with the given PP is also compatible with the explanation of the advent of new P-Stranding constructions in ME given in the previous section.

- (15) And getenisse men ben in ebron, / Quile men mai get wundren on.  
and gigantic men are in Hebron which men may yet wonder on  
'And there are gigantic men in Hebron which one may still wonder at.'  
a1325 (c1250) (Gen. & Ex. 3715 [Denison 1993])
- (16) nuste nan kempe, whæn he sculde slæn on.  
did not know no warrior whom he should strike on  
'no warrior knew whom he should strike at' (Brut (Clg) 13718-19)

Third, P-Stranding in the construction that has a non-pronominal topicalized NP is also known to be first found in early ME, as follows:

- (17) bulliche dunes þe gode pawel spek of;  
those-very hills the good Paul spoke of  
c1230 (?a1200) (Ancr. 103a.22 [Denison 1993])
- (18) ... ah þe gode ich ga aa bisiliche abuten, ...  
... but the good I go always busily about  
'... but the righteous ones I always war against constantly ...'  
(St. Marg. (1) (Bod) 30. 35-6)

An important point about the development of all the new P-Stranding constructions above is that they began to appear at about the same time and yet remained rare until the end of the 14 century.

Another construction in which P-Stranding became possible in ME is the *tough*-construction (TC). Thus, when P-Stranding became more common in late ME, it also began to be allowed in the TC, as follows (van der Wurff 1990: 522-3):

- (19) ... *the grete Roches*, þat ben stronge and dangerouse to passe *by*.  
... the great rocks, that are strong and dangerous to pass by  
(?a1425 (c1400) (Mandev. (Tit) 29.10-11)
- (20) *þe gospel* ... is most esi to wynne heuene *by*  
the gospel ... is most easy to reach heaven by  
(c1430 (c1383) Wycl. Leaven Pharisees 2.22)

As for the development of these new types of P-Stranding in the ME period, various accounts have been proposed by previous studies, as we have already considered in Section 1.2, but the following two causes seem to be most widely accepted among English historical linguists. First, *which*-relative clauses (and later also *who*-relative clauses) acquired P-Stranding on the analogy of *that*- or *þe*- relative clauses (e.g., Allen 1980b, Fischer 1992: 390). Note that like the relativizer *that* (or *þe*), which has allowed P-Stranding since OE, *which* was virtually indeclinable. Thus, this similarity between *which* and *that* (or *þe*) adds likelihood to the proposed analogy.

Second, another factor which may have contributed to the extension of the phenomenon of P-Stranding (especially to *wh*-relative clauses and to *wh*-questions) is the fact that both the (new) *wh*-relatives and the *wh*-elements in questions developed from OE free relatives which had a *wh*-head within themselves (cf. Allen 1980a, Fischer 1992: 390). Note that P-Stranding with free relatives was possible in OE under certain conditions (i.e., when the free relativizer syntactically belongs to the main clause; see Section 2.2). Note also that the relative *whæm* 'whom(ever)' in (16) above could still be analyzed as a free relative. Thus, P-Stranding is likely to have become possible with *wh*-relatives and *wh*-questions by analogy.

Although it is very likely that the above two widely-accepted factors played an important role in the development of new types of P-Stranding in ME, there is still one significant aspect which has hardly been touched and cannot be adequately explained by

any of the previous proposals including those two above. Note that although the above two promoting factors can reasonably be applied to the development of the new P-Stranding types involving a *wh*-element such as *wh*-relatives and *wh*-questions, they are difficult to use to explain the advent of P-Stranding in the passive (i.e., the P-Passive), topicalizations, and the TC. This is because these three constructions usually do not have a *wh*-element.

Some studies such as Allen (1980a) have argued that P-Stranding which began to develop in constructions involving *wh*-elements also spread to other constructions in which P-Stranding was previously impossible. This may be an explanation of why P-Stranding in the TC became possible in late ME later than the type of P-Stranding involving a *wh*-element. Note, however, that P-Stranding in the passive and in topicalizations involving a non-pronominal NP began to appear almost at the same time as P-Stranding in *wh*-relatives and *wh*-questions (i.e., in the early 13th century). This means that the relative chronology involved in the development of new types of P-Stranding in ME is yet to be explained.

Now, note that P-Stranding was possible in topicalizations in OE when the topicalized NP is a pronoun. Thus, with the weakened \*DPO in early ME, P-Stranding is very likely to have been extended to non-pronominal topicalized NPs by analogy of pronominal topicalized NPs. As for the development of P-Stranding in the passive construction, we have already proposed that the SubjR (subject requirement) triggered the advent of the P-Passive by making DPO obligatory in the passive, changing P-Stranding in the passive from unnecessary to necessary. Finally, note that there is no clear independent promoting factor involved in the development of P-Stranding in the TC and that the *it*-analog construction which can serve as a semantic (and syntactic) alternative to the TC has been available since OE. Thus, it is a quite plausible explanation that P-Stranding in the TC was not allowed until P-Stranding, along with the sufficiently

weakened \*DPO and the fully developed analogical changes, became more common in other P-Stranding constructions and spread to the TC itself.

### 5.3. The Prepositional Passive: An Innovation of Middle English?

As is well known, P-Passive is unattested in OE and first came into being in the ME period. This conspicuous diachronic fact about the English passive, however, has often been equated with the assumption that the advent of the P-Passive was an innovation purely of the ME period (which I will call the 'ME-innovation hypothesis') and this widely-held assumption has continuously encouraged many relevant previous studies to ignore or neglect certain important aspects of the changes in the English passive.<sup>12</sup> In particular, despite considerable research about the rise of the P-Passive and its success in identifying various aspects and factors involved in the change, few previous studies seem to seriously consider what constructions OE had that correspond functionally to the later P-Passive and how they are related to the advent and development of the P-Passive in the ME period. These two issues, if successfully addressed, may reveal an important new dimension to the change, thereby enabling us to better understand the English passive and its diachronic development.

In this section, I will argue against the ME-innovation hypothesis for the advent of the P-Passive by addressing the above two issues. In particular, the following three points will be demonstrated. First, OE had a MI (morphological incorporation) of P into V, which is functionally similar to the so-called reanalysis of V and P, posited by many for the P-Passive. Second, through this MI, the PO in OE could also be passivized in a disguised form. Third, this 'OE prepositional passive in disguise' and the MI are closely

<sup>12</sup> For example, no previous studies except Denison (1985) seem to sufficiently deal with the issue of why OE did not have a P-Passive and how such an aspect of the OE grammar is related to the advent of the English P-Passive.



related to the advent of the periphrastic P-Passive and reanalysis in ME. In short, the results of our discussion will argue that although the P-Passive in its periphrastic form began to develop in ME, the advent of this periphrastic P-Passive cannot be considered innovative purely within the ME period.

### 5.3.1. Morphological incorporation of preposition into verb in Old English

#### 5.3.1.1. Reanalysis of verb and preposition: another innovation of Middle English?

As we have considered in Section 1.2, most previous studies suggest that a process of reanalysis which links V and P as a unit is one of the most important promoting factors for the rise of the P-Passive. Although this process of reanalysis of V and P has often been correlated with the advent of the new passive in the ME period (cf. Denison 1993: ch.7), no previous studies seem to have explained what made such a reanalysis possible and why it happened in ME, questions which must be answered for the process to be fully justified as a major promoting factor for the advent of the P-Passive.

Some studies (e.g., Fischer & van der Leek 1981; Kemenade 1987) suggest that the adjacency of P to V, which was newly achieved through the word order change in ME, eventually made the reanalysis possible.<sup>13</sup> Note, however, that many early examples of the P-Passive have P-V order instead of V-P order (Denison 1993: 135), as in (21) and (22) below. Furthermore, at least some early examples, as in (23), have other material intervening between V and P, which are supposed to be an inseparable single unit, thereby

<sup>13</sup> Fischer & van der Leek (1981: 327-9) and Kemenade (1987: 212-3) claim that the underlying word order change from OE [<sub>VP</sub> [<sub>PP</sub> P NP] V] to ME [<sub>VP</sub> V [<sub>PP</sub> P NP]] brought about the adjacency of P to V, making possible the previously impossible prepositional stranding (by NP movement) for the P-Passive.

suggesting even the possibility that V and P did not necessarily need to be adjacent to each other at least at an early stage of the P-Passive.<sup>14</sup>

- (21) Bot nu þan am i after send  
but now when am I after sent  
'But now when I am after sent (= sent for)'

(a1400 (a1325) Cursor 14216 [Denison 1993: 126])

- (22) And þe comaundment ys brokun, | And þe halyday, byfore of spokun.  
and the commandment is broken and the holy day previously of spoken  
'And the commandment is broken, and the holy day previously spoken of'

(a1400 (c1303) Mannyng, HS 1033 [Denison 1993: 126])

- (23) þer wes sorhe te seon hire leoflich lich faren so reowliche wið  
there was sorrow to see her dear body dealt so cruelly with  
'there was sorrow to see her dear body so cruelly dealt with'

(c1330(?a1300) Arth. & M. (Auch) 849 [Denison 1993: 125])

The lexicalization of some V+P collocations may have been helpful for the emergence of the reanalysis of V and P in ME.<sup>15</sup> Invoking it, however, does not sufficiently explain why English came to have the reanalysis in the early ME period. As we have seen in Section 1.2, OE also had V+P collocations (e.g., *blissian on* 'to rejoice in') whose prepositional objects are parallel to verbal direct objects in semantic function. Moreover, not only is it the case that many unlexicalized combinations of V and P can be used in the ModE P-Passive (e.g., *The bed was slept in*) but it is also true that some

<sup>14</sup> Moreover, it is not clear why the evidence for the reanalysis such as the inseparability of V and P is found only in P-Passive sentences but not in the corresponding active sentences which have the same adjacency. See Section 6.3.

<sup>15</sup> It has been argued that as the productive OE prefixal system decayed, many OE compounds consisting of a prepositional or inseparable prefix and a verb (e.g., *be-sprecan* 'to speak about') were simply replaced by corresponding V+P combinations in ME, thereby making the semantic function of the new PO identical with that of a verbal direct object and facilitating the lexicalization of the new V+P combinations (cf. Denison 1985, Fischer 1992: 386-7).

combinations of that kind (e.g., *run at*, *waded over*, etc.), which are difficult to regard as lexicalized, were used even in early examples (Denison 1985: 193). Thus, neither the adjacency nor the lexicalization can sufficiently explain why the reanalysis of V and P came to be possible in ME.

More importantly, even if we assume that the (syntactic) reanalysis of V and P itself came into being in ME, possibly due to the newly achieved adjacency of P to V, it does not necessarily mean the absence of a similar process of the unification of V and P into a single unit in OE. Note that despite the arguable lack of the adjacency of P to V in OE underlying word order (see Section 4.2) and the relative smallness of V+P collocations in OE, V and P can be considered easier to combine with each other in OE, because OE had so many morphosyntactically and semantically transparent complex verbs consisting of a prepositional prefix and a simplex verb.

All the considerations so far make us wonder whether the reanalysis of V and P is indeed an innovation purely of the ME period. In the next section, I will show that although OE did not have an invisible process of periphrastic, syntactic reanalysis of V and P such as that of later English, OE instead had a MI (morphological incorporation) of P into V, which was functionally similar to the so-called reanalysis of V and P and that this OE counterpart is closely related to the advent of the periphrastic reanalysis of V and P in ME, which I prefer to call syntactic incorporation (SI) due to its functional similarity to MI.

### 5.3.1.2. Dual status of the Old English 'compounding' of preposition and verb<sup>16</sup>

Like later English, OE had P-V CVs which are composed of a prepositional prefix (P) and a simplex verb (V). P-V CVs in OE, however, are very different in several important respects from those of later English. Above all, P-V compounding was much more productive in OE than in later English. Thus, even prepositions that are no longer used as prefixes in ModE could combine with many verbs to form P-V CVs, as follows:

#### (24) *æt* + V

*æt-beran* 'to carry to', *æt-feolan* 'to stick to', *æt-fon* 'to seize upon', *æt-gangan* 'to go to', *æt-sittan* 'to sit by', *æt-slæpan* 'to sleep beside', *æt-spornan* 'to strike against', *æt-stæppan* 'to step up to', *æt-standan* 'to stand at', *æt-wenian* 'to wean from'.

#### (25) *in* + V<sup>17</sup>

*in-beslean* 'to hack into', *in-blawan* 'to breath upon', *in-bredan* 'to burst in upon', *in-cuman* 'to come in', *in-erdian* 'to dwell in, inhabit', *in-feran* 'to enter in', *in-feallan* 'to fall in', *in-gan* 'to go in', *in-gangan* 'to go in', *in-geotan* 'to pour in'.

#### (26) *purh* + V

*purh-borian* 'to bore through', *purh-brecan* 'to break through', *purh-brengan* 'to bring through', *purh-creopan* 'to creep through', *purh-delfan* 'to dig through', *purh-drifan* 'to drive through', *purh-dufan* 'to dive through', *purh-etan* 'to eat through', *purh-faran* 'to pass through', *purh-wundian* 'to pierce through'.

<sup>16</sup> The discussion and examples in this section partially overlap those given in Section 5.1.1.2. The OE P-V CVs and their definitions are based on Hall (1960), Bosworth & Toller (1898), and Toller (1921).

<sup>17</sup> A few traces of "in- plus verb" still remain (e.g., *income*, *incoming*, etc.), although they are not productive.

Furthermore, as we have shown in Section 3.1, many OE P-V CVs, unlike P-V CVs of later English, are semantically so transparent that their meanings can easily be derived from the meanings of their parts, as we can see from (24) through (26) above and (27) and (28) below:

(27) *ofer-V*

*ofer-beon* 'to be over', *ofer-climban* 'to climb over', *ofer-faran* 'to go over',  
*ofer-gan* 'to go over', *ofer-glidan* 'to glide over', *ofer-hleapan* 'to jump over',  
*ofer-lihtan* 'to light upon', *ofer-ridan* 'to ride across', *ofer-rowan* 'to row over',  
*ofer-sawan* 'to sow over', *ofer-settan* 'to set over', *ofer-standan* 'to stand over'.

(28) *under-V*

*under-beran* 'to support', *under-crammian* 'to fill underneath', *under-delfan*  
'to dig under', *under-don* 'to put under', *under-etan* 'to eat underneath',  
*under-flowan* 'to flow under', *under-gan* 'to undermine', *under-gestandan*  
'to stand under', *under-stredan* 'to strew under'.

Note that those OE P-V CVs in (24) to (28) are almost the same in meaning as their corresponding OE or later English prepositional verbs or V+P phrases in everything except their forms (i.e., morphosyntactic status). Thus, most of the above OE P-V CVs would be replaced by their V+P phrasal counterparts, but not by similar P-V CVs, in ModE.

These same OE P-V CVs, unlike P-V CVs in later English, are also morphosyntactically very transparent and thus their argument structures can be compositionally reconstructed, just as in ModE V+P phrases or prepositional verbs, as follows:

(29) *sittan*

Weard    mæpelode, ðær    on wicge sæt, ombeht unforht: ...  
watchman spoke    there    on horse sat    officer    fearless: ...  
'The guard, a fearless officer, spoke, sitting on his horse: ...'    (Beo 286)

(30) *sittan ymb*

... modige            ymb    mearce    sittað,  
... noble-minded    around    border [acc] sit  
'... the noble-minded men are sitting around the border'    (Gen 1907)

(31) *ymb-sittan*

Næs            hie    ðære fylle gefean hæfdon, manfordædlan,  
by no means they the feast joy had    evil-doers  
pæt hie me þegon,    *symbol*    ymb-sæton sægrunde neah;  
that they me consumed banquet [acc] around-sat sea-bed near  
'By no means did those evil-doers have the joy of consuming me  
at a feast, sitting around a banquet near the bottom of the sea'    (Beo 562-5)

The OE verb *sittan* 'to sit' often occurs with the preposition *ymb* 'around', as in (30). Moreover, these two words sometimes combine with each other to form the semantically and morphosyntactically transparent P-V compound *ymb-sittan* 'to sit around', as in (31). Note that *sittan* is an intransitive verb which does not take any object, as in (29). Note also that the preposition *ymb* takes an accusative object, as in (30). When these are combined in *ymb-sittan*, the result is a transitive verb which takes an accusative object, as in (31). This observation about the case government of *sittan*, *ymb*, and *ymb-sittan* shows that the subcategorization of *ymb* percolates so as to be that of the whole compound *ymb-sittan*. Thus, the argument structure of the whole compound can also be easily reconstructed from their components (Kim 1997, Goh 2000).

Another interesting aspect of OE P-V CVs which examples (30) and (31) suggest is that for P-V CVs that are morphologically and semantically transparent, there are V+P phrasal counterparts (cf. Ogura 1995).<sup>18</sup> Thus, for the P-V CV *purh-gan* which means 'to go through', one finds a synonymous phrasal counterpart *gan ... purh*, as follows:

(32) *purh-gan* 'to go through'

Ic wille *ðurh-gan* orsorh ðone here, mid rode-tacne  
 I will through-go without anxiety the host with sign of rood  
 gewæpnod, na mid readum scylde, oððe mid hefegum helme,  
 armed not with red shield or with heavy helm  
 oppe heardre byrnan.  
 or hard corselet

'I will fearlessly go through the host, armed with the sign of the rood,  
 not with red shield or with heavy helm, or hard corselet.'

(ÆCHom ii. 502.11)

(33) *gan ... purh* 'to go through'

Eft wæs geworden þa he restedagum *purh*  
 afterwards it happened that when he on the Sabbath through  
 æceras *gode*, his leorningcnihtas ongunnon þa ear  
 grainfields went his disciples began the ears of corn  
 pluccigean.  
 to pluck

'And it happened that He was passing through the grainfields  
 on the Sabbath and his disciples began to pick the heads of grain.'

(Mk (WSCp) 2.23)

The coexistence in OE of a transparent P-V CV with its synonymous V+P phrasal counterpart (such as *ymb-sittan* and *sittan ymb*, and *purh-gan* and *gan purh* above)

becomes more interesting if we consider that similarly synonymous pairs of a P-V CV and its phrasal counterpart are virtually unknown in ModE or that a P-V CV and the corresponding V+P phrase in ModE (e.g., *overcome* vs. *come over*) can hardly be used interchangeably. Thus, the coexistence or interchangeability of P-V CVs and their corresponding V+P phrases, along with the other features of OE P-V CVs so far considered, tells us that at least some OE P-V CVs are much closer to their later English V+P phrasal counterparts than to the corresponding later English P-V CVs, thereby suggesting that P-V CVs in OE are of two morphosyntactically and semantically different types.

Finally, the changes of P-V compounds in later English, which we have discussed in Section 5.1.1.2, provide us with further substantial evidence for the dual status of OE P-V compounds. The changes of P-V CVs in later English can be summarized as follows: first, most true compounds (which result from ordinary compounding and are semantically opaque) have survived in later English if their components have continued to exist, as in (34); second, P-V CVs generally disappeared if their components were lost, as in (35); and third, some P-V CVs disappeared even though their components have survived, as in (36):

- (34) (a) *ofer-cuman* 'to overcome', *-don* 'to overdo', *-drincan* 'to drink too much'.  
 (b) *under-lecgan* 'to support', *-licgan* 'to be subject to', *-standan* 'to perceive'.

- (35) (a) *ofer-geotan* 'to pour upon', *-leoran* 'to pass over', *-stigan* 'to climb over'.  
 (b) *under-bugan* 'to submit to', *-hnigan* 'to submit to', *-smugan* 'to creep under'.

<sup>18</sup> Ogura (1995) shows that prefixed verbs including P-V CVs and verb+particle/preposition (V+P) combinations were highly interchangeable in the same/similar contexts of many OE texts.

- (36) (a) *ofer-climban* 'to climb over', *-glidan* 'to glide over', *-ðencan* 'to think over'.  
 (b) *under-delfan* 'to dig under', *-flowan* 'to flow under', *-stredan* 'to strew under'.  
 (c) *purh-breccan* 'to break through', *-drifan* 'to drive through', *-etan* 'to eat through',  
*-faran* 'to pass through', *-sceotan* 'to shoot through'.

Why then is it that English also lost the P-V CVs of the third type although their components continue to exist with their forms and meanings generally maintained? We have seen in Section 5.1.1.2 that this question can be best answered if we assume that many OE P-V CVs (especially those of the third type) were not compounds in the ModE sense. As we have already considered, the status of OE P-V CVs was quite different from that of P-V CVs in later English. P-V compounding in OE was extremely productive and many P-V CVs in OE were semantically and morphosyntactically very transparent. Furthermore, P-V CVs and their corresponding V+P phrasal counterparts were often interchangeable within the same or similar contexts. Note that all these features are found mainly either in V+P phrases or in prepositional verbs in later English. This is also compatible with the fact that although most of the transparent OE P-V CVs were lost, as in (36) above, their V+P phrasal counterparts are still found in ModE. Thus, many OE P-V CVs were much closer to ModE V+P phrasal counterparts than to ModE P-V CVs.

What all this suggests is that P-V compounding in OE, in addition to being part of ordinary compounding, was also a morphosyntactic device for incorporating P into V and that unlike OE P-V CVs of the first type and most P-V CVs in ModE that came from ordinary compounding, those of the third type were the result of this morphological incorporation (MI).<sup>19</sup> Thus, OE P-V 'compounding' had a dual status.<sup>20</sup> On the one

<sup>19</sup> Another kind of (morphological) incorporation which is often found is noun incorporation. In noun incorporation, a (generic) noun (e.g., *dish*) is morphosyntactically included within a verb (e.g., *wash*), producing *He is dish-washing* from *He is washing the dishes*. See Quirk et al. (1985: chs. 5, 7) and Baker (1988).

<sup>20</sup> Smirniotopoulos & Joseph (1998) have a similar conclusion about adverb incorporation in Modern Greek. There is one productive and transparent combining process, with *ksaná-* 'again' + verb, and many

hand, it was part of ordinary compounding, which produced more opaque P-V CVs such as those of the first type (as in (34)), and on the other, it was a means of MI, which was responsible for more transparent P-V CVs such as those of the third type (as in (36)).

The considerations so far make the following two predictions plausible. First, the so-called reanalysis of V and P that is often believed to first appear in ME is not new at all but is reminiscent of its OE counterpart, MI. English has had the same mechanism since the OE period, adjusting it to the change in the overall language system but maintaining its core properties. Second, more importantly, the plausible presence of MI in OE strongly suggests that the PO could be passivized as an inherited verbal object of an incorporated P-V compound in OE.

### 5.3.2. *A prepositional passive in disguise*

In this section, I will present a new set of English historical data about the (Old) English passive, which I believe have not been given in any relevant previous studies, and show that the passivization of PO in OE is not just a plausible hypothesis but also a solid fact that is supported by actual data. In particular, I will demonstrate that although OE did not have a periphrastic P-Passive such as the P-Passive in later English, OE instead had a 'prepositional passive in disguise' (hereafter called the 'P-V Passive'), in which PO is passivized through the process of MI (i.e., morphosyntactic reanalysis of V and P), just as PO in later English is passivized through the process of SI (i.e., syntactic reanalysis of V and P).

First, the OE examples in (37) and (38) below show that the original PO, composed as a verbal argument of a transparent, incorporated P-V compound (i.e., the verbal object

unproductive formations that they say are compounds. Although they ultimately treat even *ksana-* + verb as a compound, they could continue to separate the two types.

inherited from the nonhead P), becomes the passive subject. Note that both passive sentences would be rephrased with the ModE V+P phrasal counterparts of the P-V CVs involved. Interestingly but not very surprisingly, the meaning of the P-V CV *under-etan* 'to eat under, undermine' in (38) is quite different from that of its corresponding ModE CV *undereat*.

(37) *gangan ... ofer > ofer-gangan* 'to pass over'

hie þeah swa ondrædendlice gebidon þæt se ege ofer-gongen wæs,  
they however fearfully awaited that the terror over-gone was  
'however, they fearfully awaited for the terror to be passed over' (Or 160.30-1)

(38) *etan ... under > under-etan* 'to eat under, undermine'<sup>21</sup>

scearde scurbeorge scorene gedrorene ældo under-eotone  
cut down buildings torn collapsed by old age under-eaten  
'buildings (were) cut down, torn, collapsed, undermined by old age' (Ruin 5-6)

As for the above examples and their analysis, one might argue that unless there is evidence that the given passive P-V CVs actually come from the corresponding active V+P phrases, the above passive sentences should be considered simply to show the passivization of the verbal object of an ordinary compound verb, not the passivization of PO (through MI of P into V). However, OE shows many pairs of passive P-V CVs and corresponding active V+P phrases, making it more plausible that P is incorporated into V, thereby allowing PO to be passivized in the form of an inherited verbal argument, as follows:

<sup>21</sup> Since the past participle *under-eotone* has an adjectival inflection, this example, unlike most other examples presented in this section, seems to illustrate the so-called adjectival passive (e.g., *She appeared very annoyed*) rather than the verbal passive (e.g., *She was annoyed by his rude behavior*).

(39) *ofer-gangan (> ofer-gongen in (37)) and gangan/gan ofer*

- (a) þa com se hælend ... to him ofer þa sæ gangende;  
then came the savior ... to them over the sea walking  
'then the Savior came to them walking over the sea' (Mt (WSCp) 14.25)
- (b) and þeos arleasa ehtnyss unablinndlice eode ofer  
and this impious persecution unceasingly passed over  
ealne middaneard ealles tyngear, oðþæt heo to Engla lande  
all earth fully ten years, until it to England  
eac swylce becom,  
also came  
'and the impious persecution continuously spread over all the earth  
fully ten years until it came to England as well' (ÆLS 414. 9-11)

(40) *be-sittan (> be-seten) and sittan be*

- (a) þa he wæs be-seten mid his feondum on þære byrig.  
then he was around-sat with his enemies in the stronghold  
'then he was surrounded by his enemies in the stronghold'  
(COE: PsHead 19.1)
- (b) Ða hi þa þæt nett upp atugon & sæton be þam strande  
when they then the net up drew and sat around the seashore  
þa gecuron hig þa godan on hyra fatu,  
then chose they the good in their containers  
'When they drew up the net and sat around the shore,  
then they gathered the good ones into containers' (Mt (WSCp) 13.48)

(41) *þurh-gan (> þurh-gan) and gan þurh*

- (a) seo eorðe bið mid ðam winterlicum cyle þurh-gan.  
the ground will be with the wintry cold through-passed  
'the ground will be passed through with the cold of the winter'  
(COE: ÆTemp 4.48)

- (b) *pa he restedagum burh æceras eode, his leorningcnihtas ...*  
 when he rest-day [dat] through grain fields went his disciples ...  
 'when He went through the grain fields on Sabbath day, his disciples ...'  
 (Mk (WSCp) 2.23)

A possible counterargument against this claim (based on the above data) may be that the passive P-V CV and the corresponding active V+P phrase in each of the given examples above are simply two different expressions which are not exactly the same semantically and that they therefore do not show the MI of P into V or prove the presence of the passivization of the PO through this MI. In fact, it seems that in the above examples, the meanings of the P-V CVs in the passive are more abstract, whereas the meanings of the V+P phrases in the active are relatively more concrete. Thus, this might make the given counterargument appear legitimate because it is compatible with the well-known distinction in semantics between a compound and a phrase.

However, OE also shows many examples of a transparent P-V CV in the passive and its V+P phrasal counterpart in the active which show little or no semantic difference, as follows:

(42) *be-flowan* and *flowan be* (with the same concrete meaning)

- (a) ... *þæt min freond siteð under stanhlepe storme*  
 ... that my lover sits under cliff by storm  
 behrimed, wine werigmod, wætre *be-flowen*  
 covered with hoar-frost lord disconsolate, by water around-flowed  
 on dreorsele.  
 in the hall of sorrow.  
 '... that my lover, my disconsolate lord, sits under a rocky cliff, covered  
 with frost by the storm, flowed around by water in the hall of sorrow.'  
 (Wife 47-50)

- (b) *seo ea, seo þe floweþ be þam burhwealle,*  
 the river which that flows around the castle's earthwork  
 'the river which flows around the dike of the castle'  
 (COE: GDPref and 3 (C) 9.192.14)

(43) *ymb-standan* and *standan ymb* (with the same concrete meaning)

- (a) & *þa þa se Godes wer wæs þær ymb-standen*  
 and when the God's man was there around-stood  
*fram þam ylcan Gotum,*  
 by the same Goths  
 'and when the God's man was there surrounded by the same Goths'  
 (COE: GDPref and 3 (C) 12.197.1)  
 (b) *Beornas stodon ymbe hyra þeodnes træf pearle gebylde, ...*  
 warriors stood around their prince's tent severely excited ...  
 'The warriors surrounded their lord's tent heavily excited ...'  
 (Jud 267)

(44) *ofer-geotan* and *geotan ofer* (with the same concrete meaning)

- (a) *swa þæt þæt scyp wearð ofer-goten mid yþum*  
 so that the ship became over-poured with water  
 'so that the ship was being covered (< poured over) with water'  
 (Mt (WSCp). 8.24 )  
 (b) *þa wæs wopes hring hat heafodwylm ofer hleor goten*  
 then was of weeping sound hot tears over cheek poured  
 'then there was the sound of weeping and hot tears poured over the cheek'  
 (El 1131-3)

The P-V CV *be-flowan* and the V+P phrase *flowan be* in (42) above have the same concrete meaning 'to flow around' and are used in the passive and active, respectively. Similarly, the examples in (43) and (44) also show that the P-V CV and the V+P phrase of each pair (i.e., *ymb-standan* and *standan ymb*, and *ofer-geotan* and *geotan ofer*) are used with little difference in meaning in the passive and active, respectively. Note that even the

contexts for the P-V CV and its counterpart V+P phrase of each pair, especially of (42) and (43), are not very different.

More strikingly, the examples in (45) below show that the P-V CV *on-spæt* and its phrasal counterpart *spæt on* are used with exactly the same meaning and within exactly the same context. Since these passages describe the same event, being only from different Gospels, the burden of proof would be on anyone who claims that there is a systematic difference in interpretation here. Thus, these examples, along with other examples so far considered, demonstrate that PO could be passivized also in OE although its passivization was achieved in a disguised form.

(45) *on-spætan* and *spætan on* (with the same meaning in the same context)

- (a) He byð ðeodum geseald & bið bysmrud & geswungen  
 he will be to the nations given and will be mocked and insulted  
 & on-spæt, ... hig hine ofsleað, & he priddan dæge arist.  
 and spat upon, ... they him kill and he third day arises  
 'He will be delivered to the nations, and will be mocked, insulted,  
 and spat upon, ... they will kill Him and on the third day He will rise again'

(Lk (WSCp) 18.32)

- (b) Ða spætton hig on hys ansyne & beotan hyne mid heora fystum;  
 then spat they on his face and beat him with their fist  
 'Then they spat on His face, and beat Him with the fist and some slapped Him'

(Mt (WSCp) 26.67)

In the ModE P-Passive, it is generally believed that V and P are syntactically (and invisibly) reanalyzed (through SI) to form a single unit and PO is passivized as the object of this reanalyzed prepositional verb. Similarly, in the OE P-V Passive, V and P are morphologically (and more visibly) reanalyzed through MI to form a single unit and PO is passivized as the inherited object of the incorporated P-V compound. Note that no matter how they are analyzed, the OE P-V Passive and the later English P-Passive make the

'prepositional passive' possible by enabling the original object NP of P in the active to become the subject of the corresponding passive. Of course, there is some difference in the way the reanalysis of V and P is realized between the OE P-V Passive and the later English P-Passive, that is, the incorporated P-V compound in OE is morphosyntactically one unit whereas the reanalyzed V+P phrasal verb in later English, although syntactically a single unit, is still two units morphologically. This small difference, however, would not be very difficult to understand since the overall linguistic circumstances that they occur in are also quite different, OE being more synthetic whereas later English being more analytic, a difference compatible with the difference in the form of reanalysis.

Even after seeing those examples such as (42)-(45) above and admitting the presence of the 'P-Passive in disguise' in OE or at least the fact that PO could be passivized also in OE in some indirect way, one might still be tempted to say that unless there is clear evidence that the OE P-V Passive is related to the advent of the P-Passive and its development in ME, the P-Passive can still be a syntactic innovation purely of the ME period. However, there is good reason to believe that both OE incorporated P-V compounds and the passivization of PO through them were major promoting factors for the advent of the P-Passive in ME. First, many early examples of the P-Passive in ME have V+P combinations whose OE counterparts with respect to form and/or meaning are (semantically and morphosyntactically transparent) P-V compounds, as follows (= (9) and (10)):

(46) OE *be-licgan* 'to lie or sleep by/with/around' > ME *liggen bi*

- þis maiden ... feled also bi her þi | þat sche was yleven bi  
 this maiden ... felt also by her thigh that she had-been lain by  
 'this maiden felt by her thigh that she had been lain with'

(c1330 (?a1300) *Arth. & M.*(Auch) 849)



- (47) OE *ymb-sprecan* or *be-sprecan* 'to speak of/about' > ME *spoken of*

And þe comaundment ys brokun, | And þe halyday, byfore of spokun.  
and the commandment is broken and the holy day previously of spoken  
'And the commandment was broken, and the holy day previously spoken of'  
(a1400 (c1303) Mannyng, *HS* 1033)

More interestingly, even virtually the same V and P that are used in OE P-V Passive examples are also found in early examples of the P-Passive in ME, as (48) and (49(=11)):

- (48) He byð þeodum geseald ... & on-spæt, ...  
he will be to the nations given ... and spat upon, ...  
'He will be delivered to the nations, and will be spat upon, ...'

(Lk (WSCp) 18.32)

- (49) OE *on-spætan* 'to spit upon' > ME *spitten (up)on*

and after he was turmentyd, and after he was spyt vpon  
and afterwards he was tormented and afterwards he was spat upon  
'and afterwards He was tormented and then He was spat upon'

(a1425 *Wycl.Serm.* I. 39.26)

Finally, some OE examples of the P-V Passive developed into the new P-Passive in later English, as we can see from different versions of the English Bible translation, as follows:

- (50) For he shall be delivered unto the Gentiles, and shall be mocked,  
and spitefully entreated, and spitted on. (1611 KJV, Lk 18.32)<sup>22</sup>
- (51) For He will be handed over to the Gentiles, and will be mocked  
and mistreated and spit upon. (1971 NASB, Lk 18.32)

<sup>22</sup> KJV = King James Version; NASB = New American Standard Bible.

### 5.3.3. Summary and conclusion

In Section 5.3, we have seen that many P-V CVs in OE are much closer to V+P phrases than P-V CVs of later English in their semantic and morphosyntactic status, enabling us to posit a dual status for OE P-V CVs. We have also seen that certain otherwise hard-to-handle aspects of changes of P-V CVs in later English can be well explained by the assumption that a portion of OE P-V CVs was the result of incorporation of P into V rather than the result of ordinary compounding. Furthermore, by presenting many OE examples containing transparent P-V CVs in the passive and their V+P phrasal counterparts in the active, we have shown that PO could be passivized also in OE as an inherited object of an incorporated P-V verb.

In conclusion, OE already had the MI (morphological incorporation) of P into V, which is functionally similar to the later English syntactic reanalysis of V and P, and a P-Passive in disguise (i.e., the P-V Passive), which made it possible for PO to be passivized, as in the periphrastic P-Passive of later English. Furthermore, these OE antecedents are also closely related to the advent of their more analytic counterparts in later English. Thus, even though the syntactic reanalysis of V and P and the periphrastic P-Passive themselves began to first appear in the ME period, they cannot be considered innovations that arose for the first time within the ME period: OE already had their antecedents in disguised forms and these antecedents played significant roles in their emergence. In order to be fully understood, the changes concerning the English P-Passive require a better understanding of its OE precedent and of input from other related domains of the grammar.

## CHAPTER 6

### THE PREPOSITIONAL PASSIVE IN CONTEMPORARY ENGLISH

#### 6.1. Introduction

The prepositional passive (P-Passive) is a syntactic pattern in which the object of a preposition in an active sentence corresponds to the subject in the corresponding passive, as follows:

- (1) (a) The buyers have thoroughly looked into those samples.  
(b) Those samples have been thoroughly looked into by the buyers.
- (2) (a) A committee deals with all the finances of the university.  
(b) All the finances of the university are dealt with by a committee.

This syntactic construction in English is very conspicuous from a synchronic standpoint as well as from a diachronic standpoint. This is mainly because the P-Passive is crosslinguistically very rare and its acceptability is determined not only by syntactic factors but also by various non-syntactic factors, as will be discussed shortly. Thus, the P-Passive in contemporary English has attracted considerable attention from many scholars, producing a great number of analyses from various theoretical frameworks, including traditional grammarians (e.g., Poutsma 1926; Jespersen 1909-49; Svartvik 1966;

Couper-Kuhlen 1979; Quirk et al. 1985), generative linguistics (e.g., Chomsky 1965, 1981; Van Riemsdijk 1978; Bresnan 1982a), and functional linguistics (e.g., Bolinger 1975; Palmer 1974, 1988; Takami 1992).

Among many interesting observations made about the English P-Passive, the following three seem to be the most remarkable in that each of them reveals an important aspect of this construction which must be explained for a complete account of the P-Passive in contemporary English. First, as is well known, the verb (V) and the preposition (P) of prepositional verbs in the P-Passive cannot be interrupted by other material whereas V and P in the active can be separated by other constituents or through movement, as follows:

- (3) (a) All the committee members agreed unanimously on the proposal.  
(b) On which proposal did all the committee members agree unanimously?  
(c) The proposal was agreed (\*unanimously) on by all the committee members.
- (4) (a) The search committee asked politely for additional information.  
(b) This is the additional information for which the search committee asked.  
(c) Additional information was asked (\*politely) for by the search committee.

This observation of the unification of V and P into a single unit in the P-Passive, which was made as early as in Jespersen (1909-49: part III, vol. II. 15.74), has constituted significant empirical evidence for formation of a sort of complex verb through incorporation of P into V. This phenomenon has been explained by means of a mechanism of reanalysis in many synchronic and diachronic studies and has sometimes even been identified simply with the term reanalysis.

Note that the (positive) evidence for this unification of V and P into a single unit is found only in the P-Passive and that the P-Passive always involves such unification of V and P. This strongly suggests that the analysis of the unification of V and P in the passive is crucial to the account of the English P-Passive. Thus, among the important questions to ask about the unification of V and P are when and where the unification of V and P occurs, what motivates or triggers the unification, what role it plays in the P-Passive, and how it can be best explained in current syntactic theory.

Second, although there are many combinations of V and P which regularly allow the passivization of POs (e.g., *ask for*, *break into*, *call for*, *deal with*, *look into*, *thank for*, etc.), not all combinations of V and P permit the P-Passive, resulting in ungrammatical examples of the P-Passive, as follows:

- (5) (a) A crowd of people gathered near the Capitol last Saturday.  
(b) \*The Capitol was gathered near by a crowd of people last Saturday.
- (6) (a) The children played under the hot sun all the afternoon.  
(b) \*The hot sun was played under by the children all the afternoon.
- (7) (a) Many people in the town bowed before that big old tree.  
(b) \*That big old tree was bowed before by many people in the town.
- (8) (a) All the people in Sleeping Beauty's palace slept for many years.  
(b) \*Many years were slept for by all the people in Sleeping Beauty's palace.

Among generative linguists, what distinguishes between the two groups of V+P sequences with respect to the passivization possibilities of POs has often been considered whether the V and the P in a given V+P sequence can be reanalyzed or not. Thus, another

important question to be answered by any reasonable account of the P-Passive is what characterizes the passive-permitting combinations of verb and preposition or so-called 'reanalyzable' prepositional verbs.

Finally, even though most V+P sequences that involve an adjunct PP normally do not participate in the P-Passive, they can sometimes permit the passivization of POs under certain special circumstances, thereby causing the two examples of each pair below to differ in acceptability although they have exactly the same V+P combination, respectively.

- (9) (a) \*New York was slept in.  
(b) The bed was slept in.
- (10) (a) \*The hotel was stayed in by him.  
(b) The hotel was stayed in by many great people--Isaac Newton, Albert Einstein, Thomas Edison, George Washington, Abraham Lincoln, Elvis Presley, Beatles, Michael Jackson, and so on.
- (11) (a) \*This statue was stood beside by John.  
(b) No statue should be stood beside in this park.

Note that there is little or no possibility of (morpho)syntactic difference between the two instances of each V+P sequence above. This above all means that the given difference in grammaticality is difficult to properly attribute to any characteristics of the V+P sequences involved. Thus, another question we have to answer for a satisfactory account of the P-Passive is what makes the P-Passive possible even with V+P combinations which are normally not passive-permitting. This question, along with the

previous question above, makes us wonder what really determines the passivization possibilities of POs and thus the acceptability of the P-Passive.

The goal of this chapter is to provide a new account of the P-Passive in contemporary English which addresses all three issues so far considered. First, I will briefly review previous analyses of the P-Passive in generative linguistics and show that none of them fully explain these three issues, thereby failing to provide a satisfactory account of the English P-Passive. Then, I will address each of the issues one by one, providing new proposals for an alternative account of the P-Passive which incorporates both formal and functional aspects of that construction. Finally, I will provide a set of formally adequate formulations of my proposals within the Head-Driven Phrase Structure Grammar (HPSG) framework in the version of Pollard & Sag (1994), thereby showing that all the proposals made in my alternative analysis can be given a coherent treatment within a current theoretical framework.

## 6.2. Previous Analyses of the Prepositional Passive in Generative Linguistics

### 6.2.1. *The unification of verb and preposition into a single unit*

#### 6.2.1.1. *Reanalysis hypothesis*

There have been numerous studies about the English P-Passive in generative linguistics and most of the studies have been done within the Government-Binding (GB, i.e., Principles and Parameters) framework and its predecessor Transformational Grammar.<sup>1</sup> In particular, most of these studies have paid great attention to the fact that V and P are united with each other to form an inseparable unit in the P-Passive and they

<sup>1</sup> There have not been many serious studies about the P-Passive in non-derivational generative linguistics. For examples of non-derivational or lexicalist approaches to the P-Passive, see Bresnan (1982a), Postal (1986), Zwicky (1987), and Grover (1995). They propose a treatment of the English P-Passive within the Lexical-Functional Grammar, Arc Pair Grammar, Generalized Phrase Structure Grammar, and Head-Driven Phrase Structure Grammar, respectively.

have repeatedly employed some sort of mechanism of restructuring V and P in the passive in order to explain the P-Passive (in English). Since the very core of their analyses of the English P-Passive has been a so-called reanalysis (or incorporation) mechanism,<sup>2</sup> I will call their position(s) the 'reanalysis hypothesis'.

Under the reanalysis hypothesis, it is generally assumed that the prepositional verbs such as *look into* and *stare at*, when their components are immediately adjacent to each other, optionally undergo reanalysis, resulting in the restructuring of [VP [V [PP P NP]]] into [VP [V V-P] NP]. That is, when reanalysis is applied, P is incorporated into V to form a complex verb and the PO immediately adjacent to the complex verb comes to have the status of a direct object of that complex verb and therefore is permitted to be passivized like a verbal object (cf. Radford 1988: 427-32).<sup>3</sup>

In particular, the application of reanalysis of V and P in prepositional verbs is assumed to be optional. This assumption is based on and/or has been made to explain the conflicting sets of facts, illustrated by the following examples:

- (12) (a) Those proposals were talked (\*immediately) about in the meeting.
- (b) We talked immediately about those proposals in the meeting.
- (c) These are the proposals about which we talked immediately in the meeting.
- (d) About which proposals did you talk immediately in the meeting?

<sup>2</sup> Examples of studies in generative linguistics that (formally or informally) invoke some kind of mechanism of reanalysis in order to explain the P-Passive include the following: Postal (1971: 213-218), Chomsky (1975:242, fn.43, 1981: 123, 292-300, 1986: 201), Van Riemsdijk (1978: 218-26), Williams (1980: 204), Bach (1980: 307, 323-324), Hornstein & Weinberg (1981), Radford (1981: 346-348, 1988: 427-32), Bresnan (1982a), Hoekstra (1984: 135), Kayne (1984: XII, 45, 65, 82, 114-116, 123), Keyser & Roeper (1984: 399), Marantz (1984: 286), Levin & Rappaport (1986: 650, fn.30), Roberts (1987: 19, 135), Baker, Johnson, & Roberts (1989: 235, fn.), Fellbaum & Zribi-Hertz (1989: 45), Lasnik & Saito (1992: 206, fn.1). Unlike most other studies, Bresnan (1982a) formulates the reanalysis hypothesis in the Lexical-Functional Grammar framework.

<sup>3</sup> Van Riemsdijk (1978: 218-26) first proposed the mechanism of reanalysis formally by adopting Chomsky's (1965, 1974) idea. This mechanism makes a unit of the contiguous V and P, which are "listed in the lexicon as semantic units", by optionally introducing "an extra pair of V-brackets" (van Riemsdijk 1978: 222).

- (13) (a) He can be depended (\*entirely) on.  
 (b) We can depend entirely on him.  
 (c) He is the person on whom we can depend entirely.  
 (d) On whom can we depend entirely?

The above examples show that although prepositional verbs such as *talk about* and *depend on* do not allow V and P to be separated or broken up by intervening material in the passive, as in (12a) and (13a), they do so in their active forms, as in (12b-d) and (13b-d). In order to resolve this apparently paradoxical behavior of prepositional verbs, most generative linguists (especially within the GB framework) assume that reanalysis is optionally applied to passive-permitting prepositional verbs and the P-Passive is permitted only when optional reanalysis is applied.

#### 6.2.1.2. No-reanalysis hypothesis

Although the reanalysis hypothesis (which argues for optional reanalysis of V and P in passive-permitting prepositional verbs) has long been the dominant position on the English P-Passive among generative linguists, some (generative) linguistics (e.g., Postal 1974: 275-6, fn.5, 1986: 205-209, 243, fn.14; Koster 1987: 279; Zwicky 1987; Baltin 1995; Baltin & Postal 1996) have argued against it. The main point of their claim, which I will call the 'no-reanalysis hypothesis', is that there is no real motivation for a mechanism of reanalysis of V and P in the English P-Passive because the stranded P of a prepositional verb in the English P-Passive retains a syntactic status independent of the V and the object of the P maintains its original syntactic status without taking on the status of a direct object of a verb.

In particular, Baltin & Postal (1996) present many different cases in which the NP object of a passive-permitting prepositional verb manifests the syntactic behavior not of a direct object of a (complex) verb, but of an ordinary prepositional object. The following examples concerning heavy-NP-shift are intended to demonstrate one of such cases (Postal 1986: ch. 6.1, 1996: 129):

- (14) (a) I discussed   <sub>i</sub> with Lorenzo -- [the problems he was having with deliveries]<sub>i</sub>.  
 (b) \*I argued with   <sub>i</sub> about such problems -- [the drivers' union leader]<sub>i</sub>.  
 (15) (a) I described   <sub>i</sub> to himself<sub>i</sub> -- [the victim whose sight had been impaired by the explosion]<sub>i</sub>.  
 (b) \*I talked to   <sub>i</sub> about himself<sub>i</sub> -- [the victim whose sight had been impaired by the explosion]<sub>i</sub>.

In (14b) and (15b) above, if the V in each V+P sequence (i.e., *argued with* and *talked to*) could combine with the following P to form a complex verb through (optional) reanalysis, thereby making the NP following the P a verbal object of the given complex verb, it would be possible for the NP to undergo heavy-NP-shift. However, as is well known, heavy-NP-shift can move a verbal object but not a PO, as in the above examples. This means that a PO, even after the arguable reanalysis has applied, differs in behavior from a verbal object. Thus, heavy-NP-shift provides evidence against the possibility of complex verb formation through reanalysis,<sup>4</sup> thereby arguing against the popular reanalysis hypothesis.

However, although such an argument may show that there is no reanalysis of V and P in the given situation and thereby argue against the reanalysis hypothesis (that

<sup>4</sup> Baltin & Postal (1996) provide many other arguments against the reanalysis hypothesis, including verbal phrase ellipsis, subdeletion, floating quantifiers, some of which are as convincing as the evidence from heavy-NP-shift. Their main arguments and problems will be discussed in Section 6.3.

reanalysis of V and P applies optionally to passive-permitting V+P sequences), it does not totally contradict the very unification of V and P in the passive. In this connection, note that the evidence from heavy-NP-shift concerns the syntactic behavior of the PO only in the active and the empirical evidence for the unification of V and P in the P-Passive is still clear. Unfortunately, no previous study arguing for or against the reanalysis hypothesis explains what this important fact about the English P-Passive really means.

In Section 6.3, I will argue against both the reanalysis hypothesis and the No-reanalysis hypothesis and propose that English indeed has reanalysis of V and P for passive-permitting V+P sequences but that this reanalysis is possible and required only in the passive but not in the active at all. In particular, I will show that all the evidence for and against the reanalysis hypothesis, which may appear to be mutually contradictory, can be well explained under this proposal.

#### 6.2.2. *What determines the passivization possibilities of prepositional objects?*

As for the second issue of why only some types of prepositional structures (regularly) permit the passivization of POs whereas others do not, most generative linguists have claimed or assumed that it is because only passive-permitting prepositional structures allow the reanalysis of the given V and P, a process which is necessary for the passivization of an original PO as a direct object of the resultant complex verb. Thus, many have tried to explain the conditions under which V and P can be reanalyzed making the passivization of POs possible, and most proposals can be classified into the following two types which are closely related to each other.

The first type of condition is syntactically oriented. For instance, Chomsky (1965: 105-6) suggests that only an NP that is part of a subcategorized PP can be passivized.

Riemsdijk (1978: 221) also says that the P *for* of a reanalyzable, prepositional verb *provide for* in the well-formed *She was provided for quite adequately* is more closely connected to the V *provide* by subcategorization than *with* is to *travel* in the ill-formed *\*His mother was traveled with by John*. Similarly, Hornstein & Weinberg (1981: 58-59) claim that the passivization of a PO is determined by whether or not the given V c-commands the following PP.

The second type of explanation, on the other hand, is more lexically and/or semantically oriented. For example, Chomsky (1977b: 87) says that the P-Passive is allowed only when the V and the P form a “semantic unit”, which Riemsdijk & Williams (1986: 188) call a “natural predicate”. Riemsdijk (1978: 221) also claims that the ungrammaticality of such examples as *\*Many years were slept for* and *\*The Capitol was gathered near* is because the combinations of V and P involved (i.e., *sleep for*, *gather near*) do not constitute “semantic units”, which might correspond to “possible words”. Note that unlike the V+P sequences that do not allow the P-Passive, those resulting in acceptable P-Passive examples are usually non-compositional in their meanings and can often be expressed by single words (e.g., *account for* = *explain*, *call for* = *require*, *care for* or *look after* = *tend*, *look into* = *examine*, etc.). Thus, it might be argued that they could be easily reanalyzed or base-generated.

However, even though the syntactic and lexico-semantic factors such as those above may enable us to distinguish (regularly) ‘reanalyzable’ V+P sequences from ‘unreanalyzable’ ones, there are still many V+P sequences such as *sleep in* and *sit beside* that cannot be considered ‘reanalyzable’ by themselves but occasionally permit the passivization of a relevant PO in certain special situations, as we have considered in Section 6.1. Since these V+P sequences do not appear to involve a complement PP or to form a semantic unit, the acceptability of the P-Passive examples which involve them cannot properly be explained by the syntactic and/or lexico-semantic factors discussed

above. This means that the condition(s) under which the P-Passive is licensed has yet to be explained.

### 6.2.3. *Summary and conclusion*

So far, we have briefly discussed how the P-Passive is analyzed in generative linguistics, focusing on the three issues raised in Section 6.1. As for the first issue (i.e., the unification of V and P in the P-Passive), neither of the two opposing positions (i.e., the reanalysis hypothesis and no-reanalysis hypothesis) show a sufficient understanding of the phenomenon, and thus fail to fully explain the facts. That is, the reanalysis hypothesis cannot explain the fact that POs often show behavior that is independent of that of verbal objects, as in heavy-NP-shift, while the no-reanalysis hypothesis cannot explain away the clear evidence for the unification of V and P in the P-Passive.

As for the question of what really determines the passivization possibilities of POs (i.e., what characterizes 'reanalyzable' V+P sequences and what makes even 'unreanalyzable' V+P sequences passive-permitting), although the syntactic and lexico-semantic factors proposed by many can be used to define regularly 'reanalyzable' prepositional verbs, those factors are not able to explain many grammatical examples of the P-Passive that involve 'unreanalyzable' V+P sequences which usually involve an adjunct PP, thereby leaving the third issue totally untouched.

Finally, another significant point about studies of the (English) P-Passive is that despite a considerable amount of research on this syntactic construction, there has not been any coherent account of the phenomenon and its formally adequate formulation within a formal or non-formal framework.<sup>5</sup>

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<sup>5</sup> Although it has widely been assumed that the reanalysis hypothesis has been or at least could be given a coherent explanation within the GB theory, no such account has been formally presented so far, and more

Given the problems of previous studies, it is clear that a new account is needed for the English P-Passive. In the remainder of this chapter, I will present an alternative account of the P-Passive in English. First, in Section 6.3, I will demonstrate that the so-called reanalysis of V and P does exist in English, but only in the passive, thereby contradicting the two opposing positions about the unification of V and P into a single unit in passive-permitting V+P sequences. I will propose obligatory syntactic incorporation of P into V for the English P-Passive, which is triggered by passive morphology. Second, in Section 6.4, I will show that for a complete account of the acceptability of the P-Passive, we need both formal and functional factors, which are ultimately complementary to one another although they often overlap with one another. In particular, based on insights from many traditional and functional studies, I will argue for the following three factors: complementhood of PPs, affectedness, and characterization. Finally, in Section 6.5, I will present a formulation of my alternative proposals within the framework of Head-Driven Phrase Structure Grammar (HPSG).

## 6.3. Syntactic Incorporation of Preposition into Verb in the Passive

### 6.3.1. *Arguments against the reanalysis hypothesis*

#### 6.3.1.1. *Questionable evidence for 'optional reanalysis' in the active*

The core of the reanalysis hypothesis, as we have reviewed in Section 6.2.1.1, is the assumption that reanalysis applies optionally to immediately adjacent V and P and that the passivization of POs is permitted just in case this optional reanalysis has applied. This assumption is claimed to resolve the obvious paradox which is illustrated by the following examples:

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importantly, there is good reason to believe that such an assumption has no reasonable ground. See Baltin & Postal (1996: 135-143).

- (16) (a) He is the only person on whom you can depend.  
 (b) Only he can be depended (\*entirely) on.
- (17) (a) On what proposal did you agree in the last meeting?  
 (b) Nothing was agreed (\*unanimously) on in the last meeting.
- (18) (a) It was about the scandal that they talked for weeks.  
 (b) The scandal was talked (\*repeatedly) about for weeks.

The (a)-sentences above suggest that V and P in prepositional verbs belong to separate constituents, whereas the (b)-sentences show that V and P form a single constituent unit which cannot be interrupted by other material. This seeming paradox caused by the two conflicting pieces of evidence is resolved by assigning two different structures to the given V+P-NP sequences, [V [<sub>PP</sub> P NP]] and [[<sub>V</sub> V-P] NP], resulting in the assumption of optional reanalysis.

Despite its initial attractiveness, however, this widely-held assumption has some serious problems. In particular, the first part of the assumption (i.e., reanalysis applies optionally) is not based on any empirical evidence but is mainly a compromising assumption which has been made to explain the two apparently contradicting situations concerning the syntactic behavior of V and P in the active and passive. Thus, it is highly doubtful whether there is any legitimate evidence which shows that reanalysis applies to V and P in the active at all.

One might want to say that the difference in grammaticality between (19) and (20) below is due to the fact that reanalysis has applied to the given V and P in each example of (19), but not to the V and P in (20) (cf. Hornstein & Weinberg 1981, Chomsky 1981).

- (19) (a) Which project<sub>i</sub> have you [<sub>VP</sub> [worked on] [<sub>t<sub>i</sub>]]] so far?  
 (b) What did you [<sub>VP</sub> [talk to Mary about] [<sub>t<sub>i</sub>]]]?  
 (c) This is the problem which<sub>i</sub> we have [<sub>VP</sub> [delved into] [<sub>t<sub>i</sub>]]] for two weeks.</sub></sub></sub>
- (20) (a) \*Which war did your grandfather [<sub>VP</sub> die] [during <sub>t<sub>i</sub>]]?  
 (b) \*Which month<sub>i</sub> did you [<sub>VP</sub> take off a whole week] [in <sub>t<sub>i</sub>]]?  
 (c) \*That is the book which I [<sub>VP</sub> studied] [without <sub>t<sub>i</sub>]].</sub></sub></sub>

For many generative linguists, subcategorizing complement PPs in (19) are dominated by a VP (or V') whereas adjunct PPs (which are mostly temporal and locative PPs) in (20) are dominated by an S node. Since reanalysis is assumed to apply to V and its contiguous elements to its right only within the domain of VP, the V and P in the examples of (19) can form a complex verb and this complex verb assigns the objective case to the following NP trace, satisfying a case filter or the Empty Category Principle (ECP) and thereby allowing the P to be stranded.

In the examples of (20), on the other hand, each NP trace is ruled out by the case filter (for Hornstein & Weinberg) or by the ECP (for Chomsky) because reanalysis cannot apply to the V and P in each example and thus each NP trace is governed by the oblique-case-assigning P, which is not a proper governor.<sup>6</sup> Thus, the applicability of reanalysis brings about the difference in acceptability between the two sets of sentences above.

<sup>6</sup> The case filter says that [+oblique] NPs with no lexical content like traces are to be ruled out (Hornstein & Weinberg 1981: 60). Furthermore, an NP is marked [+objective] if it is governed by a V and is marked [+oblique] if it is governed by a P. Government is defined as follows (cf. Chomsky 1981, 1982):

X governs Y if and only if (a) Y is contained in the maximal projection of X,  $X^{max}$ , (b)  $X^{max}$  is the smallest maximal projection containing Y, and (c) X c-commands Y.

On the other hand, the Empty Category Principle (ECP) says that an empty category (i.e., [ $\alpha$  e]) must be properly governed (Chomsky 1981: 250), and prepositions are not considered proper governors (pp. 252-253, 292). Each NP trace in (19) is properly governed by a complex verb and thus satisfies the ECP, whereas the NP traces in (20) are governed by a P, which is not a proper governor, and therefore are ruled out by the ECP.



Even in this case, however, the (optionally applied) type of reanalysis which might be argued for in the active is clearly different from the type of reanalysis which is observed in the passive. Thus, as is well known, unlike the reanalyzed V+P sequences in the passive, the 'reanalyzed' V+P sequences in the active can be separated by other material, as in (21b) and (22b), and the P of such V+P sequences in the active can be modified by a preceding specifier such as *right* and *straight*, as in (23b) and (24b):

- (21) (a) Each question raised by students was dealt (\*completely) with by the teacher.  
 (b) Which questions did the teacher deal (completely) with in class?
- (22) (a) That view was adhered (\*very firmly) to by the government.  
 (b) Which view did the government adhere (very firmly) to?
- (23) (a) That old man was stared (\*straight) at by the boy.  
 (b) Who did the boy stare (straight) at?
- (24) (a) The candidate was turned (\*right) against by many voters.  
 (b) This is the candidate whom many voters turned (right) against.

Furthermore, whereas reanalysis of V and P in the passive is usually possible only when the given V has a complement PP, 'reanalysis' in the active is often freely allowed even when the PP is an adjunct which does not normally permit reanalysis in the passive, as follows:

- (25) (a) \*France was traveled in by my brother.  
 (b) Which country did he travel in?

- (26) (a) \*The last class was left after by him.

(b) Which class did he leave after?

- (27) (a) \*That tree was rested under by the boy.

(b) Which tree did you rest under?

One might still want to argue that whenever a V and a P are separated by movement (of the P along with its PO) or by other intervening material, reanalysis has not applied to the given V and P and that the type of reanalysis involved in P-Stranding in the various active constructions, especially with adjunct PPs, is different from the type of reanalysis observed in the P-Passive. In fact, the arguments against optional reanalysis considered thus far do not directly contradict the possibility of reanalysis in the active although they strongly suggest that the grounds for the assumption of reanalysis in the active, if any, are very weak at best. Thus, it might appear that the reanalysis hypothesis can be maintained at least for certain theory-internal reasons.

#### 6.3.1.2. Evidence against 'optional reanalysis' in the active <sup>7</sup>

The reanalysis hypothesis states that V and P (of prepositional verbs) is (optionally) reanalyzed to form a complex verb, thereby giving the PO immediately adjacent to the complex verb the status of a direct object. If this is really true, then the PO should be able to show the same syntactic behavior as the direct object of a (simple) verb. However, there are many pieces of evidence which demonstrate that the PO shows the

<sup>7</sup> The arguments against the reanalysis hypothesis in this subsection are heavily built upon previous studies, especially Baltin & Postal (1996), from which I cite many examples freely. Note, however, that all the arguments, unlike Postal & Baltin's claim, can be employed only for contradicting the assumption of optional reanalysis in the active, but not for denying the presence of reanalysis of V and P itself, as will be shown shortly.

syntactic behavior of an ordinary object of a preposition, but not of a direct object of a verb, even when reanalysis could apply to V and P to form a complex verb in the active.

First of all, as we have already seen in Section 6.2.1.2, if it is true that V and P can be reanalyzed (even optionally), forming a complex verb, then the PO following the P could be a verbal object and therefore, it should be possible for the PO as the object of the complex verb to undergo heavy-NP-shift. However, as first noted by Ross (1967), the PO, unlike the direct object of a verb, cannot undergo heavy-NP-shift, as follows:<sup>8</sup>

- (28) (a) I discussed \_\_\_<sub>i</sub> with Lorenzo -- [the problems he was having with deliveries]<sub>i</sub>.  
 (b) \*I argued with \_\_\_<sub>i</sub> about such problems -- [the drivers' union leader]<sub>i</sub>.
- (29) (a) I described \_\_\_<sub>i</sub> to himself -- [the victim whose sight has been impaired by the explosion]<sub>i</sub>.  
 (b) \*I talked to \_\_\_<sub>i</sub> about himself -- [the victim whose sight has been impaired by the explosion]<sub>i</sub>.
- (30) (a) He explained \_\_\_<sub>i</sub> to us -- [the mystery that has remained unsolved]<sub>i</sub>.  
 (b) \*He talked about \_\_\_<sub>i</sub> with Mary -- [the mystery that has remained unsolved]<sub>i</sub>.

Second, although a verb can be deleted under gapping or be replaced by a pro-verb independently of its object, as in the (a)-sentences below, it is impossible to delete or replace the P of a 'reanalyzable' V-P complex verb along with the V, as in the (b)-sentences:

- (31) (a) Pavarotti loved Loren and Bond \_\_\_ Hepburn.  
 (b) Pavarotti relied on Loren and Bond \_\_\_ \*(on) Hepburn.

<sup>8</sup> Examples (28) and (29) are the same as (14) and (15).

- (32) (a) Pavarotti loved Loren much more than Bond did \_\_\_ Hepburn.  
 (b) Pavarotti relied on Loren much more than Bond did \_\_\_ \*(on) Hepburn.
- (33) (a) Pavarotti loved Loren as (much as) Bond did \_\_\_ Hepburn.  
 (b) Pavarotti relied on Loren as (much as) Bond did \_\_\_ \*(on) Hepburn.

Third, although the direct object of a verb can be linked to a floating quantifier, especially when the quantifier precedes an appropriate element, as in (34a)-(36a) below, the object of a preposition cannot be linked to a floating quantifier in the same way, as in (34b)-(36b). Again if the reanalysis hypothesis is correct, the reanalyzable complement PPs would be expected to allow their POs to be linked to a floating quantifier.

- (34) (a) The air force struck those targets both in the morning.  
 (b) \*The air force struck at [those targets both] in the morning.
- (35) (a) The lunatic shot (at) both the girls with a rifle.  
 (b) The lunatic shot (\*at) [the girls both] with a rifle.
- (36) (a) Mike told [those employees all] about speaking to reporters.  
 (b) \*Mike talked to [those employees all] about speaking to reporters.  
 (c) \*Mike talked near [those employees all] about speaking to reporters.

Finally, the object of a preposition differs from the object of a verb with respect to the phenomenon of subdeletion (Bresnan 1973, 1977a, 1977b):

(37) (a) Robin discussed more of these problems than Mary did \_\_\_\_ of those problems.

(b) \*Robin talked about more of these problems than Mary talked about \_\_\_\_ of those problems.

(38) (a) Robin examined more of these affairs than Mary did \_\_\_\_ of those affairs.

(b) \*Robin looked into more of these affairs than Mary looked into \_\_\_\_ of those affairs.

(39) (a) Robin believed more of these people than Mary did \_\_\_\_ of those people.

(a) \*Robin counted on more of these people than Mary counted on \_\_\_\_ of those people.

Note that each (b)-sentence above has a so-called complement PP. Thus, under the reanalysis hypothesis, the V and P in each (b)-sentence can be reanalyzed to form a complex verb and the PO as the direct object of that complex verb is expected to be able to undergo subdeletion. However, subdeletion is possible only from the object of a verb, but not from the object of a preposition.

In short, although the reanalysis hypothesis predicts that the objects of reanalyzable complement PPs behave in the same way as the direct objects of verbs in all the situations so far considered, they consistently show the syntactic behavior of ordinary POs, but not of verbal objects. This fact, along with the consideration that no evidence for the reanalysis hypothesis presented by previous studies proves the presence of reanalysis of V and P in the active, shows that the assumption of (optional) reanalysis in the active is totally groundless and even counterfactual.

### 6.3.2. Arguments against the no-reanalysis hypothesis

In the previous section, we have not only shown that the arguments for the reanalysis hypothesis are insufficient to prove the presence of optional reanalysis in the active but also presented evidence that contradicts the assumption of reanalysis in the active. In this situation, one might want to argue that since the reanalysis hypothesis has no solid empirical basis, there is no reanalysis at all involved in the English P-Passive. In fact, as we have considered in Section 6.2.1.2, some scholars such as Zwicky (1987) and Baltin & Postal (1996) have taken this position, thereby rejecting reanalysis or incorporation as a general basis for the account of the English P-Passive.

However, there is good reason to believe that even though there is no reanalysis for (passive-permitting) V+P sequences in the active, there is reanalysis of V and P in the passive, which always goes together with the passivization of the PO. In this section, I will show that virtually all the arguments and evidence for the no-reanalysis hypothesis made by previous studies actually support and/or are at least compatible with this third position about reanalysis.

Before we consider the arguments for this new position, note that despite all the arguments against the reanalysis hypothesis, the empirical evidence for the unification of V and P into a single unit in the English P-Passive, which is well demonstrated by the inseparability of V and P in the passive, as in (40b) and (41b) below, is clear and has not been successfully challenged or explained away yet by any previous studies:

(40) (a) The judge went thoroughly over all the evidence presented.

(b) All the evidence presented was gone (\*thoroughly) over by the judge.

- (41) (a) Army patrols searched very carefully for the two deserters  
 (b) The two deserters were searched (\*very carefully) for by army patrols.

Although some native speakers sometimes may find it not totally impossible to interrupt the given V and P by inserting other material in the P-Passive, even those speakers will agree that passive-permitting V+P sequences are clearly much more difficult to separate in the passive than in the active.

Interestingly, the same sort of evidence for the incorporation of P into V in the passive can be derived from every situation in which contrary to the prediction of the reanalysis hypothesis, the PO shows the syntactic behavior not of a direct object of a verb but of an object of a preposition. That is, each of the situations which appear to support the no-reanalysis hypothesis actually demonstrates that V and P form a single unit in the passive, thereby making some sort of mechanism for preposition incorporation more plausible for a complete account of the P-Passive.

First of all, the fact that POs, unlike verbal objects, cannot undergo heavy-NP-shift shows that their syntactic behavior is different from that of verbal objects and this argues against the assumption of optional reanalysis in the active. However, heavy POs, like heavy verbal objects, can move out of their original position to the passive subject position, as (43b) and (45b).

- (42) (a) I discussed \_\_\_<sub>i</sub> with Lorenzo -- [the problems he was having with deliveries]<sub>i</sub>.  
 (b) [The problems he was having with deliveries]<sub>i</sub> were discussed \_\_\_<sub>i</sub> with Lorenzo.  
 (43) (a) \*I argued with \_\_\_<sub>i</sub> about such problems -- [the drivers' union leader]<sub>i</sub>.  
 (b) [The drivers' union leader]<sub>i</sub> was argued with \_\_\_<sub>i</sub> about such problems.

- (44) (a) I described \_\_\_<sub>i</sub> to himself -- [the victim whose sight has been impaired by the explosion]<sub>i</sub>.  
 (b) [The victim whose sight has been impaired by the explosion]<sub>i</sub> was described \_\_\_<sub>i</sub> to himself.  
 (45) (a) \*I talked to \_\_\_<sub>i</sub> about himself -- [the victim whose sight has been impaired by the explosion]<sub>i</sub>.  
 (b) [The victim whose sight has been impaired by the explosion]<sub>i</sub> was talked to \_\_\_<sub>i</sub> about himself.

One might want to argue that passivization, unlike heavy-NP-shift, does not distinguish between a verbal object and a PO for certain independent reasons and that therefore the passivization of a heavy PO by itself does not prove the PO to have the syntactic status of a verbal object. However, the passivization of a heavy PO at least shows that the evidence from heavy-NP-shift cannot argue against reanalysis of V and P in the passive. Furthermore, note that the unification of V and P is clearly evidenced through the inseparability of V and P in each of the P-Passive sentences above, thereby arguing against the no-reanalysis hypothesis. All this makes it plausible to posit reanalysis of V and P as a complex verb in the passive.

Second, although the P of a 'reanalyzable' V+P sequence cannot be deleted along with the V under gapping or replaced by a pro-verb in the active and this fact clearly argues against the assumption of V-P complex verb formation in the active, the P of the same V+P sequence must be deleted along with the V in the passive, as in the (b)-sentences below, thereby showing the unification of the V and P in the passive.

- (46) (a) Pavarotti relied on Loren and Bond \_\_\_<sub>i</sub> \*(on) Hepburn.  
 (b) Loren was relied on by Pavarotti and Hepburn (\*on) by Bond.

- (47) (a) Pavarotti relied on Loren more than Bond did \_\_\_\_ \*(on) Hepburn.  
 (b) Loren was relied on much more by Pavarotti than Hepburn (\*(on) by Bond.
- (48) (a) Pavarotti relied on Loren as (much as) Bond did \_\_\_\_ \*(on) Hepburn.  
 (b) Loren was relied on by Pavarotti as (much as) Hepburn (\*(on) by Bond.

Third, although a floating quantifier can be linked only to the direct object of a verb in the active, it can be linked not only to a verbal object but also to a PO in the corresponding passive, as in (52)-(54) below. Thus, this fact also demonstrates that the PO has the same syntactic behavior as that of the verbal object in the passive, contrary to the claim of the no-reanalysis hypothesis, thereby arguing for our 'reanalysis-in-the-passive hypothesis'.

- (49) (a) The air force struck those targets both in the morning.  
 (b) Those targets both were struck in the morning by the air force.
- (50) (a) The lunatic shot the girls both with a rifle.  
 (b) The girls both were shot with a rifle by the lunatic.
- (51) (a) Mike told those employees all about speaking to reporters.  
 (b) Those employees all were told about speaking to reporters.
- (52) (a) \*The air force struck at those targets both in the morning.  
 (b) Those targets both were struck at in the morning by the air force.
- (53) (a) \*The lunatic shot at the girls both with a rifle.  
 (b) The girls both were shot at with a rifle by the lunatic.

- (54) (a) \*Mike talked to those employees all about speaking to reporters.  
 (b) Those employees all were talked to about speaking to reporters.

Fourth, although the evidence from the phenomenon of subdeletion can indeed be used to contradict the reanalysis hypothesis itself, it fails to show that there is no reanalysis of V and P in the passive. This is because the same kind of subdeletion is impossible in the corresponding passive sentences both for the object of a verb and that of a preposition, as follows:

- (55) (a) \*More of these problems were discussed by Robin than \_\_\_\_ of those problems were discussed by Mary.  
 (b) \*More of these problems were talked about by Robin than \_\_\_\_ of those problems were talked about by Mary.
- (56) (a) \*More of these affairs were examined by Robin than \_\_\_\_ of those affairs were examined by Mary.  
 (b) \*More of these affairs were looked into by Robin than \_\_\_\_ of those affairs were looked into by Mary.
- (57) (a) \*More of these people were believed by Robin than \_\_\_\_ of those people were believed by Mary.  
 (a) \*More of these people were counted on by Robin than \_\_\_\_ of those people were counted on by Mary.

Finally, it has sometimes been argued that there are some cases in which the P behaves only like an independent P, not as part of a V-P complex verb, even in the passive (Postal 1986: 283, fn.14; Baltin & Postal 1996: 129-130). Consider the following examples:

(58) (a) The bridge was flown (both) over and under.

(b) Communism was talked, argued, and fought about.

(59) (a) Fascism was fought for by Goebbels and (then) against by De Gaulle.

(b) Fascism was fought for by Goebbels and then, but, I assure you, only then, against by De Gaulle.

Since the P under a reanalysis hypothesis is usually assumed to be incorporated into a V, being morphologically attached to the V, such examples as those above may appear to argue against the presence of incorporation of P into V even in the passive.

Such examples, although interesting, do not necessarily deny the presence of reanalysis of V and P in the passive. As for examples such as those in (58) above, note that the P can show the same behavior even when it is clear that it is morphologically attached to a V by occurring with a V in the prenominal position, as follows:

(60) (a) These days, communism is a very rarely talked-, argued-, and fought-about ideology.

(b) This is one of the most frequently talked- and, (among Canadian linguists), written-about topics in linguistics.<sup>9</sup>

Here, *talked-about*, *argued-about*, and *fought-about* on the one hand *talked-about* and *written-about* on the other are clearly single structural units, but their word-internal parts can be conjoined (or deleted), as in (60a) and (60b), respectively.

<sup>9</sup> About this example including the parenthetical part in (60b), some native speakers find it acceptable whereas others do not. Considering the fact that word-internal conjunction involving such passive V+P sequences more easily occur in predicate positions than in prenominal positions (cf. ??*This is the flown-over and -under bridge* vs. *The bridge was flown over and under*), a certain degree of difficulty involved in the insertion of such a parenthetical expression here would not be very surprising.

In fact, word-internal conjunction or deletion of a similar sort, although not very common, can be found elsewhere, as follows:<sup>10</sup>

(61) (a) (?)His approach to that linguistic problem is system-internal and, (upon further review), -external as well.

(b) Jane coordinates intra- and, (just once in a while), extra-mural activities.

(c) The activities that she is most interested in are intra- and, (to a lesser extent), extra-mural.

(d) pre- and post-World War II automobiles (Postal & Baltin 1996: 130)

(62) (a) (?)This is an easy-to-understand and -solve problem.

(b) (?)He always played a very easy-to-love or -admire character.

(c) (?)She usually played a very easy-to(-either)-love or -hate role.

(d) (?)But somehow this hard-to-argue-for or -against position has been very popular among generative linguists for a long time.

As for examples such as (59a) and (59b) above, on the other hand, they seem to result from deletion of some large portion of the given sentences rather than from simple conjunction (or deletion) of verbs or prepositions, as in (58), (60), (61), and (62). Thus, they can be considered to have come from the following passive sentences through deletion:

<sup>10</sup> Some native speakers may have slightly different intuitions about some of the examples in (61) and (62). Note that the conjunction of word-internal elements is not very common and in many cases is judged acceptable for many speakers only with the right intonation. Note also that the unification of V and P in the passive, as in (59), is less tight than the unity of word-internal elements shown in (60) through (62) in that the former is invisible whereas the latter visible. Thus, we can expect word-internal conjunction or deletion of unified elements to be relatively easier in the predicate position of the P-Passive than in other constructions.

- (63) (a) Fascism was fought for by Goebbels and (then) (it was fought) against by De Gaulle.  
 (b) Fascism was fought for by Goebbels and then, but, I assure you, only then, (it was fought) against by De Gaulle.

Since the P *against* in each sentence above cannot be deleted along with the verb *fought*, into which it should have been incorporated to form an inseparable complex verb *fought against* through reanalysis (under the reanalysis hypothesis), one might argue that the P is not part of the complex verb (i.e., *fought against*) but an independent preposition even in the passive.

However, there is good reason to believe that the syntactic behavior of the P in such sentences as those above is due to something other than the absence of reanalysis in the passive. Consider the following sentences:

- (64) (a) Goebbels fought for Fascism and (then) De Gaulle \_\_ *\*(for)* it as well.<sup>11</sup>  
 (b) Fascism was fought for by Goebbels and (then) *\*(for)* by De Gaulle as well.  
 (c) Fascism was fought for by Goebbels and then, but, I assure you, only then, *\*(for)* by De Gaulle.

The above examples show that although the P cannot be deleted in the active under the given circumstance, as in (64a), it must be deleted along with the verb *fought* in the corresponding passive sentences, as in (64b) and (64c), thereby again arguing for the unification of V and P into a single unit through reanalysis or incorporation in the passive.

Now note that the sentences in (64b) and (64c) have exactly the same syntactic structures as those in (59a) and (59b), respectively, only with the different prepositions

*for* and *against* involved. Note also that when the P cannot be deleted, as in (59a) and (59b), the P is (semantically) different from the P in the preceding clause. Since the P is always deleted along with the verb in the given situation unless it is (semantically) different from the preceding P, the unusual syntactic behavior of the P *against* given in (59a) and (59b) should be explained in the semantics of the given sentences or of the elements involved rather than their morphosyntax. Thus, all the apparent counterexamples so far considered do not contradict the presence of reanalysis of V and P in the passive but can be well explained under our reanalysis-in-the-passive hypothesis.

### 6.3.3. Syntactic incorporation of preposition into verb in the prepositional passive

Up to this point, we have shown that although there is no evidence for the incorporation of P into V in the active, the empirical evidence for preposition incorporation in the passive is invariably maintained in various situations which have been claimed to contradict preposition incorporation both in the active and in the passive. Since it is now clear that V and P form an inseparable single unit only in the P-Passive, I would like to make the following proposals about the passivization of a PO in English, especially about the status of passive-permitting V+P sequences in the English P-Passive.

First, following the assumptions in many morphosyntactic frameworks, I view passivization as a morphosyntactic operation on the arguments of a verb, especially on the direct object of a verb (and its subject).<sup>12</sup> This above all means that only the direct object of a verb can be passivized and the object of a preposition in principle is not passivizable at least syntactically although it may be so semantically.

<sup>11</sup> Some speakers may feel that this example is a little odd. Even those speakers, however, will find the following example good: *Goebbels fought for Fascism and (then) De Gaulle \_\_ *\*(for)* democracy.*

<sup>12</sup> This relational view of passivization is shared by many theoretical frameworks such as Lexical-Functional Grammar, Generalized Phrase Structure Grammar, Head-Driven Phrase Structure Grammar, Categorical Grammar, Relational Grammar, and Arc Pair Grammar.

Second, the object of a preposition (which is not syntactically passivizable but semantically passivizable) can become syntactically passivizable as well by obtaining the status of a verbal object and this can be achieved through the incorporation of P into V. That is, when triggered, P is incorporated into V to form a complex verb, thereby giving its (original prepositional) object the status of a verbal object.

Third, the incorporation of P into V occurs only when it is triggered and it is triggered by passive morphology (i.e., /-ed/). This means that although there are 'easily-reanalyzable' V+P sequences also in the active, "reanalysis of V and P" per se exists only in the passive not in the active, an assumption supported by the evidence we have considered earlier in this section.

Finally, the passivization of a PO through the incorporation of P into V must be licensed by one of the following formal or functional conditions, which will be discussed in the next section: (a) being the object of a complement PP, (b) affectedness, and (c) characterization.

#### 6.4. Factors Determining the Acceptability of the Prepositional Passive

In the previous section, we have considered what really happens to V and P when a PO is passivized. In particular, we have proposed that V and P in the English P-Passive are reanalyzed to form a single structural unit, giving the status of a verbal object to the PO to be passivized. Since not every V+P sequence can undergo reanalysis, permitting the passivization of POs, we now have to explain what licenses the reanalysis of V and P, resulting in an acceptable P-Passive sentence. In this section, I will identify the formal and functional conditions under which a given P-Passive sentence becomes acceptable and explain how the factors determining the passivization possibilities of POs interact with one another.

##### 6.4.1. Formal factor(s)

As is well known, there are certain groups of V+P sequences which can regularly permit the passivization of the relevant POs. For examples, the POs of such V+P sequences as *account for*, *care for*, and *look into* can invariably be passivized, as follows:

- (65) (a) The chairman will account for our final decision about this issue.  
 (b) Our final decision about this issue will be accounted for by the chairman.
- (66) (a) His wife cared for the farm when he was away.  
 (b) The farm was cared for by his wife when he was away.
- (67) (a) An independent financial controller must look into the city's accounts.  
 (b) The city's accounts must be looked into by an independent financial controller.

Note that the passivization possibilities of the POs in the above examples of the P-Passive are determined mainly by the given V+P sequences, regardless of other functional factors which may be involved. In this connection, many studies in traditional grammar claim or suggest that these V+P sequences which permit POs to be passivized perform the same function as single verbs (e.g., Mincoff 1958: 185, Svartvik 1966, Hudson 1967: 244, Labov 1972: 777). Thus, such passive-permitting V+P sequences have "sufficient cohesion to be able to operate together" (Svartvik 1966: 165) and they can be considered a kind of "idioms which have been lexicalized" (Labov 1972: 777). Note that since the



number of those passive-permitting V+P sequences is limited, it would be possible even to list them in the lexicon.<sup>13</sup>

This idea among traditional grammarians is (implicitly) continued by most studies in generative linguistics, as we have already seen in Section 6.2.2. Thus, following the general assumption in traditional grammar and generative linguistics, I will define these V+P sequences as prepositional verbs which form semantic units (Chomsky 1977b: 87, Van Riemsdijk 1978: 221) or natural predicates (Van Riemsdijk & Williams 1986: 118). Syntactically, the simplex verbs of these reanalyzable V+P sequences or prepositional verbs are assumed to take a complement PP which is subcategorized by the verbs.

#### 6.4.2. Functional factors

##### 6.4.2.1. Affectedness

Besides those regularly passive-permitting prepositional verbs, there are still many V+P sequences that can result in acceptable examples of the P-Passive, although they do not involve a complement PP and therefore normally do not permit the passivization of the relevant POs. Consider the following examples:

- (68) (a) ??This road was driven on by him.  
 (b) This road has been driven on so much that there are many dents and broken pieces of asphalt everywhere.
- (69) (a) \*London was slept in by the businessman last night.  
 (b) Clearly, this bed was slept in by a huge guy last night.

<sup>13</sup> In this connection, Svartvik (1966: 165) claims for "the limited and as yet not clearly defined range of prepositional verbs". On the other hand, Couper-Kuhlen (1979) attempts to explain the conditions for acceptable P-Passive sentences by identifying semantic cases of subjects and POs in active sentences. The semantic cases eligible for the P-Passive subject position include BENEFACTIVE, COMITATIVE, GOAL, INSTRUMENT, PATIENT, REPLACIVE, and STIMULUS.

- (70) (a) \*The bridge was walked under by the dog. (Bolinger 1975: 69)  
 (b) The bridge has been walked under by generations of lovers. (Bolinger 1975: 69)
- (71) (a) \*The lake was camped beside by my sister. (Bolinger 1975: 68)  
 (b) This lake is not to be camped beside by anybody! (Bolinger 1975: 69)

The two examples of each pair above have exactly the same V+P sequence with the same syntactic (and semantic) status but they are different in their acceptability. In particular, the (b)-sentences are acceptable even though the V+P sequences they contain are difficult to regard as forming natural predicates or semantic units and the PP in each sentence seems to be an adjunct rather than a complement of the given verb. Thus, the acceptability of these (b)-sentences cannot be explained by such formal (i.e., syntactic or lexico-semantic) conditions as "natural predicates", "semantic units", or complementhood. This strongly suggests that there are certain functional factors involved in these examples of the P-Passive.

Scholars in functional linguistics, in which the notion of function (i.e., the relationship between a linguistic form and other parts of the linguistic system) is treated as central, consider the passive to be a discourse phenomenon rather than a syntactic one. In particular, they believe that the passivization possibilities of POs cannot be fully explained in syntactic terms and therefore they have focused on functional constraints which control and limit the acceptability of the P-Passive.

One of the best known functional concepts for explaining the passive is "affectedness". This concept or a similar one has been employed by many scholars including Bolinger (1975), Riddle et al. (1977), Sinha (1978), Kuroda (1979), Davison (1980), Huddleston (1984: 441), and Quirk et al. (1985: 1164-5) in order to account for what determines the acceptability not only of the P-Passive but also of the ordinary

passive involving a simple transitive verb. Thus, Bolinger (1975: 67) says that “the subject in a passive construction is conceived to be a true patient, i.e., to be genuinely affected by the action of the verb”, adding that the verbs may be simple or complex ones including prepositional verbs. Consider the following examples from Bolinger (1975: 67-8):

(72) (a) The chair was given to John.

(b) John was given the chair.

(73) (a) My brother has lived in Chicago.

(b) \*Chicago has been lived in by my brother.

(74) (a) Several famous personages have lived in the house.

(b) The house has been lived in by several famous personages.

Bolinger says that ‘the chair’ is viewed as affected in (72a), whereas in (72b), ‘John’ is viewed as affected. He also explains the contrast in acceptability between (73b) and (74b) by means of the notion of affectedness: (73b) is unacceptable because ‘Chicago’ is difficult to view as affected by the action involved; on the other hand, example (74b), which contains the same V+P sequence as (73b), is acceptable because ‘the house’ can be viewed as affected due to an aura it has by virtue of the famous people who have lived in it.

Now reconsider the examples in (68) through (71) above, part of which are repeated below for ease of reference:

(75) (a) ??This road was driven on by him. (= 68a)

(b) This road has been driven on so much that there are many dents and broken pieces of asphalt everywhere. (= 68b)

(76) (a) \*The lake was camped beside by my sister. (= 71a)

(b) This lake is not to be camped beside by anybody! (= 71b)

Note that the subject of each acceptable (b)-sentence above can be considered to be genuinely affected by the action described in the rest of the sentence. For example, whereas ‘this road’ in (75a) is difficult to consider to have been affected by the action which describes a single action of driving by ‘him’, ‘this road’ in (75b) can easily be assigned a high degree of affectedness because a great amount of driving on the road is normally expected to have heavily affected the road, as described in the latter part of the sentence. Similarly, although there is no observable effects on ‘this lake’ yet, ‘this lake’ in (76b) can be easily connected to affectedness because ‘camping’ in (76b), unlike the camping by my sister in (71a), can be viewed as harming the lake. In this way, the acceptability of the (b)-sentences can be explained by the concept of affectedness.

#### 6.4.2.2. Characterization

Although the notion of affectedness can explain a wide range of examples of the P-Passive, especially such as those which do not satisfy the formal condition(s) of the V+P sequence or PP involved, there are still many other examples of the P-Passive which are difficult to account for even by means of this functional concept. Consider the following examples:

(77) (a) \*Columbus was walked around by his father.

(b) Rome can be walked around in a day.

(78) (a) \*The hotel was stayed in by my sister.

(b) Hotels are to be stayed in.

(79) (a) \*The stone was stumbled over by Mary.

(b) The stone will be stumbled over if it's not moved. (Takami 1992: 115)

It seems that the ungrammaticality of the (a)-sentences above can be explained by the notion of affectedness because all the PPs involved (i.e., *around Columbus*, *in the hotel*, and *over the stone*) represent spatiality but not patients affected. Since the subject in each (a)-sentence cannot be considered affected in any significant way, all the (a)-sentences, which do not contain a complement PP, would turn out to be unacceptable. Note, however, that all the (b)-sentences above are perfectly acceptable although they are virtually the same as the (a)-sentences in the syntax and semantics of the PPs and the verbs involved. Since affectedness is difficult to assign to the passive subject in the (b)-sentences, a proposal based on the notion of affectedness such as Bolinger (1975) would incorrectly predict that they are ungrammatical or unacceptable. Thus, the grammaticality of the (b)-sentences suggests that there are other functional factors which, along with affectedness, determine the acceptability of the P-Passive.

In fact, there are other functional concepts which have been proposed as factors determining the acceptability of the P-Passive. In particular, Cureton (1979: 46) argues for "quality predication" and proposes the Implied Quality Predication Hypothesis (IQPH) which states that a P-Passive sentence is acceptable when "its active counterpart implicates some additional preposition which predicates a quality of the object of the preposition". In the same spirit, Kuno (1989) proposes the notion of "characterization"

by claiming that passive sentences (with inanimate subjects and human *by*-agentives) are acceptable if they can be interpreted as "sentences that define or characterize the subjects". Similarly, Takami (1992: 126) asserts that a P-Passive sentence is acceptable if its subject is "characterized by the rest of the sentence" and proposes the "Characterization Condition" for the P-Passive. Consider the following examples:

(80) (a) \*Paris has been lived in by John.

(b) This house has been lived in by many famous dignitaries.

(81) (a) \*The winter was slept through by the bear. (Cureton 1979: 47)

(b) The winter is slept through by a good portion of the animal kingdom.

(Riddle et al. 1977: 151)

Cureton claims that the difference in grammaticality between the (a)-sentences and the (b)-sentences above can be explained by his IQPH because unlike the (a)-sentences, those (b)-sentences imply some important qualities of their respective subjects. That is, whereas the fact that an ordinary person has lived in Paris does not tell much about Paris, the fact described in (80b) can be considered to imply many significant things about the house. Similarly, while the fact that a bear slept through the winter would say very little about the winter, the sleeping of many animals described in (81b) can be directly relevant to the qualities of the winter.

Note that the concept of characterization proposed by Kuno and Takami are not very different from Cureton's IQPH and that it can also be applied to explain the examples in (80) and (81) in a similar way. Since the two notions of quality predication and characterization are similar to each other, I will use "characterization" to refer to this second type of functional factor.

Now, let us consider the examples in (77) through (79) above again (repeated below as (82) through (84) for ease of reference), which have turned out to be difficult to explain by means of the notion of affectedness:

(82) (a) \*Columbus was walked around by his father.

(b) Rome can be walked around in a day.

(83) (a) \*The hotel was stayed in by my sister.

(b) Hotels are to be stayed in.

(84) (a) \*The stone was stumbled over by Mary.

(b) The stone will be stumbled over if it's not moved. (Takami 1992: 115)

We reasonably say that each (b)-sentence conveys something characteristic of its subject, whereas nothing characteristic of the subject is mentioned in the (a)-sentences. That is, unlike the (a)-sentences, the (b)-sentences tell us what kind of place Rome is, what hotels are for, and what kind of stone it is. Thus, the acceptability of such examples as the (b)-sentences above can be explained by the notion of characterization.

#### 6.4.3. Complementhood of PP, affectedness, and characterization

So far in this section, we have considered two types of functional factors (i.e., affectedness and characterization) which determine the passivization possibilities of POs. Now note that although the ungrammaticality of the (a)-sentences in (80) through (84) and the grammaticality of (80b) can be explained by the notion of affectedness, the grammaticality of the (b)-sentences in (81) through (84) is difficult to explain by means of this concept. This is because it is hard to say, for example, that the winter in (81b) is

affected by the given fact that a good portion of the animal kingdom sleeps through the winter.

In fact, the notion of characterization can also be applied to many of the P-Passive examples whose grammaticality can be explained by the concept of affectedness:

(85) (a) This road has been driven on so much that there are many dents and broken pieces of asphalt everywhere. (= 68b)

(b) Clearly, this bed was slept in by a huge guy last night. (= 69b)

(c) The bridge has been walked under by generations of lovers. (= 70b)

(d) This lake is not to be camped beside by anybody! (= 71b)

Note that each sentence above is stating something significant about the character of its subject. That is, 'this road', 'this bed', 'the bridge', and 'this lake' can be considered to be characterized by the given sentences, respectively. Thus, as Cureton (1979) and Takami (1992) argue, it might appear that the notion of quality predication or characterization is superior to or more comprehensive than the notion of affectedness in accounting for the acceptability of the P-Passive.

However, there is good reason to believe that these two factors, affectedness and characterization, are ultimately complementary although they often overlap in their applicability. Above all, there are many examples of the P-Passive whose acceptability is difficult to explain by the notion of characterization. Consider the following examples:

(86) (a) \*Tom was slept with by his wife yesterday.

(b) Even the queen of England was slept with by James Bond.

(87) (a) \*The stadium was marched through by the children.

(b) Every country will be marched through by the Nazi Army in the near future.

- (88) (a) \*France was slept in by the businessman yesterday.  
 (b) More than one thousand beds were slept in by Napoleon and his mistresses.
- (89) (a) \*Tucson was flown to by me yesterday.  
 (b) The moon has finally been flown to (by human beings).

Even though each of the above (b)-sentences says something about the referent of its subject, the subject of each (b)-sentence can be considered being affected rather than being characterized by the action that is described by the rest of the sentence. In fact, what is characterized in each (b)-sentence seems to be not its subject but the NP in the *by*-phrase (i.e., the subject of the corresponding active sentence). Thus, the queen of England can be best described as being affected rather than being characterized by the fact of sleeping with James Bond or being slept with by him, whereas the subject of the corresponding active sentence (i.e., James Bond) can be said to be characterized by the given fact.

Another important point is that even though functional factors such as affectedness and characterization can explain the acceptability of the P-Passive examples including those that involve 'hard-to-reanalyze' V+P sequences, many examples of the P-Passive can be acceptable independently of such functional constraints, contrary to the claims by many functionalists. In fact, it seems that most of the P-Passive examples that involve a complement PP or a prepositional verb almost always turn out to be grammatical no matter whether or not their subjects can be considered being affected or characterized by the rest of the sentences, as follows:

- (90) (a) More helping hands are being *asked for*.  
 (b) All your skill as a teacher is *called for* in controlling a class.  
 (c) Every possible solution to the problem was *talked about* in that meeting.  
 (d) Rain is now *prayed for* by many people in the country.

One might argue that such passive sentences as those above become acceptable mainly because the (semantics of) prepositional verbs that they contain can invariably assign a certain degree of affectedness to their subjects. Note that if this is the case, the concept of affectedness could be applied to virtually every example of the passive that involves a simple transitive verb or a regularly 'reanalyzable' prepositional verb. This is because the action described by such a passive-permitting (prepositional) verb usually has its subject as the direct target of the action to which something is done. However, such a descriptive statement which might be true of the passive in general seems to be too vague or too general to elucidate and/or distinguish various kinds of acceptable examples of the (prepositional) passive.

Furthermore, the subject of each sentence above seems to be difficult to view as being genuinely affected by the action described by the rest of the sentence. Thus, although the sentences could be altered so that their subjects might be assigned a relatively higher or lower degree of affectedness (e.g., (90a') *More helping hands are being asked for urgently right now*), the acceptability of P-Passive sentences involving a prepositional verb does not seem to be significantly influenced by a functional factor such as affectedness or characterization.

In short, it seems that there are at least three different factors which determine the acceptability of the P-Passive in English: one formal (i.e., syntactic or lexico-semantic) factor and two functional factors. Thus, I propose that the passivization of POs, which is made possible through the reanalysis of a given passive V+P sequence, is licensed if

any of the following conditions are satisfied: (a) the PP involved is a complement of the given verb (or the V+P sequence is a semantic unit that is listed in the lexicon); (b) the passive subject is genuinely affected by the action described by the predicate; and (c) the passive subject is characterized by the rest of the sentence.

## 6.5. A Lexicalist Approach to the Prepositional Passive in English

### 6.5.1. *Summary of core insights and proposals*

So far in this chapter, we have tried to explain what really happens when the object of a preposition is passivized and what determines the passivization possibilities of POs. In particular, we have focused on the following three questions: (a) what happens to the V and P of passive-permitting V+P sequences in the P-Passive; (b) what characterizes the V+P sequences that (regularly) allow the passivization of POs; and (c) what makes the passivization of POs possible with V+P combinations which do not normally permit the P-Passive. Our discussions and their implications can be summed up as follows.

First, the object of a preposition, which is not passivable as it is, becomes passivable by obtaining the status of a verbal object through the incorporation of P into V. This is mainly because passivization is a morphosyntactic operation on arguments of a verb and also because no syntactic operation should change the complementhood of any argument. Incorporation (of P into V) is responsible for the change in the complementhood of the PO from a prepositional argument to a verbal argument.

Second, the incorporation of P into V is triggered by passive morphology and thus it occurs only in the passive. This above all means that contrary to the widely-held assumption about the status of passive-permitting V+P sequences (i.e., there are two possible structures, “V [P NP]” and “[V P] NP”, which are available in the active and the passive), only the unreanalyzed structure “V [P NP]” is available in the active and this

structure changes to the structure “[V P] NP” through preposition incorporation in the passive.

Third, the passivization of POs is licensed by any of the following formal (syntactic or semantic) and functional conditions: (a) complement PP condition (i.e., the passive subject corresponds to the object of a complement PP), (b) affectedness condition (i.e., the passive subject is genuinely affected by the action described by the sentence, and (3) characterization condition (i.e., the passive subject is characterized by the rest of the sentence).

In the remainder of this chapter, I will provide formulations of my proposals within the framework of Head-Driven Phrase Structure Grammar (HPSG) in the version of Pollard & Sag (1987, 1994).<sup>14</sup>

### 6.5.2. *The standard treatment of the passive in HPSG*

Let us first look at how the simple passive involving a simple transitive verb is analyzed in the HPSG framework. In HPSG, as in many other theoretical frameworks such as Relational Grammar, Lexical-Functional Grammar, and Categorical Grammar, the passive is considered an operation on grammatical relations which demotes the subject and promotes the primary object to (passive) subject status. In particular, the standard HPSG approach to the passive (Pollard & Sag 1987, 1994) employs a lexical rule in order to explain the active-passive alternation involving a simple transitive verb. This HPSG analysis of the passive can be illustrated by comparing the following active and passive sentences:

<sup>14</sup> Although there have been many informal accounts of the P-Passive based on the reanalysis hypothesis (e.g., Radford 1981: 347, 1988: 427-432; Napoli 1993: 327), no precise formal account has been given in derivational frameworks including the GB framework. Furthermore, Baltin & Postal (1996) convincingly argue that the coherent formulation of the reanalysis hypothesis is difficult within the GB framework.

- (91) (a) Bond loved Loren.  
(b) Loren was loved (by Bond).

The active verb in (91a) and the passive verb in (91b) have the following lexical schematic signs (cf. Pollard & Sag 1987, Borsley 1996: 193-211):

- (92) Lexical entry for the active verb *love*

HEAD   VFORM	<i>bse</i>						
SUBJ	< [1]NP <sub>[2]</sub> >						
COMPS	< [3]NP <sub>[4]</sub> >						
SUBCAT	< [1], [3] >						
CONTENT	<table> <tr> <td>RELN</td><td><i>love</i></td></tr> <tr> <td>LOVER</td><td>[2]</td></tr> <tr> <td>LOVED</td><td>[4]</td></tr> </table>	RELN	<i>love</i>	LOVER	[2]	LOVED	[4]
RELN	<i>love</i>						
LOVER	[2]						
LOVED	[4]						

- (93) Lexical entry for the passive verb *loved*

HEAD   VFORM	<i>pas</i>						
SUBJ	< [3]NP <sub>[4]</sub> >						
COMPS	< ([5]PP[ <i>by</i> ] <sub>[2]</sub> ) >						
SUBCAT	< [3], [5] >						
CONTENT	<table> <tr> <td>RELN</td><td><i>love</i></td></tr> <tr> <td>LOVER</td><td>[2]</td></tr> <tr> <td>LOVED</td><td>[4]</td></tr> </table>	RELN	<i>love</i>	LOVER	[2]	LOVED	[4]
RELN	<i>love</i>						
LOVER	[2]						
LOVED	[4]						

Lexical entries for passive verbs, as in (93), can be derived from lexical entries for active verbs, as in (92), by the following lexical rule:

- (94) Passive lexical rule for the simple passive

HEAD   VFORM	<i>bse</i>	⇒	HEAD   VFORM	<i>pas</i>
SUBJ	< [1]NP <sub>[2]</sub> >		SUBJ	< [3] >
COMPS	< [3]NP, ... >		COMPS	< ..., ([5]PP[ <i>by</i> ] <sub>[2]</sub> ) >
SUBCAT	< [1], [3], ... >		SUBCAT	< [3], ..., [5] >
CONTENT	[4]		CONTENT	[4]

The above passive lexical rule achieves the following effects. First, this rule replaces the active subject (i.e., [1]NP<sub>[2]</sub>) with the least oblique, primary object (i.e., [3]NP). Second, it newly introduces an optional complement PP (i.e., [5]PP[*by*]<sub>[2]</sub>) which has the same index as the active subject for the same semantic interpretation. Finally, the lexical rule takes the first item away from the SUBCAT list and adds the *by*-phrase (i.e., [5]PP[*by*]<sub>[2]</sub>) to the end of the list. Through these processes, the lexical rule promotes the least oblique object to subject status and demotes the least oblique argument (i.e., the active subject) to the most oblique argument status, thereby bringing about a change in the obliqueness hierarchy among verbal arguments.

### 6.5.3. An HPSG analysis of the prepositional passive

#### 6.5.3.1. The prepositional passive involving a complement PP

Now, let us consider how the P-Passive in English can be explained in the HPSG framework. An easy way to accommodate the P-Passive within the standard HPSG approach to the passive would be to assume that P-Passive sentences and their active counterparts have a passive-permitting sequence of V and P which are optionally reanalyzed to form a complex verb.<sup>15</sup> However, as we have considered in Section 6.3, there is significant evidence against the widely-held assumption about optional complex verb formation.<sup>16</sup> In particular, although P is incorporated into V to form a single structural unit, this preposition incorporation, which is triggered by passive morphology, occurs only in the passive. In fact, this aspect of the P-Passive causes a serious problem in its treatment within a derivational approach employing a mechanism of reanalysis,<sup>17</sup> but it is not very difficult to accommodate within a lexicalist approach such as HPSG.

I propose to explain the English P-Passive by using a lexical rule which is similar to the passive lexical rule for the simple passive but which incorporates the important three aspects of the P-Passive: first, passive V+P sequences have a different status from their active counterparts; second, the incorporation of P into V in the P-Passive is triggered by the passive morphology; and third, the incorporation of P into V in the P-Passive must be

<sup>15</sup> The P-Passive has not attracted much attention in the HPSG framework and therefore there are very few treatments of the P-Passive within the scope of that approach. Grover (1995: 103-115) proposes a lexical rule for the P-Passive which is based on this assumption about complex verbs.

<sup>16</sup> Zwicky (1987) notes such evidence against the complex verb formation for passive-permitting V+P sequences and proposes to treat the P-Passive without a lexical rule. In his treatment, passive *be* takes a VP from which some constituent is missing and the fact about the missing constituent is encoded by a category-valued feature BSLASH (i.e., back slash). His proposal has many problems which cannot be easily resolved. For example, he still has to explain how his treatment can exclude many examples which have a VP lacking an NP constituent but are ungrammatical (e.g., *\*The king<sub>i</sub> was arrested all the enemies of   <sub>i</sub>*). Furthermore, many important aspects of the P-Passive (e.g., evidence for the unification of V and P in the passive; the acceptability of the P-Passive examples involving adjunct PPs) which we have discussed in this chapter are mostly ignored and/or cannot be properly dealt with in his proposal.

<sup>17</sup> This aspect of the English P-Passive is very difficult to accommodate in derivational approaches which must assume the same status for the active V+P sequence and its passive counterpart.

licensed by the complementhood of the PP or by functional factors such as affectedness and characterization. Furthermore, since the sentences which contain a complement PP and those which have an adjunct PP have different structures and triggers for the passivization of their POs, I will propose two different treatments for them.

Let us first consider the case in which the verbs have a complement PP and the POs are regularly passivized independently of non-formal factors. This type of P-Passive is illustrated by the following examples:

(95) (a) John looked (repeatedly) into the problem.

(b) The problem was looked (\*repeatedly) into (by John).

Noting the fact that V and P are unified to form an inseparable unit only in the passive and that the PP involved is a complement of the given verb, I propose that lexical entries below in (96) and (97) for the active and passive verbs of the V+P sequences in (95) above. Note that the simple verb *look* and the component verb *look* (i.e., *look<sup>into</sup>*) of the prepositional verb *look into* are treated as two different lexical items. This seems to be reasonable because the meaning of *look into* cannot be obtained compositionally from the meanings of its components. In both lexical entries, irrelevant features are omitted for the PP within the COMPS list.



(96) Lexical entry for the active (prepositional) verb *look<sup>into</sup>*

PHON	<look>
HEAD   VFORM	bse
SUBJ	<[1]NP <sub>[2]</sub> >
COMPS	<[3]PP [ PHON [4] HEAD [5] [PFORM into] COMPS <> CONTENT [6] ] >
CONTENT	[ RELN <i>look<sup>into</sup></i> LOOKER <sup>into</sup> [2] LOOKED <sup>into</sup> [6] ]

(97) Lexical entry for the passive (prepositional) verb *looked<sup>into</sup>*

PHON	<looked>
HEAD   VFORM	pas
SUBJ	<[7]>
COMPS	<P [ PHON [10] <into> HEAD [5] COMPS <[7]NP <sub>[9]</sub> > ], ([8]PP [by] <sub>[2]</sub> )>
CONTENT	[ RELN <i>look<sup>into</sup></i> LOOKER <sup>into</sup> [2] LOOKED <sup>into</sup> [9] ]

In the lexical entry for the active verb *look<sup>into</sup>* in (96) above, the CONTENT of the complement PP (i.e., *into*+NP) is assumed to be the same as the CONTENT of the NP object of *into*. This is because the preposition *into* of the prepositional verb *look into* can be considered a so-called argument-marking preposition which is “semantically vacuous” in that it formally marks a certain argument of the selecting predicate without making a meaning contribution (Pollard 1998, Sag & Wasow 1999: 155-161). Thus, the CONTENT of the active verb *look<sup>into</sup>* and that of the passive verb *looked<sup>into</sup>* actually turn out to be the same although they have different indices [6] and [9], respectively.

Note that unlike the verb *look* (of the prepositional verb *look into*) in the active, the COMPS list of the verb *looked* in the passive has the P *into* (which is the head P of the complement PP of the active verb), in addition to the *by*-PP that has the same index as the subject of the active verb. This addition of the P to the COMPS list of the passive verb is intended to represent the incorporation of the P into the verb. Recall that the verb and the preposition of a passive prepositional verb cannot be interrupted by other material. This fact can be expressed by the following linear precedence (LP) rule:

(98) Linear precedence rule for passive prepositional verbs:<sup>18</sup>

$$\left[ \begin{array}{l} \text{HEAD | VFORM } pas \\ \text{COMPS} < [1]P \dots > \end{array} \right] \ll \left[ \text{SYNSEM } [1] \right]$$

Now we can formulate a lexical rule which derives passive (prepositional) verbs such as *looked<sup>into</sup>* in (96) from active passive-permitting (prepositional) verbs such as

<sup>18</sup> The symbol « means “immediately precedes”. Thus, the given LP rule states that the element on the left side (i.e., passive verb) immediately precedes the element on the right side (i.e., preposition). Note that for some English speakers, the V and P of the incorporated V-P complex verb are not totally inseparable. This ‘deviation’ in intuition can be explained by the presence or absence of this LP rule.

*look<sup>into</sup>* in (97). The passive lexical rule for the P-Passive examples involving a complement PP is given as follows:<sup>19</sup>

(99) Passive lexical rule for the prepositional passive involving a complement PP

$$\left[ \begin{array}{l} \text{HEAD | VFORM } bse \\ \text{SUBJ} < [1]NP_{[2]} > \\ \text{COMPS} < [3]PP \text{ [ HEAD [4] ], ... } > \\ \text{CONTENT [10]} \end{array} \right] \Rightarrow$$

$$\left[ \begin{array}{l} \text{HEAD | VFORM } pas \\ \text{SUBJ} < [5] > \\ \text{COMPS} < P \left[ \begin{array}{l} \text{HEAD [4]} \\ \text{COMPS} < [5]NP > \end{array} \right] > \oplus \dots, ([7]PP \text{ [ } by \text{ ]}_{[2]}) > \\ \text{CONTENT [10]} \end{array} \right]$$

Recall that the P of a prepositional verb is incorporated into the V in the passive. In the above passive lexical rule, the effect of this preposition incorporation is achieved by

<sup>19</sup> Note that there may be a case conflict between the nominative passive subject NP and the accusative prepositional object in the lexical entry for the passive verb *looked<sup>into</sup>* because by sharing the same selected value [5], the passive subject is usually assumed to have all the syntactic and semantic properties of the related active object. This problem can be easily be avoided if we assume tree-based case-marking conventions for subject case marking (cf. Borsley 1996: 93, 198).

the append operation, which is indicated by the symbol,  $\oplus$ .<sup>20</sup> Thus, the passive verb *looked<sup>into</sup>* takes as its complements not only the *by*-PP but also the P which is the head of the complement PP in the active.

### 6.5.3.2. The prepositional passive involving an adjunct PP

Now let us consider the type of the P-Passive examples which involve an adjunct PP. With an adjunct PP, the passivization of the PO is normally very difficult. However, even in this case, the PO can be passivized if certain functional conditions such as affectedness and characterization are satisfied, as follows:

- (100) (a) A huge guy slept in this bed.  
(b) This bed was slept in (by a huge guy).

The active verb *sleep* which occurs with an adjunct PP has the same typical lexical entry as that for most other intransitive verbs, as given below in (101). Note that the PP does not appear as part of the lexical information of the given active verb because it is not a complement of the verb.

<sup>20</sup> The symbol  $\oplus$  represents the functor *append*. Thus,  $\langle X_0 \rangle \oplus \langle X_1, X_2, \dots, X_n \rangle$  is equal to  $\langle X_0, X_1, X_2, \dots, X_n \rangle$ .

(101) Lexical entry for the (active) intransitive verb *sleep*

PHON	< <i>sleep</i> >				
HEAD   VFORM	<i>bse</i>				
SUBJ	< [2]NP [3] >				
COMPS	< >				
SYNSEM	[4]				
CONTENT	<table> <tr> <td>RELN</td><td><i>sleep</i></td></tr> <tr> <td>SLEEPER</td><td>[3]</td></tr> </table>	RELN	<i>sleep</i>	SLEEPER	[3]
RELN	<i>sleep</i>				
SLEEPER	[3]				

In the passive, on the other hand, the head P of the adjunct PP is incorporated into the verb *slept*, forming a single structural unit. Thus, as in the case of passive prepositional verbs that take a complement PP, the head P is composed as a complement of the passive verb *slept*. Furthermore, in order to show the information about what type of head verb (the head P of) the given adjunct PP combines with, we need to relate the incorporated P and the verb.<sup>21</sup> In HPSG, this can be achieved by encoding the relevant information in a HEAD feature MOD (MODIFIED), whose value is a SYNSEM object. Thus, the P *in* that originally heads the adjunct PP will have MOD which is coindexed with the SYNSEM of the verb. Considering all these factors, I propose the following lexical entry for the verb *slept* in the passive.

<sup>21</sup> In HPSG in the version of Pollard & Sag (1994), it is assumed that adjuncts select their heads and this selection is achieved by the head feature MOD. An adjunct and a head that the adjunct modifies or selects combine through the following ID schema (p.56):

HEAD-ADJUNCT SCHEMA: A phrase with DAUGHTERS value of sort *head-adjunct-structure* (*head-adj-struct*), such that the MOD value of the adjunct daughter is token-identical to the SYNSEM value of the head daughter.

(102) Lexical entry for the passive verb *slept*

PHON	< <i>slept</i> >												
HEAD   VFORM	<i>pas</i>												
SUBJ	< [5]NP >												
COMPS	<table> <tr> <td>P</td><td> <table> <tr> <td>PHON</td><td>&lt; <i>in</i> &gt;</td></tr> <tr> <td>MOD</td><td>[4]</td></tr> <tr> <td>COMPS</td><td>&lt; [5]NP [6] &gt;</td></tr> </table> </td></tr> </table> , ([7]PP [ <i>by</i> ][3]) >	P	<table> <tr> <td>PHON</td><td>&lt; <i>in</i> &gt;</td></tr> <tr> <td>MOD</td><td>[4]</td></tr> <tr> <td>COMPS</td><td>&lt; [5]NP [6] &gt;</td></tr> </table>	PHON	< <i>in</i> >	MOD	[4]	COMPS	< [5]NP [6] >				
P	<table> <tr> <td>PHON</td><td>&lt; <i>in</i> &gt;</td></tr> <tr> <td>MOD</td><td>[4]</td></tr> <tr> <td>COMPS</td><td>&lt; [5]NP [6] &gt;</td></tr> </table>	PHON	< <i>in</i> >	MOD	[4]	COMPS	< [5]NP [6] >						
PHON	< <i>in</i> >												
MOD	[4]												
COMPS	< [5]NP [6] >												
CONTENT	<table> <tr> <td>RELN</td><td><i>sleep</i></td></tr> <tr> <td>SLEEPER</td><td>[3]</td></tr> <tr> <td>EVENT</td><td>[9]</td></tr> </table> $\wedge$ <table> <tr> <td>RELN</td><td><i>in</i></td></tr> <tr> <td>ARG 1</td><td>[9]</td></tr> <tr> <td>ARG 2</td><td>[6]</td></tr> </table>	RELN	<i>sleep</i>	SLEEPER	[3]	EVENT	[9]	RELN	<i>in</i>	ARG 1	[9]	ARG 2	[6]
RELN	<i>sleep</i>												
SLEEPER	[3]												
EVENT	[9]												
RELN	<i>in</i>												
ARG 1	[9]												
ARG 2	[6]												

Note that the CONTENT value of the passive *slept* given in the above lexical entry is different from the CONTENT value of the active *sleep*. This is because the passive *slept* has the subject NP as an additional argument and its two arguments are (rather indirectly) related to each other via the relations *sleep* and *in*.<sup>22</sup>

In addition, as in the lexical entry for the passive prepositional verb involving a complement PP, the LP rule in (98), repeated below for ease of reference, will make sure that the passive V and P are always immediately adjacent to each other, thereby reflecting the inseparability of the incorporated passive V and P:

<sup>22</sup> As originally argued by Davidson (1967), the semantics of modification is facilitated by adding implicit event arguments to the relation associated with a verb. Although the status of events is controversial in formal semantics, it is beyond the scope of this thesis to resolve their status in semantic theory.

(103) Linear precedence rule for passive prepositional verbs:

$$\left[ \begin{array}{l} \text{HEAD} \mid \text{VFORM } \textit{pas} \\ \text{COMPS} < [1]\text{P} \dots > \end{array} \right] \ll \left[ \text{SYNSEM} [1] \right]$$

Finally, the passive lexical rule which derives the passive form of the (intransitive) verb from the corresponding active form is given as follows:

(104) Passive lexical rule for the prepositional passive involving an adjunct PP

$$\left[ \begin{array}{l} \text{HEAD} \mid \text{VFORM } \textit{bse} \\ \text{SUBJ} < [2]\text{NP}_{[3]} > \\ \text{COMPS} < > \\ \text{SYNSEM} [4] \\ \text{CONTENT} [11] \end{array} \right] \Rightarrow$$

$$\left[ \begin{array}{l} \text{HEAD} \mid \text{VFORM } \textit{pas} \\ \text{SUBJ} < [5]\text{NP} > \\ \text{COMPS} < \text{P} \left[ \begin{array}{l} \text{MOD} [4] \\ \text{COMPS} < [5]\text{NP}_{[6]} > \end{array} \right] > \oplus \dots, ([10]\text{PP} [ \textit{by}_{[3]} ] > \\ \text{CONTENT} [12] \left[ [11] [ \text{EVENT} [13] ] \wedge \left[ \begin{array}{l} \text{ARG 1} [13] \\ \text{ARG 2} [6] \end{array} \right] \right] \end{array} \right]$$

$$\wedge \{ \text{highly-affected } ([6]) \vee \text{characteristic } ([12], [6]) \}.$$

What is notable in this passive lexical rule is that for the object of an adjunct PP to be passivized, it must satisfy not only the given formal structural condition but also relevant functional conditions. Thus, the two functional conditions which we have proposed earlier are incorporated as the additional conditions which must be satisfied in order for the passivization of the object of an adjunct PP to be licensed. This rule basically predicts that any intransitive verb can have a P-Passive form if the PO is highly affected or characterized, and we are unaware of any examples in which highly affected or characterized objects are not passivizable.<sup>23</sup>

## 6.6. Summary and Conclusion

In this chapter, I have presented a new analysis of the P-Passive in contemporary English. I have first shown that the unification of V and P into a single unit occurs only in the passive but not in the active, a conclusion which contradicts both the widely-held reanalysis hypothesis (i.e., V and P of prepositional verbs are optionally reanalyzed, resulting in two different structures, “V [P NP]” and “[V P] NP” available in both the

<sup>23</sup> There are some examples of the P-Passive which seem to call for further consideration in connection with the passivization possibilities of POs and the interaction between form, meaning, and function:

- (i) He stumbled over the stone.
- (ii) \*The stone was stumbled over by him.
- (iii) That small child will stumble over even the smallest stone.
- (iv) Even the smallest stone will be stumbled over by that small child.

Interestingly, what is to be affected in (iii) and (iv) is ‘that small child’ (i.e., the active subject) rather than ‘the smallest stone’ (i.e., the PO in the active or the passive subject). This might seem to require a substantial revision of the passive lexical rule for the P-Passive involving an adjunct PP in (104). Note, however, that the meaning of *stumble over* is different from those of most other (prepositional) verbs and V+P sequences (i.e., *step upon*) in that what is really acted on is the subject of *stumble over* rather than its object. That is, transitivity in *stumble over* flows from its object to its subject, not from its subject to its object as in the case of most ordinary (complex) verbs which have transitivity in them. Thus, from a semantic standpoint, it is still the case that the passivization of POs is licensed if the ‘patient’ is highly affected by the action of the verb.

active and the passive) and the no-reanalysis hypothesis (i.e., there is no such reanalysis or incorporation of P into V in the English P-Passive).

Then, I have addressed the issue of what really determines the passivization possibilities of POs in English by answering two main questions: what characterizes 'reanalyzable' V+P sequences which regularly permit the passivization of POs and what makes 'unreanalyzable' V+P sequences passive-permitting. I have proposed three different conditions under which the passivization of POs is licensed when one or more of them are satisfied: first, the passive subject corresponds to the object of a complement PP of an active verb (i.e., complement PP condition); second, the passive subject is (to be) highly affected by the action involved (i.e., affectedness condition); and third, the passive subject is characterized by the rest of the sentence (i.e., characterization condition).

Finally, I have provided a set of formulations of my proposals within the framework of HPSG, thereby showing that the new analysis of the P-Passive, despite certain functional aspects in it which usually defy formulation in formal syntax, can be given a coherent treatment within formal syntactic theory.

English passives including the P-Passive are the syntactic phenomena which have perhaps been the most extensively discussed in generative grammar, playing an important role in the development of early transformational grammar and most subsequent theories of grammar. Despite extensive discussions which have produced many insightful observations, though, no previous study of English passives has been able to provide a unified account of the P-Passive which fully addresses all three of the questions raised at the beginning of this chapter.

In fact, as far as the English P-Passive is concerned, it always appeared that generative linguists were confronted with a choice between a well-motivated and well-supported theory and a relatively small piece of recalcitrant data, thereby making it reasonable to expect most unresolved problems to be superficial and to be explained away

in due course. However, research on the P-Passive based on such a choice (and mostly built upon some sort of reanalysis mechanism) not only has had little success but also is defective. This is because there is considerable counterevidence against the core assumptions of reanalysis and because the grammaticality and acceptability of the P-Passive cannot be sufficiently explained only by formal (i.e., syntactic and lexico-semantic) factors without referring to non-syntactic and/or functional factors influencing the passivization possibilities of POs.

In conclusion, as Bolinger (1975: 76) adequately put it, the limitations of most previous analyses of the English P-Passive seem to be mainly due to "too much insistence on immanent rather than transparent features" and "lumping all cases of ungrammaticality together" without distinguishing "those due to violations from those due to difficulties of processing".

## CHAPTER 7

### CONCLUDING REMARKS

#### 7.1. How Syntactic Is the 'Syntactic' Change?

In this study, we have discussed one example of linguistic change, the advent of the P-Passive, which has generally been called 'syntactic'. Yet, it is fair to ask just how syntactic this change was. While the change in the English passive can be considered syntactic in that it was triggered by the syntactic factor SubjR (subject requirement) and in that SI (syntactic incorporation), which is often termed "reanalysis", played a significant role, even these aspects are not totally syntactic. Clearly, the triggering SubjR was developed under the influence of the changes in other parts of the grammar. As for SI, its development and status are closely related to OE MI (morphological incorporation) through P-V 'compounding' and thus there is no good reason why 'syntactic' incorporation cannot be treated morphologically or morphosyntactically rather than purely syntactically. Therefore, the change was purely syntactic only at the beginning and endpoint of the change: "no (periphrastic) P-Passive in OE" and "the advent of the new syntactic passive form in ME".

The results of our discussion in this study suggest that the changes of the English passive, in particular, the advent of the P-Passive, were not totally syntactic and cannot be sufficiently explained simply by the modification or addition of (syntactic) rules. More generally, linguistic change, especially syntactic change, is more likely to come

about through gradually accumulating changes of surface forms in other components of the grammar (especially, in the sound system and morphology), which often result in the reinterpretation of a certain syntactic rule, rather than through the modification or addition of rules. At most such a rule change could be a result of the change but not a cause.<sup>1</sup>

This view of language change, especially regarding the passive, is also suggested by Hock (1991: 346-8) and Joseph (1992b): a change in the passive, as Hock states, which is "notorious for its instability", does "not involve the syntax of the passive, but its morphological encoding". Although Givón's (1971: 394) slogan that "Today's morphology is yesterday's syntax" has been popular among many linguists, especially those who argue for grammaticalization (i.e., a process which changes (lexical) items from a less grammatical status to a more grammatical status),<sup>2</sup> the changes in the English P-Passive clearly argue for the opposite. In particular, in early English P was morphologically incorporated into V (e.g., *on-spæc(an)*) whereas in later English P is syntactically incorporated into V (e.g., *spat upon*).<sup>3</sup> Thus, we can sometimes say: "Yesterday's morphology is today's syntax".<sup>4</sup>

#### 7.2. Form, Meaning, and Function: A Multi-Dimensional Approach

Most synchronic and diachronic studies concerning the P-Passive seem to share one methodological characteristic: they all view various phenomena and the changes involved in the P-Passive from only one perspective (usually syntactic and occasionally semantic or functional) without recognizing the interdependence of various aspects of the

<sup>1</sup> See Joseph (1997) for this line of argument about linguistic change.

<sup>2</sup> For a discussion of fundamental aspects of grammaticalization and various grammaticalization theories, see Campbell & Janda (to appear).

<sup>3</sup> In a sense, this is the reverse of the development seen in how German 'separable prefixes' arose.

<sup>4</sup> In the same spirit, Janda (1980: 251) argues for "Today's morphology is tomorrow's syntax" on the basis of the ME reanalysis of the case inflection *-es* as the phrasal-final enclitic *his*.

construction. It is highly doubtful, however, whether such a one-dimensional approach can lead us to a full description and satisfactory account of the P-Passive in particular and natural language in general.

In this connection, it is important to note that the account of the synchrony and diachrony of the English P-Passive presented in this study incorporates the significant role of several factors: purely syntactic and semantic factors (concerning the form and meaning of the construction), pragmatic factors (the interpretation of the construction in the context of the actual use), and functional factors (the relationships between different components of the grammar or between different categories within a component). This integrated approach to the P-Passive has allowed us to explain many important but mostly neglected aspects of the construction which have proved difficult to analyze satisfactorily within formal syntactic theory.

In particular, the nebulous notion of obliqueness, although widely assumed and employed in many linguistic studies within both formal and informal frameworks, has never been clearly defined or justified. In this study, however, a more concrete version of obliqueness has been derived from the distinctions in passivization possibilities among NP arguments with respect to their morphological case and governors, and this functional construct has enabled us to resolve many interesting puzzles (e.g., case government of OE verbs, subcategorization inheritance in OE P-V compounds, the OE constraint on P-Stranding), thereby demonstrating the applicability of the notion.<sup>5</sup>

Note that the notion of obliqueness is closely related to the functional factor "affectedness" which influences the passivization possibilities of POs in contemporary English, as we have observed in Chapter 6, because obliqueness generally represents the

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<sup>5</sup> (Relative) obliqueness is also applied to the account of alternative case markings with OE verbs. See Goh (in press).

opposition between the subject and an object and this opposition will directly result in a certain degree of affectedness which can usually be assigned to the passive subject.

In conclusion, formal syntactic researchers have traditionally eschewed any ties to functionally-oriented accounts while functionalists have minimized the role of formal aspects of language. However, as exemplified in this study, many new valuable insights can be provided through a synthetic approach which draws on both formal and functional aspects and recognizes the interconnectedness of different components of the grammar in forming a morphosyntactic construction and bringing about its changes. Thus, more positive contact between the two perspectives is highly desirable and is greatly to be welcomed.<sup>6</sup>

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<sup>6</sup> See Newmeyer (1998), who outlines promising areas of positive contact between formal and functional perspectives.

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