Case Frames of the Old English Impersonal Construction: Conceptual Semantic Analysis

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Jong Sup Jun. 2005. Case Frames of the Old English Impersonal Construction: Conceptual Semantic Analysis. Language and Information 9.2, 107-126. The impersonal or psyc-predicate construction in Old English (=OE) poses a special challenge for most case theories in generative linguistics. In the OE impersonal construction, the experiencer argument is marked by dative, accusative, or nominative, whereas the theme is marked by nominative, genitive, or accusative, or by a PP. The combinations of possible cases for experiencer and theme are not random, bringing about daunting complexity for possible and impossible case frames. In this paper, I develop a conceptual semantic case theory (a la Jackendoff 1990, 1997, 2002; Yip, Maling, and Jackendoff 1987) to provide a unified account for the complicated case frames of the OE impersonal construction. In the conceptual semantic case theory, syntax and semantics have their own independent case assignment principles. For impersonal verbs in OE, I propose that UG leave an option of determining either syntactic or semantic case to lexical items. This proposal opens a new window for the OE impersonal construction, in that it naturally explains both possible and impossible case frames of the construction. (Hankuk University of Foreign Studies)

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1. Introduction

Impersonal or psychological predicates in Old English (=OE) make up "constructions which have no nominative subject and have the verb in the default 'agreement'

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form: third person singular (Fischer et al. 2000, 44)", as shown in (1).

(1) Jonne of Jync him Jws ilcan Je he ær forbær then displeases him(DAT) the same(GEN) that he before endured 'Then he regrets what he endured before'

(CP 33.225.18; Fisher et al.'s (2000) p. 44)1

The psychological predicate of pyncan 'to displease, regret' takes two arguments, namely experiencer and theme. In (1), the experiencer argument him is marked dative, and the theme argument δx ilcan is marked genitive.

The OE impersonal construction is particularly difficult in that case alternations occur for both the experiencer and the theme argument. The experiencer argument can be marked by any one of dative, accusative, and nominative; and the theme argument can be marked by any one of nominative, genitive, and accusative, or by a PP. The combinations of the allowed cases for experiencer and theme are not random. They are highly restricted, and poses a special challenge for most case theories in the generative tradition.

The purpose of this article is to provide a unified account for the case frames of the OE impersonal construction under the framework of conceptual semantics (Jackendoff 1990, 1997, 2002; Yip, Maling, and Jackendoff 1987; Maling, Jun, and Kim 2001; J. S. Jun 2003). There are a good deal of descriptive generalizations about the case frames of the OE impersonal construction in the literature (Gaaf 1904; Fischer and van der Leek 1983; Anderson 1986; Lightfoot 1991; Wahl?n 1925; Visser 1963; Elmer 1981; Ogura 1986; Allen 1995), but a coherent theoretical treatment of the possible and impossible case frames of the construction is relatively sparse.

One requirement for any case theory to account for the OE impersonal construction is *expressiveness*: the case theory should be expressive enough to allow all possible case frames of the construction. Another requirement is *restrictiveness*: the case theory should be restrictive enough to block all impossible case frames of the construction.

Developing a case theory that has both expressiveness and restrictiveness is a daunting task. The case theory in conceptual semantics (J. S. Jun 2003) is perhaps the only theory available that satisfies both expressiveness and restrictiveness to some degree. In the conceptual semantic case theory, case is redundantly determined by both syntax and semantics. That is, an NP may get nominative/accusative because its syntax and semantics collaborate to mark it so. Syntax has its own case assignment principle, and assigns nominative, accusative and genitive to syntactic entities like NPs. Likewise, semantics has its own case assignment principle, and assigns nominative, accusative, dative, etc. to semantic entities like THINGs. Surface case is the result of resolution between syntactic and semantic case. In most cases, syntactic case matches its corresponding semantic case, and complete redundancy occurs. Sometimes, syntactic case conflicts with semantic case; languages may differ in choosing syntactic case over semantic case, semantic case over syntactic case, either syntactic or semantic case, both syntactic and

¹ CP: King Alfred's West Saxon Version of Gregory's Pastoral Care

semantic cases, etc. The key idea of the conceptual semantic case theory, when modified to some reasonable extent, provides us with a new insight into the case frames of the OE impersonal construction. It also shows us a direction any grammatical theory should pursue with respect to case.

This paper is organized, as follows. Section 2 briefly discusses why the experiencer argument should be regarded as the subject of the OE impersonal construction, and presents the complexity of the possible and impossible case frames of the construction. Section 3 introduces Allen's (1995) LFG analysis of the construction as a representative earlier study. Section 4 provides a brief introduction of the case theory in conceptual semantics. Section 5 is the main proposal of the paper. Because case alternation results from the conflict between syntactic and semantic case in conceptual semantics, I suggest that the universal grammar (=UG) should have an option to leave the choice of syntactic and semantic case to lexical items. That is, in OE, some lexical items realize only the syntactic case, others realize only the semantic case, and still others realize either syntactic or semantic case. After discussing possible case frames of the OE impersonal construction, I show how the proposed analysis accounts for several intriguing theoretical and empirical questions like impossible case frames of the construction. Finally, section 6 is the conclusion of the paper.

2. The Impersonal Construction in Old English

2.1 Experiencer: the subject of the construction

The term *impersonal* comes from the traditional grammar perspective that the subject of a sentence should be marked only by nominative case. In this regard, the sentence in (1) does not have a subject, since it has no nominative NP. The literal translation for (1) from the traditional grammar perspective is something like 'Then [it] displeases to him what (=the same that) he endured before', where [it] is an expletive or *impersonal* subject in Modern English. Impersonal verbs usually refer to mental or cognitive experiences. This is why the impersonal construction is sometimes called the psychological or simply psyc-construction.

On the other hand, there are reasons to believe that the experiencer NP in the impersonal construction is not an adverbial, but the real subject of a sentence. One piece of evidence comes from the coordinate subject deletion, according to which only the subject of a clause controls the deletion of the subject of a coordinated clause.² The experiencer NP is sometimes marked accusative instead of dative, as shown in (2).

(2) þa lyste hi þæs & hine genam then desired her(ACC) that(GEN) and it(ACC) took 'Then she desired that and took it' ((COE) GD I(C) 4.30.33; Allen's (1995) p. 112)³

² For additional arguments for the subjecthood of the experiencer argument in the OE impersonal construction, see Elmer (1981) and Allen (1995).

³ COE: Healey and Venezky's (1980) Concordance to Old English

In (2), the accusative-marked experiencer controls the deletion of the subject of the coordinated clause & hine genam 'and took it', which suggests that the experiencer, and not the theme, is the subject of the preceding clause with an impersonal verb.

Interestingly, a number of contemporary languages display more or less similar properties for psyc-predicates as in OE in terms of the case frame and the subjecthood of the experiencer NP. Look at an Icelandic sentence in (3).

(3) Henni leiddist her(DAT) bored 'She was bored'

(Tallerman 1998, 165)

- In (3), the psyc-predicate *leiddist* 'bored' takes a dative NP as its experiencer argument. According to the traditional perspective that only the nominative case marks the subject of a sentence, there is no subject NP in (3). On the other hand, we have evidence that the dative NP in (3) is in fact the subject of the sentence. For instance, only subjects can undergo subject-verb inversion to make a question in Icelandic; it is the dative NP in a psyc-predicate construction that undergoes the inversion process to form an interrogative, as shown in (4).
 - (4) Hefur henni alltaf βótt Ólafur leiðinlegur? has her(DAT) always thought Olaf(NOM) boring 'Has she always thought Olaf boring?' (Tallerman 1998, 166)

Because the dative NP of the psyc-construction passes the subjecthood test in Icelandic and in many other languages with the psyc-predicate construction, linguists tend to use terms like the psyc-construction, the dative subject construction, the experiencer subject construction, etc. as synonyms.⁴

As the experiencer argument of the impersonal or psyc-construction in OE passes subjecthood tests like coordinate subject deletion, researchers sometimes call the construction the experiencer subject construction or the dative subject construction. The term *dative subject construction*, however, is a misnomer, since the experiencer argument can be marked not only dative, but accusative and nominative as well. We have already studied an example of the accusative experiencer in (2). An example of the nominative experiencer is in (5).

(5) Hwæt þa se mæssepreost þæs mannes ofhreow lo then the priest(NOM) the man(GEN) pitied 'Lo then the priest had pity on the man' (Æls(Oswald) 262; Fisher et al.'s (2000) p. 45)⁵

In short, the experiencer argument of the OE impersonal construction shows case alternations among dative, accusative and nominative. In the following subsection, we will see how complicated the case alternations of the construction are not only for the experiencer but for the theme argument.

⁴ For more arguments for the subjecthood of the dative NP in the Icelandic psyc-construction, see Tallerman (1998).

⁵ ÆLS: Ælfric's Lives of the Saints

2.2 Case alternations of the construction

Grammarians generally agree that there are three types of the impersonal construction in terms of the case frame in OE (Allen 1995, 68; Elmer 1981; Fischer and van der Leek 1983).

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(6) EXP(eriencer) TH(eme) Label
DAT NOM Type I
DAT/ACC GEN/PP Type N
NOM GEN/ACC Type II
(Elmer 1981; Allen 1995)
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Verbs lexically decide which pattern(s) they belong to. The labeling for each case frame is originally suggested by Elmer (1981), and adopted by Allen (1995). (7) is the data for each type.

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(7) a. Type I: DAT-NOM
       ac him
                     ne ofhreow na bæs
                                               deofles
                                                            hryre
       but him(DAT) not pitied not the(GEN) devil's(GEN) fall-NOM
       'But he did not feel sorry about the fall of the devil'
       ((COE) ÆCHOM I, 13 192.17)
    b. Type N: DAT-GEN
       ... him
                    ofhreow bæs
                                      mannes
         him(DAT) pitied
                          the(GEN) man-GEN
       'He felt sorry for the man'
       (\text{Ælc.Th.I.p.}192.16)^7
    c. Type II: NOM-GEN
       and ic
                              næfre ne sceamige
                   bæs
       and I(NOM) this(GEN) never not shame(1Sg)
       'and I am never ashamed of that'
       ((COE) Ps 24.1)
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(Allen 1995, 68)

⁶ Allen (1995, 74–79) also discusses two more possible case frames ACC ACC and DAT ACC for the EXP-TH word order. She reports that lystan 'to desire' is the only verb that shows the ACC ACC frame, and there is only one example of lystan in this extremely rare case frame in the OE literature, suggesting that the ACC ACC frame is extremely marginal. As for the DAT ACC frame, she points out that the accusative object in attested data is not distinguished from nominative morphologically. The only evidence for the ACC analysis is the failure of agreement between the verb and the seemingly nominative NP — therefore, the NP is not in nominative (Denison 1990). According to Allen, we can find many instances of OE data, where nominative NPs fail to agree with verbs. The argument based on agreement is not so convincing as it appears to be. Allen's choice is to follow the null hypothesis that the seemingly accusative NP in the DAT ACC frame is in fact nominative that fails to agree with the verb.

⁷ Ælc.Th: The Homilies of the Anglo-Saxon Church

One obvious question posed by these data is how to account for each case frame under a given theory. For instance, why is the theme marked nominative instead of accusative in Type I? How are dative subjects or genitive objects licensed? Another apparent question is concerned with the case alternations between dative and accusative for experiencer in Type N, and between genitive and accusative for theme in Type II. Likewise, the alternation between the genitive theme and the PP theme in Type N should be accounted for. (8a) shows the accusative experiencer in Type N; (8b) the PP theme in Type N; and (8c) the accusative theme in Type II.

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(8) a. Type N: ACC-GEN
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for \eth æm þynge men lyst ælces þara gooda for that reason men(ACC) desires each(GEN) the goods(GEN)

be hi lyst that them(ACC) desires

'For that reason do men desire each of the goods which they desire'

((COE) Bo.34.88.10; Allen's p. 105)

b. Type N: DAT/ACC-PP

and ... us nu wlatað wið þysne leohtan mete and us(DAT/ACC) now nauseates with this light food 'And we are now nauseated with this light food'

 $(\text{Ælc.P.XX.313}; \text{Allen's p. 70})^8$

c. Type II: NOM-ACC

... swa heo maran læcedom behofað

so it greater leechcraft(ACC) needs

'... so it requires greater medicine'

((COE) ÆCHOM I,33 496.30; Allen's p. 135)

Possible case frames for the OE impersonal construction are summarized in (9).

(9) Possible case frames for EXP-TH:

a. DAT-NOM (Type I)

b. DAT-GEN/PP (Type N)

c. ACC-GEN/PP (Type N)

d. NOM-GEN (Type II)

e. NOM-ACC (Type II)

Notice that many impersonal verbs occur in more than one of these types. For instance, the verb *ofhreowan* is used for Types I and N in (7a, b).⁹ (10) shows various types of membership for some representative impersonal verbs in OE.

⁸ Ælc.P: Homilies of 双到lfric: A Supplementary Collection

⁹ In fact, according to Allen's (1995) classification, ofhreowan occurs in all three types.

(10) a. Type I only:

losian 'to be lost, lose', gelician 'to feel pleasure', mislician 'to feel displeasure', oflician 'to feel displeasure', lician 'to feel pleasure', eglian 'to bother/ail', gehreowan 'to feel pity', lapian 'to feel loathing'

- b. Type N only: lystan and langian lystan(?)¹⁰ 'to feel desire', langian¹¹ 'to feel longing'
- c. Type II only:
 behofian 'to need', wilnian 'to desire', giernan 'to yearn'
- d. Types I & N: ofpyncan 'to feel regret', pyncan 'to think/seem', hreowan 'to feel pity'
- e. Types N & II:

 sceamian 'to feel shame', tweonian 'to feel doubt'
- f. Types I, N & II: ofhreowan 'to feel pity'

(Reorganized from Allen's p. 85)

There is an important thing to notice concerning Type N and Type II. According to Allen, except for the dubious verb *lystan* 'to desire', which also occurred once in the *ACC ACC* frame, and the rare verb *langian*, all verbs that occur in the Type N frame also occur in the Type II frame, but not *vice versa*. Type N implies Type II, but Type II does not imply Type N, since several verbs in OE do occur only in Type II. Thus, Type N seems to be the subset of Type II.

To sum up, (11) shows both the possible case frames and the possible memberships for representative verbs disregarding the problematic *lystan* and *langian* in (10b).

$$(11) = (9) + (10)$$

Possible Case Frames	Types	lician 'to feel pleasure' (Type I)	behofian 'to need' (Type II)	<pre>byncan 'to think/ seem' (Types I & N)</pre>	sceamian 'to feel shame' (Types N & II)	ofhreowan 'to feel pity' (Types I, N & II)
DAT-NOM	I	YES	No	YES	No	YES
DAT-GEN/ PP	N	No	No	YES	YES	YES
ACC-GEN/ PP	N	No	No	YES	YES	YES
NOM-GEN	II	No	YES	No	YES	YES
NOM-ACC	II	No	YES	No	YES	YES

¹⁰ Questionable due to the single example showing the ACC ACC case frame (cf. Footnote 6).

¹¹ This verb rarely appears in the OE literature. Allen reports that she found only three instances of this verb from her corpus search.

Finally, the actual case patterns	reported by Allen mostly overlap with (11),
but are not completely transparent.	Look at (12).	

(12)			EXP	тн	Membership in (11)	Appropriate Type
	a.	tweonian	DAT	GEN/PP	N & II	N
			ACC	GEN/PP		N
			NOM	PP		EXP(II)+TH(N)
	b.	sceamian	DAT	GEN/PP	N & II	N
			ACC	GEN		N
			NOM	GEN/PP	II or ${f E}$	XP(II)+TH(N)
	c.	lician	DAT	NOM	I	I
	d.	ofþyncan	DAT	NOM	I & N	I
			DAT	GEN		N
	e.	þyncan	DAT	NOM	I & N	I
			DAT	GEN/PP		N
	f.	ofhreowan	DAT	NOM	I, N & II	I
			DAT	GEN		N
			NOM	GEN		II

(Reorganized from Allen's p. 137)

Except for the two lines with case frame in bold in tweonian and sceamian, everything is clear from the discussion so far. Why is the NOM-GEN/PP frame in tweonian and sceamian a problem, then? As I indicated in the Appropriate Type column, the NOM-PP frame is the mixture of Type N and Type II frames; i.e. NOM is the case for EXP in Type II, and PP is for TH in Type N. Precisely speaking, this is not an alternation between Types N and II. Rather, it is the mixture of both types. It would be nicer for any case theory to be able to predict such mixture of two different case frames than to posit an ad hoc case frame like NOM-GEN/PP.

Since the mixture of the nominative experiencer (from Type II) with the PP theme (from Type N) exists, a natural question is whether we can find the mixture of the dative/accusative experiencer from Type N with the accusative theme from Type II (i.e. *EXP_{DAT/ACC}-TH_{ACC}). The answer seems to be No. First, Allen did not report any such case frame in her study except for *lystan* (cf. Footnote 6). Secondly, I searched the Brooklyn corpus for impersonal verbs taking advantage of the morphological annotation tags, and found no such case frame. One problem in studying OE is that we do not have negative evidence. Any claim based on the absence of certain data in the literature is thus indirect and tentative. Nevertheless, we can at least see if our theory makes any predictions about the presence/absence of the data.

The peculiarities (or questions) I have discussed so far are summarized in (13).

- (13) Empirical/Theoretical issues of the OE impersonal construction:
 - a. Principled account for each type of the construction; i.e.
 - (i) Why is the theme object marked nominative rather than accusative in Type I (i.e. DAT-NOM)?

- (ii) How are dative subjects and genitive objects licensed in all three Types?;
- b. Case alternations between dative and accusative for experiencer in Type N, and between genitive and accusative for theme in Type II, plus the alternation between the genitive theme and the PP theme in Type N;
- c. Type alternations in Types I & N (e.g. *byncan*), N & II (e.g. *sceamian*), and I, N & II (*ofhreowan*);
- d. Type $N \subset Type II$, but not *vice versa*;
- e. Why is the mixture of Type N and Type II possible in only one direction (i.e. EXP_{NOM}-TH_{GEN/PP}, but *EXP_{DAT/ACC}-TH_{ACC})?

In the next section, I will briefly discuss how Allen (1995) tried to explain the data from the LFG perspective; what she successfully explains; and what questions in (13) she could not handle.

3. Allen's (1995) LFG Analysis

Allen's (1995) analysis is couched on the lexical mapping theory in Lexical Functional Grammar (=LFG; Bresnan and Kanerva 1989; Bresnan and Moshi 1990) plus the Case-in-Tiers (=C/T) theory (Yip, Maling, and Jackendoff 1987). Bresnan and her colleagues, in their influential studies of the locative inversion in Chicheŵa and other Bantu languages, proposed the lexical mapping theory, where thematic roles were lexically underspecified for grammatical functions. The underspecified thematic roles are realized as subject or object depending upon contexts. In this theory, syntactic functions are decomposed into two features; i.e. $[\pm r]$ (=thematically restricted or not) and $[\pm o]$ (=objective or not).¹²

(14) a.
$$[-r, -o] = SUBJ$$

b. $[-r, +o] = OBJ$
c. $[+r, -o] = OBL_{\theta}$
d. $[+r, +o] = OBJ_{\theta}$

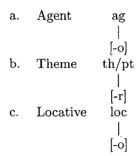
(14) gives us the natural classes of grammatical functions in (15).

(15) a. [-r]: SUBJ, OBJ b. [+r]: OBJ
$$_{\theta}$$
, OBL $_{\theta}$ c. [-o]: SUBJ, OBL $_{\theta}$ d. [+o]: OBJ, OBJ $_{\theta}$

¹² See Jackendoff (1993) for comparison between Bresnan and her colleagues' feature decomposition and the A-marking convention in conceptual semantics.

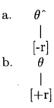
Once thematic roles of a predicate are given by lexical information, they go through intrinsic role classification and default classification to determine what grammatical function they play. Intrinsic role classification assigns unmarked features to thematic roles.

(16) Intrinsic role classification:

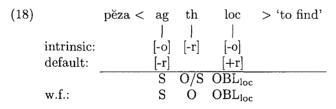


Next, their default classification goes it that the highest thematic $(\theta^{\hat{}})$ role is unrestricted, whereas all other roles (θ) are restricted.

(17) Default classification:



Look at Chichewa verb pěza 'to find' for illustration.



(Bresnan and Kanerva 1989, 29)

In (18), by intrinsic role classification in (16), ag is [-o]; th is [-r]; and loc is [-o]. By default classification in (17), ag is [-r], and loc is [+r]. Default classification does not assign [+r] to th, since it already has [-r] by intrinsic classification. Because of (18), ag, whose features are [-o, -r], is a sure candidate for SUBJ. Because [-r] defines the natural class for SUBJ and OBJ as shown in (15), th, whose feature is [-r], is a candidate for both SUBJ and OBJ. Loc, whose values are [-o, +r], is a sure candidate for OBL $_{loc}$. The final line in (18) is the well-formed choice for S, O, and OBL $_{loc}$.

The second machinery Allen (1995) adopted was the Case-in-Tiers (=C/T) theory. In this theory, syntactic arguments are hierarchically lined up with respect to its embedding in syntactic trees. Case is mapped onto these arguments hierarchically. In (19), nominative is mapped onto the NP_{SUBJ} rather than the NP_{OBJ} , because the NP_{SUBJ} is less deeply embedded than the NP_{OBJ} in syntax.

(19) Syntactic Hierarchy:
$$NP_{SUBJ} > NP_{OBJ}$$
 | | | Case Tier Hierarchy: $NOM > ACC$

The C/T theory treats the dative subject construction, in which the nominative theme is the most frequent cross-linguistically, in an interesting way.

In (20), when the NP_{SUBJ} , which is the experiencer argument, gets lexical dative, the remaining theme (= NP_{OBJ}) is marked nominative rather than accusative, since it is the highest-ranking NP that is available for case-mapping in tiers.

Now, let us turn to Allen's LFG analysis of impersonal verbs in OE. Look at (21) for verbs like *lician* (Type I only).

In (21), TH is intrinsically classified as [-r], and EXP, which is the θ ^, is [-r] by default. Since [-r] defines the natural class for SUBJ and OBJ, both EXP and TH are S/O. Since EXP is higher than TH in thematic hierarchy, it is the subject. EXP gets dative as lexical case. The remaining argument TH gets nominative following the basic idea of the C/T theory.

Besides lexical case (e.g. DAT_{Lex} and ACC_{Lex}), the lexical information of verbs may specify such features as [+o] and [+r]. These lexical features block the intrinsic or the default classification of [-o] or [-r]. For instance, verbs like *sceamian* (Types N & II) have the upper part of the following lexical information.

The TH of sceamian is lexically specified for either [+o] or [+r] (but not both). Allen assumes without justification that the lexically specified [+o]_{Lex} must get genitive. Hence, when the TH chooses [+o], it is realized as a genitive object. When it is [+r], it is realized as an oblique (i.e. PP). The EXP of sceamian is either DAT_{Lex} or ACC_{Lex}. This way, we get the case alternation between dative and accusative for the experiencer argument with Type N verbs. Finally, the lexical case on EXP of sceamian is entirely optional, which is why DAT_{Lex} /ACC_{Lex} is in parentheses in (22). When the lexical case is entirely absent, the experiencer subjects structurally gets nominative. This is how we get the alternation between Type N and Type II.

Allen devised $[+o]_{Lex}$ just for the purpose of the genitive object, and stipulated that $[+o]_{Lex}$ gets dative. This does not look better than specifying it simply as GEN_{Lex} . ¹³ As for the five questions posed in (13), she could manage to provide explanation for (a) and (b), but not for (c), (d), and (e). The subsequent sections present an alternative account under the framework of conceptual semantics.

4. Case in Conceptual Semantics

The key idea of case in conceptual semantics (J. S. Jun 2003) is that case is both syntactic and semantic. In many theories including GB, minimalism, LFG, GPSG, HPSG, etc., case is determined in syntax. On the other hand, many others do think that case is determined in semantics: e.g. cognitive linguists, Role and Reference Grammar, such LFG studies as K-S Hong (1991) and Alsina (1996, 1997).

Descriptively, case is explained by its function and meaning, i.e. syntax and semantics. Since case is explained by both syntactic and semantic terms equally well or badly, the null hypothesis should be that function and meaning are the head and tail of case. To put this idea into practical terms, an NP gets nominative/accusative/etc. simply because its function and meaning collaborate to mark it so.

I adopt the C/T approach proposed by Yip, Maling, and Jackendoff (1987), and elaborated in Maling (1993) and Maling, Jun, and Kim (2001). There are two independent case assignment principles in the conceptual semantic case theory; i.e. syntactic and semantic case. The syntactic case assignment is already discussed in section 3 concerning (19). In conceptual semantics, the semantic structure is as highly organized and configurational as the syntactic structure, and hence the semantic arguments are hierarchically lined up with respect to its embedding in semantic trees. Then, case is also mapped onto these arguments hierarchically. In (23), the actor gets nominative, because it is higher than the theme in semantic hierarchy.

¹³ One possible reason she did not use GEN_{Lex} is that she wanted to explain the alternation between NP_{GEN} and $PP_{Oblique}$ in terms of the lexical choice between [+o] and [+r]. It is clear that whichever option she chooses, she must pay quite a high *opportunity* cost.

The semantic case in conceptual semantics is different from such semantic cases as dative in traditional theories. Moreover, the semantic case in conceptual semantics has nothing to do with meaning. In (23), cases like nominative and accusative are directly mapped onto thematic roles like actor and theme. But this does not mean that nominative is the case for actor, and that accusative is the case for theme. In conceptual semantics, thematic relations like actor and theme do not play a significant role in grammar. Rather, thematic roles are merely derived concepts over conceptual structures (Jackendoff 1987). That is, a THING argument is defined as actor when it occupies a certain position in a highly configurational semantic tree. This is exactly parallel with the statement that an NP is defined as the subject of a sentence when it occupies a certain position in a highly configurational syntactic tree. For this reason, the thematic roles in the semantic hierarchy in (23) are simply defined labels over structural positions of a conceptual structure. What (23) amounts to say is that when a THING argument occupies a higher structural position in a conceptual structure than another THING argument, the configurationally higher THING gets nominative, and the configurationally lower THING gets accusative. 14

One may wonder why we need this mechanism for semantic case when we already have a mechanism for syntactic case. The reason lies in the architecture of language in conceptual semantics. Since syntax and semantics are two autonomous levels of grammar, we need correspondence rules between syntax and semantics. In order to define correspondence rules, we first have to identify syntactic and semantic entities that correspond to each other. In other words, we need an interface component between syntax and semantics. J. S. Jun (2003) argues that case plays this interface role between syntax and semantics. To illustrate the point, we have three NPs in syntax and three THINGs in semantics. We mark one of the three NPs with nominative, and mark one of the three THINGs with nominative. Correspondence rules refer to this case marking in both syntax and semantics, and map the NP with nominative marking in syntax onto the THING with nominative marking in semantics. For this reason, both syntactic and semantic markings of case are required by the foundational architecture of conceptual semantics.

The crucial aspect of this theory is the surface case resolution. In most cases, syntactic case matches its corresponding semantic case. That is, an NP gets nominative in syntax, because it is the subject. Its corresponding THING argument gets nominative in semantics, because it is the actor. Therefore, the NP gets nominative because its syntax and semantics collaborate to mark it nominative.

A problem occurs when syntactic case conflicts with the semantic case. When syntactic case does not match the semantic case, languages differ in choosing syntactic case over semantic case, semantic case over syntactic case, either syntactic or semantic case, both syntactic and semantic cases, etc. For parametric crosslinguistic applications of the proposed theory to various empirical data, see J. S. Jun (2003).

¹⁴ Role and Reference Grammar (=RRG) also develops its semantic case theory that has nothing to do with meaning per se (Van Valin and LaPolla 1997). In RRG, case assignment is semantic, but it refers to a thematic hierarchy, which is derived from a highly configurational semantic structure as in conceptual semantics.

5. Proposal: Let Lexical Items Decide!

In this section, I will show how we can account for the complexity of the OE impersonal construction, when we view Universal Grammar as a *toolkit* (Jackendoff 1997, 2002).

5.1 UG as a toolkit

The term Universal Grammar (=UG) first appears in Chomsky's (1965, 5-6) Aspects of the Theory of Syntax. The main conception of UG is that all languages share particular grammatical features, which seem to be innate to the human being's language capacity. Since Chomsky (1981), the popular conception of UG has been that UG is a finite set of parameters that have to be turned on or off, or that have to be ranked differently from language to language (esp. in OT, cf. Prince and Smolensky 1993). On the other hand, Newmeyer (1998), Culicover (1999), and Ackerman and Webelhuth (1999), through detailed investigation of cross-linguistic data, conclude that it is impossible to parameterize all the diversities of human languages with a finite number of parameters.

Jackendoff (2002, esp. Ch. 4) shares the view with Newmeyer, Culicover, and Ackerman & Webelhuth, and suggests a new perspective about UG; i.e. UG is a toolkit. According to Jackendoff (p. 193), the contents of UG are architectural universals (i.e. possible structures in the grammar and their interface rules), a number of prespecified tricks (e.g. particular fragments of structure) that guide the children's acquisition of generalizations, and so on. A crucial insight in Jackendoff's view of UG as a toolkit is that "when you have a toolkit, you are not obliged to use every tool for every job (p. 75)." Unlike the standard conception of UG, "not every grammatical mechanism provided by Universal Grammar appears in every language (Ibid.)." Van Valin and LaPolla's (1997) discussion of grammatical function illustrates this point well. According to them, languages like Acehnese do not make use of grammatical functions. All grammatical operations that resort to the crucial notions like SUBJ, OBJ, etc. in other languages depend upon semantic macroroles (i.e. Actor and Undergoer) in Acehnese. Jackendoff's (pp. 261-264) view is that the grammatical function is part of UG as a toolkit, and they do not use the tool in Acehnese.

5.2 Let lexical items decide!

What are possible options for case in UG, if we view UG as a toolkit? In conceptual semantics, case is independently motivated in syntax and semantics. In section 4, I have assumed that languages may differ in dealing with conflicts between syntactic and semantic case; i.e. a language can choose to prefer either syntactic or semantic case, or keep the choice open, so we can get case alternation. Another thing a language could do is to leave it up to each lexical item to decide, so that one verb could prefer syntactic case, another semantic case, and yet another verb does not care (Jackendoff, p.c.). This would give the appearance of quirky case, except that the cases would be motivated by general principles. To sum up, UG has independent tools for both the syntactic case and the semantic case, and lets each language decide which tool(s) it uses. Also, UG has an option for each lexical item

in one language to decide which tool(s) it uses. Not all languages take this option, since "you are not obliged to use every tool for every job (Jackendoff 2002, 75)". Finally, there can be really quirky case, for which there is no reason at all. The really quirky case (e.g. the accusative subject) together with our current view of UG as a toolkit makes the theory expressive enough to account for most complexities posed by the OE impersonal construction.

Suppose that the experiencer and the theme arguments are assigned nominative and accusative respectively in syntax, by virtue of the C/T-theoretic syntactic casemapping principles discussed in section $3.^{15}$

Also, the C/T-theoretic *semantic* case-mapping principles in section 4 motivates the following case-mapping in semantics.

$$\begin{array}{ccc} \text{(25)} & & \text{EXP} & \text{TH} \\ & \text{Semantic Case} & \text{DAT}_{\text{Lex}} & \text{NOM} \end{array}$$

In (25), dative is lexical, and the nominative after dative is assigned by the C/T theory. (26) is the combined result.

In our current view of UG as a toolkit, lexical items can choose whether to use the syntactic or the semantic case frame, or to leave it as an open choice. This allows three case frames in (27).

- (27) a. Syntactic case only: NOM-ACC
 - b. Semantic case only: DAT_{Lex}-NOM
 - c. Either syntactic or semantic case: NOM-ACC or DAT_{Lex}-NOM

(27a) represents Type II verbs like behofian in (11). (27b) represents Type I verbs like lician in (11). (28c) represents verbs like ofhreowan, which occur in both Types II and I (plus N) in (11).

In Types N and II, the theme object can/should be marked by GEN(/PP). In OE, genitive marks not only adnominal complements, but also verbal/adjectival/prepositional complements. Since we know nothing about genitive in non-adnominal complements, we cannot say much about the GEN(/PP) object in Types N and II. In this paper, I will consider the GEN(/PP) object as lexical choice (i.e.

Jackendoff (p.c.) points out that it is also possible for the accusative case to be motivated by its position (i.e. <Comp, V>) as in GB, since we can even combine the GB-style case theory with the C/T theory in principle with UG as a toolkit. Plausible as it is, I do not pursue this option here, since my goal is to develop a way to express the basic intuition in C/T-theoretic terms.

GEN(/PP)_{Lex}) on the theme argument in syntax/semantics without further ado. This simply means that I dare not make rough guesses about the non-adnominal genitive. It is also consistent with Allen's (1995) treatment of the genitive theme, since she assumes that [+o]_{Lex} is the lexical feature responsible for the genitive theme.

Following Allen's proposal that lexical case can be optional rendering alternation between structural case and lexical case on the same argument, I assume that the experiencer can be also marked ACC_{Lex} in syntax 秀召 really quirky case. The $GEN(/PP)_{Lex}$ on the theme in syntax and semantics is italicized to show that I do not have much to talk about it.

(28a) allows four case frames; i.e. (i) NOM-ACC, (ii) NOM-GEN(/PP)_{Lex}, (iii) ACC_{Lex}-GEN(/PP)_{Lex}, and (iv) ACC_{Lex}-ACC. (28b) allows two case frames; i.e. (i) DAT-NOM, and (ii) DAT-GEN(/PP)_{Lex}. (29) is the combined result.

(29)			EXP	TH
	a.	Syntactic Case:	(i) NOM	ACC,
			(ii) NOM	$GEN(/PP)_{Lex}$
			(iii) ACC _{Lex}	$GEN(/PP)_{ m Lex}$
			(iv) ACC_{Lex}	ACC.
	b.	Semantic Case:	(i) DAT_{Lex}	NOM
			(ii) DAT _{Lex}	$GEN(/PP)_{ m Lex}$

Now, we are ready to provide account for OE impersonal verbs' membership for possible case frames in (11). First, verbs like *lician* (i.e. Type I) occur only in the DAT-NOM frame (i.e. (29b-(i))). We can accomplish this by specifying these verbs as *semantic case* only in their lexical information.

Secondly, verbs like behofian (Type II) allow NOM-GEN and NOM-ACC frames (i.e. (29a-(i), (ii))). We get this result by optionally specifying GEN(/PP)_{Lex} on

```
(i) EXP TH (ACCLex) (GEN(/PP)Lex)
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¹⁶ In (28a), we do not have to list NOM or ACC in the lexicon at all, since they are predictable. That is, by specifying the lexical information for a certain predicate as (i), we get the alternation between NOM and ACCLex, and between ACC and GEN(/PP)Lex.

¹⁷ An important assumption here is that lexical case can be independently specified for syntax and semantics. This assumption was implicitly made in (26).

the theme (i.e. in parentheses), and making the verbs take only the syntactic case as in (31).

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(31) behofian (Type II): Syntactic Case Only
EXP TH
Syntactic Case (GEN(/PP)<sub>Lex</sub>)
Semantic Case
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Thirdly, verbs like *byncan* (Types I & N) allow DAT-NOM, DAT-GEN/PP, and ACC-GEN/PP frames (i.e. (29a-(iii), b-(i), (ii))). We accomplish this by specifying the lexical information of *byncan* as (32).

```
(32) byncan (Types I & N): Either Syn. or Sem. Case

EXP TH

Syntactic Case ACC<sub>Lex</sub> GEN(/PP)<sub>Lex</sub>

Semantic Case DAT<sub>Lex</sub> (GEN(/PP)<sub>Lex</sub>)
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Fourthly, verbs like *sceamian* (Types N & II) allow DAT-GEN/PP, ACC-GEN/PP, NOM-GEN, and NOM-ACC frames (i.e. (29a-(i), (ii), (iii), b-(ii))). We get this result by (33).¹⁸

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(33) sceamian (Types N & II): Either Syn. or Sem. Case EXP TH Syntactic Case (ACC<sub>Lex</sub>) (GEN(/PP)_{Lex}) Semantic Case DAT<sub>Lex</sub> GEN(/PP)_{Lex}
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Finally, verbs like ofhreowan (Types I, N & II) allow DAT-NOM, DAT-GEN/PP, ACC-GEN/PP, NOM-GEN, and NOM-ACC frames (i.e. (29a-(i), (ii), (ii), b-(i), (ii))). We get the result by (34).

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(34) of hreowan (Types I, N & II): Either Syn. or Sem. Case EXP TH

Syntactic Case (ACC<sub>Lex</sub>) (GEN(/PP)_{Lex})

Semantic Case DAT<sub>Lex</sub> (GEN(/PP)_{Lex})
```

The conceptual semantic case theory, together with the view of UG as a toolkit, provides explanation for the first three questions of (13); i.e. it explains (i) why the theme object is marked nominative in Type I (i.e. DAT-NOM); (ii) how dative subjects interact with theme, if the genitive on the theme is lexical; (iii) how dative and accusative alternate on experiencer in Type N; (iv) how genitive and accusative alternate on theme in Type II; and (v) how different verbs have different memberships for each type including such multiple memberships as Types I & N (e.g. byncan), N & II (e.g. sceamian), and I, N & II (ofhreowan).

The fourth and the fifth questions in (13) were concerned with Type N verbs; i.e. why most/all Type N verbs alternate with Type II frames, but not *vice versa*;

¹⁸ At present, I have no account for why ACC_{Lex}-ACC does not occur from (33) and (34), although it is always possible to rule out such frames as ACC-ACC by some reasonable stipulation.

and why the *DAT-ACC frame does not occur with Types N & II verbs. According to my analysis, this is due to the nature of Type N case frames. Type N frames are DAT-GEN/PP and ACC-GEN/PP. From the discussion so far, these frames are possible when we have lexical entries like (33). The DAT-GEN/PP frame comes from semantics, and the ACC-GEN/PP frame comes from syntax. Unlike Type I and Type II, which make use of just semantic and syntactic frames respectively, Type N verbs combine both syntactic and semantic frames. This makes it possible for Type N verbs to be expressed in syntactic frames like NOM-GEN or NOM-ACC. On the other hand, Type II verbs refer to only the syntactic case, and it cannot alternate with semantic frames involving dative. Also, since the *DAT-ACC frame in Types N & II is the mixture of the semantic dative with the syntactic accusative, it is not, strictly speaking, part of the alternation between the syntactic frame and the semantic frame. This way, the proposed analysis has nice theoretical and empirical consequences for the two intriguing questions in (13).

6. Conclusion

I have so far taken a tough journey into the study of the OE impersonal construction. I showed how complicated the possible and impossible case frames are in the OE impersonal construction. Allen's (1995) LFG analysis was pioneering, but not free from empirical and theoretical limitations. What is most important to account for the complexity of the construction is expressiveness and restrictiveness; i.e. any theory of case faces the dilemma of allowing only possible case frames plus blocking impossible case frames like *DAT-ACC. As far as I can tell, the conceptual semantic case theory is the only theory available at present that satisfies both expressiveness and restrictiveness. The conceptual semantic case theory is independently motivated by a number of empirical data like the aspectual nominal construction in Korean, and the light verb construction in Korean, Japanese, and Hindi (J. S. Jun 2003). For lack of space, I could not show how successful the conceptual semantic case theory is to account for tough questions of case in many languages.

The conceptual semantic case theory has many inherent problems as well. For instance, we do not have any principled account for non-adnominal genitive in OE, except that it may be quirky. From our present understanding of the OE case system, it is almost impossible to provide a comprehensive account for the construction. Noticing this, I wanted to show two things in this paper. First, it is very difficult to explain the case/Type alternations in the OE impersonal construction with traditional case theories. Second, the conceptual semantic case theory provides some meaningful, though not perfect, insight into the impersonal construction in an interesting way.

<References>

Ackerman, Farrell and Gert Webelhuth. 1999. A Theory of Predicates. CSLI Publications, Stanford.

Allen, Cynthia L. 1995. Case Marking and Reanalysis: Grammatical Relations from

- Old to Early Modern English. Oxford Univ. Press, Oxford.
- Alsina, Alex. 1996. The Role of Argument Structure in Grammar: Evidence from Romance. CSLI Publications, Stanford.
- Alsina, Alex. 1997. Causatives in Bantu and Romance. In Alex Alsina, Joan Bresnan, and Peter Sells (eds.), *Complex Predicates*. CSLI Publications, Stanford, pp. 203–246.
- Anderson, John. 1986. A Note on Old English Impersonals. *Journal of Linguistics* 22, 167–177.
- Bresnan, Joan and Jonni Kanerva. 1989. Locative Inversion in Chicheŵa: a Case Study of Factorization in Grammar. Linguistic Inquiry 20, 1–50.
- Bresnan, Joan and Lioba Moshi. 1990. Object Asymmetries in Comparative Bantu Syntax. *Linguistic Inquiry* 21, 147–85.
- Chomsky, Noam. 1965. Aspects of the Theory of Syntax. MIT Press, Cambridge, MA.
- Chomsky, Noam. 1981. Lectures on Government and Binding: the Pisa Lectures. Foris, Dordrecht.
- Culicover, Peter. 1999. The View from the Periphery: the English Correlative Conditional. *Linguistic Inquiry* 30, 543–71.
- Denison, David. 1990. The Old English Impersonals Revived. In Sylvia Adamson et al. (eds.), Papers from the 5th International Conference on English Historical Linguistics. Current Issues in Linguistic Theory, 65. John Benjamins Publishing Company, Amsterdam, pp. 111–140.
- Elmer, Willy. 1981. Diachronic Grammar: The History of Old and Middle English Subjectless Constructions. Max Niemeyer Verlag, Tübingen.
- Fischer, Olga C. M. and Frederike van der Leek. 1983. The Demise of the Old English Impersonal Construction. *Journal of Linguistics* 19, 337–368.
- Fischer, Olga C. M., Ans van Kemenade, Willem Koopman, and Wim van der Wurff. 2000. The Syntax of Early English. Cambridge Univ. Press, Cambridge.
- Healey, Antoinette and Richard Venezky. 1980. A Microfiche Concordance to Old English. Center for Medieval Studies, Univ. of Toronto, Toronto.
- Hong, Ki-Sun. 1991. Argument Selection and Case Marking in Korean. Ph.D. thesis, Stanford University.
- Jackendoff, Ray. 1987. The Status of Thematic Relations in Linguistic Theory. Linguistic Inquiry 18, 369-411.
- Jackendoff, Ray. 1990. Semantic Structures. MIT Press, Cambridge, MA.
- Jackendoff, Ray. 1993. On the Role of Conceptual Structure in Argument Selection: a Reply to Emonds. Natural Language and Linguistic Theory 11, 279–312.
- Jackendoff, Ray. 1997. The Architecture of the Language Faculty. MIT Press, Cambridge, MA.
- Jackendoff, Ray. 2002. Foundations of Language: Brain, Meaning, Grammar, Evolution. Oxford Univ. Press, Oxford.
- Jun, Jong Sup. 2003. Syntactic and Semantic Bases of Case Assignment: A Study of Verbal Nouns, Light Verbs and Dative. Ph.D. thesis, Brandeis University.

- Lightfoot, David. 1991. How to Set Parameters. MIT Press, Cambridge, MA.
- Maling, Joan. 1993. Of Nominative and Accusative: the Hierarchical Assignment of Grammatical Case in Finnish. In Anders Holmberg and Urpo Nikanne (eds.), Case and Other Functional Categories in Finnish Syntax. Mouton De Gruyter, Berlin, pp. 49–74.
- Maling, Joan, Jong Sup Jun, and Soowon Kim. 2001. Case-marking on Duration Adverbials Revisited. In Hee-Don Ahn and Namkil Kim (eds.), Selected Papers from the Twelfth International Conference on Korean Linguistics. Kyungjin Munhwasa, Seoul, pp. 323–335.
- Newmeyer, Frederick J. 1998. Language Form and Language Function. MIT Press, Cambridge, MA.
- Ogura, Michiko. 1986. Old English 'Impersonal' Verbs and Expressions. *Anglistica* 24. Rosenkilde and Bagger, Copenhagen.
- Prince, Alan and Paul Smolensky. 1993. Optimality Theory: Constraint Interaction in Generative Grammar. Technical Report 2, the Rutgers Center for Cognitive Science, Rugers University.
- Tallerman, Maggie. 1998. Understanding Syntax. Arnold, London.
- van der Gaaf, W. 1904. The Transition from the Impersonal to the Personal Construction in Middle English. Carl Winter's Universitätsbuchhandlung, Heidelberg.
- Van Valin Jr., Robert D. and Randy J. LaPolla. 1997. Syntax: Structure, Meaning and Function. Cambridge Univ. Press, Cambridge.
- Visser, F. Theodorus. 1963-73. An Historical Syntax of the English Language. Brill, Leiden. In 3 parts (4 vols.).
- Wahlén, N. 1925. The Old English Impersonalia, Part I. Elanders Boktryckeri Aktiebolag, Göteborg.
- Yip, Moira, Joan Maling, and Ray Jackendoff. 1987. Case in Tiers. Language 63-2, 217-250.

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