

NP Shift in English*

Hong-Ki Sohng · Seung-Chul Moon**

(Hanyang University) (Korea Aerospace University)

Sohng, Hong-Ki & Moon, Seung-Chul. 2009. NP Shift in English. *The Linguistic Association of Korea Journal*. 17(1). 1-25. This paper aims to explore the nature and use of NP shift in Old - Modern English. Old English had non-heavy or light NP shift to the sentence-final position in the light of end-focus, while Modern English only has heavy NP shift in the light of end-weight. Object NPs with clear morphological endings, which were reflections of inherent Case in Old English, were easily identifiable both in the shifted position and in the in-situ position, so a shifted object NP in Old English yielded end-focus effects whereas an in-situ object NP did not. However, sentence-final shift of non-heavy objects with no clear morphological endings in Modern English leads to confusion, and thus is judged marginal or ungrammatical. On the other hand, heavy NPs in Modern English shift sentence-finally to produce a stylistically well-balanced sentence in accordance with the norms of English Syntax, end-weight, and thus their shift is considered optimal. In contrast, in-situ heavy NPs in Modern English are not stylistically well-balanced in accordance with the norms of English Syntax, and thus are judged non-optimal. This paper provides a principled account of NP shift in English by means of a set of hierarchical, violable constraints that operate actively in the English speakers' linguistic faculty.

Key Words: NP shift, end-focus, end-weight, heavy NP, morphological Case endings, principled constraints

* We are grateful to the anonymous reviewers for their insightful comments on the first draft of this paper.

** first author (Hong-Ki Sohng); coauthor (Seung-Chul Moon)

1. Introduction

NP shift to the sentence-final position has been extensively used in English since the Old English period (AD 450-1100).¹⁾

The use and properties of NP shift have been one of the research topics of keen interest for scholars in English Linguistics. This paper aims to provide a principled account of the use of NP shift in English.

Old English has been assumed in the literature (Lightfoot 1974, 1979, 1981, 1997a, 1997b), Canale (1978), Traugott (1965), etc.) to have an SOV base word order. In this context, it is worthy of study to examine the SVO pattern that appeared in embedded clauses, and the S-V-DO-IO pattern in main clauses, which were reflections of NP shift in Old English. Old English had one more type of NP shift in the main clauses that included particle-verb compositions. Section 2 discusses in detail the use of NP shift in these types of constructions in Old English in the light of end-focus (Quirk et al. 1985:1398).

Section 3 explores the phenomena of heavy NP shift, a representative NP dislocation in Modern English, in great detail, and argues that this type of weight NP shift takes place in accordance with end-weight (Quirk et al. 1985:1398).

Section 4 provides a principled account of NP shifted constructions in Old - Modern English in terms of a set of universal, violable constraints that must be inherent and operate in the syntactic component of the English speakers' linguistic faculty.

Section 5 is the conclusion of the paper.

2. NP Shift in Old English

Old English had roughly three types of NP shift to the sentence-final position, one that occurred in embedded contexts, the second in main clauses

1) Old English had non-heavy NP shift, while Modern English only has heavy or weighty NP shift. It is uncertain whether such type of movement as heavy NP shift was used in Old - Middle English, as there is no literature available for that. For this reason, research on NP shift before the Modern English period is restricted to non-heavy or light NPs in this paper.

with direct and indirect objects, and the third in particle-verb constructions. We will consider the phenomena of NP shift in Old English in detail in this section before giving a full account of them in the later section.

2.1. NP Shift in Main and Embedded Contexts

It has been argued by a lot of scholars (Lightfoot 1974, 1979, 1981, 1997a, 1997b, Canale 1978, Traugott 1965, etc.) that the base word order in Old English was SOV.

Consider the following examples from Old English.

- (1) a. Ic herige þē (Ha.)
 I admire you
 'I admire you'
- b. & he sende him micla gifa
 and he sent him great gift
 'and he sent him great gift'
- c. Se swicola Herodes cwæp to þam tungel witegum
 the treacherous Herod spoke to the star wise men
 'The treacherous Herod spoke to the astrologers.'

It appears at first glance that the main clauses in Old English had the order S-V-O. It soon turns out that the V2 phenomenon well-attested in Old English, German, and other West Germanic languages, under which the verb appears in the second position of a clause, was responsible for the word order in the Old English examples (1a-c). It should be noted that not only a subject but also other elements of a sentence including an object, a prepositional phrase, or an adverbial can occupy the initial position of a sentence, leaving the verb in the second position of a main clause.

Take a look at the following sentences from Old English (2) and German (3), all of which show the well-known V2 phenomenon.

- (2) a. Her gefeaht Ecbryht cyning.
 In-this-year fought Ecbryht king

- ‘In this year King Ecgbryht fought’ (Chr.)
- b. [Swelcum ingeþonce] gerist þæt ...
 such-a disposition suits that ...
 ‘It is fitting for such a disposition that ...’ (CP 60, 10)
- (3) a. Ich las schon letztes Jahr diesen Roman.
 I read already last year this book
 ‘I already read this book last year.’
- b. [Schon letztes Jahr] las ich diesen Roman
 Already last year read I this book

However, the embedded clauses in the following examples from Old English do not seem to show the verb second phenomenon. These sentences show the SOV word order argued to be the base order of Old English.

- (4) a. þæt ic þas boc of Ledenum gereorde to Engliscre spræce awende
 that I this book from Latin language to English tongue translate
 ‘that I translate this book from the Latin language to the English tongue’ (AHTh.)
- b. ..., se his hūs ofer stān getimbrode. (Mat.)
 who his house on rock built
 ‘..., who built his house on rock.’

Dutch and German, which belong to the same Germanic group of languages as English, also show the similar pattern in the embedded environments, as shown below.

- (5) dat Wim het boek koopt
 that Wim the book buys
 ‘that Wim buys the book’
- (6) daß Karl das Buch kauft
 that Karl the book buys
 ‘that Karl buys the book’

In addition, it should be noted that the word order for the embedded

contexts in Old English was not so straightforward, but rather complicated, as evidenced by the following examples.

- (7) a. ...þæt *se winsele* wiðhæfde heaþoderum
 ...that *the wine-hall* withstood brave-ones
 ‘...that the wine-hall withstood the brave ones...’ (*Beo* 771-772)
- b. ...þæt *se winsele* heaþoderum wiðhæfde
 ...that *the wine-hall* brave-ones withstood
 ‘...that the wine-hall withstood the brave ones...’
- (8) a. þæt hi sceoldon oncnawan heora Scyppend
 that they might acknowledge their Creator
 ‘that they might acknowledge their Creator’ (AHTh 1, 96)
- b. þæt hi sceoldon heora Scyppend oncnawan
 that they might their Creator acknowledge

The examples in the embedded contexts in the above examples show alternation in regard to the location of the objects. While the examples in (7b) and (8b) show the SOV order acknowledged to be the base order for Old English by a majority of scholars in the historical linguistics, those in (7a) and (8a) clearly show us the pattern where the objects were dislocated to the clause-final position.

Following Lightfoot(1974, 1982), Canale (1978), Wurff (1997), etc. we argued in Sohng & Moon (2007) that the base word order for Old English was SOV, as exemplified in (4a-b). In Sohng & Moon (2007), we gave an in-depth account why the base SOV order was converted into the SVO order surfaced in the examples (1a-c). For the sake of exposition, we will briefly talk about the surface word order in Old English here, which was the topic of Sohng & Moon (2007).

As is well-known, the complementizers were in agreement with the subjects morphologically in regards to person and/or number features in a lot of dialects of Dutch and German.²⁾ Thus, following Lee’s (1993) suggestion, we proposed in

2) The relevant examples are provided below.

a. of-s too kom-s
 whether-2sg. you come-2sg.
 ‘whether you come’

Sohng & Moon (2007) that COMP contains AGR in Old English, Standard German and Dutch, and argue that agreement was covert in Old English. Considering that a demonstrative, a correlate to a complementizer, had an agreement paradigm in Old English, we claimed that a complementizer in Old English had the covert agreement features.

We proposed that T in Modern English has the agreement features while the verb in Old English had the agreement features.

- (9) Ic herige þē (Ha.)
 I admire you
 'I admire you'

The verb *herige* in (9) naturally gets the features [+1, masc, sing] under agreement with the subject. In the *Minimalist Inquiries* (Chomsky 1998, 1999) account, Agree of AGR in COMP and the verb occurs, leading to the head movement of the verb to COMP, since COMP is the only possible landing site for a head in the projection of C. We argued further that T in Old English had the topic feature, whereas COMP or some other functional head in Modern English has the topic feature. In Old English, T with the topic feature was pied-piped via head movement of V to C, and the topic feature in T adjoined to C induced movement of the subject or some other item with the topic feature to Spec CP. It thus follows that the applications of V-to-C head movement under Agree and movement of the subject with the topic feature to Spec CP derived the SVO surface order from the base SOV order in the main clause in Old English.

We will now discuss the SOV base order in the embedded contexts in Old English, as exemplified in (7b), (10), and (11).³⁾

- (10) þa ic ða þis eall gemunde

b. da-n-k ik kom (e)n (West Flemish)
 that-1sg. I come-1sg
 'that I come'

3) The accounts of word order in the embedded clauses in Old English was given in Sohng & Moon (2007: 183-187) and Lee (1993: 16-47).

- when I then this all recall
 'when I then recall all this'
- (11) þæt hi sceoldon heora Scyppend oncnawan
 that they might their Creator acknowledge

Since the embedded COMPs in (10-11) are filled in by the complementizers *þæt* and *þa*, and agree with these complementizers, no Agree of COMP and the verbs takes place, leading to no movement of the verbs. On the other hand, the subjects move to Spec TP to check the topic feature in T, showing the SOV surface order in the embedded contexts in (7b), (10), and (11).

As noted above, the word order in the embedded contexts in Old English was rather complicated, as shown below, repeated from (7-8).

- (12) a. ...þæt *se winsele* wiðhæfde heaþoderum
 ...that *the wine-hall* withstood brave-ones
 '...that the wine-hall withstood the brave ones...' (*Beo* 771-772)
- b. ...þæt *se winsele* heaþoderum wiðhæfde
 ...that *the wine-hall* brave-ones withstood
 '...that the wine-hall withstood the brave ones...'
- (13) a. þæt hi sceoldon oncnawan heora Scyppend
 that they might acknowledge their Creator
 'that they might acknowledge their Creator' (AHTh 1, 96)
- b. þæt hi sceoldon heora Scyppend oncnawan
 that they might their Creator acknowledge

As is evident from the above examples, the object NPs in the embedded contexts, unlike those in the main clauses, were able to appear either pre-verbally showing the SOV surface order, or post-verbally exhibiting the SVO order.

Further, the order for indirect and direct objects in the main clause in Old English showed alternation as well.

- (14) a. he gedælde [seofon hlafas]_{Od} [feower þusendum]_{Oi}
 'he divided seven loaves of bread among four thousand

people' (WPol 227.16)

b. he gedælde [feower þusendum]_{O_i} [seofon hlafas]_{O_d}

Even though the two kinds of objects showed alternation in Old English, an indirect object showed a strong tendency to precede a direct object, suggesting that IO-DO should be the base order in Old English. Lee (1996:15) argues that an indirect object was dislocated sentence-finally in the (14a).

Let us discuss heavy NP dislocation phenomena in Modern English, under which the weighty NP gets extraposed and focused sentence-finally.

- (15) He showed t_i to her [_{N_{PI}} the very interesting novel by the writer which had a lot of appealing stories]
- (16) He introduced t_i to her [_{N_{PI}} the extremely competent detective from Belgium who had successfully handled a lot of complicated cases].

In (15-16), the heavy NP objects get assigned Accusative Case from the main verbs, satisfying the Case Filter.⁴⁾ Then, these heavy NPs move rightwards to the sentence-final positions for some pragmatic reason which we will call 'end weight' that helps to dissolve miscommunication or confusion on the part of the listeners.

We already discussed the derivation of the SVO order from the base SOV order in the main clauses in Old English. We also talked about the SOV order in the embedded clauses in Old English, which was mainly due to the subordinate COMPs filled in by the complementizers, blocking movement of V-to-C. The crux at hand is that the embedded clauses in Old English also showed SVO order, which was deviant from its base order. Before the advent of generative grammar, it was argued by traditional grammarians that Old English was a language with free word order. However, since the development of generative grammar, the idea that there exist two types of languages, one with free order and the other with fixed word order has not been considered adequate, not reflecting the inner workings in the linguistic component of the human mind, since varied surface structures can be derived via linguistic

4) Case Filter is defined as follows: *[NP [-Case]]. In other words, every lexical NP in a sentence must get Case from a Case assigner.

operations from the base structure.

It should be noted in this regard that an object NP could be commonly shifted to the sentence-final position in Old English, as shown in (12a) and (13a).⁵⁾ We would also like to point out that the indirect object in (14a) was shifted sentence-finally in the main clause.

Even though only a heavy NP could be put sentence-finally in Modern English, just an ordinary non-heavy object NP was able to be dislocated sentence-finally in Old English. We argue that this type of object shift in Old English with rich inflections was possible, since there existed no problem identifying dislocated object NPs with clear morphological Case ending, which were reflections of inherent Case assigned by the verbs in Old English. For this matter, we will call the type of object shift in Old English a phenomenon of end-focus. The notion 'end-focus' was elaborated on by Quirk et al. (1985:1398) as follows.

(17) End-Focus

. . . to achieve an information climax with END-FOCUS

To put it simply, the object NPs in (12a) and (13a) and the indirect object in (14a) are assumed to have moved sentence-finally to achieve an information climax and become more focused in Old English.

(18) a. He gave [four thousand people]_{O_i} [seven loaves of bread]_{O_d}.

b. *He gave [seven loaves of bread]_{O_d} [four thousand people]_{O_i}

(19) a. He gave the girl a book.

b. *He gave a book the girl.

It was argued by traditional grammarians that the objects or complements of the verbs were assigned inherent Case by the verbs in Old English. Inherent Case assigned to the complements was characterized by clear morphological Case endings in Old English. Thus, complements with clear morphological Case endings were easily identifiable in Old English, and as such, their order in a sentence was taken to be relatively free.⁶⁾ Thus, objects with distinct

5) See Lee (1996:11-12) for this phenomenon in Old English.

morphological endings in Old English were shifted sentence-finally to achieve an information climax. On the other hand, the objects in Modern English with the loss of inflections have no clear morphological Case endings except for some pronominals, so they can rarely be dislocated sentence-finally, whose movement could lead to confusion or miscommunication on the part of the listeners, as exemplified in (18-19).

2.2. NP Extraposition in Particle-verb Constructions

In this context, we will consider the other type of NP shift in Old English, which was also found to be rather common during that period of time.

Lee (1996:2) and Goh (1999:191-194) claim that the particle-verb constructions in the Old - Middle English period were originators of phrasal verbs in Modern English. There is, however, a big difference between them: a particle is placed postverbally in Modern English, whereas a particle tended to appear preverbally in Old English (Lee 1996:3). For this reason, the structure for the particle-verb constructions was viewed as follows (Kemenade 1987:38, Koopman 1985: 109).

(20) [_V particle V]

(21) a. He rang up the lady.

b. He paid back his debts.

(22) a. þæt hie mid þæm þæt folc ut aloccoden

that they with that the people out enticed

'that they might entice with it the people (to come) outside'

b. swa þæt þa cristenan bealdlice inn-eodon

so that the Christians boldly in-went

'so that the Christians boldly went in'

As is seen in the above examples, a particle in general was immediately to the left of the verb, and the particle-verb structure appeared clause-finally in Old English.

Next, consider the following examples from Old English.

6) Refer to Lee (1996:12) for this phenomenon.

- (23) a. Ond þa *ahof* Drihten hie *up*
 And then raised God them up
 ‘And then God raised them up’ (BIHom 157.22)
- b. þa *sticode* him mon þa eagan *ut*
 then stuck him someone the eyes out
 ‘then his eyes were gouged out’ (Oros 90.14)

It is evident that the verbs underwent V2 movement while the particles remained in-situ in the above examples. In Sohng & Moon (2007), we argue that Agree (AGR_{COMP}, the verb) led to the verb movement to COMP in Old English.

Now consider the following sentences from Old English, which showed object movement.

- (24) a. þa *ahof* Paulus up his heafod
 then raised Paul up his head
 ‘then Paul raised his head’ (BIHom 187.35)
- b. þa *ahof* Paulus his heafod up
 then raised Paul his head up

As in (23), the verbs underwent V2 movement to COMP in (24a-b). The crux at hand is what happened in the order ‘object - particle’ in these examples. If the verbs moved to COMP, the particles should appear sentence-finally, as is suggested in (22-23). On par with object shift (12a) and (13a), the object, which was to the left of the particle-verb complex, was dislocated sentence-finally in (24a) to achieve an information climax. On the other hand, in (24b), the object was not dislocated, but stayed in-situ, to the left of the particle *up*.

Overall, objects in Old English were able to shift sentence-finally in the three types of structures, embedded contexts, double object main clauses, and particle-verb constructions, to achieve end-focus effects.

3. NP Extraposition in Modern English

Middle English (1100-1500 AD) showed a wide variety of word order, which was complicated, and the period was considered a transition from Old English to Modern English.⁷⁾ Middle English underwent extensive changes, one of which was a general reduction of inflections. Due to the decay of inflections during the Middle English period, juxtaposition, word order, and the use of prepositions all played important roles in making clear the relations of words in sentences. In Old English, the grammatical functions of two consecutive nouns were clear from their inflections in, for example, the Nominative and Dative Cases. In Middle English their functions might be unclear. The direct way to avoid ambiguity of this kind is through limiting the possible pattern of word order (Baugh & Cable 1993:162). Scholars including Kemenade (1987, 1993a, 1993b) have argued that Middle English became underlyingly SVO by around 1200, and that the V2 phenomena disappeared from the language at around 1400.

However, Middle English also showed the SOV pattern, as in the following examples.

- (25) a. & 3it he 3euiþ not þis grace.
 and yet he gives not this grace
 'And yet he does not give this grace.'
 (Cloud of Unknowing 69/12)
- b. for he hadde power of confessioun, . . . (Mustanoja 1960, 143)
 for he had power of confession
 'for he had power of confession, . . .'
- (26) a. 3if þei þise degrees knowyn.
 if they these degrees know
 'If they know about the degree [i.e. of affinity].'
 (Jacob's Well 21/17)
- b. I may no sorwe haue.
 I may no sorrow have
 'I may have no sorrow.' (Jacob's Well 22/8)

7) This is from personal communication with Professor Lee, P.-H.

Even though Middle English showed the SVO pattern as a major one, as in (25), it also exhibited the SOV pattern both in the main and the embedded contexts, as in (26). Word order in the Middle English period was pretty complicated and unclear, so we will not discuss NP shift in this transition period, where the literature on the phenomena of object dislocation is hardly available.

Modern English (1500 AD - present) lost most of the inflections that had been used in the Old English period. In Modern English, the subject and the object do not have distinctive forms. Due to the great reduction of inflections, Modern English came to depend heavily on fixed word order to indicate distinctive grammatical relations. (Baugh & Cable 1993:235).

We talked about the motivations for non-heavy object dislocation in Old English and the nonavailability of non-heavy object dislocation in Modern English in 2.1. To put it simply, objects with distinct morphological endings in Old English were dislocated sentence-finally to achieve an information climax whereas non-heavy objects in Modern English with no clear morphological Case endings can hardly be dislocated sentence-finally, whose movement could lead to confusion or miscommunication on the part of the listeners.

On the other hand, some types of NPs can be dislocated sentence-finally in Modern English, as shown below.⁸⁾

- (27) a. He showed t_i to her [_{NPi} the very interesting novel by the writer which had a lot of appealing stories]
 b. ?#He showed [_{NP} the very interesting novel by the writer which had a lot of appealing stories] to her.
- (28) a. He introduced t_i to her [_{NPi} the extremely competent detective from Belgium who had successfully handled a lot of complicated cases].
 b. ?*#He introduced [_{NP} the extremely competent detective from Belgium who had successfully handled a lot complicated cases] to her.

As can be seen in (27-28) and (29-30), there must be certain restrictions on

8) The symbol # is used to indicate the (very) unnaturalness or awkwardness of a sentence.

the dislocations of objects in Modern English.

- (29) a. I introduced [_{NP} the guy] to her.
 b. *I introduced t_i to her [_{NP_i} the guy]
- (30) a. I introduced [_{NP} the guy from Redmond] to her,
 b. ?I introduced t_i to her [_{NP_i} the guy from Redmond].

We claim that NP shift in Modern English is not a phenomenon of end-focus. The reason is that NP-shift in Modern English is limited to heavy NPs, as illustrated in (27a) and (28a).⁹ Elaborating on Selkirk (2001) and Shiobara (2002), we argue that NP shift in Modern English constitutes a phenomenon of end-weight, whose definition is given below (Quirk et al. 1985:1398).

(31) End-Weight

. . . to achieve a stylistically well-balanced sentence in accordance with the norms of English structure; in particular END-WEIGHT.

We thus claim that a heavy NP shifts sentence-finally to produce a stylistically well-balanced sentence in accordance with the norms of English structure in Modern English. Selkirk (1996, 2001) and Shiobara (2002) propose that weight should be measured by the number of prosodic words defined below.

- (32) A lexical word forms a prosodic word on its own whereas a mono-syllabic function word does not unless it carries a stress.

Based upon this definition of prosodic words, we find that the dislocated objects in (29b) and (30b) contain one prosodic word and two, respectively, whereas those in (27b) and (28b) contain eight and nine prosodic words, respectively. We

9) It should be noted, however, that the following sentence with an NP being phonologically focused is grammatical.

(i) I introduced t_i to him [_{NP_i} the GUY from REDMOND].

We observe that, as this is a PF phenomenon, this type of dislocation should be handled in the phonological component. This is not a key issue for our research.

argue that NP shift in Modern English is a phenomenon of end-weight and that an NP should contain at least eight prosodic words to count as "weighty" or "heavy".

It thus follows that, in Modern English, an NP which can count as "heavy" can be dislocated sentence-finally to yield a well-balanced structure in accordance with end-weight, and that a sentence with a weighty NP being shifted sentence-finally is preferred over one with a heavy NP staying in-situ, which is not in accordance with the norms of English Syntax.¹⁰⁾

We will pursue a constraint-based account of NP shift in English in the next section.

4. A Constraint-based Account of NP Shift in English

We noted in the previous sections that non-weighty object shift in Old English with rich inflections was a phenomenon of end-focus to provide an information climax, with no problem identifying a dislocated object NP with a clear morphological Case ending in Old English. We also noted that the non-heavy objects in Modern English with no clear morphological endings can rarely be shifted sentence-finally, whose movement could lead to confusion or miscommunication. We further noted that weighty NP shift in Modern English is a phenomenon of end-weight to achieve a stylistically well-balanced structure in accordance with the norms of English syntax.

In this section, we will provide a full-fledged account of NP shift in English by means of a set of hierarchical, violable constraints that operate actively in the English speakers' linguistic faculty. For the purpose of an account of the object NPs in-situ in all the examples so far, it is necessary to motivate the constraint

10) Some linguists argue that heavy-NP shift is an optional operation. However, as can be seen in (27) and (28), the sentences with heavy NPs shifted sentence-finally are preferred over those with heavy NPs in-situ. Thus, we argue that a sentence with a heavy NP dislocated sentence-finally is perfect in regards to the stylistic balance in light of the norms of English structure, whereas a sentence with a heavy NP in-situ is very awkward or a little marginal in regards to the structural balance. Hence a sentence with a heavy NP shifted is an optimal output, while a sentence with a heavy NP in-situ is non-optimal.

STAY, which requires the object NPs not to shift. Next, we need to motivate principles to require relevant object NPs to be shifted sentence-finally, namely, SATISFY_{end-focus}, and SATISFY_{end-weight}

Thus, we come up with the following constraints for NP shift in English.

(33) Constraints for NP Shift in English¹¹⁾

(A) STAY: Do not move.

(B) SATISFY_{end-focus}: Move an object NP sentence-finally to achieve an information climax.

(C) SATISFY_{end-weight}: Move a heavy object NP sentence-finally to achieve a stylistically well-balanced structure in accordance with the norms of English Syntax.

To put it simply, the interactions of these constraints yielded different types of sentences with respect to the locations and weight of object NPs in English. The following hierarchy of constraints is proposed to account for object shift in Old English.

(34) Ranking of the Constraints for object shift to sentence-final position in Old English

STAY = SATISFY_{end-focus}

From the viewpoint of the constraint-based account, it is evident that Old English allowed full optionality of sentence-final shift of object NPs, as the two constraints at issue are tied, i.e., unordered with respect to each other. We already observed in 2.1 that object dislocation to the sentence-final position in

11) An anonymous reviewer gave an insightful comment that the three constraints STAY, SATISFY_{end-focus}, SATISFY_{end-weight} will attain explanatory adequacy if the data from Middle English is to be accounted for in terms of the interaction of these constraints. However, we haven't yet found no literature available on that, so we will leave this matter open for future research.

Old English was possible, since there existed no problem identifying a dislocated object NP with clear morphological Case ending in Old English.

The relevant examples are given below, repeated from (7) and (24).¹²

- (35) a. ...þæt *se winsele* wiðhæfde heaþoderum
 ...that *the wine-hall* withstood brave-ones
 '...that the wine-hall withstood the brave ones...' (*Beo* 771-772)
 b. ...þæt *se winsele* heaþoderum wiðhæfde

12) A reviewer gave a very interesting, insightful comment that both V-particle- light NP and V-light NP-particle structures are possible in Modern English as well as Old English, and that only the structure V-particle-heavy NP is possible in Modern English. The reviewer further goes on to ask why the structure V-particle-it is not possible if the string V-particle-light NP is acceptable. First of all, the fact that only the structure V-particle-heavy NP is acceptable in Modern English can be accounted for in terms of the constraint interaction presented in (41) SATISFYend-weight > STAY > SATISFYend-focus in our paper.



As we noted in 2.1, the objects which were assigned inherent Case by the verbs and characterized by distinct morphological endings in Old English were shifted sentence-finally to achieve an information climax. In contrast, the objects with no clear Case endings in Modern English with the loss of inflections except for some pronominals can rarely be dislocated sentence-finally, whose movement will lead to a serious problem for sentence processing, as shown in (38).

We argue, following Givón (1979), that the phenomenon at hand should be resolved in terms of pragmatic principles. Under Givón's theory, the sentence '*John looked up it' can be handled by resorting to the discourse presupposition principle. According to him, there is a discourse presupposition hierarchy for sentences: discourse presupposition is highest at the beginning of a sentence, and it decreases in the order in which constituents appear, so it is lowest at the end of a sentence. This implicates that the higher structure for a sentence contains old information, while lower structure for a sentence includes new information. The pronominal 'it' in the sentence '*John looked up it' is old information, so it may not be used at the end of a sentence. This is applicable to the structure 'V-particle-it', not 'V-preposition-it', since prepositions are always followed by NPs including pronominals, under the norm for English Grammar, which has a priority over Givón's theory. For a different approach to the phenomenon at hand, the reader is referred to Ross (1967: 48ff). We thank the reviewer for his insightful comment that it is not clear whether to give a precise, clear-cut definitions of the terms 'heavy' and 'light'. Even though We argue that an NP should contain at least eight prosodic words to count as "weighty" or "heavy", this is not based on a solid theoretical foundation. The further refinement of the definitions will be a topic of our next research.

- ...that *the wine-hall* brave-ones withstood
 ‘...that the wine-hall withstood the brave ones...’
- (36) a. βa ahof Paulus up his heafod
 then raised Paul up his head
 ‘then Paul raised his head’ (BIHom 187.35)
- b. βa ahof Paulus his heafod up
 then raised Paul his head up

The following tableau will provide the characterization of the inner workings of the constraints at hand.

(37) Tableau for Object NP Shift in Old English

INPUT	STAY	SATISFYend-focus
Object Shift 	*	
Object in-situ 		*

What the interactions of the constraints presented above mean is that, in Old English, a shifted object NP yielded end-focus effects whereas an in-situ object NP did not.

We noted in 2.1 that the non-heavy objects in Modern English have no clear morphological Case endings, so they can rarely be dislocated sentence-finally, as exemplified in (38).

- (38) a. He gave the girl a book.
 b. *He gave a book the girl.

On the other hand, heavy NPs can be dislocated sentence-finally in Modern English, being stylistically well-balanced in accordance with the norms of English Syntax. Therefore, shifted heavy NPs are judged preferable to those in-situ, as shown below.

- (39) a. He introduced t_i to her [_{NPi} the extremely competent detective from Belgium who had successfully handled a lot of complicated cases].

- b. ?*#He introduced [_{NP} the extremely competent detective from Belgium who had successfully handled a lot of complicated cases] to her.
- (40) a. He showed t_i to her [_{NP_i} the very interesting novel by the writer which had a lot of appealing stories]
- b. ?*He showed [_{NP} the very interesting novel by the writer which had a lot of appealing stories] to her.

By slightly changing the hierarchy of the constraints, the seemingly confusing NP-shift phenomenon in Modern English can be nicely accounted for. The constraint $SATISFY_{end-weight}$ takes precedence over the other constraints to yield end-weight effects for the shifted heavy NPs, which, then, should be judged optimal.

We already noted that end-focus effects were available for light NPs in Old English, while this is hardly the case in Modern English. In this connection, the constraint $SATISFY_{end-focus}$ ranks lowest in the hierarchy of the constraints in Modern English.

Thus, we come up with the following hierarchy for object shift in Modern English.

- (41) Ranking of the Constraints for Object Shift to Sentence-final Position in Modern English

$SATISFY_{end-weight} > STAY > SATISFY_{end-focus}$


What the constraint $STAY$ ranking higher than $SATISFY_{end-focus}$ means is that a non-heavy object NP in Modern English hardly shifts sentence-finally to achieve an information climax, since its movement leads to confusion or miscommunication on the part of the listener, as exemplified in (42-43), repeated from (18-19).

- (42) a. He gave [four thousand people]_{O_i} [seven loaves of bread]_{O_d}.
 b. *He gave [seven loaves of bread]_{O_d} [four thousand people]_{O_i}
- (43) a. He gave the girl a book.


b. *He gave a book the girl.

The following tableaux show the interactions of the constraints at hand for sentence-final shift of object NPs in Modern English.

(44) Tableau for heavy Object NP Shift in Modern English

INPUT	SATISFY _{end-weight}	STAY	SATISFY _{end-focus}
Heavy NP Shift 		*	
Heavy NP in-situ	*		

(45) Tableau for light Object NP Shift in Modern English

INPUT	SATISFY _{end-weight}	STAY	SATISFY _{end-focus}
Light NP Shift 		*	
Light NP in-situ			*

The examples (39-40) are nicely handled by means of the interactions of the constraints in the tableau (44). Further, the examples (42-43) are well explained in terms of the interactions of the constraints in the tableau (45).

Overall, Old English allowed full optionality of sentence-final shift of light object NPs, i.e., end-focus effects were available for light NPs in Old English. We noted that this phenomenon was possible due to the fact that there existed no problem identifying dislocated object NPs with clear morphological Case endings in Old English. On the other hand, this is not the case in Modern English, since sentence-final shift of light NPs with no clear morphological Case endings may lead to confusion or miscommunication on the part of the listener. However, heavy NP shift to the sentence-final position in Modern English achieves end-weight effects and are judged optimal, being stylistically well-balanced in accordance with the norms of English Syntax. It thus follows that shifted heavy NPs are judged preferable to those in-situ in Modern English. All these linguistic phenomena are seen to be well explained in terms of the constraint interactions presented in (44) and (45) in the Optimality Theory framework.

5. Conclusion

NP shift has drawn a lot of attention and has led to a lot of research in the field of English Linguistics.

Old English had non-heavy or light NP shift to the sentence-final position, while Modern English does not have light NP shift of that type, but only has heavy NP shift. The motivations for these phenomena are as follows. First, object NPs with clear morphological Case endings, which were reflections of inherent Case assigned by the verbs in Old English, were easily identifiable in the shifted position, so they were shifted sentence-finally to achieve end-focus effects (Quirk et al. 1985:1398) in Old English. In other words, in Old English, a shifted object NP yielded end-focus effects whereas an in-situ object NP did not.

On the other hand, non-heavy objects in Modern English with the loss of inflections have no clear morphological Case endings. Thus, their shift to the sentence-final position leads to confusion, as exemplified in (18b), (19b), and (29b), and thus is judged marginal or ungrammatical. However, NP shift to the sentence-final position is available only for heavy NPs in Modern English. Heavy NPs shift sentence-finally to produce a stylistically well-balanced sentence in accordance with the norms of English structure, that is, end-weight in Modern English. In contrast, light NP shift in Modern English is judged marginal or non-optimal in the light of end-weight.

Section 4 has given a full-fledged account of NP shift in English by means of a set of hierarchical, violable constraints that operate actively in the English speakers' linguistic faculty. We have found that the two constraints *STAY* and *SATISFY_{end-focus}* were tied in Old English, due to the fact that object NPs with clear morphological Case endings were easily identifiable both in the shifted position and in the in-situ position.

We have further noted that *SATISFY_{end-weight}* tops the constraint ranking in Modern English, with the constraint *STAY* ranking higher than *SATISFY_{end-focus}*, which means that heavy NPs shift sentence-finally in accordance with end-weight and are judged optimal. It thus follows that in-situ heavy NPs in Modern English are not stylistically well-balanced in accordance with the norms of English Syntax, end-weight, and thus are judged non-optimal.

Overall, the constraint rankings for object NP shift in Old - Modern English

suggest that non-heavy object NP shift was a phenomenon of end-focus in Old English and that heavy NP shift is a phenomenon of end-weight in Modern English. We have shown that all these phenomena of different types of object shift can be nicely handled in terms of the constraint interactions presented in this paper.

References

- Baugh, A. C. & T. Cable. (1993). *A History of the English Language* (4th ed.). New Jersey: Prentice-Hall, Inc.
- Canale, W. M. (1978). *Word Order Change in Old English: base reanalysis in generative grammar*. PhD Dissertation. McGill University.
- Chomsky, N. (1998). *Minimalist inquiries: the framework*. MIT Occasional Papers in Linguistics 15. Distributed by MIT Working Papers in Linguistics. Cambridge, MA.
- Chomsky, N. (1999). *Derivation by phase*. MIT Occasional Papers in Linguistics 18. Distributed by MIT Working Papers in Linguistics. Cambridge, MA.
- Givón. (1979). *On Understanding Grammar*. New York: Academic Press.
- Goh, G.-Y. (1999) Establishments of Preposition-inclusive Verbs and Syntactic Prepositional Passives in Old English (고대영어의 전치사포함 동사와 통사적 전치사수동 구문의 생성) *English Language and Linguistics* vol. 8.
- Kemenade, A. Van. (1987). *Syntactic Case and morphological case in the history of English*. Dordrecht: Foris.
- Kemenade, A. Van. (1993a). The history of English Modals: a reanalysis. *Folia Linguistica Historia* XIII/1 2, 143-166.
- Kemenade, A. Van. (1993b). Syntactic change in late Middle English. In H. Aertsen and R. Jeffe. (Eds.), *Historical linguistics 1989* (pp. 235-248). Amsterdam: John Benjamins.
- Koopman, Willem F. (1985). Verb and particle combinations in Old and Middle English. In Eaton, R., Fischer, O., Koopman, W. and Van der Leek, F. eds. *Papers from the 4th International Conference on English Historical*

- Linguistics: Amsterdam, 10-13 April 1985. (*Current Issues in Linguistic Theory*, 41) Amsterdam: John Benjamins.
- Lee, P.-H. (1993). *A diachronic study on Word Order in English: The Minimalist Approach*. Ph.D. Thesis, Department of English, Seoul National University.
- Lee, P.-H. (1996) An Article on the Positions of Old and Middle English Particles, *Studies in Modern Grammar* vol. 9.1.
- Lightfoot, D. (1974). The diachronic analysis of English modals. In Anderson, J. & C. Jones (Eds.) *Historical Linguistics* (pp. 219-149). Amsterdam: North Holland.
- Lightfoot, D. (1979). *Principles of diachronic syntax*. Cambridge: Cambridge University Press.
- Lightfoot, D. (1981). Explaining syntactic change. In Hornstein, N. & Lightfoot, D. (Eds.) *The logical problem of language acquisition*. (pp. 207-240). London: Longman.
- Lightfoot, D. (1997a). Catastrophic change and learning theory. *Lingua* 100 (50th anniversary issue), 171-192.
- Lightfoot, D. (1997b). Shifting triggers and diachronic reanalyses. In van Kemenade & Vincent (eds), *Parameters of morphosyntactic change*. Cambridge: Cambridge University Press.
- Mustanoja, T. F. (1960). *A Middle English syntax*, part. 1., Helsinki: Société Néophilologique.
- Quirk, R., S. Greenbaum, G. Leech, & J. Starvik. (1985). *A comprehensive grammar of the English language*. London: Longman.
- Ross, J.R. (1967) *Constraints on variables in syntax*. unpublished Ph.D. dissertation, MIT. Reproduced by the Indiana University Linguistics Club.
- Selkirk, E. (1996). The prosodic structure of function words. In J. L.Morgan & K. Demuth. (eds), *Signal to syntax*. (pp. 187-213) Mahwah, NJ: Laurence Erlbaum Associates.
- Selkirk, E. (2001). *Phonological weight in sentence grammar: reexamining heavy noun phrase shift*. Paper presented at the Prosody in Processing Workshop, Utrecht, Netherlands.
- Shiobara, K. (2002). *On the interaction between end-weight and end-focus*. In 2002 *CLA Proceedings*. 273-284.
- Sohng, H.-K. & S.-C. Moon.(2007). Word order in the history of English. *The*

Linguistic Association of Korea Journal, 15(1), 159-198.

Traugott, Elizabeth C. (1965). Diachronic syntax and generative grammar. *Language*, 41, 402-415.

Texts Quoted by Abbreviated Titles

AHTh = *The Homilies of the Anglo-Saxon church*. Ed. B. Thorpe. (1971), AElfric Society, (1844, 1846). New York: Johnson Reprint Corp.

Beo = Beowulf and the fight at Finnsburg, ed. Klaeber. (1950).

BlHom = *The Blickering Homilies of the Tenth Century*. (1874-1880). ed. R. Morris, EETS. London: Oxford Univ. Press.

Chr. = The Old English chronicle. *The elements of Old English*. (1965).

CP = *King Alfred's translation of Pope Gregory's Cura Pastoralis*. (1871-1872). Ed. H. Sweet. EETS, vols. 45 and 50, London: Trübner.

Ha. = The harrowing of hell. *The elements of Old English*. (1965).

Mat. = The gospel of Matthew. *The elements of Old English*. (1965).

Oros = The Old English Orosius. (1980). ed. J. Bately, EETS, vol. 79. Trubner, London.

Hong-Ki Sohng

Department of English Language and Literature

Humanities, Hanyang University

17 Haengdang-dong, Sungdong-gu

Seoul 133-791, Korea

Phone: 82-2-2220-0740

Email: sohngkh1@yahoo.co.kr

Seung-Chul Moon

Department of English

Korea Aerospace University

200-1 Hwajeon-dong, Deokyang-gu

Goyang-si, Gyeonggi-do 412-791, Korea

Phone: 82-2-300-0071

Email: scm071@hanmail.net

Received: 1 February, 2009

Revised: 17 March, 2009

Accepted: 23 March, 2009