

An SIOV Hypothesis for Old English

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1 Introduction

The aim of this paper is to suggest an SIOV underlying structure for Old English. Since Chomsky's *Syntactic Structure* (1957), it has been the trend to study Old English syntactic structure under current transformational theories. According to that trend, there have been a lot of analyses of Old English underlying structure with current transformational theories. This can be called a theoretical analysis. In this paper, I would like to review two theoretical analyses of the underlying structure of Old English, and to suggest a new SIOV single underlying structure of Old English.

In general, we can analyze the syntactic structure of Old English using two different methods. One is the traditional analysis, and the other is the theoretical analysis. To distinguish the theoretical analysis from the traditional analysis, I'd like to explain the traditional analysis first.

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2 The traditional analysis

In the traditional analysis, scholars analyze existing Old English manuscripts and suggest their own conclusions based on evidence concerning the frequency of each word order. We can divide the entire traditional analysis into two parts. Before the 1960's, most scholars, including Charles C. Fries and Quirk & Wrenn, thought Old English was an SVO language. This is called the SVO hypothesis. Scholars before the 1960's focused on the high frequency of SVO order in main clauses only. But, after the 1960's scholars began to look into Old English manuscripts more deeply, and generally consider Old English an SOV language. This is called the SOV hypothesis. Nowadays we generally accept the SOV hypothesis in the field of the generative approach to the History of English. Anyway, using the traditional analysis, scholars use the frequency of word order in each sentence in Old English sources as data, and present them in support of their conclusions. Table 1 is an example of such data.

Table 1: Frequency of word orders in Old English subordinate clauses⁽¹⁾

	I		II		III		IV		V		VI		TOTAL	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%
SV	39	45	6	10	12	48	17	19	25	24	8	42	107	28
S...V	21	24	39	64	5	20	49	53	49	48	7	32	169	44
VS...	3	4	2	3	—	—	1	1	2	2	—	—	8	2
SXVX	8	9	6	10	2	8	9	10	7	7	2	11	34	9
SVIXV2	7	8	3	5	—	—	9	10	6	6	1	5	26	7
SV	8	9	2	3	5	20	6	7	12	12	2	11	35	9
Misc.	1	1	3	5	1	4	1	1	2	2	—	—	8	2
TOTAL	87		61		25		92		103		20		388	

With the frequencies of word orders in Table 1, we can find a great difference in the syntactic structure of subordinate clauses between Old English and Modern English. That is, the frequency of SOV word order is a lot higher than that of SVO word order. Table 1 is evidence of Old English being in the midst of a change from S...V language to SV... language. However, in spite of its footprint in studying Old English manuscripts, the current transformational grammarians have sometimes criticized the traditional analysis as it lacks explanation. According to them, the traditional analysis just describes the syntactic phenomena of Old English without explaining them.

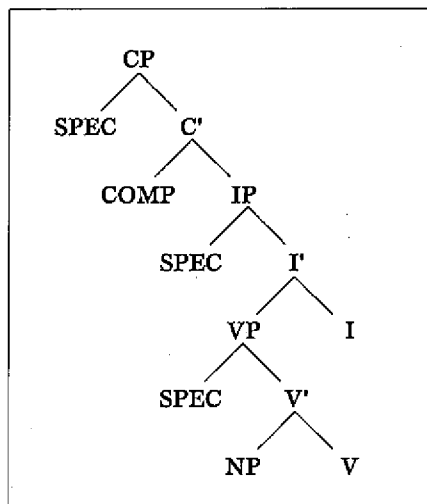
3 The theoretical analysis

Under the trend of theoretical studies of Old English syntax, there have been some different analyses of the underlying structure of Old English, which can be divided into two parts. One is the (single) ⁽²⁾ SOVI hypothesis and the other is the double-underlying structure hypothesis.

3.1 SOVI hypothesis

The SOVI hypothesis suggests verb-final SOVI structure (Figure 1.) as its underlying structure and derives SVO word order with V2 movement to COMP. However, it derives other various word orders from the SOVI structure using "Extraposition" of structural elements except verbs.

Figure 1. Underlying structure in SOVI hypothesis.



According to this theory all structural elements except verbs can be topicalized to the position SPEC(CP), and verbs move to COMP. Therefore, when the COMP node is occupied by a complementizer, for example *wh-* in subordinate clauses, V2 constraint cannot be applied and consequently the verb remains in its original structure-final position.

Example (1) is a general example of the Old English main clause, which has SVO word order, and (2) is a subordinate clause, which has SOV word order. In (1), the finite verb “*fortrōdon*” moves to the second position in the sentence after the subject “*ge*”. In (2), however, the finite verb “*fleoð*” remains in the final-position in the sentence, because the COMP node is occupied by the subordinate conjunction “*ðonne ðonne*”.

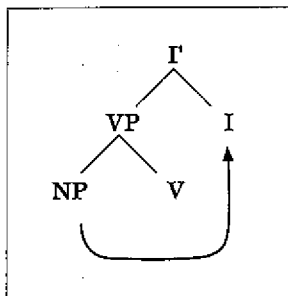
- (1) ge fortrædon Godes sceapa gærs (CP. 31. 1)
 'you trod down the grass of God's sheep'
- (2) ðonne ðonne hie sumne unðeaw unwærlice fleoð (CP. 271. 11)
 'when they avoided a vice incautiously'

The SOVI hypothesis clearly shows the asymmetric relationship between the Old English main clause and subordinate clause, and tries to keep the basic assumption of modern transformational grammar by assuming only one underlying structure in one language. However, we can find some problems in the SOVI hypothesis.

- (3) (a) he hine to cyninge gehalgode (A.853.6)
 'he consecrated him as king'
- (b) þa hwile þe mon worhte þa burg æt Tofeceastre mid stan wealle (A.921.55)
 'while one reinforced the fortress at Towcester by a stone wall'

Example (3a) is an Old English main clause, but the word order is SOXV. The SOVI hypothesis cannot explain this SOXV word order clearly, even though the pronoun object can be regarded as clitic. And (b) is an Old English subordinate clause, but it has X elements after the verb "worhte". According to the SOVI hypothesis, when the COMP is occupied by a subordinate conjunction, the verb cannot move to COMP. The SOVI hypothesis explains this SVO word order in the subordinate clause not using Verb-movement, but using Extraposition of NP (PP). According to the SOVI hypothesis, the NP rises to final INFL, and SVO order in the subordinate clause can be derived.

Figure 2. NP-Extrapolation in CV2



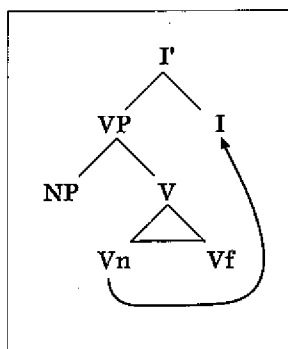
Consequently, the SOVI has to have at least two movement rules with different directions to explain OE word orders. In addition, the SOVI hypothesis explains the same SVO word order in main and subordinate clauses in different ways. That is, it explains SVO order in main clauses by V2 movement, but SVO order in subordinate clauses by rightward NP extrapolation. However, even though problems concerning the landing site of extraposed elements in SOV languages are difficult to solve, it cannot be INFL as long as we accept the standard theory. It seems to me that the SOVI hypothesis lacks consistency in explaining OE syntax. In addition to the problem, the SOVI hypothesis has another problem in its explanation of complex verb construction.

- (4) þæt hi hine ne mehton ferian (A.894.33)
 'so that they could not move him'

Example (4) is also an example of Old English subordinate clauses, but the finite verb (Vf) does not follow the non-finite verb (Vn).

Under the SOV hypothesis, the order of the complex verb constituent in (4) should be “ferian mehton”. The SOVI hypothesis explains example (4) using “verb-raising” of the non-finite verb as in Figure 3.

Figure 3. Verb-raising in Old English



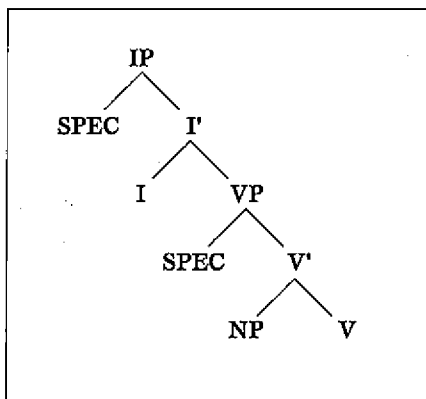
However, in that case, the SOVI hypothesis needs another verb-movement in a different direction in addition to the leftward verb-movement (V2 constraint). In spite of its several strong points, it contradicts itself, by assuming two different verb-movements in different directions in one language. Within one language, it is not desirable to assume two different verb-movements with different directions under current transformational grammar. And in the Old English period, the finite verbs began to lose their original feature as verbs and then could move more easily than non-finite verbs. Therefore, we cannot accept the explanation of the SOVI hypothesis that the Vn moves to INFL while Vf is still in its original position. Furthermore, there is no reason for the Vn to move to INFL. How can it obtain INFL feature? Furthermore, the movement of Vn crossing over Vf violates the Head

Movement Constraint. However, if we assume I-initial structure, we do not need the raising rule, and then, the simplicity of the I-initial hypothesis can be said to be higher than that of the I-final (SOVI) hypothesis.

3.2 Double-underlying structure hypothesis

Several scholars following Susan Pintzuk (1991, 1992) proclaim that under the SOVI hypothesis, we cannot explain the various types of Old English word orders, and suggest there are syntactic variants in Old English phrase structure. Specifically, both VP and IP can be either head-initial or head-final. Figure 4 is one possible underlying structure under this theory.

Figure 4. An underlying structure in double underlying structure hypothesis



Under the double-underlying structure hypothesis, the verb doesn't move to COMP, but to INFL, and therefore topicalization is also a movement to SPEC(IP), not SPEC(CP). This means we can set up SVO underlying structure for the main clause and SOV for the subordinate clause, and vice versa.

- (5) (a) Offa nam þone tuun (A.777.2)
 'and Offa took the village'
 (b) He þa swa dyde (A.853.3)
 'He then did so'
 (c) þa hwile þe mon worhte þa burg æt Tofecestre mid stan
 wealle (A.921.55)
 'while one reinforced the fortress at Towcester by a stone
 wall'
 (d) gif hie æigne feld secan wolden (A.894.10)
 'if they wished to attack any open country'

Example (5a) and (b) are main clauses, but (a) has SVO order and (b) has SOV order. (5c) and (d) are subordinate clauses, but (c) has SVO order and (d) has SOV order respectively. If we accept the double-underlying structure hypothesis, we can assume that we need not set up any rules to explain the different surface word order between (a) and (b), and between (c) and (d), because every sentence in example (5) can itself be its original underlying structure of each sentence respectively. However, there are many anti-examples because of which we cannot accept the double-underlying hypothesis.

- (6) (a) siððan he his cnihtas gelæred hæfde ðone cræft ðæs lare-
 owdomes (CP.385.3)

'when ha had taught his disciples the art of teaching'

- (b) forðam þe he asceacen wæs fram Æðelrede cynge ofer
ealle ða getrywða (A.1001.13)

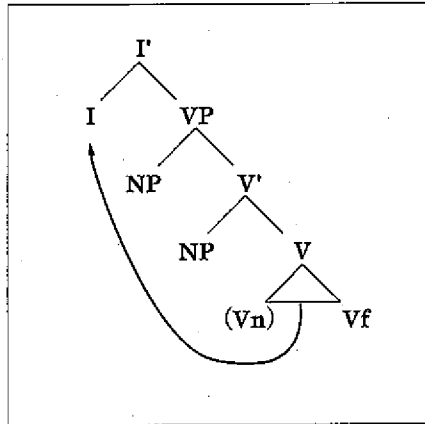
'because he had departed from the allegiance of king
Æthelred'

- (c) ðæt ðis Iudeisce folc micclum blissigan wile mines deaðes
(AHNL.167)

'that the Judean folk will rejoice greatly of my death'

All sentences in example (6) are examples of Old English subordinate clauses, and (6a) has Conj + Suj + IO + Vn + Vf + DO, (6b) has Conj + Subj + Vn + Vf + PP, and 6c has Conj. + Subj. + Adv. + Vn + Vf + Obj. The Vn + Vf orders are typical examples of Old English subordinate clauses, but there are other elements after the verbs. That is, under the double-underlying structure hypothesis, SVO order can also be its underlying structure like SOV order, but the order in these complex verb constituents is that of SOV order. In these cases, the double-underlying structure hypothesis explains these examples with the rightward NP-extraposition rule, which moves the X element after the verbs. This means that the double-underlying hypothesis still needs some rules, even though it suggests the double-underlying structure as an easy explanation of complicated surface structures. However, if we accept the SIOV underlying hypothesis, we can explain the Vn + Vf structure in the subordinate clause with leftward verb movement rule as in Figure 5.

Figure 5. Optional V2 movement in the SIOV hypothesis



As we can see in Figure 5, the Old English finite verb can move alone to COMP through INFL, or with a non-finite verb if there is a non-finite verb. With this optional verb movement, we can explain the Vn + Vf order in the subordinate clause as in (6). When the COMP node is occupied with a complementizer, the landing site of the verb movement is INFL. With this hypothesis, we can explain the asymmetric relationship between Old English main and subordinate clauses, and the problems of the SOVI hypothesis or double-underlying structure hypothesis. As an example, a subordinate clause which has a verb between the subordinate conjunction “se” and the NP element like in example (7).

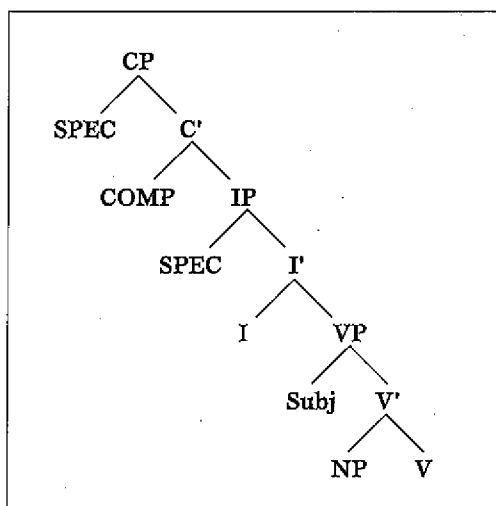
- (7) se wæs gecoran biscop to Eferwic (A.1070.7)
 ‘who was elected bishop of York’

Under the SIOV hypothesis, even though the COMP is occupied by the subordinate conjunction, the verb “wæs” can move to INFL, and we need no additional rule except verb movement.

4 Conclusion

I have shown the differences between the traditional analysis and the theoretical analysis in studying Old English syntax, and that both the SOVI hypothesis and the double underlying structure hypothesis have some problems in explaining Old English syntactic structure. When we assume a new SIOV underlying structure⁽³⁾, as in Figure 6, as Old English underlying structure, we can solve all of the above mentioned problems.

Figure 6. SIOV single underlying structure hypothesis for Old English.



Using an SIOV underlying structure and only one leftward verb-movement rule as in Figure 5, we can explain the problems mentioned above and other various types of Old English word orders very simply and consistently. At first, look at example (3) again.

- (3) (a) he hine to cyninge gehalgode (A.853.6)

'he consecrated him as king'

- (b) þa hwile þe mon worhte þa burg æt Tofeceastre mid stan wealle (A.921.55)

'while one reinforced the fortress at Towcester by a stone wall'

The examples in (3) were very common word orders in OE. However, as I mentioned in chapter 3.1., the SOVI hypothesis cannot explain those examples. (3a) is a main clause, and there is no complementizer in COMP. Therefore, according to the SOVI hypothesis, the verb should move to the position between the subject "he" and the object "hine". But, the verb "gehalgode" is in the final position in the sentence. In this case, some scholars of the SOVI hypothesis try to explain it by adopting their theory of "cliticization". But, even though we can accept their assumption, the PP "to cyninge" still remains unexplained. However, in the SIOV hypothesis, in which the verb movement to COMP is an optional movement, the verb, which already moved to INFL, does not have to move to COMP again even though the COMP is not occupied. The SIOV hypothesis can explain (3b) without using the NP extraposition rule. The verb in example (3b) cannot move to COMP because the nose is already occupied by the subordinate conjunction "þa hwile," after its movement to INFL. In (3a), the SPEC(IP) is occupied by subject "þe mon," and the other elements,

after the verb, remain on their original positions. The SIOV hypothesis can also explain example (4) and (6) very simply and clearly. As in example (4) and (6), we can find a lot of complex verb examples which do not follow Greenberg's system according to the sentence type. Both the SOVI hypothesis and double-underlying structure hypothesis either do not explain those examples or need other rules to explain them. However, with only one optional verb movement rule, the SIOV hypothesis can explain them. Look at example (4) and (6) again.

(4) *þæt hi hine ne mehton ferian* (A.894.33)

(6) (a) *siððan he his cnihtas gelæred hæfde ðone cræft ðæs lareowdomes* (CP.385.3)

(b) *forðam þe he asceacen wæs fram Æðelrede cynge ofer ealle ðagetrywða* (A.1001.13)

Even though all of examples in (4) and (6) are subordinate clauses, the positions and word orders of their verbs are different to each other. For easy understanding, I've rearranged them as follows.

(4)' [_{CP}conj [_{IP} subj [obj [_I Vf [_{VP} Vn t]]]]]]]

(6) (a)' [_{CP}conj [_{IP} subj [obj [_I Vn Vf [_{VP} X t]]]]]]]

(b)' [_{CP}conj [_{IP} subj [_I Vn Vf [_{VP} X t]]]]]]]

As we saw in chapter 3, both the SOVI and double-underlying structure hypothesis do not explain them. However, we can derive them from SIOV underlying structure using the optional verb movement rule. In (4), the Vf moves to the left side of Vn from its original sentence-final position. In (6), the entire complex verbs (Vn + vf)

move to the position between the object and X in (6a), and to the left side of X in (6b). Consequently, by assuming I-initial hypothesis, we can explain it without assuming an additional NP raising to INFL. Therefore, I can say that this SIOV underlying structure hypothesis is a more economical and desirable hypothesis than the SOVI hypothesis and double-underlying structure hypothesis because it keeps the basic assumption of modern transformational grammar and needs just one movement in explaining various word order types we can find in Old English manuscripts.

Notes

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- (1) The data analyzed in Table 1 were of the Parker manuscript of the Anglo-Saxon Chronicle. Within the Chronicle following divisions were made: (I) pre-755 A.D.; (II) 755-884; (III) 885-891; (IV) 892-900; (V) 901-1001; (VI) 1002-1070. The dating of divisions was not arbitrary. For details, see SangWoo Han (1995).
- (2) Comparing it with the double-underlying structure hypothesis in 3.2, I put "single" in front of the SOVI hypothesis.
- (3) This SIOV underlying structure hypothesis is also a single underlying structure hypothesis like an SOVI hypothesis.

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