Toward a Theory of Word Order Change: Parameter Percolation Principle
Shinji Saito  Masao Okazaki
Masaharu Shimada

In this joint research, we attempted to propose a universal principle governing the word order change from the viewpoint of the principles-and-parameters approach. In particular, we reanalyzed the word order change in the history of English, adopting as the basis of our investigation Chomsky's (1986) X'-theory, where S and S' correspond to IP and CP, respectively.

In the first place, we attempted to establish the underlying word order in Old English (OE). We claimed with Lightfoot (1981) and Kemenade (1984) that the underlying word order of OE is SOV on the basis of an investigation into the data in The Anglo-Saxon Poetic Records (ASPR). This is evidenced by the following two facts: i) in embedded sentences a verb occupies the final position, as in (1a), and ii) in root sentences a verb occupies the second position, as in (1b).

(1) a. Þa seo sæl gewærd

þæt his wif sunu
then the time became
that his wife the son

b.
sunu lamedees,
the son of Lamech
pa he mid bearnun
when he with the sons
dugetum dyrum.
with a lot of animals.

(Gen A, 1186b-1187)

Noe hæfde,
Noah had
syxhund wintra
six hundred of winters
under borg gestah,
under the plank went
(Gen A, 1369b-1372a)

We further showed that there is a sharp contrast between the word order pattern in the Early OE (EOE) period and that in the Late OE.
(LOE) period. Specifically, in EOE unstressed personal pronouns never occupy the first position of root sentences when a verb occupies the second position. In LOE, on the other hand, unstressed nominative personal pronouns occupy the first position of root sentences when a verb occupies the second position, as in (2).

(2)  
He hæfde god gepanc  
healdan wihte  
while he with hands  
hold could  
board and broadsword ...

(Mld, 13b-15a)

We claimed that this contrast between EOE and LOE is due to the difference in the position of I. Specifically, we argued that EOE is an SOVI language on the grounds that in SOVI languages where the Verb Second Phenomena (V2) are operative, unstressed personal pronouns, not focalized, are not able to occupy the initial position of root sentences, a position for focalized elements. LOE is, by contrast, an S1OV language, for, in S1VO languages where V2 is operative (e.g. Modern German), unstressed nominative personal pronouns occupy the first position of root sentences, which is not a position for focalized elements.

At the next stage, we attempted to establish the underlying word order in Late Middle English (LME) on the basis of an investigation into the data in the poetic works of Geoffrey Chaucer and The Owl and the Nightingale. We argued that LME is an S1OV language mainly based on the examples in (3). V2 is operative in both root and embedded sentences and unstressed nominative personal pronouns occupy the initial position of root sentences.

(3) a. Ye shul me never on lyve yse.
You shall me never on life see.

(BD. 205)

b. Ye knowe what this ensembel may resemble.
You know what this ensemble may resemble.
(D.WB.90)

We further observed, following the traditional analyses, that the underlying word order in Modern English (ModE) is SIVO. Thus, it can be said that the underlying word order is changed in the history of English as follows: SOVI (EOE) → SIOV (LOE→LME) → SIVO (ModE).

This change amply shows that the value of the Head-Complement Parameter is changed in the course of the diachronic word order change. In particular, in EOE, both IP and VP are head-final; from LOE through LME, IP is head-initial, while VP is still head-final; in ModE, both IP and VP are head-initial. This change also shows that the change of the parameter value begins at CP and percolates down to IP and VP.

Thus, we claimed that it is quite reasonable to propose a general principle on the word order change, called the Parameter Percolation Principle, which is roughly formulated as in (5). We strongly believe that this principle sheds fresh light on the nature of word order change, or more generally, on the nature of diachronic syntactic phenomena.

(5) **Parameter Percolation Principle**

The value of a parameter percolates down from CP to VP in the course of word order change.