Title: What is behind the word order change?: the emergent functional categories drive innovation
Author: Fuyo Osawa, Hosei University
Keywords: emergence, functional category, word order, stress, branching

The word order change, especially the OV-to-VO change is most widely discussed by many researchers. This change is, however, part of a more comprehensive and wider change of the language nature, i.e. strengthening of syntax which I name 'syntacticization' with a meaning different from the previously argued notion (cf. Kastovsky 2009).

I assume that in earlier English functional categories like DP, vP (ex-AgrO), were absent or only limitedly existed. Over time, functional categories emerged in the clause structure (cf, van Gelderen 1993, 2000, 2004, Roberts and Roussou 2003, Osawa 2003, 2007). For example, the nominal structure changed from an NP to a DP via the emergence of a D.

(1) a. OE   NP   b.   PDE   DP

                  →   D'

   N N N   D NP

Strengthening is realized as the emergence of functional categories like this. A new structure brought about many innovations. A D takes care of a task such as referentiality assignment, instead of case morphology. Syntax takes over the task of other domains. More and more tasks go to syntax.

I claim what happened is not the shift from OV-to- VO. Although the OE word order is said to be OV, actually OE was a relatively free word order language with VO predominant in main clauses and OV predominant in subordinate clauses. This means that the OE clause structure is not configurational but flat such as (2):

(2) OE clause structure   (NP1 and NP2 are unordered with respect to each other and can be zero.)

        VP

    V NP1 NP2

Although this flat structure might look strange, if we take historical facts into consideration, this structure is a feasible one in OE. By historical facts, I mean the absence of the double object constructions in OE (cf. Osawa 2020) and the presence of impersonal constructions in OE (cf. Fischer and van der Leek 1983 ; Osawa 2000, 2007).

In this flat structure, Cinque's (1993) null theory of stress assignment based on Chomsky and Halle (1968) does not work. Cinque's null theory states that the most deeply embedded constituent in a structure, that is ordinarily the innermost complement of the phrase head, is given stress. This stress rule depends entirely on the direction in which depth of embedding develops. That is, in the right-branching language like Present-day English, the main stress falls on the rightmost constituent, therefore, a VO language, while in the left-branching language like Japanese, the stress is located in the leftmost constituent, thus an OV language. The location of the main stress is related to the direction of branching of a given language.

For this rule to apply, the relation between constituents must be asymmetrical in the sense that one of the two is necessarily more deeply embedded than the other. Without this asymmetry, in OE, this rule does not apply. Those elements of language such as stress that may not be encoded by grammar were determined by means of ordinary prosodic variables, irrespective of syntax.

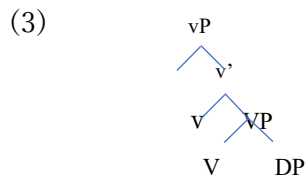The change happened, i.e., the emergence of a new functional category a vP above the lexical projection

VP.

(3)

```
        vP
       ╱╲
         v'
        ╱╲
       v  VP
          ╱╲
         V  DP
```

    As shown in (3), the structure became hierarchical: if the flat structure (2) is extended horizontally as it is, there are many daughters under the one node: this structure cannot be parsable cognitively. Whereas, this structure (3) positions the functional category v as head over the lexical category V. This structure establishes the parallelism with the DP structure (1b). The presence of a functional category can fix the position of constituents in the clause structure. Here the null theory of stress assignment comes in. The main stress is located in the most deeply embedded constituent, i.e. the rightmost complement, thus, VO order obtains. Therefore, locating stress is determined by the syntactic structure, and no specific phonological rule is needed (cf. Szendröi 2001).

References

Chomsky, Noam and Morris Halle (1968) *The Sound Pattern of English*, Harper and Row: New York.

Cinque, Guglielmo (1993) A Null Theory of Phrase and Compound Stress, *Linguistic Inquiry* 24. 239- 298.

Fischer, Olga and Frederike van der Leek (1983). The Demise of the Old English Impersonal Construction, *Journal of Linguistics* 19. 337-368.

Gelderen, Elly van (1993). *The Rise of Functional Categories*. John Benjamins: Amsterdam.

Gelderen, Elly van (2000). *A History of English Reflexive Pronouns*. John Benjamins: Amsterdam.

Gelderen, Elly. van (2004). *Grammaticalization as Economy*. John Benjamins: Amsterdam.

Kastovsky, Dieter (2009) Astronaut, Astrology, Astrophysics: About Combining Forms, Classical Compounds, and Affioids, *Selected Proceedings of the 2008 Symposium on New Approaches in English Historical Lexis* (HEL-LEX 2), ed. by R.W. McConchie, Alpo Honkapohja, and Jukka Tyrkkö, 1-13, Cascadilla Proceedings Project, Somerville, MA

Oehrle, Richard ,T. (1976) *The Grammatical Status of the English Dative Alternation.* Doctoral dissertation, MIT.

Osawa, Fuyo (2000) *The Rise of Functional Categories: Syntactic Parallels between First language Acquisition and Historical Change*, Doctoral dissertation, University College London.

Osawa, Fuyo (2003) Syntactic Parallels between Ontogeny and Phylogeny. *Lingua*. .113.1, 3-47.

Osawa, Fuyo (2007) The Emergence of DP from a Perspective of Ontogeny and Phylogeny: Correlation between DP, TP and Aspect in Old English and First Language Acquisition." *Nominal Determination: Typology, Context Constraints, and Historical Emergence.* ed. by Elisabeth Stark, Elisabeth Leiss and Werner Abraham, 311-337, John Benjamins: Amsterdam.

Osawa, Fuyo (2020) What the Emergent DP Brought about: The Emergennce of the Double Object Construction in English, *Studies in Linguistic Variation and Change 3* ed. by F. Toupin, S. Gatelais and I. Sasu, 89- 110. Cambridge Scholars Publishing: NewCastle upon Tyne.

Roberts, Ian and Anna Roussou (2003) *Syntactic Change*: *A Minimalist Approach to Grammaticalization,* Cambridge University Press: Cambridge.

Szendröi, Kriszta (2001) *Focus and the Syntax Phonology Interface,* Doctoral dissertation, University College London.