

Title: What is behind the word order change? the emergent functional categories drive innovation

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Main claim: The word order change from ‘OV to VO’ is, in essence, the strengthening of syntax which I name ‘syntacticization’.

☞ Syntax decides the location of the main stress, which, in turn, determines the word order.

‘Syntacticization’ = Syntax takes care of more and more tasks.

Short abstract

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. the strengthening of syntax which I name ‘syntacticization’ with a meaning different from the previously argued notion (cf. Kastovsky 2009).

‘The word order change’ issue should not be discussed as such, since this is the surface realization of more fundamental changes behind the scene.

More fundamental changes: • the emergence of functional categories

- ☞ the clause structure change i.e., from flat to hierarchical structure
- The null theory of stress assignment can be applied.
- The main stress is located on the most deeply embedded complement.
- The VO order obtains.

1. The mechanism of the main stress assignment

Assumption: Cinque’s null theory (1993: 271) : a phrase's main stress is located on its most deeply embedded constituent. This is ordinarily **the innermost complement of the phrase head**; hence, the location of the main stress is expected to covary with the location of the innermost complement, as determined by the head-complement parameter.

More specifically,

Cinque shows that the following generalizations hold across several languages and constructions:

- (1) a. In a head-complement structure, the complement is prosodically more prominent than the head.
b. In a specifier-X structure, X is prosodically more prominent than the specifier.

This is based on Chomsky and Halle's (1968) **Nuclear Stress Rule**. Cinque argues that no language-specific proviso is necessary and that the (unmarked) pattern of phrase stress can be entirely determined on the basis of surface syntactic constituent structure.

• Nuclear Stress rule (Chomsky and Halle:1968)

The Nuclear Stress Rule re-assigns primary stress to the rightmost primary stressed syllable in a phrasal

component and reduces all other stresses by one degree in that component. The rule starts working on the most deeply embedded component first.

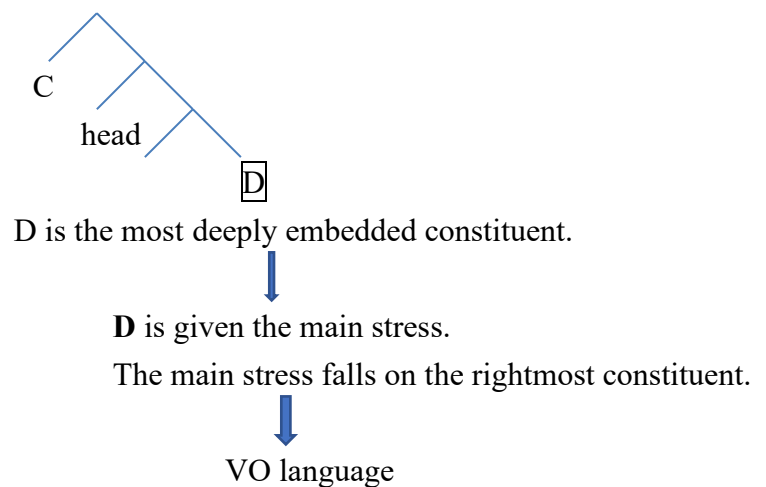
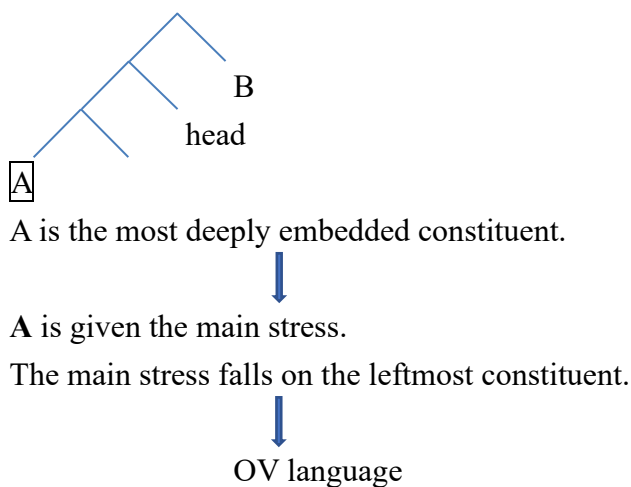
Assuming Cinque's (1993) null theory of stress assignment, Tokizaki (2011, 2013) and Tokizaki and Kuwana (2013) have proposed that there is a correlation between word stress location and word order in world languages (Tokizaki 2013). Languages with left-hand stress choose complement-head order such as OV order, since this stress pattern is compatible with compound stress. Meanwhile languages with right-hand stress choose head-complement order such as VO order this stress pattern is compatible with phrasal stress.

☞ This mechanism is illustrated below.

(2)

a. left-branching :ex. Japanese

b. right-branching: ex. Present-day English



Thus, in a VP, main stress should be to the right of V in VO languages and to its left in OV languages.

This rule can explain the stress assignment of Present-day English.

Hence, no language-specific rule (such as the Nuclear Stress Rule) should be postulated to determine stress prominence at the phrase level (Cinque 1993: 246).

Cf. Tokizaki (2011) Tokizaki (2013) Tokizaki and Kuwana (2013).

2. Old English situation

2.1. Can Cinque's null theory be working in Old English clauses?

☞ Unfortunately, this theory does not work in Old English.

Why?

One necessary condition for this main stress rule to apply

☞ For this rule to work, the relation between constituents must be asymmetrical in the sense that one of the two is necessarily more deeply embedded than the other.

There must be asymmetry between constituents!!

Without this asymmetry, this stress assignment rule does not work!

However, no asymmetry in Old English complements.

Historical facts show that there is no asymmetry in Old English clause structure.

By historical facts, I mean:

(i) free word order

(ii) the absence of the double object constructions in Old English (cf. Osawa 2020) and

(iii) the presence of impersonal constructions in Old English (cf. Fischer and van der Leek 1983 ; Osawa 2000,

2007).

See the next section.

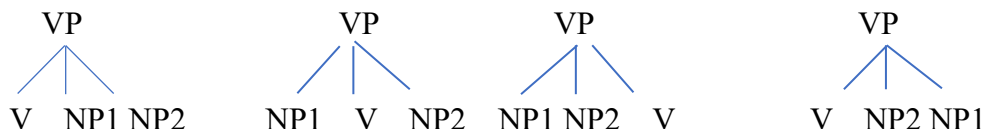
2.2. Old English clause is **not hierarchical, but flat**.

I assume that in earlier English functional categories like DP, vP (ex-AgrO), were absent or only limitedly existed. Languages without functional categories show word order variation.

(cf. van Gelderen 1993, 2000, 2004, Roberts and Roussou 2003, Osawa 2003, 2007, 2009).

2.2.1 (3) Old English clause structure:

(i) in the case of VP



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

•All the word order varieties shown in (3i) are attested in Old English(Osawa 2020: 97).

•Although this flat structure might look strange, if we take historical facts into consideration, this structure is a feasible one in Old English. (cf. Oehrle 1976: 168, Fischer and van der Leek 1983)

2.2.2. the absence of ‘PDE type double object construction.’

In fact, there were no PDE type double object constructions which meet c-commanding relations of two objects, in Old English. See Osawa (2020)

2.2.3. the presence of impersonal constructions (i.e., subject-less) sentences

(4) Impersonal constructions:

norþan sniwde

From the north snowed

(Seafarer 31)

‘it snowed from the north’

In (4), there is no nominal element, but it consists of only a verbal element and an adverb.

(cf. Fischer and van der Leek 1983 ; Osawa 1996, 2000, 2007).

(ii) In the case of NP

(5) a. OE NP



Examples:

(6) Ælfred-es sweostor cynning-es

‘King Alfred’s sister’

(AS.Chronicle Parker MS 82. 2. 888)

[N1-GEN. + N-Head + N2-GEN.] type

(7) Ælfred-es cynning-es godsunu

‘King Alfred’s godson’

(AS.Chronicle Parker MS 82. 10. 890)

[N1-GEN. + N2-GEN. + N-Head] type

All in all, OE clause is a flat structure without hierarchy.

2.3. Word Order of Old English

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 (3)(5) and so on.

☞ The null theory of stress assignment does not apply to Old English.

☞ Languages without functional categories show word order variation. →child language

Without asymmetry, in Old English, this stress 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.

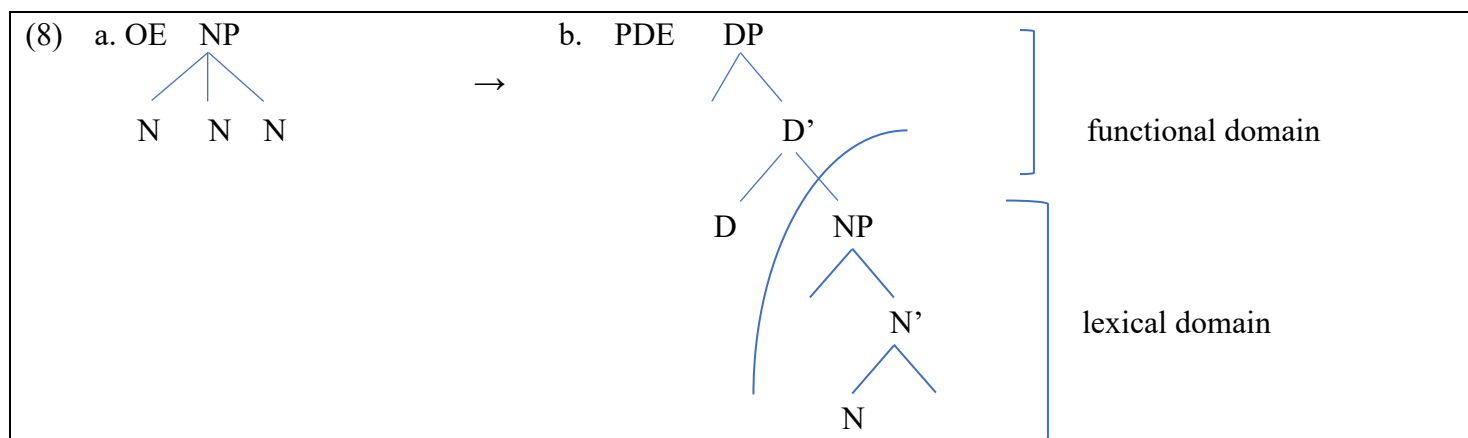
3 The Emergence of Functional Categories

The change happened!!!

The change happened, i.e., the emergence of a new functional category!

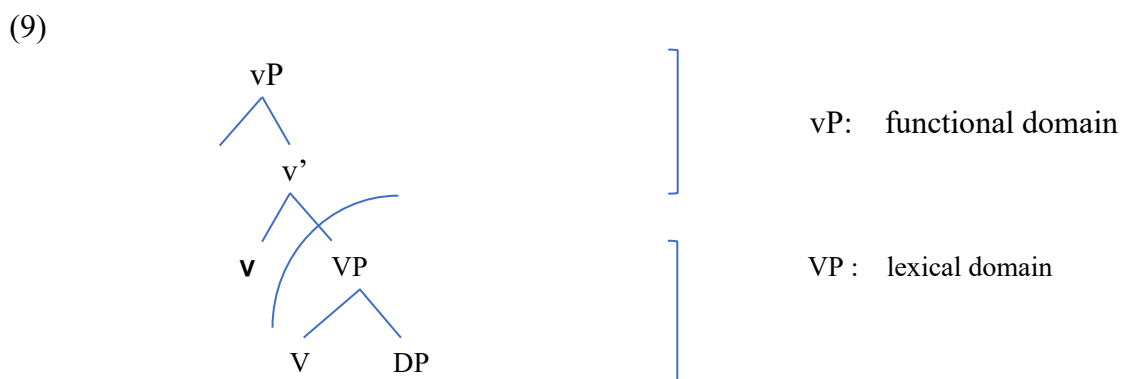
This emergence means that one more projection appeared over the lexical projection of Old English clauses.

In the case of nominal phrases, a DP appeared over the OE lexical projection, NP. See Osawa (2003, 2007, 2009) .



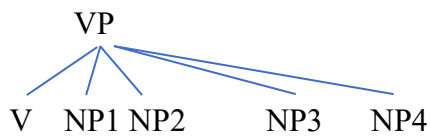
In the case of VP, a vP appeared over the VP.

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



As shown in (9), the structure became hierarchical: if the flat structure such as (3) or (4) is extended horizontally like (10), there are many daughters under the one node: this structure cannot be parsable cognitively.

(10)



Whereas, this structure (9) positions the functional category *v* as head over the lexical category *V*. This structure establishes the parallelism with the DP structure (8b).

The timeline of what happened in English:

(i) The emergence of a functional category can fix the position of constituents in the clause structure.



(ii) The clause structure changed from a flat to a hierarchical structure.

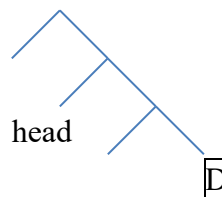


(iii) Here the null theory of stress assignment comes in.

The main stress is located in the most deeply embedded constituent, i.e. the rightmost complement.

Remember (1b).

(b) b. right-branching: ex. Present-day English



• D is the most deeply embedded constituent.



D is given the main stress.

The main stress falls on the rightmost constituent.



VO language

Thus, VO order obtains. Therefore, locating stress is determined by the syntactic structure, and no specific phonological rule is needed (cf. Szendrői 2001).

4 child language acquisition

One piece of supporting evidence for the argument that languages without functional categories show word order variation comes from child language.

Fixed argument positions depend on the presence of functional projections in clause structure. For example, in adult Present-day English grammars, the object argument appears in a fixed position as a result of its movement to the Spec of AGR-O or the Spec of small *v*.

If there are no such positions, there are no landing sites. No movement!

Hence, if a given language lacks functional categories, the language is expected to show free word order.

Tsimplici (1996) argues that early child grammars lack lexical and morphological elements which belong to the functional categories, irrespective of their adult counterparts (i.e., the target languages).

Osawa (2000) has shown that in early child English around the age of 24 months functional categories such as DP and vP are absent or only limitedly have existed.

As indeed, the early child clause structure renders the derivation illustrated in adult counterparts impossible because of the absence of the relevant landing site. Thus, objects at this stage are predicted to exhibit a certain variability compared to their adult counterparts. In other words, both OV and VO orders are available cross-linguistically (Tsimplici (1996: 160-174).

Variation in word order beyond what is possible in the adult languages (i.e., the target language) is exhibited in much early child speech: subjects may appear in pre-verbal or post-verbal position in English, Greek, Spanish, French and so on.

5 Further issues

Question: Is there French influence on this change?

The influx of French words into Anglo-Saxon English after the Norman Conquest.

From GSR (Germanic Stress rule) to RSR (Romance Stress rule) ?

Halle and Keyser (1971) argue that a major change in the history of English stress was a shift in directionality (or edge orientation) from the Germanic practice of computing stress from the left edge of the word to the right edge. Many researchers attribute this shift to the massive influx of Romance loanwords into English but there has been no agreement as to when the shift began.

•GSR: Stress is placed on the stem-initial syllable, regardless of quantity, building secondary stress from left to right. (Dresher & Lahiri 2005: 76)

•RSR: a. (i). If the final syllable is heavy or the only syllable, assign S.

(ii). If the final syllable is light, go back to the penult.

b. (i). If the penult is heavy, assign S.

(ii). If the penult is light, go back to the antepenult.

c. Assign S to the antepenult regardless of weight. (Lass 1992: 87)

In short, GSR says that “Ignore any prefixes (except those specified as stressable), and assign stress to the first syllable of the lexical root, regardless of weight.” Lass (1999: 56- 186).

☞ In Old English main stress falls on the initial syllable of a word.

6 Inertial Theory: Is Syntax redundant?

Longobardi's (2001:277, 278) Inertial Theory:

(11) In fact, under the Inertial Theory, I want to explore ... the hypothesis that at least *syntax* by itself, is diachronically completely inert.

(12) I will suggest that linguistic change proper ... may only originate as an interface phenomenon, in the sense of Chomsky's Minimalist Program.

(13) I will tentatively assume that syntactic change should not arise, unless it can be shown to be caused – that is, to be a well-motivated consequence of other types of change (phonological and semantic changes, including the appearance/disappearance of whole lexical items) or, recursively, of other syntactic changes....

Longobardi's Inertial Theory is based on the hypothesis of Inertia which is formulated by Keenan (1994, 2002, 2009):

(14) Inertia: Things stay as they are unless acted upon by an outside force or DECAY.(Keenan 2002: 37)

That is, grammatical change does not happen without some external cause.

Longobardi (2001) asserts that there is no such thing, strictly speaking, as 'syntactic change.' Changes classified as syntactic traditionally are reduced to other changes. This is based on the Minimalist approach that word order plays no role in narrow syntax, and it is determined at the phonological component.

(15) There is no clear evidence that order plays a role at LF or in the computation from N to LF. [...] Then ordering is part of the phonological component. Chomsky (1995: 334):

If this is on the right track, syntax may be redundant.... However, as we have observed in this paper, what happened is the strengthening of syntax.

Locating stress is determined by the syntactic structure, and no specific phonological rule is needed (cf. Szendrői 2001).

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