

From I-final to I-initial and from OV to VO: On two new non-postposing elements in Old English: predicative adjectives and *self*

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1. Introduction

A change from head-final to head-initial phrase structure for the inflectional and verbal domains affected English during the Old (OE) and Middle English periods (Pintzuk 1993, Kiparsky 1996, Kroch & Taylor 1997). Through grammar competition (Kroch 1989), initial phrase structure gradually becomes generalized.

(1) a. $[_{IP} [_I [_{VP} \dots] I^\circ]] \ggg [_{IP} [_I I^\circ [_{VP} \dots]]]$ b. $[_{VP} [_V [_{XP} \dots] V^\circ]] \ggg [_{VP} [_V V^\circ [_{XP} \dots]]]$

However, it is difficult to measure the frequency of I-final and I-initial phrase structure / of V-final and V-initial phrase structure directly because of V / VP raising and other rightward extraposition processes (e.g. Kemenade 1987).

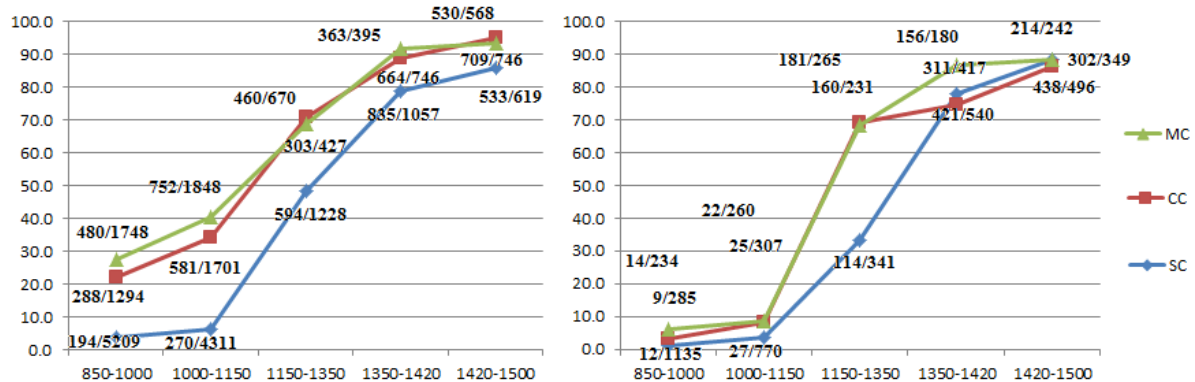
(2) a. subject verb object
 b. $[_{IP} \text{subject} [_I [_{VP} t_i t_j] I^\circ + \text{verb}_i]]$ object_j (I-final structure + extraposition)
 c. $[_{IP} \text{subject} [_I I^\circ + \text{verb}_i [_{VP} t_i \text{object}]]]$ (I-initial structure)

Thus, diagnostic elements that cannot possibly postpose need to be identified. If these elements occur in post-verbal position, they indicate necessarily initial phrase structure. The following are non-postposing diagnostics (Pintzuk 1999, Pintzuk & Haeberli 2008):

- particles
- stranded prepositions
- non-subject pronouns /demonstratives
- negatively quantified objects
- negative adverbs

(3) *post-verbal particle, necessarily I-initial clause*

... þæt hi $[_I \text{comon}_i [_{VP} \text{on Scotland } \underline{\text{upp}} t_i]]$
 ... that they came in Scotland up
 ‘... that they came up to Scotland’ (cobede, Bede_1:1.28.7.203)



Graph 1 & 2: Development of necessarily I-initial clauses (left) and necessarily V-initial clauses (right) by clause type (main clause, conjoined main clause, subordinate clause) and period, old diagnostics

2. Can primary predicative adjectives and *self* postpose?

2.1. Methodology

Assume that *self* and primary predicative adjectives do never postpose. We could compare the frequency with which *self*/predicative adjectives are found after the main verb between unambiguous I-final contexts and clauses that potentially possess a head-initial IP.

necessarily I-final contexts = {non-finite verb ... finite verb, non-finite clause ... finite verb, XP...YP...finite verb, particle ... finite verb, stranded preposition ... finite verb, negatively quantified object ... finite verb}

potentially I-initial contexts = {finite verb ... non-finite verb, finite verb ... non-finite clause, XP ... finite verb ... YP}

For I-final contexts, *self*/predicative adjectives should then never appear post-verbally. In potentially I-initial contexts, *self*/predicative adjectives should be able to occur after a main verb indicating leftward verb-movement.

2.2. Results

| root clauses | primary predicative adjectives | | <i>self</i> | | |
|---------------------|--------------------------------|-----------|-------------|-----------|----|
| | pre-verb | post-verb | pre-verb | post-verb | |
| I-initial | 14 | 155 | I-initial | 40 | 13 |
| I-final | 6 | 0 | I-final | 11 | 0 |
| subordinate clauses | pre-verb | post-verb | pre-verb | post-verb | |
| | I-initial | 62 | 97 | I-initial | 66 |
| I-final | 46 | 0 | I-final | 35 | 0 |

2.3. Examples

(4) a. *self*, potentially I-initial context, pre-verbal position

þa wununga we magon us **sylfum** gewyrcan.
 the dwelling-places we may us self work
 'we may build the dwelling places ourselves'
 (cocathom1,+ACHom_I,_16_[App]:535.47.3064) (cocura,CP:48.369.21.2496)

b. *self*, potentially I-initial context, post-verbal position

God þa geswutelode hyne **sylfne** Abrame
 God then revealed him self Abraham
 'God then revealed himself to Abraham' (cootest,Gen:12.7.465)

c. *self*, necessarily I-final context, pre-verbal position

and he sona gesund **sylf** upp aras,
 and he soon healthy self up arose
 'and he himself rose up at once, healthy'
 (coalive,ÆLS_[Maur]:257.1649)

d. **self*, necessarily I-final context, post-verbal position

→ ***self* and primary predicative adjectives do not postpose in early English**

3. Using the new diagnostics for the measurement of IP and VP headedness

frequency of necessarily V-initial sentences *finite verb – non-finite verb – self* as a percentage of all sentences with a finite verb, non-finite verb and *self* in any order.

- (5) Rufinus wolde habban him self þone anwold þær east
 R. wanted have him self the power there east
 ‘Rufinus himself wanted to have the power there in the east’ (coorosiu,Or_6:37.155.18.3304)

frequency of necessarily I-initial sentences, *finite verb – self*, as a percentage of all sentences with a finite verb, and *self* in any order.

- (6) if she sey so hirsellf, than woll I beleve hit.
 if she says so herself then will I believe it (CMMALORY,35.1127)

| period | SELF | | | OLD DIGANOSTICS | | |
|-----------|------|------|------|-----------------|------|------|
| | MC | CC | SC | MC | CC | SC |
| 850-1000 | 65.6 | 39.9 | 23.9 | 27.5 | 22.3 | 3.7 |
| 1000-1150 | 88.5 | 56.8 | 30.5 | 40.7 | 34.2 | 6.3 |
| 1150-1350 | 100 | 73.3 | 84 | 68.7 | 71.0 | 48.4 |
| 1350-1420 | 100 | 95.2 | 95.1 | 91.9 | 89.0 | 79.0 |
| 1420-1500 | 100 | 95.8 | 100 | 93.3 | 95.0 | 86.1 |

Table 1: Percentage of necessarily I-initial clauses by clause type and period, *self* vs. old diagnostics

| period | SELF | | OLD DIAGNOSTICS | |
|-----------|------|------|-----------------|------|
| | ROOT | SC | ROOT | SC |
| 850-1000 | 14.6 | 4.7 | 4.4 | 1.1 |
| 1000-1150 | 21.6 | 13.2 | 8.3 | 3.5 |
| 1150-1350 | 28.6 | 33.3 | 68.8 | 33.4 |
| 1350-1420 | 90 | 83.3 | 78.2 | 78.0 |
| 1420-1500 | 88.2 | 93.8 | 87.3 | 88.3 |

Table 2: Percentage of necessarily V-initial clauses by clause type and period, *self* vs. old diagnostics

→ The development of V- and I-initial structure is largely parallel between *self* and old diagnostics. This substantiates the claim that *self* is a new non-postposing element in early English.

frequency of necessarily V-initial sentences, *finite verb – non-finite verb – ADJ*, as a percentage of all sentences with a finite verb, non-finite verb, ADJ in any order.

- (7) Hu se lareow sceal bion clæne on his mode.
 how the teacher shall be clean on his mind
 ‘How the teacher shall be clean in mind’ (cocura,CP:13.75.18.501)

frequency of necessarily I-initial sentences, *finite verb – ADJ*, as a percentage of all sentences with a finite verb, ADJ in any order.

- (8) þou art worþy
 you are worthy (CMSIEGE,90.638)

→ The development of V- and I-initial structure as measured by predicative adjectives is very innovative; initial phrase structure predominates from early Old English on

4. High adjectival scrambling

While adjectives cannot postpose, they can undergo High Scrambling (move to the left). AdjP – finite verb order may be underlyingly I-initial with scrambling c. 25% of the time for the late Old English author Ælfric.

- (9) ...for ðam ðe se ælmihtiga God [swa mildheort]i wæs us ti þæt he his Sunu asende
 ... because the almighty God so mild-hearted was us that he his son sent
 '... because Almighty God was so compassionate to us that he sent his son.'
 (coaelhom, ÆHom_3:124.484)

5. Sketch of an LFG analysis

Extrapolation can be modelled as rightward IP adjunction, perhaps for i-structure reasons, focus-movement (10a). High adjectival scrambling can be modelled as leftward I' adjunction (10b). Adjectival extraposition is ruled out because of the non-existence of a relevant, language specific rule that could license it (10c). The rule secondary adjective postposition is formally different (10d).

- (10) a. IP --> IP DP
 ↑=↓ (↑ FOCUS)= ↓
 (↑ XCOMP OBL)= ↓
- b. I' --> AP I'
 (↑ XCOMP) ↑=↓
 (↑ XCOMP HIGH_SCRAMBLING)=+
- c. *IP --> IP AP
 ↑=↓ (↑ FOCUS)= ↓
 (↑ XCOMP)= ↓
- d. IP --> IP AP
 ↑=↓ (↑ FOCUS)= ↓
 ↓ \$ (↑ XADJUNCT)
 (↑ XADJUNCT SUBJ)=(↑ GF)

6. Conclusion

Predicative adjectives and *self* are non-postposing elements in early English and thus indicate necessarily initial phrase structure in post-verbal position. While *self* patterns exactly as expected, i.e. similar to other diagnostics, headedness with predicative adjectives is surprisingly innovative. Predicative adjectives can undergo high scrambling in late OE. The observed facts can easily be implemented in LFG as a set of language-specific phrase structure rules.

References

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