

An LFG model of Old English conjoined main clauses

Richard Zimmermann

University of Geneva

richard.zimmermann@unige.ch

There are several distributional differences in Old English between ordinary main clauses and those main clauses that are introduced by a coordinating conjunction, like *and* ‘and’, *ac* ‘but’, *opþe* ‘or’ and *ne* ‘nor.’ These differences are statistical in nature and not categorical. Firstly, main clauses are far more likely to show the finite verb in initial position similar to Modern English (1a)¹ than conjoined main clauses, which retain a conservative verb-final pattern more frequently (1b) (e.g. Bech 2001).

- (1) a. Se engel **gehyrte** hi mid his wordum
the angel encouraged them with his words (cocathom1,_CHom I, 13:284.110.2451)
- b. & þæt folc nugyt þæt tacn Iosepes gesetnesse **æfterfylgeað**
and that people now-yet that token Joseph’s law after-follows
‘And the people still follow that aspect of Joseph’s law’ (coorosiu,Or 1:5.24.13.472)

Secondly, main clauses have much higher rates of high verb placement in front of subject pronouns under negation (2a) than conjoined main clauses, where, as before, a clause-final position is often preferred (2b).

- (2) a. **Ne wylle** we þeh her na mare scaðe awritan
not will we though here no more scathe write
‘We will not, however, record here any more injustices’
(cochronD,ChronD [Classen-Harm]:1079.11.2519)
- b. & heo him hyran **ne woldon**
and they him hear not would
‘But they would not listen to him’ (cobede,Bede 2:2.98.19.917)

Third, constituent fronting to a clause-initial, information structural (possibly topic) position happens frequently in main clauses (3a), but is uncommon in conjoined main clauses (3b). The underlined post-verbal elements are diagnostics for verb-initial structures (cf. Pintzuk & Haerberli 2008 for the basic idea and methodology).

- (3) a. **þone suðran steorran** we ne geseoð næfre
the southern star we not see never
‘We don’t ever see the southern star’ (cotempo,_Temp:9.8.299)
- b. And heora nan ne sealde **swylce leafe** næfre,
and of.them none not gave such permission never
‘And none of them ever gave such a permission’ (colsigef,ÆLet_5_[Sigefyrth]:205.70)

Finally, pronouns can scramble before subjects after initial conjunctions (4a). In contrast, ordinary main clauses never show scrambled pronouns in pre-subject position (4b) despite the fact that – assuming an equiprobable scrambling rule in both clause types - several such instances would be expected in the surviving Old English material.

- (4) a. & **him** Scipia sende sciphre æfter
and them Scipia sent ship-army after
‘And Scipia sent a fleet after them’ (coorosiu,Or_4:10.106.31.2216)
- b. ?* **Him** Scipia sende sciphre æfter

These facts can be formalized as follows: A structurally high phrase, CP, optionally projects a fronted constituent in its specifier, allows either a complementizer or – in very restricted contexts – the finite verb in its head position C° and selects IP as its complement. The head of IP is the default position for finite verbs, but its directionality is variable so that both verb-initial and verb-final structures can be generated (e.g. Clark 2004). VP

¹ The syntactically parsed *York Corpus of Old English*, YCOE (Taylor et al. 2003) is the source for all examples, their citation, and the statistical counts that the generalizations described here are based on.

is the complement of IP and contains other lexical material like objects and non-finite verbs. One can then assume that Old English has a very special class of conjunctions, which can occur under C°, call them C-head conjunctions. This captures the higher rates of verb-final headedness (see ex. (1) above) and the lower rates of high verb placement (see ex. (2) above) in conjoined main clauses at the same time. A mechanism is needed that prevents fronting if a C-head conjunction is present in the syntactic structure (to rule out Old English sentences like *[_{CP} Mary [_{C°} and [_{IP} I like]]) intended: ‘And I like Mary’). This can be accomplished through clause-typing. CPs can have various types, like relative clauses, interrogatives etc. and crucially also types for constituent fronting, called CP[TOPIC], and C-head coordination, called CP[CONJ] (5a). A designated topic rule will type the clause if a fronted constituent is used (5b). Otherwise, the type is left unspecified and C-head conjunctions in the lexicon will type a CP as CONJ (5c). This formalization accounts for the low rate of constituent fronting in conjoined main clauses (see ex. (3) above).

- (5) a. $CP[_{type}] = \{CP[TOPIC], CP[CONJ], \dots CP[REL]\}$
- b. $CP[_{type}] \rightarrow \begin{array}{cc} XP & C'[_{type}] \\ (\uparrow TOPIC)=\downarrow & \uparrow=\downarrow \\ (\uparrow TOPIC)=(\uparrow GF* GF) & [_{type}]=TOPIC \end{array}$
- c. *and* C[CONJ] (\uparrow COORD) = conjunctive
ac C[CONJ] (\uparrow COORD) = contrastive
 etc.

If it is further assumed that full subjects normally front to the specifier of CP and that this position is unavailable under the presence of C-head conjunctions by the same clause-typing mechanism outlined above, a simple rule licensing pronominal scrambling on the edge of IP will suffice to capture the differences regarding pronoun distribution between main and conjoined main clauses as well (see example (4) above).

The proposed analysis accounts correctly for a fair number of properties. Most importantly, the model predicts that the distributional differences illustrated in (1)-(4) will disappear if the conjunction and IP are not immediately adjacent, since a C-head analysis is impossible in such syntactic contexts. A careful statistical analysis of the available material does indeed support this hypothesis. Moreover, the same clause type differences should weaken over time as C-head conjunctions gradually disappear from the English language. Again, the corpus data suggests that the diachronic development does in fact agree with the model prediction. The etymological bases of some English conjunctions as well as a difference in discursive environment between logical connectors and C-head conjunctions may further strengthen the basic assumptions of the proposed analysis. However, the evidence is more subjective and hence less reliable here.

From a broader perspective, this research shows that variable output can be a direct consequence of intra-grammatical, structural causes and is not necessarily caused by extra-grammatical constraints, like processing efficiency or discourse optimization. Secondly, it offers another empirical example that demonstrates the fruitfulness of grammar formalization in LFG for research questions on linguistic change.

References

- Bech, K. (2001) *Word Order Patterns in Old and Middle English: A Syntactic and Pragmatic Study*. PhD dissertation. University of Bergen.
- Clark, B. (2004) *A Stochastic Optimality Theory Approach to Syntactic Change*. PhD dissertation. Northwestern University.
- Pintzuk, S. & Haeberli, E. (2008) ‘Structural variation in Old English root clauses.’ *Language Variation and Change* **20.3**: 367-407.
- Taylor, A., Warner, A., Pintzuk, S. and Beths, F. (2003), *The York-Toronto-Helsinki Corpus of Old English Prose (YCOE)*, <http://www-users.york.ac.uk/lang22/YCOE/YcoeHome.htm> (Accessed 1 January 2014), Oxford Text Archive.
- Vincent, N. (2001) ‘LFG as a model of language change.’ In: Butt, M & Holloway King, T. (eds.) *Time over matter: Diachronic perspectives on morphosyntax*. Stanford, CA: Center for the Study of Language and Information, 20011-42.