

It is by now widely accepted that Old English (OE) exhibits a type of verb-seconding (V2) in root clauses that is different from most of the other West Germanic languages, with movement of the finite verb to a structural head lower than C in all but a small group of exceptional clause types. And although leftward movement of the finite verb is by no means categorical, the frequency of verb-final root clauses is assumed to be low: for example, Koopman 1995 estimates that approximately 6% of OE root clauses are head-final.

In this talk we demonstrate that the frequency of head-final root clauses in OE is higher than previously acknowledged. Building on previous work, we make three assumptions about clause structure and movement in OE: 1) finite verbs in ‘normal’ V2 clauses move to a functional head lower than C, call it I; 2) the headedness of projections varies; in particular IP may be either head-initial or head-final; 3) there is evidence for both rightward movement (postposition) and leftward movement (scrambling) of arguments and adjuncts. Under these assumptions, clauses with finite main verbs are not normally used for evidence of headedness, since they are structurally ambiguous. For example, clauses with the finite verb in second position, as in (1a), may be derived in at least two ways: by leftward movement of the finite verb (1b) or by rightward movement of post-verbal constituents (1c):

- (1) a. God ascunað leasunga ‘God hates lies’ (coelive,+ALS[Ash\_Wed]:128.2768)  
 b. God [<sub>I</sub> ascunað<sub>i</sub>] [<sub>VP</sub> leasunga t<sub>i</sub>]      c. God [<sub>VP</sub> t<sub>j</sub> t<sub>i</sub>] [<sub>I</sub> ascunað<sub>i</sub>] [<sub>I</sub>leasunga]<sub>j</sub>

However, there are four types of constituents for which movement is constrained: particles, stranded prepositions, negative objects, and pronouns (Pintzuk 2002, 2005). If these elements themselves do not move, then their surface position with respect to the verb can be derived only by leftward or rightward movement of the verb to I in a head-initial or head-final IP. Thus their position can be used as a diagnostic for the headedness of the clause. The data on which our analysis is based were extracted from the York-Toronto-Helsinki Parsed Corpus of Old English Prose. The distribution of the four diagnostic elements is shown in Table 1. Note that the Total column includes data from a few OE texts that cannot be dated, and so the total Ns for negative objects and pronouns are larger than the sum of the early and late Ns.

Table 1: The position of diagnostic elements (XP) in OE root clauses  
with overt subjects and finite main verbs

Type of XP	Early OE Texts		Late OE Texts		Total	
	N	%XP-Vf	N	%XP-Vf	N	%XP-Vf
Particles	71	56.3%	149	50.3%	220	52.3%
Stranded Ps	21	38.1%	105	12.4%	126	16.7%
Neg Objs	14	42.9%	39	25.6%	54	31.5%
Pronouns	832	88.2%	2039	65.5%	3025	73.2%

The first diagnostic is the position of particles. The data were limited to those particles that are always stranded when the finite main verb moves to C, i.e. to particles that are separable from the verb: *adun* ‘down’, *after* ‘after’, *aweg* ‘away’, *in* ‘in’, *niðer* ‘under’, *ongean* ‘back’, *up* ‘up’, *ut* ‘out’. 115/220 (52.3%) of these clauses have the particle preceding the verb; in other words, more than half of these clauses have head-final IP structure. Examples of head-final and head-initial clauses with particles are given in (2):

- (2) a. Apollonius þa ut eode                      b. Hi eodon þa ealle ut  
 Apollonius then out went                      They went then all out  
 (coapollo,ApT:16.26.326)                      (coaelive,+ALS[Agnes]:199.1846)

The second diagnostic is the position of stranded prepositions, which in OE root clauses can be stranded by clitic or weak pronoun movement of the pronominal object. 21/126 (16.7%) of root clauses with stranded prepositions have the preposition in pre-verbal position, indicating head-final IP structure. This is a much lower frequency than for the particle data, but a substantial amount nevertheless.

The third diagnostic is the position of negative objects. Table 1 shows that the frequency of pre-verbal negative objects, and therefore the frequency of head-final structure in OE root clauses with negative objects, is  $17/54 = 31.5\%$ .

Finally, the fourth diagnostic is the position of pronominal objects. Although pronouns do not postpose in OE, they do optionally move to the left periphery of the IP. The frequency of pre-verbal pronouns therefore represents the upper limit of head-final structure in these clauses. As shown in Table 1, this upper limit is 73.2% over the OE period.

In summary, the distribution of particles, stranded prepositions, negative objects, and pronouns in OE non-conjoined root clauses with finite main verbs indicates that the frequency of head-final structure is much higher than has previously been demonstrated or assumed. The quantitative patterns are very regular, with the frequency of head-final structure decreasing from early to late OE. This decrease is expected under an analysis of grammatical competition between head-initial and head-final IP structure during the OE period, with head-initial structure replacing head-final structure almost completely by the beginning of the Middle English period (Kroch and Taylor 2000).

These results have important implications for our analysis of the clausal syntax of early stages of English, and raise a number of questions about previous analyses and results. For example, why do OE clauses with finite auxiliaries and non-finite main verbs appear to have a very low frequency of head-final structure? One possibility is that the frequency of verb (projection) raising in OE is also higher than previously thought (see Haeberli and Pintzuk 2005); many instances of auxiliary-main verb order are therefore derived from head-final rather than head-initial structure. Another question arises concerning the transition between Old English and Middle English: if head-final structure was still very common in late OE root clauses, the change from OE to ME may have been more abrupt than previously thought. In conclusion, the high frequency of head-final structure in root clauses suggests that both qualitative and quantitative analyses of many aspects of syntactic variation and change in the history of English must be revisited and perhaps revised.

### References

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