A Note on the Position of the Verb in Old English Rhythmic Prose

ANN TAYLOR

Abstract

In this paper I investigate differences in the line position of the non-finite verb in the Old English poem Beowulf and Ælfric's rhythmic prose. I show that while in Beowulf the non-finite verb appears in final position in the half-line over 95% of the time when there is an object present, in Ælfric this tendency, while still present, is less strong. I explore how this difference might be related to changes in prosodic structure between the two texts, triggered by word order changes: specifically, the change from head-final to head-initial order in the VP.

1. Introduction

As I will show below, the non-finite verb in the Old English poem Beowulf appears in final position in the half-line over 95% of the time when there is an object present. Of these cases about one-third are final in the first half-line and two-thirds in the second. The explanation given for this distribution is as follows. In Old English head-complement pairs, the head is the weak element, while the complement is strong (Getty 2002). Beowulf is a verb-final language (Pintzuk 1999) and thus the underived position of the object is preverbal. The stress pattern of object-verb pairs in Beowulf is therefore strong-weak. The stress pattern of poetic half-lines in Old English is strong-weak (Stockwell and Minkova 1997, Getty 2002), and thus putting the verb in final position perfectly maps the natural stress pattern of the language to the metrical stress pattern of the poetry.

In this paper I compare the situation in Beowulf to that found in Ælfric's rhythmic prose, a later metrical style of writing loosely based on Old English poetry (Pope 1968). I show that in clauses with surface object-verb (OV) order Ælfric mirrors the usage in Beowulf exactly, but that clauses with surface verb-object (VO) order behave quite differently in the two authors. As well as altering the ratio at which verbs appear finally in the first and second half-lines, Ælfric makes significant use of a rare option in Beowulf: first position in the second half-line. I argue that Ælfric makes these changes in order to accommodate the different prosody of VO order in his language, a result of the change in the underlying headedness of the VP.

1.1. Old English Poetry

Old English verse is composed of long lines, each containing two half lines joined by alliteration. The general pattern is for each half line to contain two main stresses, although verses with a single stress (and rarely, three stresses) also occur. Alliteration occurs only on stressed words, although not every stressed word is alliterated. In this paper I am concerned only with the position of line breaks and stressed words, for which I follow Chickering (1977) and Bliss (1967). More detail on the rules governing the position of stressed and unstressed syllables and the allowable patterns of alliteration can be found in any edition of the poem as well as numerous scholarly studies (e.g., Bliss 1967, Cable 1974, Getty 2002, Russom 1998, Sievers 1893). Example (1) from Beowulf illustrates a typical Old English verse. Half-line breaks are indicated by / and line-ends by |. Alliterating sounds are in bold-face.

(1) | þonne wæs þeos **m**edoheal / on **m**orgentid |
          then was this mead-hall on morning
        | **d**rihtsele   **d**reorfah /   þonne **d**æg lixte, |
          princely-hall bespattered-with-gore when day shone
        "Then was this meadhall, the princely hall, bespattered with gore, in the morning
        when day dawned"
        (cobeowul,17.484.406)

1.2. Rhythmic Prose

Rhythmic prose is the name given to a style of writing used by Ælfric in many of his
compositions. It is a loose metrical form that resembles Old English alliterative verse,
particularly in having generally two stresses per half-line and using alliteration as a way of
binding half-lines together into long-lines. It differs from verse, however, in completely
lacking the strict constraints on syllable count and the alternation of strong and weak syllables
found in verse. Both the patterns and phonetics of alliteration are also less strictly adhered to.
Example (2) is from Ælfric's Lives of Saints (LoS), written in rhythmic prose. Half-line
breaks are indicated by / and line-ends by |. Alliterating sounds are in bold-face.

(2) | þa   weard se **b**isceop / mycclum a**b**licged |
          then was   the bishop   much   astonished
        | and genam þæt **h**usel /   þe se **h**ælend gebletsode |
          and took   the sacrament that the saviour blessed
        "then was the bishop very astonished and took the sacrament that the saviour had
        blessed"
        (coaelive, +ALS_[Basil]:120.527-8)

1.3. Verb-Object order in Old English

In this paper I focus on non-finite verbs and adjacent objects. It is well-known that there is
variation in the surface order of non-finite verbs and objects in Old English (Pintzuk and
Taylor 2006), as shown in examples (3) and (4). Verbs are in italics and objects in bold-face.

(3)   OV order
        | seþe *wæs* fram cyldcradole / **Criste** *gehalgod* |
          who was from cradle   Christ consecrated
        "who was consecrated to Christ from the cradle" (coaelive,+ALS[Agnes]:184.1837)

(4)   VO order
        | ac   he ne   *dorste ameldian* / **his ungemetegodan lufe** |
          but he NEG dared announce   his inordinate   love
        "but he dared not announce his inordinate love" (coaelive,+ALS_[Basil]:361.696)

How such variation is derived is the subject of much debate in English historical syntax (see
Taylor and van der Wurff 2005 for a number of views), but can be reduced to the following
three possibilities: (a) the object is base-generated in preverbal position and all post-verbal
objects are derived (e.g., van Kemenade 1987, Lightfoot 1991); (b) the object is base-
generated in post-verbal position and all preverbal objects are derived (e.g., Biberauer and
Roberts 2005, Roberts 1997, van der Wurff 1997, 1999, Zwart 2005); or (c) a combination of

(a) and (b) (Pintzuk 1999, 2002, 2005). I adopt position (c) here, but, because prosodic structure is derived from *surface* syntactic structure (see section 2 below), nothing in what follows crucially depends on this choice.

The data used in this study are taken from the York-Toronto-Helsinki Parsed Corpus of Old English Prose (Taylor et al. 2003) and the York-Helsinki Parsed Corpus of Old English Poetry (Pintzuk and Plug 2001). They have been carefully chosen to minimize ambiguity in the syntactic structures of the verb-object sequences, although this is not completely possible for reasons that will become clear. The following restrictions have been applied.

1. All clauses have a finite auxiliary and non-finite verb in that order. This ensures that the non-finite (or main) verb is in its base-generated position. Verb-final clauses are omitted since they do not comply with restriction (4) below, that only objects adjacent to the non-finite verb are included.
2. All clauses have a single non-pronominal, non-clausal NP object. It is well-known that pronoun objects in Old English show clitic properties (van Kemenade 1987, Koopman 1997, Pintzuk 1996) and thus are highly susceptible to leftward movement, while clausal objects appear almost exclusively in post-verbal position.
3. Quantified and negative objects have been excluded. Pintzuk and Taylor (2006) show that these objects (and only these) can move across the verb from post-verbal position. Given that the landing site of such movement may well be outside the VP (NegP or QP), they are not completely comparable to non-quantified, non-negative objects.
4. Only objects adjacent to the verb are included, since an object separated from a non-finite verb is clearly in a derived position.

The Beowulf data is based on the whole poem, while the Ælfric data is based on the entire Lives of Saints, unless otherwise noted.

2. Prosodic Theory

The aspects of rhythmic prose that concern us here are primarily the division of the text into lines and half-lines and secondarily the number of stresses (generally two) allowed per half-line. Getty (2002: 129ff) and Taylor (2005: 144) have shown that line-breaks in Old English metrical texts (poetry and prose) align to a high degree with prosodic boundaries, making it possible to identify prosodic boundaries in these texts with some accuracy. Moreover, since prosodic structure is derived in a rule-based way from syntactic structure, we can go further and reconstruct the syntactic structures underlying certain surface word orders on the basis of the prosodic structure revealed by the metrical structure of the text.

In order to investigate the effects of rhythmical prose on syntax via metrics/prosody as outlined in the previous paragraph, we need a model of prosodic structure. In simplest terms this amounts to the set of rules for deriving prosodic structure from syntactic structure. The model I adopt here is a basic version of the end-based model of Selkirk (1986, 2000). Under this approach prosodic constituents are constructed by inserting a maximal prosodic constituent (MaP) at the left- or right-edge of an XP in the syntax, the choice of left- or right-edge being language specific. The edges of functional projections and the projections of empty categories do not trigger MaP boundaries (Truckenbrodt 1999), but only projections of lexical categories (noun, verb, adjective, adverb). For this reason, the syntactic representations in this paper only include the projections relevant to the syntax-prosody mapping, but the relevant functional and empty-headed projections should be assumed to be present. A simple example is given in (5), showing the different prosodic structure that results depending on whether the language is left- or right-edge. In (5a) it is the left-edge of the NPs and ADJP that

trigger the MaP boundary, while in (5b) it is the right-edge of the same constituents that is the trigger. The result is a MaP boundary between 'red' and 'balloon' in (5b) but not (5a).

(5)   a.   Left-edge: ($_{MaP}$ [$_{NP}$ [$_{NP}$ John's]) ($_{MaP}$ [$_{NP}$ [$_{ADJP}$ red] balloon]])

        b.   Right-edge: ($_{MaP}$ [$_{NP}$[$_{NP}$ John's]) ($_{MaP}$ [$_{NP}$ [$_{ADJP}$ red]) ($_{MaP}$ balloon]])

The parametric choice of left or right edge for the location of prosodic boundaries interacts cross-linguistically with headedness. In a head-initial language, the selection of left-edge for prosodic boundary insertion results in heads and complements being separated by a prosodic boundary. In right-edge head-initial languages, on the other hand, heads and complements are contained in the same MaP. The opposite is true for head-final languages. If the language selects the left-edge, there is no prosodic boundary between the complement and the head, while if the language selects the right-edge, there is a prosodic boundary. Thus, using the VP as an example, we find the following possibilities (with example languages from Inkelas & Zec 1995).

[$_{VP}$ verb [$_{NP}$ object]]	syntactically head-initial
($_{MaP}$ verb object)	right-edge (e.g. Chi Mwi:ni)
($_{MaP}$ verb) ($_{MaP}$ object)	left-edge (e.g. French)
[$_{VP}$ [$_{NP}$ object] verb]	syntactically head-final
($_{MaP}$ object) ($_{MaP}$ verb)	right-edge (e.g. Japanese)
($_{MaP}$ object verb)	left-edge (e.g. Korean)

Thus in any given language, a complement on one side of the head will group with the head in a single MaP, while a complement on the other side will be separated from it (see Selkirk 1986: 391 for an example from Ewe), a fact which is crucial to the analysis given below.

3. The prosodic structure of verb-object pairs in Old English

3.1. Early Old English (Beowulf)[1]

The VP in Beowulf is syntactically head-final, and thus, underlyingly, objects precede non-finite verbs and post-verbal objects are derived by extraposition (Pintzuk & Kroch 1989). Prosodically, Beowulf is a left-edge language; i.e., MaP boundaries coincide with the left-edge of syntactic constituents (Getty 2002). Thus when the object is preverbal (i.e. in base order), the object and verb are contained in a single MaP, as in (6).

(6)   ($_{MaP}$ [$_{VP}$ [$_{NP}$ object] verb])
        / wel biđ þæm þe   mot |
          well is   that   who may
        | æfter deađdæge / ($_{MaP}$ **drihten** *secean*) |
          after death-day   Lord   seek
        "well is it with him who after his death-day may seek the Lord" (cobeowul,8.183.150)

When the object is post-verbal, on the other hand, as a result of extraposition, the verb and object are separated by a MaP boundary, as in (7), since there is a syntactic (NP) boundary between them.

(7)   ($_{MaP}$ [$_{VP}$ t$_i$ verb]) ($_{MaP}$ [$_{NPi}$ object])
       þeah   þe he ne   meahte / on mere ($_{MaP}$ *drifan*) |
       though that he NEG might   on sea   drive
       | ($_{MaP}$ **hringedstefnan**) /
              ring-prowed-ship
       "though he might not steer the ring-prowed ship on the sea" (cobeowul,36.1129.928)

Given these structures, it is not surprising that we find a high frequency of objects separated from the verb in VO sequences, where a MaP intervenes between the verb and object, but not in OV sequences, where there is no MaP. This is shown in Table 1. The division is not categorical, showing that the alignment of line-breaks to MaP boundaries is not absolute; nevertheless, the tendency to align the two is clearly very strong.

word order	not separated		separated		total
	N	%	N	%	
OV	93	97.9	2	2.1	95
VO	2	13.3	13	86.7	15
total	95		15		110

Table 1: Distribution of verb-object pairs in Beowulf with respect
to separation by a line-break (from Taylor 2005)

3.2. Later Old English (Ælfric)

In Ælfric, non-negative, non-quantified OV sequences are underlying head-final (Pintzuk and Taylor 2006). VO sequences, on the other hand, may be head-final with extraposition, as in Beowulf, or underlyingly head-initial (Pintzuk 1999, 2002, Pintzuk and Taylor 2006). The prosodic structure of OV sequences and derived VO sequences is the same as in Beowulf (examples (6-7)). The prosodic structure of underived VO sequences requires a little more discussion, however. Under the analysis of Old English as a left-edge language, the prosodic structure of derived and underlyingly VO sequences is the same, because the prosodic boundary is triggered by the left-edge of the object NP. However, Modern English is a right-edge language (Selkirk 2000), and, since prosodic structure is related to syntactic structure, it seems plausible that the change from left-edge to right-edge occurred at the same time as the change from head-final to head-initial. This would mean that OV structures and derived VO structures, i.e., those in which the VP is underlyingly head-final, are left-edge, while underlyingly head-initial VP structures are right-edge. Under this assumption, underived VO sequences are contained in a single MaP, and the relevant prosodic structures for Ælfric are as follows. The first two structures are the same as those found in Beowulf, while the last is the innovative base-generated VO structure.

OV : object in situ   ($_{MaP}$ object verb)
VO : object extraposed   ($_{MaP}$ verb) ($_{MaP}$ object)
VO : object in situ   ($_{MaP}$ verb object)

     Table 2 repeats Table 1 for Ælfric's Lives of Saints (LoS). We can see from this table that the prosodic structure of OV sequences is very similar to that found in Beowulf. VO sequences, on the other hand, are separated less frequently in LoS than in Beowulf, providing evidence for the idea that VO sequences may form a single MaP in LoS, but not (or rarely) in

Beowulf.

word order	not separated		separated		total
	N	%	N	%	
OV	161	91.5	15	8.5	176
VO	80	38.3	129	61.7	209
total	241		144		385

Table 2: Distribution of verb-object pairs in LoS with respect
to separation by a line-break (from Taylor 2005)

4. Verb position

Let's turn now to the main concern of this paper, verb position. In general, when accompanied by an adjacent object, the verb can appear in one of four positions in metrical texts:

- position A: the first foot of the first half-line
- position B: the second foot of the first half-line
- position C: the first foot of the second half-line
- position D: the second foot of the second half-line

The possibilities are illustrated in examples (8a) through (8d), from LoS.

(8)   a.   position A
            | Pa   wolde   Dionisius, / gif hit gewurðan mihte, |
             Then desired Dionisius   if it   be   might
            | *prowian* **martyrdom** / mid ðam apostolum, |
              suffer   martyrdom   with the apostles
            "Then Dionisius desired, if it might be, to suffer martyrdom with the apostles"
            (coaelive,+ALS_[Denis]:109.5847)

       b.   position B
            | Ælc   cristen   man sceal *cunnan* / **his paternoster and his credan**. |
            "Each Christian man must know   his paternoster   and his creed"
            (coaelive,+ALS[Ash_Wed]:261.2850)

       c.   position C
            | ða   ðe he ne   mihte **ða menn** / *gebigan* fram Criste |
              when that he NEG could the men   turn   from Christ
            "when he could not turn the men from Christ"
            (coaelive,+ALS_[Sebastian]:372.1436)

       d.   position D
            | wiston þæt hi   ne   mihton / **Machabeo** *widstandan*. |
              knew   that they NEG could   Maccabeus withstand
            "[they] knew that they could not withstand Maccabeus"
            (coaelive,+ALS_[Maccabees]:421.5120)

Table 3 shows the distribution of the non-finite verb in Beowulf and LoS in clauses with an adjacent object.[2] The difference is clear; position D (final in the second half-line) is about half

as frequent in LoS, and position C (initial in the second half-line), which is barely used in Beowulf, is used about four times as often. There is also a small increase in the use of position B.

verb position	Beowulf		LoS	
	N	%	N	%
A	6	4.9	10	2.8
B	38	31.2	159	45.0
C	0	0.0	56	15.9
D	78	63.9	128	36.2
total	122		353	

Table 3: Non-finite verb position in clauses with an adjacent object
in Beowulf and Lives of Saints

Table 3, however, hides an interesting fact. Nearly the entire difference between Beowulf and LoS in Table 3 results from differences in VO clauses; OV clauses remain the same. This can be seen in Table 4. Here we can see that while the percentages for OV clauses are very close, the most heavily-favoured verb position in Beowulf for VO clauses, position D, has been replaced by position B, with the new position, position C, taking up most of the remainder.

verb position	OV				VO			
	Beowulf		LoS		Beowulf		LoS	
	N	%	N	%	N	%	N	%
A	4	3.7	1	0.6	2	13.3	9	4.9
B	35	32.7	52	30.6	3	20.0	107	58.5
C	0	0.0	11	6.5	0	0.0	45	24.6
D	68	63.6	106	62.4	10	66.7	22	12.0
Total	107		170		15		183	

Table 4: Non-finite verb position in OV and VO clauses with an
adjacent object in Beowulf and Lives of Saints

4.1. The difference between one- and two-stress objects

In order to further elucidate what's going on in VO clauses, it is first necessary to say a few words about the difference between one- and two-stress objects. Previous work has shown that object length (however measured) is a major factor affecting object position; longer objects appear post-verbally at a higher rate than shorter ones (Pintzuk and Taylor 2006). This effect is generally considered to be a reflection of information structure (longer objects are more likely to contain new information), and as such, can be expected to affect rhythmic prose in the same way as non-rhythmic prose. In rhythmic prose, however, there is a further factor involved in the determination of object position: the number of stresses the object contains. While number of stresses obviously correlates with length, the metrical structure of the text also imposes constraints on objects with different numbers of stresses that are absent in non-metrical texts; in particular, because the half-line generally contains only two stresses,

two-stress objects are difficult to accommodate in the same half-line with the non-finite verb, while one-stress objects are not.

Unlike in OE poetry where stress can be determined with some accuracy by the position of the alliteration, determining stress unequivocally in prose is problematic. In order to maintain objectivity, therefore, I have simply counted all open class words (nouns and adjectives) as stressed and all function words (determiners, possessives, conjunctions, etc.) as unstressed.[3] This is clearly an oversimplification, since it ignores the possibility of secondary stress on open class words, but avoids circularity. In what follows, therefore, the labels one-stress and two-stress should be interpreted as containing one/two *potential* stresses, rather than actual stresses. Thus the 26 two-stress examples in the same half-line as the verb in Table 5 all contain two words which could carry stress, but they may not actually do so.

Table 5 compares one- and two-stress[4] objects with respect to whether or not they appear in the same half-line as the non-finite verb. As expected, one-stress objects are more likely to appear in the same half-line as the non-finite verb.

	same half-line as the verb		
stressed words	N	%	total
one	213	78.9	270
two	26	23.4	111

Table 5: Percent of adjacent objects in the same half-line
as the non-finite verb by number of stressed words in LoS

We saw in Table 2 above that the surface order of the verb and object also affects whether the object appears in the same half-line as the verb. Table 6 shows that this effect is not the same for one- and two-stress objects. While the differences are non-significant when the object is preverbal, with both one- and two-stress objects favouring a position in the same half-line as the verb, when the object is post-verbal, one-stress objects continue to favour the position in the same half-line as the verb, although not as strongly, while two-stress objects strongly disfavour it.

	OV				VO			
stressed words	same half-line		separated		same half-line		separated	
	N	%	N	%	N	%	N	%
one	138	94.6	8	5.5	49	66.0	37	44.0
two	20	82.6	4	17.4	5	5.8	81	94.2
total	158	92.0	12	8.0	54	39.5	118	60.5

Table 6: Frequency of objects on the same half-line as the non-finite
verb by number of stressed words and object position in LoS

There are three points to note with respect to Table 6. First, the fact that objects occur mainly on the same line as the verb when preverbal reflects the prosodic structure of these sequences, which form a single MaP and thus have no intervening prosodic boundary (cf. example 6). Second, two-stress objects in VO sequences occupy the same half-line as the verb very rarely. This follows from the combined effect of two factors: (1) that it is difficult to accommodate two-stress objects on the same line as the verb (which itself is usually stressed), and (2) that there is a valid derivation and thus prosodic structure for these sequences that puts a prosodic

boundary between the verb and object (i.e. extraposition). Finally, one-stress objects favour the position in the same half-line as the verb, but not as strongly as in OV order. The simplest explanation for this fact is that the VO sequences occupying a single half-line are base-generated VO sequences, and thus form a single MaP, while the separated cases are derived and thus the verb and object are separated by a prosodic boundary, reflected by the line-break separating them. In the next section I investigate this hypothesis more closely.

4.2. The verb in VO clauses

In Beowulf we don't find much difference in the position of the verb or object in VO clauses based on the number of stresses, as shown in Table 7, but there are very few examples. In LoS, on the other hand, the number of stresses an object contains has a big effect on the position of the verb, as shown in Table 8. With a one-stress object the verb is split between positions B and C, while for two-stress objects, position B is highly favoured, with most of the remainder in position D.

verb position	one-stress object		two-stress object	
	N	%	N	%
A	1	16.7	1	11.1
B	0	0.0	2	22.9
C	1	16.7	0	0.0
D	4	66.7	6	66.7

Table 7: Verb position in VO clauses with
one- and two-stress objects in Beowulf

verb position	one-stress object		two-stress object	
	N	%	N	%
A	6	7.0	3	3.5
B	35	40.7	67	77.9
C	43	50.0	2	2.3
D	2	2.3	14	16.3

Table 8: Verb position in VO clauses with
one- and two-stress objects in LoS

Some examples may help to clarify the situation. Beowulf favours position D for both one- and two-stress objects, as illustrated in (9).

(9)   a.   … / a   mæg god *wyrcan* |
               always may God bring-about
           wunder æfter wundre, / wuldres hyrde.
           wonder after wonder   of-glory shepherd
           "May God, the Shepherd of glory, always bring about wonder after wonder"
           (cobeowul,30.929.782)

b.   sceal hringnaca /   ofer heafu *bringan* |
         shall ring-prowed-ship over seas   bring
         lac   ond luftacen. /
         gifts and   love-tokens
         "The ring-prowed ship shall bring gifts and love-tokens over the seas"
         (cobeowul,57.1855.1534)

For two-stress objects, LoS favours position B, as in (10), while for one-stress objects the most frequent position is C, as in (11a), followed by B, as in (11b).

(10) | and ongan hyre *sagan* / **hyre sweartan gepohtas** |
           And began her say   her dark   thoughts
         " and began to say to her her dark thoughts"
         (coaelive,+ALS_[Eugenia]:152.284)

(11)   a. | þa ne   mihte se   casere / *widcwepan* þ**am dome** |
                    then NEG could the emperor gainsay   the   decision
                  "Then the emperor could not gainsay the decision"
                  (coaelive,+ALS_[Basil]:352.688)

         b. | and nolde   *gehealdan* / **his preosthad** on riht |
                    and NEG-would hold   his priesthood on right
                  "and would not keep his priesthood in righteousness"
                  (coaelive,+ALS_[Basil]:389.642)

        In summary, in VO clauses in Beowulf, the preferred configuration for a verb-object pair is to have a long-line break intervening. In LoS, on the other hand, the preferred configuration is either no break between the two elements (favoured by one-stress objects) or to be separated by the mid-line break (favoured by two-stress objects). Table 9 gives the frequencies for the different configurations for two-stress objects in both Beowulf and LoS.

verb and object	Beowulf	LoS
same half-line	11.1%	5.2%
across half-line	22.2%	74.2%
across line-end	66.7%	20.7%

Table 9: Object position with respect to the verb in VO clauses
with two-stress objects (from Tables 7 and 8)

5. *Discussion*

The situation as laid out above is as follows. OV clauses in both Beowulf and LoS have the same syntax; in both texts the object is in its base-generated position.[5] In these clauses the verb is overwhelmingly in the weak position in the line, and the object, the prosodically stronger element, is in the stronger metrical position. Separation between the object and verb is kept to a minimum in line with the fact that the two elements form a single MaP, thus reproducing the prosodic structure of the natural language.

        In VO clauses, on the other hand, we find a difference between the two texts. In Beowulf, the verb is found in weak position 81.3% of the time, but unlike in OV clauses, the verb and object are commonly separated, a reflection of the fact that this order is derived, and

thus there is a MaP boundary between the verb and object. In LoS, the verb appears in weak position (positions B and D) 67.4% of the time. Although this is rather less frequent than in Beowulf, it is still the most frequent position. In addition, post-verbal objects are separated from the verb less often (86.7% of the time in Beowulf, 61.7% in LoS; Tables 1 and 2). This follows from the fact that at least some VO order in LoS is not derived, and thus should disfavour a prosodic break between the verb and the object. Non-separation of the verb and object in VO clauses is achieved by using the innovative verb position, initial in the second half-line (position C), despite the fact that it is a stronger position, since this is the position that allows the verb and object to appear on the same half-line.

Note, crucially, that in the Old English metrical system it is impossible both for the verb to be in the weaker position and for the verb and object in a VO clause to be in the same half-line, since a half-line contains one weak and one strong stress. Thus, while the metrical line is well-suited to OV clauses and VO clauses derived by extraposition, it is rather ill-suited to underived VO clauses. Ælfric was thus left with a difficult choice. Given that he didn't decide to avoid underived VO clauses altogether (as we know from other syntactic evidence; cf Section 5.1 below),[6] for any particular underived VO clause he could either maintain the stress pattern of natural Old English or he could maintain the prosodic structure, but he couldn't do both. The evidence given above suggests that he didn't in fact pick one of these two options, but in some cases sacrificed stress, and in others, prosodic structure.

5.1. The status of the half-line break

The analysis given above is based on the assumption that both line-breaks, the half-line and long-line, "count" as equivalent prosodic breaks. This is a standard assumption for Beowulf (Getty 2002, Pintzuk and Kroch 1989, Taylor 2005), and was adopted for rhythmic prose in Taylor (2005). However, if it is the case that the half-line break is less strong in Ælfric than in Beowulf, it would make some sense of Ælfric's tendency to put the verb final in the first half-line (position B), rather than the second (position D). As we saw in Table 5, in VO clauses Ælfric uses position B 59.3% of the time, while in Beowulf the figure is only 12.5%. If Ælfric treats the half-line break as weaker than the long-line break, even perhaps being able to ignore it altogether in some contexts, then he can have the verb in a weak position with a following object in first position in the second half-line without the strong prosodic break characteristic of extraposition. A clause such as (11b), under this hypothesis, could have the prosodic structure in (12a), rather than (12b).

(12)   a. | and nolde ($_{MaP}$ *gehealdan* / **his preosthad**) on riht |

           b. | and nolde ($_{MaP}$ *gehealdan*) / ($_{MaP}$ **his preosthad**) on riht |

One indication that Ælfric treats the half-line break differently from the Beowulf poet comes from the position of sentential breaks. The sentence break is the strongest prosodic boundary and in Beowulf it maps about equally to the half- and long-line breaks, as shown in Table 10. In Ælfric, on the other hand, sentence boundaries map to the half-line break less than 20% of the time. This aspect of Ælfric's line has been noted by Pope, who comments that "Ælfric's lines are prevailingly end-stopped, with only light stops or none at all in the middle" (Pope 1968: 122). This suggests a down-grading of the half-line break by Ælfric, at least as an appropriate position for strong prosodic breaks.

Position of sentence boundary	Beowulf	Ælfric
Long-line break	43.6%	83.0%
Half-line break	56.4%	17.0%
Total	1169	1268

Table 10: The correlation of sentence boundaries
with line breaks in Beowulf and Ælfric[7]

Another way to approach this problem is to look only at cases in which the syntactic/prosodic structure is completely unambiguous.[8] Unfortunately such cases are not as common as we would like. While each clause with a verb and object must, of course, have a particular underlying structure, because of the large amount of variability in both headedness and movement in the language, for any particular case it is often not possible to determine unambiguously what that structure is. For most VO cases, both base-generation and derivation by extraposition are equally possible in any individual case. There are, however, a small number of well-established diagnostics, which, when present, unambiguously indicate underived VO order. These are negative objects, post-verbal pronouns, post-verbal particles, and post-verbal stranded prepositions. None of these elements move rightward (Koopman 2005, Pintzuk 1999, 2002, Pintzuk and Taylor 2006), and thus when they appear in post-verbal position, they indicate an underlyingly verb-initial structure. None of these diagnostics appear post-verbally in Beowulf, but there are a small number of examples of the first three in Ælfric, as given in Table 11. All the tokens included in Table 11 have objects with at most one stress, which means that there is nothing which constrains their position with respect to the verb.[9]

Although the status of quantifiers with respect to stress in these texts is not always clear, the examples of negative objects included here all have another stressed word apart from the object in the half-line, indicating that the negative quantifier can't be stressed in these cases.

Diagnostic	same line	across HL	across LL	total
Neg object	4	3	2	9
Post-verbal pro	2	6	0	8
Post-verbal prt	2	0	0	2
Total	8	9	2	19
Percentage	42.1%	47.4%	10.5%	

Table 11: The position of the object with respect to the verb
in underived VO clauses in Ælfric (HL=half-line, LL= long-line)[10]

Typical examples of VO clauses with negative objects are given in (13).

(13)   a. | ne   moste þær nan broðor / *began* **nænne cræft**, |
                 NEG might there no brother   practise any   craft
               "and there no brother might practise any craft"
               (coaelive,+ALS_[Martin]:320.6166)

b. | ac   he nolde   *niman* / **nan ðingc** to medes |
     but he NEG-would take   no   thing to reward
     | his wunderlicre mihte / oððe his mærlican bodunge; |
     his wonderful power or his mighty preaching
     "but he would take nothing as a reward for his wonderful power or his mighty preaching"
     (coaelive,+ALS_[Abdon_and_Sennes]:183.4828)

c. | gif he wend þæt he ne   ðurfe / þanon forð *wyrcan* |
     if   he thinks that he NEG need   thence forth work
     | **nan þincg** to gode, /
     no   thing to good
     "if he thinks that he need not thenceforth do anything good"
     (coaelive,+ALS[Ash_Wed]:273.2856)

The examples in (14) are typical examples of cases with a postverbal pronoun or particle and a second full NP object. All the NP objects are one-stress.

(14)   a. | and we wyllað sceortlice / *secgan* <u>eow</u> **þæt andgit**. |
         and we will   shortly   tell   you the meaning
         "and we will shortly tell you the meaning"
         (coaelhom,+AHom_4:56.552)

    b.   … / ac we wyllað swaðeah |
         but we will   nevertheless
         | sceortlice *secgan* / **þas geendunge** <u>eow</u>. |
         shortly   tell   the ending   you
         "but we will nevertheless shortly tell you the ending"
         (coaelhom,+AHom_13:224.1990)

    c. | þonne mihte we *ondrædan* <u>us</u> / **deaðes** rihtlice. |
         then   might we fear   us death   rightly
         "then we might rightly fear death"
         (coaelive,+ALS_[Cecilia]:137.7197)

Table 11 shows that in unambiguously underived AUX-V-O sequences in Ælfric, the verb is equally likely to be found in position B with the object across the half-line break, as in position C with the object following on the same half-line. Like the sentence boundary data in Table 10, this data suggests that the half-line boundary is less strong in Ælfric than Beowulf. Unfortunately due to the lack of clearly underived AUX-V-O cases in Beowulf, it is not possible to make a direct comparison of the texts.

There is one derived VO construction that occurs in both Beowulf and Ælfric, however, V-AUX-O order. In these cases, because the object is not adjacent to the verb, the position of the object is clearly derived. These cases are not entirely equivalent to the AUX-V-O cases, however, because in the V-AUX-O cases the verb and auxiliary virtually always form a very tight unit which fills the half-line, forcing the object into the following half-line. Thus the comparison here is only between cases in which the object is across the long-line

versus the half-line break, as illustrated in the examples in (15). Cases in which the auxiliary and verb are on the same line as the object are rare.

(15)   a.   *… /* ᵖᵃᵗ he *ofslean wolde* |
                         that he slay   wished
                | ᵖᵃ geleaffullan Iudei, / ᵖᵉ   gelyfdon ᵈᵃ   on God. |
                  the faithful   Jews   who believed then in God
                "so that he wished to slay the faithful Jews who then believed in God"
                (coaelive,+ALS_[Maccabees]:549.5191)

        b. | ᵖᵃᵗ heo *offrian   sceolde* / **ᵖᵃᵐ arleasum godum**. |
                     that she sacrifice should   the   wicked   gods
                "so that she should sacrifice to the wicked gods"
                (coaelive,+ALS_[Cecilia]:285.7281)

Table 12 gives the results. Although the difference between Beowulf and Ælfric appears fairly large, the difference isn't in fact significant ($\chi^2 = 3.77$, p ≤ .10), so it is difficult to tell whether it means anything. What is clear is that compared to the underived VO cases (Table 11), which clearly favour the position across the half-line when separated, these derived cases favour the position across the long-line.

Text/Author	across HL		across LL	
	N	%	N	%
Beowulf	2	8.3	22	91.7
Aelfric	11	28.9	27	71.1

Table 12: The position of the post-verbal object with respect
to the verb in infl-final clauses in Beowulf and Ælfric

The higher percentage of cases across the half-line in V-AUX-O clauses in Ælfric is particularly mysterious, since other evidence, such as the position of the sentential boundary (Table 10), and the underived VO cases (Table 11), seems to indicate that Ælfric views the half-line boundary as weaker than the long-line. Interestingly, it may be that this difference has nothing to do with the object, but rather some other (so-far undiscovered) factor involved in verb position. Table 13 compares the position of the V-AUX cluster in Beowulf and Ælfric when there is no complement (NP or PP) present. The rationale here is to uncover the 'default' position of the verb when it is not affected by the presence of a complement. In this table, position A corresponds to the 'across HL' category in Table 12, and position C to 'across LL'. As in Table 12, we see that Ælfric has a higher percentage of cases in position A, although again this difference is not significant ($\chi^2 = 3.55$, p ≤ .10).

Text/Author	Position A		Position C	
	N	%	N	%
Beowulf	4	5.6	68	94.4
Aelfric	20	20.4	78	79.6

Table 13: The position of the non-finite verb in infl-final clauses
with no complement in Beowulf and Ælfric

In Table 4 above, we saw that in AUX-O-V clauses, i.e., clauses in which the surface order of the verb and object is generated by the same V-final grammar in both Ælfric and Beowulf, both texts pattern the same way. Since V-AUX-O cases are also unambiguously generated by the same V-final grammar (by extraposition) in both texts, the expectation is that for this clause type as well the texts would pattern in the same way. This is especially the case since the pattern found in Beowulf fits the metre of both texts equally well, and there is thus no apparent reason for Ælfric to change it (as there is for underived AUX-V-O order, for instance). We are thus left with the following situation: either the apparent difference is simply a result of random fluctuations in a small dataset (recall that the differences are not statistically significant), or there is some other, currently unidentified, factor underlying this difference, which must remain the subject of future research.

6. Conclusions

In this paper, I have shown that the Old English poetic line is a good fit for the early Old English of Beowulf, a syntactically OV, prosodically left-edge language. In the later Old English of Ælfric, clauses of the archaic type, i.e. OV, are treated metrically in the same way as in Beowulf, presumably because they are the same syntactically and therefore prosodically. VO clauses, on the other hand, are treated quite differently in the two texts. In Beowulf, there is a high degree of separation between verb and object, while this is less common in Ælfric. I show that this follows from the fact that, syntactically, the derivation of this type is different in the two texts; in Beowulf VO sequences are primarily derived, while in Ælfric, some percentage of these clauses are base-generated. The prosodic structure of underived verb-object pairs poses a problem for Ælfric, however, since their prosodic structure can only be optimally mapped to the metrical line by putting the verb in a strong, rather than the preferred weak, metrical position. Maintaining the weak position of the verb, on the other hand, requires a sub-optimal prosodic structure, with a break between the verb and the object. Finally, I speculated that Ælfric may have solved this impasse by downgrading the importance of the half-line break as a prosodic boundary, thus allowing both the optimal stress pattern and prosodic structure to be satisfied at the same time. Unfortunately the available evidence is sparse and while suggestive, less than completely convincing, making it difficult to draw any firm conclusions on this point.

Notes

1. The dating of Beowulf is a vexed question. A comprehensive survey of the linguistic evidence by Fulk (1992) places the date of composition between 685 and 825. Whatever its actual date of composition, however, the evidence of datable Old English texts makes it clear that that the syntax of Beowulf is, at any rate, conservative with respect to other texts.
2. Only cases where the verb is clearly the single stressed element of the foot are included. A small number of cases where there is more than one potential stressed word in the foot (Ælfric only) or where the verb or verbs fill the half-line have been omitted.

3. Quantified NPs have not been included in the dataset, and thus the status of quantifiers as stressed or not does not arise.

4. Objects of the appropriate type with more than two stressed words are quite rare in LoS (25 total) and are not included here.

5. Negative and quantified objects have been excluded, so the possibility of derived objects in preverbal position doesn't arise.

6. Although there is some evidence that he did in fact use less underived VO order in his metrical texts, than in his non-metrical ones. See Taylor (2005) footnote 12.

7. The Ælfric data in this table is based on the Life of St. Martin and Maccabees from LoS and Supplemental Homilies 11, 14, and 22.

8. Thanks to Susan Pintzuk for this suggestion.

9. One example of a negative object with more than one stress (with the object across the long-line from the verb) has been omitted from the table to make all the data comparable.

10. The Ælfric data in this table is based on the whole of *Lives of Saints* and *Supplemental Homilies.*

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Dept. of Language and Linguistic Science
University of York
Heslington, York YO10 5DD
email: at9@york.ac.uk