

## Raiding the demotic: verse as evidence for speech prosody in Old and Middle English<sup>1</sup>

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This article reviews the isomorphism which may or may not have existed between the speech-prosodic principles pertaining in Old English (OE) and in later Englishes, and the metrical patterns evident in both OE and (early) Middle English lyric poetry. A key question is this: was there isomorphism in OE between rules of right-edge phrasal prominence in speech and purely metrical prominence? Recent theories of OE metrical prominence, particularly those of Russom (2017 and earlier works) show that many normative OE half-lines have a structure which can be adequately described without making reference to right-edge prominence. That very adequacy is a challenge to metrists since well-known eurhythmic phenomena of promotion (of erstwhile weaker syllables to relative stress position within the verse line) and demotion (of erstwhile stressed syllables to relatively less-stressed positions) depend crucially on phrasal right-headedness: if that right-headedness didn't exist in OE, where did it originate? And if it did exist in OE, why didn't poets then make use of the metrical opportunities the language afforded? What can revisiting and studying isomorphism (or the lack of it) between the forms of language and of verse teach scholars about English poetic history?

**Keywords:** metrics, diachrony, alliteration, half-line, stress-timing

### 1 Background

From the thirteenth century onwards, metrical verse in many (though not all) varieties of English was modulated by both syllable count and the regular occurrence of stressed syllables within the metrical domain – prototypically, the line. An earlier example is provided by *The Owl and the Nightingale* (*O&N*), written in southern England at the end of the twelfth century. In the following, metrically prominent syllables are underlined:

(1) Ho was þe gladur uor þe rise (*O&N*, line 19)

<sup>1</sup> I'm grateful to Professor Monika Schmid, University of York, for suggesting the reference to Mehler *et al.* and for assisting with electronic library searches. I'm also grateful to Professor Donka Minkova and other contributors to the Leiden metrics workshop (part of the proceedings of ICEHL21, University of Leiden, 2021) for suggestions as to new lines of research, or the revisiting of old ones. Anonymous reviewers of this article for *ELL* also suggested some sharpening of arguments as well as providing further, and fruitful, references. I am most grateful for these inputs. Any errors remaining in the analyses or references offered here are, of course, my own.

- (2) [P]e nɪʒtɪŋgale hi iseʒ (line 29);  
 of pɪne hi ʒoʒelɪŋge (line 40 – cf. *grettere is pin heued þan þu al* (line 74) where *pin* is most plausibly read as metrically non-prominent)
- (3) þu art lodlich to biholde (line 71)
- (4) for me hi halt lodlich & fule (line 32 – cf. *me is þe w[u]rs þat ich þe so* (line 39), where *me* is metrically ambiguous); *mid faire worde me biswike* (line 158)<sup>2</sup>

Here the metrical pattern – a generally alternating, octosyllabic line, with an optional extrametrical syllable at the line-end – is filled where necessary by non-lexical words occupying stressed positions: in (1), a form of the verb *be*; in (2) the monosyllabic pronoun *hi* and the first syllable of the pronoun *thine*; in (3) an infinitive particle; in (4) the personal pronoun *me*.

In Chaucer's pentametric work (later fourteenth century) the same modulation, where non-lexical items appear in stressed metrical positions, is readily apparent. Two examples only will suffice:

- (5) Bifil that in that seson on a day (*General Prologue [GP]*, line 19)
- (6) The chambres and the stables weren wyde (*GP*, line 28)<sup>3</sup>

Here, as in still later forms of metrical verse, prepositions (example (5)) and conjunctions (example (6)) are, where they occur in particular environments, freely allowed to occupy metrically stressed positions within the verse line.

The examples touched on so far are general instantiations from verse of a phenomenon widely attested in spoken forms of almost all those medieval and post-medieval varieties of English found in the British Isles: that is a Principle of Rhythmic Alternation, whereby stressed syllables separated by one (and only one) lesser-stressed syllable are evaluated as more eurhythmic than stressed syllables separated by more than one unstressed syllable (Hayes 1984, and see the wider discussion of eurhythmy and its implementation in Beat Addition and End Rules in Hayes 1995: 372ff.). To maximise eurhythmy, if the environment allows it then underlyingly unstressed syllables, such as those identified in (1)–(6), are 'promoted' to a relative stress (the phenomenon captured in Beat Addition within grid-based rhythmical representations) and may function as stressed within the verse line.

In English – by which is here meant, and as far as is known, in those varieties of English spoken within the British Isles – two further, kindred, eurhythmically driven phenomena have been well-known for decades. One is known as a Rhythm Rule which shifts stress leftwards within phrases so that the resulting stressed syllables are optimally rhythmically spaced:

- (7) underlying: nineteen fish > nineteen fish (output neatly alternating)

<sup>2</sup> <https://quod.lib.umich.edu/c/cme/OwIC/1:2?rgn=div1;view=fulltext>, accessed December 2021.

<sup>3</sup> <https://sites.fas.harvard.edu/~chaucer/teachslf/gp-par.htm>, accessed 24 February 2020.

The other ‘demotes’ underlyingly stressed monosyllables in certain environments so that they are perceived as bearing less relative stress than the syllables around them, again so that the perceived major stresses are optimally spaced:

(8) underlying: three lárge tróut > thréé large tróut (output neatly alternating)

These rhythmically driven phenomena have been known in the analytical literature for many years; the same principles were of foundational interest in the beginnings of non-linear phonology (Liberman & Prince 1977) and in a specifically verse-prosodic context, Attridge (1982) writes of the ‘promotion’ of unstressed syllables and the ‘demotion’ of underlyingly stressed ones in metrical contexts.<sup>4</sup> The rhythmic principles manifested in examples in (7)–(8) may be replicated many times over in later forms of English metrical verse, as in these examples spanning the late sixteenth century (9) to the early twentieth (10a, b):

(9) Grim-visag’d war hath smoothed his wrinkled front

(Shakespeare, *Richard III*, Act I, i, l.9: metrical demotion of *grim* [although other readings are possible, i.e. with relative stress shift so that *grim* is more stressed than *vi(sag’d)*])

(10) (a) But one man loved the pilgrim soul in you

(Yeats, ‘When you are old’; demotion of ‘man’)

(b) Among whose warty snags the quaint perch lair

(Edmund Blunden, cf. in the same poem *The ogling hunchback perch with needled fin*)<sup>5</sup>

No metrist would claim of course that the lines in (9)–(10) should be read in a metrical jog-trot: the effect of eurhythmic pressure allows a metrical line to qualify in the first instance as metrical, while a reading may play underlying structure against a more or less emphatic form of delivery. Thus in (10a), *man* would be *underlyingly* more stressed than *one*, while eurhythmy may pressure the same syllable into less relative stress than the monosyllables which surround it; the same holds true in the Blunden example (10b), where *perch* – like *man* the head of its noun phrase – would be *underlyingly* more stressed than the monosyllable *quaint*. Cable (1991) speaks aptly of the ‘tilting power’ of metre, as that last is manifest in much medieval and post-medieval English verse: such a ‘tilting power’ adds to the interest of the line.

In terms of the theme of the present work – metrical evidence for speech prosody – then it’s of interest that while many later, syllable-counting forms of English verse abundantly attest the isochronic (i.e. stress-timed) basis of English speech (and particularly, the

<sup>4</sup> The terms ‘promotion’ and ‘demotion’ are retained in Attridge (2013) – see e.g. Attridge 2013: 130, where the terms are defined. Attridge interestingly writes of these principles as being ‘a formalization of the fundamental tendency towards an alternating rhythm in spoken English’ (2013: 131). Hayes (1995: 372–3) notes that apart from End Rules (such as, in English, rightmost phrasal stress), rules implementing eurhythmy are optional (for an earlier formulation of such optionality, see also Giegerich 1980) and seem to belong most readily to the ‘well-formedness judgements’ of listeners rather than speakers. This matter is further explored (in the context of metricality judgements in sung and chanted verse) in Hayes & Kaun (1996).

<sup>5</sup> W. B. Yeats, ‘When you are old’ ([www.poetryfoundation.org/poems/43283/when-you-are-old](http://www.poetryfoundation.org/poems/43283/when-you-are-old), accessed December 2021); Edmund Blunden, ‘Perch fishing’ (<https://allpoetry.com/Perch-Fishing>, accessed December 2021).

*perception* of that speech; see below), there is little unambiguous trace of linguistic or metrical principles of promotion or demotion in any form of Old English verse. (That's not to say that there's no trace at all of stress-timing in OE poetry – see section 2 below.) Specifically, in OE verse, and even in environments where one might have otherwise expected it, there seems to be no pressure to 'promote' underlyingly unstressed non-lexical syllables to relative stress:

(11) *hū ðā æþelingas*

(*Beo.* 3a – no metrical pressure to 'promote' *hū*; see also (25) below)

(12) *lange hwīle. Him þæs Liffrēa*

(*Beo.* 16 – no metrical pressure to 'promote' *Him*; see also (26) below)

Further, the alliterative patterning of the line often helps to identify such a lack of pressure. Had any 'promotion' of unstressed syllables been operative in (12), for example, one might have expected *hwīle* to alliterate with *Him* (which last by 'promotion' would have become a candidate for alliteration). Clearly this doesn't happen, and doesn't happen across the entire corpus of Old English verse. This hasn't stopped critics assuming that Old English verse was structured and performed on an isochronic basis, with e.g. harp-strokes falling at regular intervals and, if necessary and in certain environments, occupying rhythmically salient pauses, as in Pope's (1966 [1942]) ingenious reading of OE metre. Poets, too, have sometimes provided pastiches of what they've understood to be OE (or more widely and even loosely, early 'Germanic') verse, and in providing the pastiche, have allowed unstressed syllables to fill metrically stressed positions within the line or hemistich in a way that would be entirely familiar from later forms of English but would have been illegitimate in OE (or other earlier Germanic languages). Thus, perhaps most notoriously, Longfellow's 1855 pastiche of early, notionally 'Germanic' verse as manifest in *Hiawatha*:

(13) Lines from Longfellow, *Hiawatha* (1855)

Should you ask me, whence these stories?

Whence these legends and traditions,

With the odors of the forest

With the dew and damp of meadows,

With the curling smoke of wigwams,

With the rushing of great rivers,

With their frequent repetitions,

And their wild reverberations

As of thunder in the mountains?

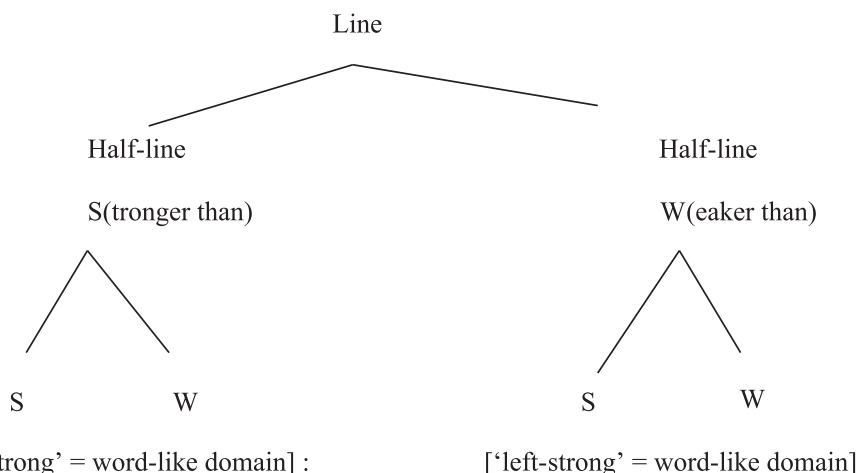
Longfellow is alleged to have based the metre of *Hiawatha* on the metrical materials he found in the Finnish *Kalevala* – patterned selectively here as trochaic tetrameter.<sup>6</sup> Yet at the time of composition, Longfellow was twenty years beyond his

<sup>6</sup> The *Kalevala* has a mixed metre comprised of both quantitative trochees and dactyls; see e.g. Sarv 1998. Longfellow selected from among those metrical possibilities and presented *Hiawatha* in a purely accentual metre.

brief study of Finnish and possibly modelled his work on a German translation of the *Kalevala* by Franz Anton Schiefner (1817–79).<sup>7</sup> Even though Finnish isn't an Indo-European language it seems likely that Longfellow, intent on presenting a nineteenth-century version of the 'noble savage' to an American readership, was attempting to deploy his intuitive sense of some mythical, somewhat 'Germanic' form and press that into the service of a new, native American context.

The point is that OE metre lacks some of the hallmarks of isochrony familiar from later periods of English verse (see section 2 below). Tolkien's comment, made in an aside during his great essay on *Beowulf*, is pertinent: the structure of OE verse, he wrote, 'is more like masonry than music' (Tolkien 1936: 30). The 'masonry' – to pursue the metaphor for a moment – is formed of morphology, and specifically of structures which are, or are reminiscent of, lexical words. Russom makes this particularly clear in a series of book-length works (Russom 1987, 1998, 2017).

(14)



This well-known configuration (Russom 1987 and subsequent works) requires that half-lines behave like (compound-)word-sized domains; there is a strong medial break within the line; and the configuration allows for an elegant constraint on alliteration, such that a weak constituent of a weak constituent (W in (14)) is too weak to alliterate.

While it would be legitimate, therefore, to look into the form of OE metre in order to understand it as providing evidence for morphology and for morphological stress, it would probably be rash to look to the same metrical constituents as providing evidence

<sup>7</sup> Nor should it be forgotten that the inspiration for Elias Lönnrot's compilation of those materials which comprised the collection of folk-tales known today as the *Kalevala* was drawn from the wish of Finnish scholars such as Gottlund (1796–1875) to construct a Finnish national epic similar in scope to *The Iliad*, *Beowulf* and the *Nibelungenlied*.

for aspects of *speech* prosody (such as stress-timing, though see remarks on poetic resolution below). Rather, OE metre seems, like other, later forms of metre, to be a specialised *game*, one whose ‘rules’ depend on *counting* and on *closure*.<sup>8</sup> That is, there are four positions in the typical half-line and there are strict constraints on the material which can be allowed to occupy position 4. This can be crudely summarised as follows:

(15) The ‘OE metrics game’: *count to four and fix the end*, where ‘end’ = strict constraints on the fourth position of each half-line

gomban gyldan (‘tribute to-give’ [to pay tribute], *Beo.* 11a)

1 2 3 4

ymsittenddra (‘of about-sitters’ [neighbouring tribes], *Beo.* 9a)

1 2 3 4

fæder ellor hwearf (‘father elsewhere-departed’ [father had died], *Beo.* 55b)

1 2 3 4

swā hē selfa bāed (‘as he himself had asked’, *Beo.* 29b)

1 2 3 4

This view is, metrically speaking, uncontroversial: almost all metres known to me have domain-end markers of some kind (see also McCully 2017) and the position with respect to OE is succinctly summarised in Strang: ‘[T]here is between half-lines a break, or line-end marker ... The end of a half-line is always determinate ... [I]f it is occupied by a lift [stressed syllable: McC] that goes without saying, but if it is occupied by a drop *there is the special restriction that the drop must there be monosyllabic*’ (Strang 1970: 326; my emphasis).

It seems plausible that this, or something very like it, was the metrical game played by Cædmon: fitting raw material – biblical stories, in the first, devotionally most important instance, and fragments of orally transmitted poems (such as praise formulas) – into the framework of the OE metrical game was clearly something that required not so much the rapture of apparently spontaneous, oral composition but careful consideration – silent rumination, as Bede testified in his well-known account of Cædmon’s compositional procedure:

(16) Bede on Cædmon

Ond he eal þa he in gehærnesse geleornian mehte mid hine gemyndgade, ond swa swa clæne neten eodorcende in þæt sweteste leoð gehwerfde. Ond his song ond his leoð wæron swa wynsumu to gehæranne þætte þa seolfan his lareowas æt his muðe wreoton ond leomodon.

<sup>8</sup> The notion that metre is a linguistic game had a formidable poetic advocate in the form of the twentieth-century poet and man of letters W. H. Auden. Responding to a questionnaire circulated for a special issue of the periodical *Agenda*, Auden wrote that among other things, (metrical) verse was always a form of game and that ‘one can’t play a game without rules’ – a comment reminiscent of Frost’s (often made and often quoted) deprecation of the construction of free verse as ‘playing tennis with the net down’ (for Auden’s view, see Auden 1972).

‘And he was able to learn all that he heard, and, keeping it all in mind, just as a clean animal chewing cud, turned (it) into the sweetest song ...’<sup>9</sup>

‘... swa swa clæne neten eodorcende in þæt sweteste leoð gehwerfde’: this can only mean that Cædmon’s gift required effort, thought and concentration. It was not a gift of spontaneous ‘song’ (despite Cædmon’s output being described metaphorically as *leoð* – and nor, we might notice in Bede’s account above, is there any mention of harps). It’s plausible to imagine (and see here Opland 1980) that the miracle of Cædmon was embodied not so much in the fact that a previously illiterate neat-herd was able to compose poetry but in the fact that (i) he deployed poetic epithets from secular praise-poetry and placed them into a new devotional context and (ii) he was able to do so using all the apparatus – that is, all the rules of this highly specialised language game – associated with the explicit (and apparently prized) knowledge of that subset of literate peers called poets.<sup>10</sup>

These rules included resolution. From a purely metrical point of view, resolution is a fix which allows an underlying half-line spanning five or more syllables to qualify as metrical because two of those syllables, in a particular and adjacent phonemic configuration, ‘fit’ one metrical position. This fix was employed by Cædmon as well as by his fellow, and later, English poets:

(17) Resolution [resolved sequences in bold font]

**heofon**rīces Weard<sup>11</sup> (‘Guardian of heaven-kingdom’, *Hymn* 1b)

1 2 3 4

weorc Wuldor**fæder** (‘work(s) of the Glory-Father’, *Hymn*, 3a)

1 2 3 4

The same set of rules also, and for our purposes somewhat more interestingly, made provision for the *suspension* of resolution, of which the most concise and recent statement is that of Terasawa (2011: 55-6):<sup>12</sup>

<sup>9</sup> From the Old English translation of *Historia Ecclesiastica Gentis Anglorum*,

book IV, ch. xxiv, <https://heorot.dk/bede-caedmon.html>, accessed 27 February 2020.

<sup>10</sup> Thornbury (2014) provides a wonderfully nuanced view of what the word ‘poet’ might have meant in Anglo-Saxon England. As Thornbury elucidates (2014: 19ff.), there were several terms for such a verbal maker, among which were the following: *scop* (the most common term), *poeta*, *leoðwyrhta* (applied to the makers of prose as well as poems), *gleeman* (a term that seemed to mean ‘entertainer’ and might thus include the harpist, who may or may not have been the same as the *scop*). Thornbury also usefully points out (2014: 17) that in the famous *Beowulf* passage relating to *hearpan sweg* (the sound of the harp, *Beo.* 89b–92) as many as three different performers might have been enumerated (a poet, a harpist and someone reciting the Creation in normal speech).

<sup>11</sup> An anonymous reviewer helpfully pointed out that verse 3a of the *Hymn* had an alternative scansion where *Wuldor*-scanned as monosyllabic (with a non-syllabic resonant ‘r’) and suspension of resolution on *-fæder* (see also (18a) above); verse 6a *heofon tō hrōfe* (‘heaven as a roof’), which I had originally inserted as an example in (17), also scans perfectly whether or not *heofon* is analysed as resolved. In *heofonrīces Weard*, however, there can be no such ambiguity: *heofon*- must show resolution so that the linguistic material spans four metrical positions.

<sup>12</sup> Terasawa scrupulously notes (2011: 56) that the applicability of resolution – a phenomenon known as Kaluza’s Law – depends *inter alia* on the nature of syllabic endings (thus resolution applies in *Beo.* 430a, *frēowine folca* ‘noble friend of the people’, even though *wi-* is preceded by a long (heavy) syllable, because *-ne* is itself short; cf. the *-can* of *bānlocan*, where the final syllable ends with a consonant. Kaluza’s Law applies to certain verse

## (18) Suspension of resolution

Resolution may be suspended where:

- (a) the potentially resolvable sequence is preceded by a stressed and long syllable in the same metrical constituent
- (b) the potentially resolvable sequence has a minimally bimoraic second syllable

*Example:* **bāt bānlocan** ('bit the bone-locks', *Beo.* 742a)

It's not easy to imagine rules for the suspension of resolution applying in spontaneous composition. Speakers are not usually (or even at all) consciously aware of syllable weight in the production of spontaneous speech: they just ... speak (however the production of that speech may be conditioned by principles of which those same speakers are unaware). In *Cædmon's* context, too, as in the wider and subsequent Old English context, matters are further complicated by the *inherently archaising* nature of OE verse. To get this verse to work at all, i.e. to fit language materials into a counted and closed metrical frame, it's sometimes necessary for poets to draw on structures which fit into the metrical frame in diachronically legitimate but synchronically illegitimate ways:

## (19) Archaism and metrical fit

Swā rīxode (*Beo.* 144a – not \* x / x x but x / \ x where suffix < -ōde)

gearo gynnwræce (*Beo.* 2118a – -e historically long < PGmc -ōz; Terasawa 2011: 56, fn. 4)

The view that OE metrics is the product of a specialised game would be fairly uncontroversial. It's a pity that there is no contemporary description of the rules of the game from any Anglo-Saxon poet. What accounts there are of verse-making in England do not, unfortunately, relate to the making of English verse but to verse composed in Latin: Bede's *De Arte Metrica*, probably composed in or around 710 CE,<sup>13</sup> was an introduction of the principles of Latin prosody to a non-specialised readership; Aldhelm's *Enigmata* (or 'Riddles') were written in Latin hexameters in order to demonstrate the form and amplify on comments made in the metrical treatise which was part of a letter he wrote to Aldfrith of Northumbria at the end of the seventh century.<sup>14</sup> Nor, equally unfortunately, is there much to help the metrical historian of

types in *Beowulf* but 'is ... generally abandoned by other Old English poets' (Terasawa 2011: 56). That observation doesn't affect the nature or the development of the argument presented here, however, which centres on the assumption of how scriptist (or not) the composition and delivery of OE verse might have been. The fact that resolution (and in a limited context, suspension of resolution) occurred at all suggests a carefully wrought, well-considered compositional process. That said, it's probably unwise to rule out entirely the existence in Anglo-Saxon England of spontaneous songs, chants, children's verses/counting-out games or even political slogans. These exist in contemporary English too, of course – and how many of those are ever written down?

<sup>13</sup> See Heikkinen (2012), who suggests that the dating cannot be before 709 and may possibly be as late as 725 CE. <https://core.ac.uk/download/pdf/14922993.pdf>, retrieved 1 February 2021.

<sup>14</sup> One of the manuscripts (c. late tenth/early eleventh century) of this important work, which survives wholly or partially in 32 manuscript versions, exists in the collections of the British Library: [www.bl.uk/collection-items/aldhelms-riddles/](http://www.bl.uk/collection-items/aldhelms-riddles/), retrieved 1 February 2021.



English if we enquire into the metrics of Old Norse as that's described in the (chronologically much later) work of Snorri Sturluson. It's well known that Old Norse *fornyrðislag* shows close similarities to OE metre, and in the *Prose Edda* Snorri provided a resource both for prose writers and, in one section of the work (*Háttatal*), for aspiring skalds via rules for the composition of both syllable-counting and/or stanzaic, and traditional metres. Yet what Snorri best reveals is actually the relative paucity of the OE metrical repertoire: for all its sophisticated archaism, the OE metrical game was essentially one of a kind, so far as is known. One looks in vain for syllable-counted forms of verse, or stanzaic ones, or even for regularly deployed variants of standard alliterative patterning or new combinations of repeated phonemes such as one finds in ON *ljóðahátt* or *dróttkvætt*. The Norse poetic world seems remarkably sophisticated when compared with, for example, the earnest pastiche – even the repetitive monotony – of *The Battle of Maldon*.

## 2 Stress-timing and English historical metrics

The general instantiations of post-lexical 'rhythm rules' of different kinds are familiar from much of the relevant phonological literature of the past thirty years. Yet the relative absence of evidence for these rules from OE verse is a puzzle. Given that many of such rules seem to depend critically on right-headedness – i.e. adjustments are made so that linguistic material to the left of a rightmost head is arranged so as to be maximally eurhythmic and preferably, alternating – and given that rhythmic alternation is an optimal instantiation of stress-timing, could it be the case that OE was not organised rhythmically in the same way as later Englishes? Were the relevant rules added to the language at some point between the tenth century and the thirteenth? And in that same period, does the nature of English verse itself reconfigure so that maximally alternating forms are privileged within the line and the old, position-based structures disfavoured? Put more simply: given the absence of evidence for it in OE verse, has stress-timing been an unchanging feature of the English language?

Bertinetto (1989) provides a useful overview of the literature and key concepts belonging to the study of isochrony – a term he uses to cover 'the temporal regulation of speech' in a general sense. He points out that while interstress intervals in so-called stress-timed languages are preferentially regulated, stress-timing is in some ways a perceptual illusion: it is not the case that stable diagnostics (such as the absolute duration of stressed syllables or the absolute regularity of interstress intervals) apply invariably to such languages. Nevertheless, it remains true (in Bertinetto's view) that stress-timed languages exhibit some or all of the following features:

(20) Some features of stress-timing (< Bertinetto 1989)

In comparison with syllable=timing, in stress-timing there is

- compensatory shortening of unstressed syllables within the rhythmic foot (consider e.g. schwa in *the manager's here* vs *the manor's here*)

- preference for regularity in interstress intervals (even though this is in Bertinetto's view a 'perceptual illusion'; see also Roach 1982)
- more vowel reduction in unstressed syllables
- more tolerance for extreme shortening of unstressed syllables

Yet these tendencies are arguably just that – tendencies – and there remain languages, such as Russian, whose status as stress-timed or syllable-timed is contestable despite having initial stress and despite displaying some of the features listed in (20) – see for example Mehler *et al.* (1988: 177, particularly fn.1.). It may also not be insignificant that while Mehler *et al.*, in researching prosodic cuing, found that infants responded to *some* prosodic features from their native language – for so-called stress-timed languages, the placing of word-stress preferentially onto heavy syllables might, for instance, be considered as a likely source of cue recognition – stress-timing itself appears to be ruled out as a basis for infants discriminating one language from another. That in turn, and taken together with the findings of Bertinetto (1989), suggests that stress-timing and syllable-timing aren't either/or options but are scalar in nature.

Suppose for a moment that varieties of OE weren't stress-timed in the sense familiar from those present-day Englishes spoken within the British Isles. For the language historian interested in the evolution of verse forms that might be an enticing position: the coming of rhyme as a structural feature of some verse could then be aligned with the ingress of some 'Romance' features of prosody such as right-to-left prosodic scansion of words for stress placement together with final stress in some nouns borrowed from French. Further, if phrasal right-headedness ('right-hand phrase-stress') were to gain a firmer foothold in English speech prosody in the early Middle English period then that might align with the corresponding availability of rhythmically promoted function words to poets. In the past I have flirted with both positions (see e.g. McCully 1996, 2003) – in other words, have entertained the possibility that right-hand phrasal stress emerges or develops at or near the beginning of the ME period and that verse-structures are critically sensitive to, and thereby provide evidence for, structures present (or tendencies at work) in those varieties of English in which the relevant texts are written. That is, in the past I have entertained the idea that speech prosody and versification are more isomorphic rather than less.

Intellectual flirtations are best left to the young. In (21) are found some features of OE that suggest it was rhythmically patterned like present-day English:

(21) Stress-timing present in OE, as evidenced by verse

- interstress intervals regulated so that monosyllabic dips are more frequent (this is of course part of the design of Sievers' 1885 *Typentheorie*: for example, Type A half-lines with monosyllabic dips occur more frequently than the same Type with two or more unstressed syllables in the second position of the verse)
- vowel reduction well underway by the time much OE verse was composed/compiled
- Minkova & Stockwell (1997) summarise arguments both for and against the emergence of a right-hand, phrasal stress rule in earlier Middle English – a moderate assumption is that such a rule ('Nuclear Stress Rule') has been present in all periods of English

- Behaviour of finite verbs in OE verse is ambiguous (just as in later Englishes, cf. *ran* in *John ran home*, *Janet ran away* etc.) and in the right contexts, right-headedness within verb phrases was a ‘viable choice’ for Anglo-Saxon poets (Minkova & Stockwell 1997: 307; see also fn.19 below).

All the same, if we approach the position that Old English was stress-timed (and had right-hand phrasal stress) in much the same way as later Englishes then that leaves several further things for which a language historian and metrist must account:

(22) Linguistic questions to answer

- If there was right-hand phrasal (‘Nuclear’) stress in OE then why is the default underlying metrical organisation of the half-line left-strong (‘compound stress’ – see (14) above)?
- If there was Nuclear stress then weaker syllables (esp. monosyllabic function words lying to the left of the rightmost rhythmic head) would in principle be available for rhythmic promotion in the same way as they are available to later English poetry and poets. While there’s well-known evidence in OE for underlyingly unstressed function words bearing metrical stress under conditions of syntactic displacement (e.g. *in* in *Scedelandum in*, *Beo.* 19b), there’s little evidence of monosyllabic function words lying to the left of a rightmost rhythmical head being promoted in OE classical verse. Why not?

The lines and half-lines of OE mimic the default stress patterns of English words, with strongest prominence at their leftmost edges. That pattern survives to the present-day, of course, and it’s of interest that many bisyllabic acronyms – ACAS (Arbitration and Conciliation Advisory Service) is a typical example – display not primary+weak stress but primary+secondary, with the final syllable of such words apparently resistant to reduction to schwa (see McCully & Holmes 1988 for an initial account of the stress patterns of English acronymy). There may be a case for regarding the stressing of such words as embodying old and indeed ‘native’ principles of word-stress (and conversely, for regarding end-stressed monomorphemic nouns as exhibiting non-native patterns – the pronunciations of the French loanword *garage* in different varieties of English rather prove the point). All the same, there are many half-lines in the OE corpus which are unambiguously phrases and might be expected to have strong(est) prominence at their *rightmost* edges: it remains true that alliteration suggests (but no more than suggests) that *mihtig* and *manna* are stronger than any syllable in their following adjacent lexical words (the <g> of *God* is stressed but doesn’t alliterate) but if rightmost phrasal stress operates in OE then surely *God* would bear more prominence than anything in the preceding adjective?

(23) Right-edge stress?

ðæt [mihtig God] manna cynnes

(*Beo.* 701)

For Russom (2017) such lines would straightforwardly exemplify the ‘stress contour for a typical line ... 1–3–2–4, where 1 is highest and 4 is lowest’ (2017: 52). That typical contour, he suggests, derives from an original SOV syntactic pattern: ‘[i]n the earliest alliterative poetry, a verse was typically realized as a phrase with SOV

syntax' (Russom 2017: 51). Such a pattern, with corresponding left-edge phrasal stress, is archaistically preserved ('by formulaic tradition' in Russom's view – 2017: 52) into and within the surviving OE poetic corpus. Possibly, too, there is something more at work: in contemporary Englishes it's well-known that there's considerable variability in the stressing of compounds and phrases, as in the examples in (24):

(24) Variability in English phrasal and compound stress

Madison Street (left-strong) vs Madison Avenue (right-strong)

Brandenburg Concerto (right- or left-strong, see Giegerich 2017: 53)

coach-driver (left-strong) vs town crier (right-strong)<sup>15</sup>

Why is it possible, even preferable, to allow variability in the perception of compound and phrasal stress in contemporary Englishes but deny it to OE? Further, linguists and critics quite generally accept that there are tensions between an underlying metrical pattern and its instantiation – 'trochaic substitution' is a well-known example, one so familiar as to require no further comment here. Such mismatches are sometimes regarded as exemplifying a productive and satisfying metrical complexity (see e.g. Kiparksy 1977 for an account of such complexity in the Shakespearean pentameter). Why deny OE its own metrical mismatching and (therefore) its own form of satisfying complexity? To revisit the example in (23) for a moment:

(25) Metrical complexity in OE verse



[verse instance; phrase-stress on *God*]

ðæt mihtig God manna cynnes (*Beo.* 701)

S W S W [underlying metrics; word-stress not shown]



It seems plausible to allow Anglo-Saxon poets the same ingenuity, the same structural aversion to metrical monotony, as one would grant to their poetic aftercomers in succeeding centuries. In later, foot-based forms of English verse, mismatches occur in

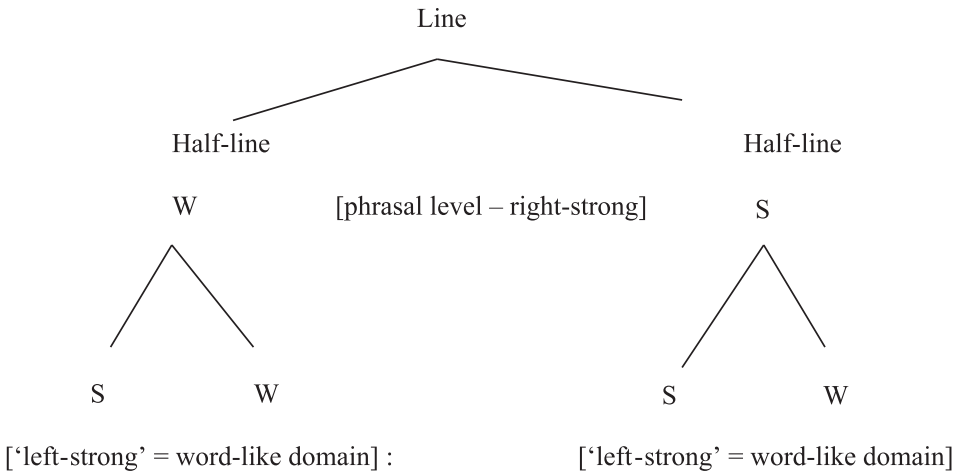
<sup>15</sup> Giegerich (2017) ascribes anomalies in some well-known phrasal and compound stress patterns to principles operating on an interesting interface between phonology and pragmatics, and specifically in [N1+N2] compounds to structures where N1 is an attribute (*cotton* in end-stressed *cotton dress*) and not an 'object' of N2 (a *watch-maker* – compound stress – makes *watches* (2017: 62)).

sequences of feet (by which is here meant constituents of a fixed stock drawn supposedly from Classical metres – iamb, trochee, spondee and so on) ranged against an underlying metre; in Old English verse, stress mismatches seem to occur across word-based stress contours ranged against an underlying, word-sized metrical domain. That is, while it comprises elements of isochrony and is constrained by principles of position and closure, the metre is essentially morphological.

That view of the underlying, morphologically based nature of OE ('more like masonry than music') is captured in the assumption that both the line and the half-line are left-strong, as suggested in (14) above – a figure derived from Russom (1987) and later works. Both metrical domains mimic the stress-pattern of native words, not necessarily phrases.

Suppose for a moment that the underlying metre allowed for the replication of right-hand, phrasal prominence. We might conceivably (though ultimately erroneously) want to suggest that instead of (14) a configuration such as (26) might be considered descriptively viable:

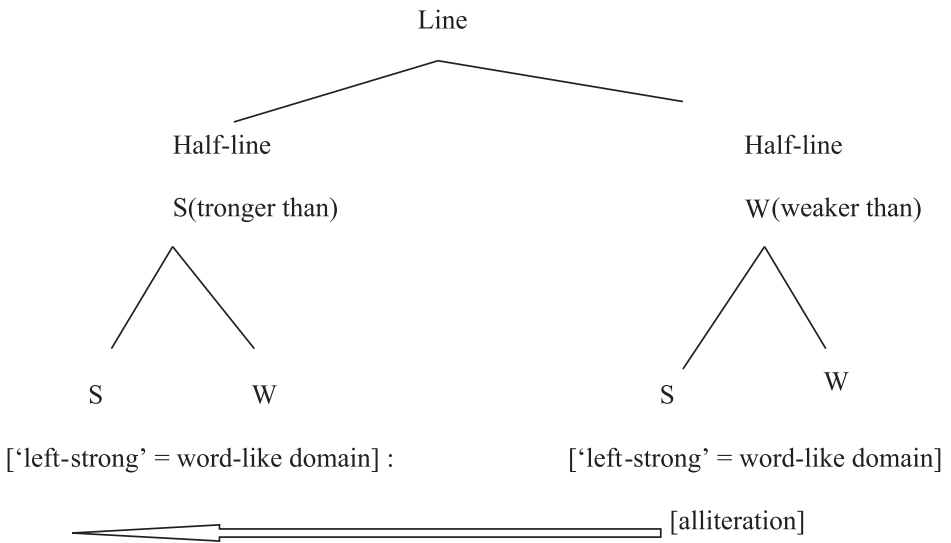
(26)



Right-strong phrasal prominence would thereby be built into the underlying template for the metre – and would, as an aside, provide a natural explanation for the position of the obligatory site and origin of alliteration within the line, the strongest position of the strong, second half-line (the *Hauptstab*). Yet as Suzuki (1985) shows, no such assumption need be made: association between segments (in the present context, alliteration) is governed by a Universal Association Convention (UAC) which stipulates that ‘association lines drawn from the same autosegmental tier, i.e., the tier

belonging to the same morpheme, may not cross’ (Suzuki 1985: 111; Suzuki notes that the UAC was developed in McCarthy (1981)).<sup>16</sup> In effect, that means that alliteration associates segments working right-to-left. Further, for OE alliterative verse we might make a basic stipulation such that ‘alliteration proceeds from and preferentially associates metrically strong (sub)constituents’. The fourth lift of any metrical line might be a candidate for a site of origin – but is ruled out because it’s not a metrical strong subconstituent. Neither of the lifts in the a-verse can be candidates for a site of origin (because to allow alliteration to spread rightwards from either lift would violate the UAC). That leaves only the first lift of the b-verse as a viable candidate for the site of origin of alliteration across the line and there is no need to assume that phrasal stress is replicated or mimicked within the underlying metrical origination of the line, as shown in (27):

(27) Alliteration and left-edge prominence in the OE verse line



If this view is correct then although right-hand phrasal stress may well have been present in Old English, poets *made a choice not to use it* – or any of the metrical possibilities associated with rhythmical right-headedness. That’s not to claim or even to imply – despite what I’ve described above as the paucity of its metrical repertoire – that OE verse was somehow aesthetically impoverished: an astonishing range of verse

<sup>16</sup> One of the anonymous reviewers of this article made the shrewd, and ultimately Sieversian, point that ‘[t]he choice and placement of alliterating syllables [in OE metre] is a flat, linear parametrical convention’ (emphasis in the original). The present paragraphs owe a great deal to that reviewer’s comment and I am accordingly most grateful for it.

and rhythmical prose remains. Yet the absence of isomorphism between phrasal stress and the underlying form of the OE alliterative verse line is suggestive: a morphological basis for the production of aesthetic effect had been found, and found of old – hence, perhaps, the archaising nature of this highly wrought, intricate verse. It was for later English-language poets (often attempting to replicate, or pastiching or translating the work of their Continental contemporaries; see here e.g. Duffell 2018) to exploit the further rhythmical possibilities existing within the English language – to promote and demote syllables to relatively strong positions within the verse-line, to count syllables and to allow and even encourage right-strong patterns of metrical closure. The final section of this article begins to review that form of cultural rapacity and linguistic exploitation.

### 3 Poetic change as linguistic and cultural rapacity

To recap: it would not necessarily be the case that those neatly alternating outputs seen in (1)–(10) above didn't occur in vernacular OE and were (therefore) unavailable to poets. As section 2 begins to suggest, absence of evidence does not provide evidence of absence. The most straightforward assumption to make is that then, as now, right-hand phrasal stress – rightmost headedness – was present in the language and alternation might well have been found in, for example, strings of monosyllabic function words. Yet because the metre was essentially morphological such alternating outputs weren't identified as possible poetic patterns. Further, if such underlying unstressed syllables were so identified then the rhythmic promotion involved would violate alliterative principles or threaten to overload any potential half-line with stresses and therefore, with potential metrical lifts:

(28) **hū ðā** æpelingas

(*Beo.* 3a – if *hū* is promoted then the half-line becomes unmetrical because /h/ has no alliterative correspondent in the b-verse)

(29) lange hwīle. **Him þæs** Liffrēa

(*Beo.* 16 – if *Him* is promoted then the alliterative pattern is deviant)

(30) **þæt wæs** gōd cyning

(*Beo.* 11b – if *þæt* promoted there are three stresses and alliteration violated)<sup>17</sup>

The same problem would arise if the first (relatively stressed) syllable of disyllabic prepositions were allowed to scan as metrically stressed:<sup>18</sup>

<sup>17</sup> Half-lines with three stresses do of course occur – they are instantiations of D-type verses – and (25)–(27) could conceivably be read as D\* verses (/x/\x), but in no such case would the resulting alliterative pattern be allowed.

<sup>18</sup> The stressed syllable of disyllabic prepositions is everywhere in later metrical verse allowed to scan as metrically stressed, e.g. in Gray's 'Elegy in a Country Churchyard' consider *upon* in *To meet the sun upon the upland lawn* or *under* in Shakespeare's Sonnet 134: *Under that bond that him as fast doth bind*. The pattern is so familiar in later English verse that further examples would be otiose. Yet if they are not syntactically displaced such disyllabic prepositions (e.g. *under* in *wēox under wolcnum*, *Beo.* 8a) never function as metrically stressed in OE verse, which strongly implies their ineligibility as metrical lifts in this morphologically based metre.

(31) *æfter wælnīðe*

(*Beo.* 85a – if *æf-* is metrically stressed then the half-line has three potential lifts and violates alliterative principles)<sup>19</sup>

In practice, what seems to happen in the period between the eleventh and thirteenth centuries is that an essentially morphological metre – by ‘essentially morphological’ is here meant that the metre is developed from the form and placement of morphological words – gave way to a new metre based largely on the form and placement of syllables. In order to effect this change, poets had to exploit features of the English language which had, perhaps, always been present but which weren’t operable as parts of the former, once-prestige, metrical pattern. That is, function words – articles, prepositions, pronouns – as well as certain high-frequency verbs (such as forms of *have* and *be*) became usable in the new metres in ways in which they had formerly been non-usable. The fact that in the same period prepositions took on functions formerly supplied by nominal inflections meant that there was an abundant supply of such syllables in the new dispensation. As nominal and verbal inflections were eroded, reordered or redeployed then pronouns, too, were increasingly needed in the new, syllabically based metres to disambiguate who was doing what to whom. Russom puts this well. The syntactic ambiguities arising from inflectional loss were in his view

resolved by more frequent employment of function words. An ambiguous dative inflection, for example, would increasingly be clarified by a preposition like *to* or *for*. Ambiguous definite inflections would be clarified by a determiner equivalent to modern English *the* or *that*. A verb inflection no longer provided adequate identification of the subject. The *Beowulf* poet could omit subject pronouns to improve the meter but this option was becoming unworkable in the tenth century... (2017: 93)

Early signs of the coming metrical changes are observable in *Maldon* (composed in or very shortly after 991). As Russom and many others have noted, in *Maldon* the poet uses more expanded dips than would have been tolerated by the *Beowulf* poet or indeed by Cynewulf (Russom compares *Elene* 134, *flugon on fæsten ond feore burgon*

<sup>19</sup> One of the reviewers here noted that interesting additional cases were provided by those verses which Sievers (1885) classified as A3, essentially those of the form  $.x\ x / x$ . At particular issue would be the classification of verses beginning with finite verbs, such as the following, from *Beowulf*: *Būgon þā tō bence* (*Beo.* 1013a – ‘then they bent to the bench’). The alliteration seems to indicate clearly that *būgon* occupies the first lift of the (on one reading, a fairly standard A Type) verse but Bliss (1958), following Kuhn (1933), read such high-frequency verbs as less-stressed when they occurred early in the syntactic clause or half-line (cf. later English *ran* in [John [ran away]], where *ran* is relatively less stressed than the preceding noun or following adverb) and accordingly, the finite verb in e.g. *Beo.* 1013a would bear only accidental alliteration – decoration rather than structure. If Bliss is correct then A3 verses in *Beowulf* provide evidence for one-stress half-lines: the key constraint seems to be that there should be four positions within the half-line obligatorily filled with linguistic material and a minimal one stress (metrical lift) in position 3. There are, then, grounds for thinking that  $.x\ x / x$  is the template for the minimal metrical half-line in OE. Beyond noting that the ambiguity of the poetic evidence (and the possible existence, in OE as in later Englishes, of the kind of metrical fudging which on the grounds of aesthetic variety and interest has always been useful to poets) provides provocative material for historically minded metrists, for reasons of space I will not develop that much wider theme here.



[(they) fled into (the) safe place and saved (their own) lives'] with *Maldon* 194, *flugon on þæt festen and hyra feore burgon* – Russom 2017: 90).

Russom (2017) also, following Fulk (1992), cautions against conflating poetic *change* with *decline*. The *Maldon* poet was not necessarily less able than his writerly ancestors; he was simply working with raw materials whose nature and disposition made it more difficult to write using all the metrical constraints (including constraints on expanded dips) of former times. It's also the case that alliterative verse-making seems not to have entirely disappeared between the eleventh and thirteenth centuries: *some* knowledge of the former system seems to have survived in different parts of the country and traces of alliteratively structured, two-stress phrases appear in some prose of the same period, but when alliterative verse-making again appears as a significant part of English literary production in the fourteenth century it employs a longer, more discursive line than would ever have been thought metrical in either *Beowulf* or *Maldon* and/or is yoked together with frankly syllabic and stanzaic forms, as most famously in *Gawain*.

In considering English verse as it existed between the eleventh and thirteenth centuries it therefore seems wiser to think of poetic change rather than poetic decline. I would add a further caution: principles of historical reconstruction such as Uniformitarianism mean that ascribing uniqueness to poetic events and changes may be as rash as ascribing uniqueness to language change itself. English poets have, after all, always been rapacious: they have ransacked not only their own language for raw materials but have also ransacked other literary models from those languages with which English has been in contact. To use a picturesque metaphor: poets are in some ways sculptors, cutting shapes from raw material in a process of composition which (as far as metrical compositions are concerned) critically involves *selecting* and *discarding* aligned with *counting* and *closure*. As Hanson & Kiparsky (1996) show, constituents – phonemes, syllables, words themselves – are likely to be selected and metricised in such a way as to make use of the largest number of them available at any given time to any given poet. Thus OE metre in principle makes use of the largest number of morphological words; later metres, which count not positions but syllables and rhythmic beats, exploit the stress patterning of the language in a different way but nevertheless optimise what portions of the English word-stock can be used by poets. This point can be summarised in (32):

(32) The metrical rapacity of poets

'Maximise the ways in which the word-stock of English can be aligned with metres constrained by counting and closure.'

1. OE: essentially morphological, based on position (optimises syllable onsets in structural alliteration, disposition of stress within morphological words)
2. Later metres: largely phonological, based on syllables and rhythmic beats (optimises syllable rhymes in structural rhyming, disposition of stress within morphological words and within or across strings of function words)

The poetic changes involved here are of course affected by those languages and literary models with which English comes into contact. The fascination of Bede or Aldhelm with

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Latin prosodic organisation did not translate into the inception of new forms of English verse, however, and that failure is instructive: the principles of quantity around which classical Latin verse is constructed bore little or no relationship to those native metrical principles then familiar to literate monks or clerics. Further, there were no native Latin speakers or poets available to support the inception of a new form of poetic making. Elsewhere, it may have been the case that by the tenth and eleventh centuries English poets had contact with Norse speakers (i.e. with speakers of Danish or Norwegian dialects of Norse) who were in turn familiar with syllable-counting and/or stanzaic forms of verse, but the widespread adoption of such forms for English audiences would have been unlikely: in that period, large parts of England were an occupied country, so experiments with verse-forms favoured by the political occupier would have been stigmatised even if they had been attempted. Nor – again across the same period – does literacy seem widespread enough to support durable experiments with verse-forms drawn from other languages and cultures, even though monastic orders were in the eleventh and twelfth centuries beginning once again to have contact with languages and cultures in France and Italy (see again Duffell 2008 and, in particular, 2018).

This article has perhaps begun to stray into the sociolinguistics of metrics (a research field where much still remains to be done) and away from the brief which asked for analyses of the evidential value of older English verse to linguistic historians. In one respect and context – that of the presence or absence of right-hand phrasal stress in Old English – that evidence is possibly less than I once imagined. That is, it seems more straightforward to think of such right-hand phrasal stress as always having been present in the language together with the associated possibilities of rhythmically promoting or demoting monosyllables. Yet if that is the case then the subsequent coming of syllable-counting, rhythmically alternating forms of (rhymed) verse can be seen not as something unprecedented or unique but as a movement exploiting phonological and other constituents already found within the language, but exploiting them in new ways. To paraphrase T. S. Eliot,<sup>20</sup> as English poetry develops and changes, its ventures are not only raids on the inarticulate; they are raids – vibrant, necessary, vital – on the structures of the demotic.

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<sup>20</sup> T. S. Eliot, 'Burnt Norton' (composed c.1936), from *Four Quartets* (published 1943).

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