

Stress-Timing and the History of English Prosody

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Cable, Thomas. 2002. *Stress-Timing and the History of English Prosody*. *Korean Journal of English Language and Linguistics* 1-4, 509-536. The traditional typology of English poetic meters makes a binary division between *strong-stress* (or *accentual*) meters and *accentual-syllabic* (or *syllable-stress* or *syllable-accent*) meters. According to this typology, Old and Middle English alliterative poetry was composed in strong-stress meter; the iambic pentameter from Chaucer to Yeats and on to the present has been an accentual-syllabic meter. Intersecting with this literary typology is a linguistic typology that classifies languages of the world as *stress-timed* or *syllable-timed* or some mix of the two. English is a clear example of a stress-timed language. Whereas most descriptions of strong-stress meter focus on the counting of stresses, the present study focuses on the patterns of unstressed syllables between the stresses (possibly at isochronous intervals). The implications of this analysis suggest a new typology in which certain forms of English verse follow strict grammatical stress (mainly Old and Middle English, but for reasons different from “strong-stress” expectations) and other forms are shaped by a compromise of grammatical stress and the metrical template. Within this later group, iambic pentameter contrasts with trochaic, anapestic, and dipodic meters in lending itself more readily to modulation. Some of this modulation comes from an easy incorporation into iambic pentameter of elements associated with Old and Middle English meters.

1. Introduction

The familiar idea that the languages of the world can be divided into *stress-timed* and *syllable-timed* languages is intriguing on the face of it, and it has a certain impressionistic plausibility, at least for speakers of English. A stress-timed language is one in which the intervals between stressed syllables is perceived as

approximately equal, regardless of the number of unstressed syllables between them. These isochronous stresses may be separated by a single syllable, or several syllables, or no syllable at all. English is a prime example:

- (1) / / / /
This is the house that Jack built.

In contrast is a syllable-timed language such as French, without lexical stress and with perceptually equal intervals between each syllable:

- (2) C'est absolument ridicule.

Among the many phonologists who have noted this distinction, Pike (1946) and Abercrombie (1965) are especially clear.

Russian and Arabic are often cited along with English as stress-timed languages; Spanish and Yoruba along with French in the syllable-timed category. Investigators have tried to extend the classification to other languages, but the results are often ambiguous. Daunt (1983) adopts the term "stress-based" rather than "stressed-timed" and proposes that most language are neither wholly one or the other but are ranged along a continuum:

- (3) —————> Stress-based
Japanese French Spanish Greek Portuguese English

Korean, according to Nahm (1987:47), falls somewhere between Japanese and English on the continuum because of a tendency toward shortening the time taken up by each syllable as the number of syllables in a rhythmic unit increases.¹⁾ Nahm

¹I would like to thank Jeong-Hoon Lee for help with the Korean

concludes: "Although such a tendency is not so distinct as in English, this phenomenon leads us to conclude that the Korean speech rhythm is not a 'syllable-timed rhythm' as has been believed by some scholars, but it should be classified as a kind of 'stressed-timed rhythm.' Or it can be characterised as a type intermediate between the two extreme types of speech rhythm. ..."

Even for English, usually considered one of the most obviously stress-timed languages, the experimental results for clocking intervals between stresses is inconclusive. It may be that cues such as consonant clusters and vowel reduction are more important than actual timing in giving the impression of isochronous stressing. Still, it is a curious feature of English poetry that a single unstressed syllable between stressed syllables can often be replaced by more than one syllable, or by no syllable at all, and the meter remains intact. The present study gives an overview and survey of this kind of metrical substitution from the origins of English poetry to the modern period. The underlying assumption, one that often appears in literary handbooks and essays on prosody, is that these substitutions modulate the poetic line by varying its speed in certain places. This poetic effect is clearly related to the idea that English is a stress-timed language, though the exact connection between the poetic effect and the phonological features of the language is beyond the scope of this paper.

More important is the emergence of a new typology of English meter from these considerations. We begin with the well-known contrast between *accentual* meter (also called *strong-stress* meter) and *accentual-syllabic* meter (also called *syllable-stress* or *syllable-accent* meter) as key concepts for constructing a typology of literary meter. These ideas are especially interesting when

reference, and Annie Finch and Tom Kalgreen for original ideas on accentual meter in Modern English that have corrected some of my notions.

languages of the categories discussed above come into contact — as happened with Norman French (a presumed syllable-timed language) and Middle English (a presumed stress-timed language) between the twelfth and fourteenth centuries.

The description of literary meter that has derived from the usual understanding of this contact has been stated often in literary histories and college anthologies. Some of these generalizations are helpful, but others — as will be argued below — are misleading. Accentual meter was the only meter of English poetry between the seventh and eleventh centuries. By the usual understanding, its alliterating line, divided into hemistichs, contained four stressed syllables and an indeterminate number of unstressed syllables. In the Middle English period the Anglicization of French syllable-counting meters produced a hybrid in which not only the metrical stresses but also the total number of syllables in the line were counted. Therefore, of necessity, the variable number of unstressed syllables that had been a feature of Old and Middle English was contracted to a single syllable between stresses, or, with certain adjustments, occasionally to two unstressed syllables.

This hybrid meter, according to the standard account, is manifested by the iambic tetrameter and, even more impressively, by the great staple of English meter between Chaucer and Yeats and on up to Richard Wilbur, the iambic pentameter. During the latter half of the fourteenth century, while Chaucer was writing in London, strong-stress meter flourished in the West Midlands in brilliant poems such as *Sir Gawain and the Green Knight* and William Langland's *Piers Plowman*. After the early fifteenth century, the old strong-stress meter has occasionally surfaced, although only sporadically and in poets and specific poems that are often cited to make the point: Spenser's *February Eclogue* (1579), Coleridge's "Christabel" (1797-1801), Hopkins' "The Windhover" (1877), Eliot's *Four*

Quartets (1943), along with folk meters, nursery rhymes, and college chants. The essential element that presumably makes these forms of verse strong-stress meter is the simple counting of stressed syllables, most usually four to a line, and the optional expansion of the single unstressed syllable to two, three, or four syllables, or the omission of the unstressed syllable altogether and the creation of clashing stress.

In various studies over the past twelve years I have suggested that this standard picture is wrong at some of its most essential points. My own studies have made the arguments piecemeal, however, and the overall critique and alternative theory have not been as clear as they might be. The purpose of this essay is to consolidate the various parts of previous arguments and to present new evidence for a coherent alternative typology of English meters that has not been suggested before. Coherency of typology is needed if a new history of English prosody is to be coherent itself. There are also implications for more purely linguistic investigations of stress in the earlier periods.

2. A New Typology

Instead of a division of English meter into strong-stress meters and syllable-stress meters, the present approach proposes a division between those meters that assume strict grammatical stress and those that assume modifications of the stress by the metrical template. The outline is as follows:

(4) *English meters*

I. Strict grammatical-stress meter

Examples: *Beowulf* (8th century), *Sir Gawain and the Green Knight* (14th century)

II. Template meter

A. Easily modulated: iambic foot

Examples: Shakespeare's poetry, including the *Sonnets* (1590s), Milton, *Paradise Lost* (1667), Keats's *Odes* (1819) — and much other poetry between the sixteenth and twentieth centuries.

B. Less easily modulated

1. alternating

(a) octosyllabic

Examples: Chaucer, *The Hous of Fame* (c. 1380);
Gower, *Confessio Amantis* (1390)

(b) decasyllabic

Example: Chaucer, *Canterbury Tales* (1386-1400)

2. trochaic

Examples: Poe, "The Raven" (1845); Longfellow,
Hiawatha (1855)

3. anapestic

Examples: Byron, "The Destruction of
Sennacherib" (1815); Swinburne, "Hymn to
Proserpine" (1866)

4. dipodic

Example: Meredith, "Love in the Valley" (1876)

Alternative terms for the main division would be *a priori* or *deductive* for template meters and *a posteriori* or *inductive* for meters of strict grammatical stress. The difference can be seen between the iambic pentameter of Modern English and the *Beowulf* meter. The stress pattern of an iambic pentameter line is always approximately *te tum te tum te tum te tum te tum*. Well known variations such as the inverted first foot, or the extra weak syllable at the caesura, often modulate the line in minor ways, but the basic pattern is always perceptible, and a description of the variations can be mapped onto that pattern.

The situation in the *Beowulf* meter is completely different. There is no recurring pattern to which the meter returns and to

which variations can be referred. In fact, one aim of the meter seems to be to avoid establishing a recurrent pattern (see Lehmann 1975). The most widely accepted account of Old English meter (and the meters of Old Norse, Old Saxon, and Old High German) is from Sievers (1893), which describes five separate contours of stress for each *half-line* (also called *hemistich* or *verse*) labeled A through E. Even this scheme is a simplification because certain of the unstressed positions, marked x, can be expanded to two, three, four, or even five unstressed syllables:

- (5) A x / x /
 B x / x /
 C x / / x
 D / / \ x
 E / \ x /

One does not know and cannot guess until the verse is realized which of these patterns the verse might be. Some of them are mirror images of each other. Bliss (1967) identifies 130 different patterns of stressed and unstressed syllables based on these Five Types. Pope (1966) catalogues 279 patterns.

The only way metrical order can arise from so many variables is for metrical stress to be determined strictly by *grammatical* stress. Ever since Sievers' studies, a "grammatical hierarchy" has been assumed whereby nouns, adjectives, participles, and infinitives always bear metrical ictus, and function words such as prepositions never do. Normal grammatical stress cannot be "tilted" toward the abstract metrical pattern, because the abstract metrical pattern is not known until the normal grammatical stress pattern is known. The fourteenth-century meter of *Sir Gawain and the Green Knight*, *Cleanness*, *The Parlement of the Three Ages*, *William of Palerne*, and *Piers Plowman* works much the same

way. As in the Anglo-Saxon meter of *Beowulf*, *The Seafarer*, *The Wanderer*, and *The Battle of Maldon*, alliteration indicates metrical ictus (although through somewhat different rules in the two traditions). These are *a posteriori* or *inductive* meters.

A priori or *deductive* meters, by contrast, all have a platonic metrical template that both alters the normal pattern of grammatical stress and is altered by it. A constantly ongoing compromise is struck, and the compromise is known as *tension*. What is usually not understood is that this category of meters should include most of the Modern English meters that are misclassified by being lumped together with the Old and Middle English alliterative meters. It would help if neither tradition were called “strong-stress.” The key to Old and Middle English meters is strict grammatical stress. The key to the wide assortment of presumed strong-stress verse in Modern English, which includes nursery rimes and Coleridge’s *Christabel*, is a tilting of grammatical stress to fit the metrical template — often an anapestic template with iambic substitutions, sometimes vice versa. Indeed, it is a feature of trochaic, anapestic, and dipodic meters that unless the poet is skillful, the metrical template can take on a life of its own and wrench the normal patterns of grammatical stress in violent ways. In other words, the familiar but misleading category of “strong-stress” or “accentual” rhythm comprises meters that have quite opposite internal dynamics. Brogan (1993) makes this point succinctly in enumerating nine traditions that have been classified as “accentual verse.”

Halle and Keyser (1971:145) compare the meters of *Beowulf* and *Sir Gawain and the Green Knight* with the meter of nursery rimes, such as:

- (6) Ride a cock-horse to Banbury Cross
 To see a fine lady upon a white horse.
 Rings on her fingers, bells on her toes,

She shall have music wherever she goes.

According to Halle and Keyser, the verse form of *Beowulf* “shares certain fundamental properties with the English nursery rimes” (147). However, the most obvious point about “Ride a cock-horse” is that it is basically anapestic with the usual variations of that meter. A more relevant comparison than anything in Old or Middle English poetry is a poem like Sir Walter Scott’s “Lochinvar,” which also involves a horse (a real one) and a lady:

- (7) One touch to her hand and one word in her ear,
 When they reached the hall-door, and the charger stood near;
 So light to the croupe the fair lady he swung,
 So light to the saddle before her he sprung!
 “She is won! We are gone, over bank, bush, and scaur;
 They’ll have fleet steeds that follow,” quoth young Lochinvar.

Both poems demote adjectives to a position of non-ictus: *fine lády* in the nursery rime, *fair lády* in Scott. Both poems shift stress on compounds from the normal pattern of primary-secondary to secondary-primary, in accord with the meter: *cock-hórse*, *hall-dóor*.

In Old and Middle English meter, stress on lexical words and compounds does not shift in accord with a pre-existing metrical template, because the abstract metrical pattern is revealed by the retention of normal stress. For example, *hal dor* in *Gawain* keeps stress on the first element, as the alliteration shows:²

- (8) / x / x x / \ x / x x / x
 Halled out at þe hal dor, his hed in his hande (458)
 Went out at the hall-dor his head in his hand

²Citations from *Sir Gawain and the Green Knight* are from Tolkien and Gordon (1968); citations from *Beowulf* are from Klaeber (1950).

Similarly, *hall-thanes* in *Beowulf*:

(9)	/	x	/	x	/	\	x	/
	heardran	hæle,		healðegnas	fand	(719)		
	harder	luck,		hall-thanes	(he)	found		

In both lines, metrical ictus falls on syllables of certain grammatical categories: the stressed syllables of finite verbs (*halled*, *fand*), of nouns (*hal*, *hed*, *hande*, *hœl*), of adverbs (*out*), and of adjectives (*heardran*). Metrical non-ictus occurs on inflectional syllables and on function words such as prepositions (*at*, *in*), determiners (*þe*, *his*), and so on.

In the lines from the two modern English poems, there is an overall tendency for metrical ictus to occur on the same categories as in Old and Middle English, but there is no strict requirement for it to do so. The metrical template causes demotion not only of the adjectives *fine* and *fair*, as noted, but also, in “Ride a cock-horse,” of the adjective *white*; conversely it causes the promotion of the preposition *upon* and of the pronoun *she*. In the lines from Scott, the metrical template causes the promotion of the preposition *before* and the demotion of the verbs *stood* and *quoth* and of the nouns *bush* and *steeds*. These demotions and promotions are possible, because there is a pre-existing metrical template.

It might be argued that Old English meter has a template too, though one more complex, as expressed in Sievers’ Five Types. However, in addition to the proliferation of metrical subtypes already mentioned, there are reasons for jettisoning Sievers’ positivistic scheme as a representation of the meter and to see it as epiphenomenal — the inevitable result of a simpler underlying meter. The two half-lines in (9) can serve as an indication of an argument that has been made elsewhere (see Cable 1991): although those lines have quite different sequences of metrical

stress, weak stress, and secondary stress, they both have four syllables. If we begin with the idea that the metrical template of Old English meter is four syllables in any sequence of stresses, the question then becomes how to state the conditions under which one or more of those syllabic positions can be expanded. A sequence of two or more unstressed syllables is, of course, one of the most obvious features of Old English meter.

3. Old English Meter as Four Syllables

If Old English meter is based on a count of four syllables, then one or more of those syllables will have to be expandable to more than one syllable to produce the wide variety of line lengths and stress patterns that occur in the poetry; for example:

- (10) x x x / / x
 gyf þu on weg cymest
 if thou comest on the way

Here the expansion would be in the place of the first syllable — or first *position*, to invoke a more abstract but useful term. Clearly no more than two of the four positions can be expanded, because the expansions would have to be separated by stressed syllables. Otherwise, two continuous sequences of unstressed syllables would fall together into one long sequence — one long *dip*, as it is often called. It turns out that this expansion can occur only in the first or second position. When it appears to occur later, there is almost always an explanation in terms of syllabic resolution, or verbal prefixes, or some other peculiarity. Beyond these constraints and explanations, exceptions do occur, but generally Old English meter can be thought of as counting four syllables or syllable-equivalents to the half-line.

This view of Old English meter makes it much less driving

and less emphatic than the handbook summaries would have it. Steele (1999:247), for example, repeats Michael Alexander's schematization of the long line's meter as BANG ... BANG: BANG ... CRASH. The reference is specifically to alliteration, but the impression that it gives is of Old English poetry lurching forward in a noisy vehicle. However, studies during the past twenty-five years have made it clear that Old English does not depend on a rhythmic counting of two stresses to the half-line, four stresses to the line. Stress is important for alliteration, but the full meter of the verse is a complex blend of stress, syllable count, and syllabic quantity — including the count of moras in certain contexts. Meters that are based on syllable count, such as French, or on syllabic quantity, such as Latin, are often seen as the antithesis of Old English "strong-stress" meter. Yet these elements are a part of the *Beowulf* meter.

When proper attention is paid to syllable count and quantity, Old English poetry may sound to modern ears more like free verse than like a nursery rime. Despite the superficially apparent freedom, the verse maps onto a very strict and subtle scheme, in which possible hemistichs can be identified as metrical or unmetrical with fine precision:

(11) *Beowulf*, 1372-82

B	x	x	/	x	/
	Nis	þæt	hēoru	stōw!	
	Is	not	that	place	pleasant!

B, A	x	x	/	x	\	/	x	/	x
	þonon	ȳðgeblond		up	āstigeð				
	Thence	waves		up	rise				

A, C	/	x	/	x	x	x	/	\	x
	won	tō	wolcnum,	þonne	wind	styreþ			
	black	to	heavens,	when	wind	stirs			

- A, C / x / x x x / \ x
 lāð gewidru, oð þæt lyft drysmaþ, 1375
 awful storms, until air becomes gloomy,
- A, B / x x / x x x x / x /
 roðeras rēotað. Nū is se rād gelang
 skies weep. Now is help at hand
- A, E / x x / x / \ x /
 eft æt þē ānum. Eard gīt ne const,
 again in thee alone. Land yet you not know,
- A, B / x / x x x / x /
 frēcne stōwe, ðær þū findan miht
 awful place, where thou find might
- E, A / \ x / / x x / x
 sinnigne secg; sēc gif þū dyrre!
 sinful creature; seek if thou dare!
- A, D / x x / x / / \ x
 Ic þē þā fæhðe fēo lēanige, 1380
 I thee (for) that feud (with) fee reward,
- A, C / x \ x x x / \ x
 ealdgestrēonum, swā ic ær dyde,
 (with) old treasures, as I ere did,
- A, C / x / x x x x / \ x
 wundnum golde, gyf þū on weg cymest.
 (with) wound gold, if thou on way comest.

Only nine of the 21 verses have four syllables. It should be noted that all the rest get their extra unstressed syllables in either the first position (1372b: *Nis þæt*; 1373a: *þonon*; 1374b:

þonne; 1375b: *oð þæt*; 1376b: *Nū is se rād*; 1378b: *ðær þū*; 1381b: *swā ic*; 1382b: *gyf þū on*) or the second position (1377a: *æt þē*; 1379b: *gif þū*; 1380a: *þē þā*). Verse 1376a appears to have an extra syllable, but here the quantitative rules are at work, and the first two syllables of *roderas* are “resolved” into a single metrical position (still two syllables, but one position of ictus).

The main point of interest in these dips of two and three unstressed syllables brings us back to the idea of stress-timing in English. One of the most effective ways of gaining variety and avoiding monotony in metered poetry is by varying the speed of the line. The Old English hemistichs are constantly varied, because a sequence of unstressed syllables speeds up the movement, but the speed is modulated by a single dip, or secondary stress, or clashing stress. Furthermore, it is unpredictable which of these patterns will be used. We know that the extended dip itself, if it occurs, must fill one of the first two positions of the half-line, but it is impossible to predict whether it will occur at all. The effect is of a constantly shifting series of patterns that resist any regular rhythm, speeding up in a stretch of unstressed syllables in one half of a half-line, only to encounter clashing stress within that half-line or at the beginning of the next. It is a kind of start, stop, start again, half-stop movement, all within the count of four — not four stresses to the full line but *four metrical positions to the half-line*.

An analogy with musical syncopation comes to mind, except that syncopation depends on a regular beat that undergoes a temporary displacement. In Old English poetry there is no regular beat. Even this impressionistic description might suggest too much jerkiness. As Fulk (1992) and Suzuki (1996) have shown, the counting of syllabic quantities figures prominently in the meter in subtle ways. Such quantities would be overwhelmed by elements in many of the modern theories that have been proposed (including the melodic elements of previous theories by

the present author).

4. Middle English Alliterative Meter

The meter of the poems of the fourteenth-century Alliterative Revival also depends on manipulating sequences of unstressed syllables, though with certain crucial differences. First, syllabic quantity is not a part of Middle English meter, and thus there are no rules for resolution and suspension of resolution. Second, although the long line comprises hemistichs, the stress patterns for the two halves of the line are not interchangeable, as they generally are in Old English meter. (In Old English, patterns of alliteration are distinct for the a-verse and the b-verse, and certain stress patterns are restricted to one or the other, but the great majority of stress patterns can occur in either half-line.) A sample from *Sir Gawain and the Green Knight* illustrates the basic principles:

(12) *Sir Gawain and the Green Knight* (713-23)

x x / x x x / x / x x / x
 Mony klyf he ouerclambe in contrayez straunge,
 Many a cliff he climbed in countries strange,

/ / x x x / x / x x x / x
 Fer floten fro his frendez fremedly he rydez.
 Far wandered from his friends forlorn he rides.

x x x / x x x / x x x / x / x
 At vche warþe oþer water þer þe wyȝe passed 715
 At each ford or water where the man passed
 x / x / x x / x x / x x x / x
 He fonde a foo hym byfore, bot ferly hit were,
 He found a foe him before, unless unusual it were,

x x x / x x / x / x x x / x
 And þat so foule and so felle þat fezt hym byhode.
 And that so foul and so wild that (to) fight him (it) behooved.

x / x / x x / x x / / x
 So mony meruayl bi mount þer þe mon fyndez,
 So many a marvel by hills there the man finds,

x x x x / x x x /x x x / x / x
 Hit were to tore for to telle of þe tenþe dole.
 It were too hard for to tell of the tenth part.

x / x x / x x / x x x / x / x
 Sumwhyte wyth wormez he werrez, and with wolues als, 720
 Sometimes with serpents he wars, and with wolves also,

x / x x / x\ x x / x x x x / x
 Sumwhyte wyth wodwos, þat woned in þe knarrez,
 Sometimes with wild men, that lived in the rocks,

x x x / x x / x x / x x x x / x
 Boþe wyth bullez and berez, and borez oþerquyle,
 Both with bulls and bears, and boars besides,

x / x x x x / x x x x / x / x
 And etaynez, þat hym aneledede of þe heze felle.
 And giants that him pursued from the high rocks.

As in Old English meter, the assignment of metrical ictus in strict accord with grammatical stress reveals the metrical patterns, which cannot be guessed before the fact. Whereas the iambic pentameter constantly returns to *te tum te tum te tum te tum te tum*, these lines show a variety of stress patterns. All eleven a-verses are different from each other, and they are all different from any of the b-verses. In the b-verses, there are two

repeated patterns among seven lines: in 716, 717, and 721; and in 715, 719, 720, and 723. However, even the b-verse, for which the meter prescribes less flexibility, has six different patterns here. Altogether there are seventeen patterns of half-line stress in these eleven long lines.

The abstract pattern of Middle English alliterative meter has been discovered and described only within the past seventeen years. The main principles of the b-verse were found independently by Hoyt N. Duggan and myself and were first presented at the 1985 Modern Language Association convention (see Duggan (1986) and a series of subsequent articles, and Cable (1988, 1991)). The main principles seem to have held up under scrutiny in the years since. The theory in Cable (1988, 1991) makes more claims than that in Duggan (1986), involving the a-verse as well as the b-verse, and it is subject to more exceptions and more debate. Essentially both theories say that the b-verse must have exactly one strong dip — a stretch of two or more unstressed syllables — and this is what is of relevance in the present study of stress-timing.

More precisely, the strong dip can occur either before or after the first metrical stress in the b-verse, but not after the second stress. Thus, in 713b, *in contrayez straunge*, the two unstressed syllables occur between the two metrical stresses, and the speeded-up effect of stress-timing occurs in the middle of the verse. In 715b, *þer þe wyȝe passed*, the two unstressed syllables occur at the beginning. There should not be more than one strong dip in the b-verse.

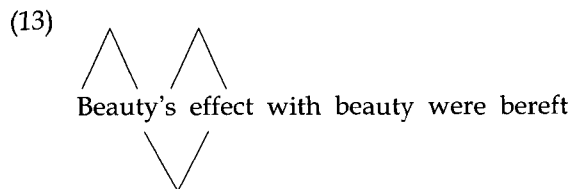
The a-verse, by contrast, must have at least two strong dips, or else three metrical stresses. These at least are the requirements as proposed in Cable (1991). All the a-verses in (12) conform. It should be acknowledged that the constraint is often violated — in about nine percent of a-verses in a representative selection of Middle English texts, and so the rule is not a categorical one.

The general effect, however, is unmistakable. The a-verse has greater length and more speed, and the b-verse puts on the brakes — or pulls in the reins. In both halves of the line the metrical pattern is inductive, as in Old English. It emerges from strictly following grammatical stress.

5. Stress-timing in the Iambic Pentameter

The history of the iambic pentameter between Chaucer, who died in 1400, and the Elizabethan poets of the late sixteenth century is confused and confusing. Elsewhere I have traced this development through a century and a half, beginning with Chaucer and the idea that he wrote not in iambic pentameter but in a strictly alternating meter (see Cable (1991:117-22) and Cable (1998)). However, the uncertainties, difficulties, and controversies at every step along the way would distract the focus from the main point before us here, which is the relevance of stress-timing in poetry composed in English at various stages of the history of the language.

Therefore, let us turn to Shakespeare and his use of the “inverted first foot” in a line like Sonnet 5, line 8:



The top branching shows how generative metrists would group the unstressed syllables. The bottom branching shows how an assortment of metrists from various traditions would group them, leaving aside the question of which stress the unstressed syllables are construed with (see Stewart (1930) and Stockwell and Minkova (2001)). These different points of view have their

parallels in phonology, in which unstressed syllables are grouped into feet differently in two traditions, one mainly American (the studies following Liberman and Prince (1977), though these vary in their construction of feet) and one mainly British (Halliday, Abercrombie, Giegerich, but also Pike), where the idea of stress-timed languages in contrast with syllable-timed languages figures prominently. Hogg and McCully (1987:220-27) succinctly summarize these two conceptions of the foot. My own view is closer to the British tradition, possibly because of a bias in coming to Modern English metrics from the isochronous structures of Old and Middle English poetry, especially the “strong dip,” as we have seen it illustrated above.

In other words, it can be argued that the so-called “inverted first foot” or “substitution of a trochee” is not a disyllabic foot at all but the insertion of a strong dip, a sequence of two unstressed syllables between stresses that is a familiar and essential part of the alliterative traditions of Old and Middle English. Shakespeare’s meter generally consists of iambic feet, but in this particular context there seems to be an intrusion of a native principle of stress-timing into a meter that was adapted from French and Italian. Whether this strong dip should be a part of a trisyllabic foot is beyond the scope of the present inquiry. It could conceivably be a dactyl (*Beauty’s ef-*) or, more likely, an anapest (*-ty’s effect*). Alternatively, it could be a strong dip that is not construed with a stressed syllable in either direction (as in Old and Middle English, by the theory assumed here). The question is an empirical one, but the answer, and even the means of finding an answer, are not clear to the present author.

What is clear is that the two unstressed syllables have the effect of speeding up the line in this place, giving it a variation that a more strictly alternating meter, such as Chaucer’s, does not have.

6. Trochaic and Anapestic Meters

Halpern (1962) proposed a binary typology of English meters in which iambic meter was in one category, and all the other English meters were in another. The main reason for the division is the greater modulation and subtlety that Halpern saw as being possible in iambic meter as against the sharper contrasts of stress, less opportunity for substitution, and ultimately greater monotony of trochaic, anapestic, and dactylic meters. Halpern's impressionistic description of the effect of poetry in iambic meter is a good starting point for considering non-iambic meters: "Iambic verse rides *with* the more softly contrasted rising rhythm of monosyllables, and *softens* the sharp contrast in trochaic disyllables by setting against their natural movement a contrary metrical movement; the accented syllable thus becomes the major syllable in *one* foot, while the unaccented syllables the minor syllable not in the same, but in the *next* foot" (184). In trochaic poetry, he says, the processes are reversed: "Rather than counteract the sharp contrasts in falling disyllables, the meter rides *with* them and thereby reinforces them; and even monosyllables in series tend, since one of them must occur 'on the beat,' to be contrasted more sharply than in ordinary speech in order to sustain the heavy accentual pattern" (184). Among his examples are William Blake's lines: "Tyger! Tyger! burning bright / In the forests of the night."

Finch (1999) makes a plea for readers to be more open to non-iambic meters and for poets to explore the possibilities of the less familiar metrical forms; her own poetry illustrates some of those possibilities with great skill. Still, as she acknowledges, writing in trochaic or anapestic meter is simply more difficult. It presents more of a challenge than writing in iambic meter. There is no sustained tradition of serious verse in these meters in British or American literature, and many readers of

Longfellow's *Hiawatha* have found the meter monotonous. Why should this be?

- (14) Homeward now went Hiawatha;
 Pleasant was the landscape round him,
 Pleasant was the air above him,
 For the bitterness of anger
 Had departed wholly from him,
 From his brain the thought of vengeance,
 From his heart the burning fever ...

Part of the problem has to do with the metrical stress that must fall artificially on words that normally have weak stress: the occurrence of metrical stress on the preposition *From* in the last two lines, on the conjunction *For* in the fourth line, on the helping verb *Had* in the fifth; on the copula *was* in the second and third lines, and so on. In addition, the ending of every line on a metrically unstressed syllables reinforces the drum-beat effect.

This artificial stress overrides the normal stress patterns that provide both the trisyllabic substitutions of iambic verse and also the expanded "strong dips" of "strong-stress" meter. Such phrases as "From his brain" and "From his heart" have exactly the syntactic structure for anapestic substitutions in the iambic pentameter, but the trochaic template gives them a different stress pattern; for example:

- (15) / x / x / x / x
 (a) From his heart the burning fever

- / | x x / | x / x / x /
 (b) Burst from his Heart, and Torrents from his Eyes
 (A. Pope, *Iliad* 23.22)

In trochaic meter the stress-timing element of English is in

competition with the metrical impulse toward ictus on every odd syllable, and the metrical template wins out. This is what is meant by “less easily modulated template meter” in (4). It seems that allowing two consecutive unstressed syllables in trochaic verse would undermine the meter, though the reasons for this are not completely clear. Jespersen (1913) stated the problem in terms of not allowing an iambic substitution in trochaic verse (the obverse of the quite acceptable and frequent “trochaic substitution” in iambic verse), and his solution has a neatness that has often been cited. However, if the “trochaic substitution” in iambic verse is better understood as the combination of a monosyllabic foot and a trisyllabic foot (see 13 above, and the discussion there), then the question is why trisyllabic feet cannot occur in trochaic verse. This is a matter for future investigation.

In these terms, it is interesting that anapestic verse has often been characterized as inflexible and monotonous, just as trochaic verse has been. However, while trochaic verse does not normally admit trisyllabic feet, the trisyllabic foot is, of course, the norm for anapestic verse. The ease with which it accommodates iambic substitutions varies with the skill of the poet. Stewart (1930:74) notes that disyllabic substitutions “may be a cause of trouble. If these are allowed at all, they should be used frequently; otherwise the line movement is unduly broken.” He illustrates with lines by Jean Ingelow that he calls “thoroughly bad,” because they “give one the effect of a horse trying to break from a trot to a walk.” By contrast he points to Swinburne, “a master at this art”:

- (16) I have lived long enough, having seen one thing, that love
 hath an end;
 Goddess and maiden and queen, be near me now and
 befriend.
 Thou art more than the day or the morrow, the seasons

that laugh or that weep;
For these give joy and sorrow; but thou, Proserpina,
sleep.

(*Hymn to Proserpine*, 1-4)

In these anapestic hexameters, the prevailing rhythm is $x \times /$, yet the first line has two consecutive iambic substitutions in the first line: *one thing, that love*.

7. Conclusion

In a classic essay on English prosody Kiparsky (1975:579) wrote: “The most important, virtually unbreakable constraints on meter in English involve the grammatical structure of the verse, notably the phrase and word units of which it is made up.” One can acknowledge the important and original insights that have come from Kiparsky’s focus on the phrase unit and yet note that there is a world of difference between *phrase units* and *word units* as these have been handled by the poets of the English language. The assumption running through the present study is that the poets generally follow the normal stress patterns of words. However, even in ordinary speech the stress patterns of phrases vary widely in different registers, different tempos, and so on. There seems to be no reason for taking any one of these patterns as a benchmark for describing the stress patterns of a line of poetry — showing the extent to which the line conforms to it or diverges from it.

The metrics of Old English poetry helps to clarify the issue. We do not know the stress patterns of phrases in ordinary talk in Anglo-Saxon times. Henry Sweet believed that the normal stress on a phrase like *god mann* was primary-secondary (Sweet 1898:1.243, 889ff.). Most descriptions of Modern English from the SPE Nuclear Stress Rule, through Liberman-Prince metrical

phonology, to present theories would assume a pattern of secondary-primary stress on *good man*.

It turns out that there is compelling evidence in Old English poetry that clashing stress on nouns and adjectives — and on all other lexical words — was primary-secondary, as in the opening lines of Beowulf:

- (17) x x / \ x
 þæt was gōd cyning!
 that was good king!

And in the verses cited in (11) above:

- (18) x x / \ x
 þonne wind styrep
 then wind stirs

Does this mean that Henry Sweet was right? Not necessarily. It does not matter what the “normal pronunciation” was. Normal pronunciation cannot be determined for Old English. Some phonologists such as Bolinger (1972) would argue that it cannot even be determined for the living language. In any event, the patterns of phrasal stress in ordinary talk are largely irrelevant for locating metrical ictus in lines of English verse of any period.

The linguistically most sophisticated description of the meter of *Hiawatha*, Hayes (1989:228), assumes a certain pattern of phrasal stress on *crag fell*:

- (19)
- | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | x |
| | | | | | | | x | x |
| . | . | x | x | . | . | x | . | . |
- And the crags fell and beneath them
 S W S W S W S W

The phrase occurs in a position in this line of trochaic tetrameter where a trochee is expected, and so adjustments are needed in the theory. The obvious question to ask is why begin with the assumption that *crag* *fell* is stressed as marked. Again an analogy with Old English is helpful. It might have been that in Anglo-Saxon conversation *wind styreþ* 'wind stirs' often, or even usually, had the stress pattern secondary-primary. However, in Anglo-Saxon poetry, clashing stress always had the pattern primary-secondary. Likewise, one could say that in *Hiawatha* in SW sequences, clashing stress always has the pattern primary-secondary.

The typology of English meters proposed in section 2 above assumes the "tilting" power of template meters. This idea in itself does not solve all the problems of constructing a metrical description, because the metrist should aim to specify which patterns are tiltable and which are not. The point is that this taxonomy of the tiltable can and should be worked out within the poetry itself, a text divided into lines. To start with patterns of ordinary conversation (even if it were possible in periods before the present) inserts an extra and misleading level of description into the process.

This brings us back finally to the matter of stress-timing with which the essay began. It was noted that experimental evidence from clocking the intervals between stressed syllables of Modern English have been largely ambiguous in their conclusions. Still, phonologists and phoneticians of various schools over the years have noted their *impressions* of isochrony in English, and speakers not trained in linguistics generally agree about the perceptual effect when it is explained to them. Metrists can use this possible feature as a heuristic, just as generative metrists have used their understanding of the structure of syntactic and phonological phrases as a heuristic. One can describe the disyllabic and multisyllabic substitutions of unstressed syllables *as*

if English is a stress-timed language, and the assumptions underlying the description can lead to a more elegant theory than is otherwise possible. (Incidentally, this approach also has implications for a theory of performance.) By contrast, the beneficial effect of transporting assumptions about normal phrasal stress into poetry is much more indirect and often misleading. The Monosyllabic Word constraint of Kiparsky 1975 is an important discovery, but I would argue that the syntactic mechanisms of the heuristic leading to it, which have little intuitive appeal, can be translated into terms of more traditional prosody along the lines sketched above so that elegance and simplicity are added to its power to filter.

References

- Abercrombie, D. 1965. A phonetician's view of verse structure. In his *Studies in Phonetics and Linguistics*, 16-25. London: Oxford University Press.
- Bliss, A. J. 1967. *The Metre of Beowulf*. Rev. ed. Oxford: Blackwell.
- Bolinger, D. 1972. Accent is predictable (if you're a mind-reader). *Language* 48, 633-44.
- Brogan, T. 1993. Accentual verse. In Preminger, A. and T. V. F. Brogan, eds., *The New Princeton Encyclopedia of Poetry and Poetics*, 6-7. Princeton: Princeton University Press.
- Cable, T. 1988. Middle English meter and its theoretical implications. *Yearbook of Langland Studies* 2, 47-69.
- Cable, T. 1991. *The English Alliterative Tradition*. Philadelphia: University of Pennsylvania Press.
- Cable, T. 1998. Metrical similarities between Gower and certain sixteenth-century poets. In R. F. Yeager, ed., *Re-Visioning Gower*. Ashville, NC: Pegasus.
- Daunt, R. M. 1983. Stress-timing and syllable-timing reanalyzed. *Journal of Phonetics* 11, 51-62.
- Duggan, H. N. 1986. The shape of the b-verse in Middle English alliterative poetry. *Speculum* 61, 564-92.
- Finch, A. 1999. Metrical diversity: a defense of the non-iambic meters. In A. Finch, ed., *After New Formalism: Poets on Form, Narrative, and Tradition*, 117-22. Ashland, OR: Story Line Press.

- Halle, M., and S. J. Keyser. 1971. *English Stress: Its Form, Its Growth, and Its Role in Verse*. New York: Harper & Row.
- Halpern, M. 1962. On the two chief metrical modes in English. *PMLA* 77, 177-86.
- Hayes, B. 1989. The prosodic hierarchy in meter. In P. Kiparsky and G. Youmans, eds., *Rhythm and Meter*, 201-60. San Diego, CA: Academic Press.
- Hogg, R., and C. B. McCully. 1987. *Metrical Phonology: A Coursebook*. Cambridge: Cambridge UP.
- Jespersen, O. 1913. Notes on metre (1913). In *Linguistica: Selected Papers in English, French and German*. Copenhagen: Levin & Munksgaard, 1933, 249-74.
- Kiparsky, P. 1975. Stress, syntax, and meter. *Language* 51, 576-616.
- Klaeber, F., ed. 1950. *Beowulf and the Fight at Finnsburg*. 3rd ed. Boston: Heath.
- Lehmann, R. P. M. 1975. Broken cadences in *Beowulf*. *English Studies* 56, 1-13.
- Liberman, M., and A. Prince. 1977. On stress and linguistic rhythm. *Linguistic Inquiry* 8, 249-336.
- Pike, K. 1946. *The Intonation of American English*. Ann Arbor: University of Michigan Press.
- Pope, J. C. 1966. *The Rhythm of Beowulf*. 2nd ed. New Haven: Yale University Press.
- Sievers, E. 1893. *Altgermanische Metrik*. Halle: Niemeyer.
- Steele, T. 1999. *All the Funs in How You Say a Thing*. Athens, OH: Ohio University Press.
- Stewart, G. R., Jr. 1930. *The Technique of English Verse*. New York: Holt.
- Stockwell, R. P., and D. Minkova. 2001. The partial-contact origins of English pentameter verse: the Anglicization of an Italian model. In D. Kastovsky and A. Mettinger, eds., *Language Contact in the History of English*, 337-63. Frankfurt am Mein: Peter Lang.
- Sweet, H. 1898. *A New English Grammar, Logical and Historical*. 2 vols. Oxford: Clarendon.
- Tolkien, J. R. R., and E. V. Gordon, eds. 1967. *Sir Gawain and the Green Knight*. 2nd ed. Rev. N. Davis. Oxford: Clarendon.

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접수일자: 2001. 8. 17.

게재결정: 2001. 11. 30.