



## Deseret Language and Linguistic Society Symposium

---

Volume 1 | Issue 1

Article 7

---

4-8-1975

### Chaucer's "Underweighted" Line: Some Computer-Assisted Steps Toward Reassessment

Karen Lynn

Follow this and additional works at: <https://scholarsarchive.byu.edu/dlls>

---

#### BYU ScholarsArchive Citation

Lynn, Karen (1975) "Chaucer's "Underweighted" Line: Some Computer-Assisted Steps Toward Reassessment," *Deseret Language and Linguistic Society Symposium*: Vol. 1 : Iss. 1 , Article 7. Available at: <https://scholarsarchive.byu.edu/dlls/vol1/iss1/7>

This Article is brought to you for free and open access by the Journals at BYU ScholarsArchive. It has been accepted for inclusion in Deseret Language and Linguistic Society Symposium by an authorized editor of BYU ScholarsArchive. For more information, please contact [scholarsarchive@byu.edu](mailto:scholarsarchive@byu.edu), [ellen\\_amatangelo@byu.edu](mailto:ellen_amatangelo@byu.edu).

CHAUCER'S "UNDERWEIGHTED" LINE:  
SOME COMPUTER-ASSISTED STEPS TOWARD A REASSESSMENT

Karen Lynn

Languages and Linguistics Symposium

*April 7-8, 1975*

Brigham Young University

## CHAUCER'S "UNDERWEIGHTED" LINE: SOME COMPUTER-ASSISTED STEPS TOWARD A REASSESSMENT

Karen Lynn

Perhaps it's true that we don't miss great authors we never had, just as we don't miss friends who've never been born. But it's difficult to imagine Middle English without Chaucer. He seems to fill an important emotional niche for medievalists; I think our personal stability requires him. When a medievalist is discussing Chaucer, he knows that it's one of the times he won't have to be on the defensive quite so often; he won't quite so often have to make a dash for that escape tunnel he by now knows so well: that is, whenever the middle ages has left us something unappealing and inexplicable that we must read and deal with anyway just because it has survived, the medievalist accounts for this unattractive relic by muttering something about "the tastes of another day" or the necessity for "approaching the work through conventions by now completely foreign." Valid though the point may be, the suggestion that "well, they might really have liked this in the Middle Ages" always has a ring of condescension to it. That's why Chaucer is so indispensable; he's the proof, Exhibit A whether or not there's an Exhibit B, that people six centuries ago could speak for themselves, and could speak to us.

It's important to begin with that this statement of agreed-upon medievalist preferences because this paper has as its point of departure an assumption that's admittedly an intuitive one. Though the Middle English period, like every other literary period, is full of undistinguished and undistinguishable verse by a host of minor poets, only Chaucer sounds like Chaucer; just as no one but Milton can sound consistently Miltonic, whatever that term means, no other poet can turn out a Chaucerian line, except as an occasional happy accident. We sense the difference in Chaucer; we're convinced of it; we can recognize Chaucer's work immediately; so whatever Chaucerian means, it must mean something. It's here that the student of poetry and the student of linguistics are brought together; as the linguist sorts out and gives names to the elements of language and the processes of linguistic construction, the student of poetry is particularly concerned with the behavior of these elements and processes as the poet employs them.

How can we best approach the question of what makes a Chaucerian line Chaucerian? An adequate analysis of any one poet's handling of any one verse form must fulfill two requirements: it must give a satisfactory description of the underlying verse patterns as the poet conceives it, perhaps comparable to linguistic competence; and it must provide an account of the variations and alternatives within the prosodic craft of the particular author which to him constitute the acceptable actualizations--his possible performances--of this pattern. The alert student of Chaucer would surely see the value of working toward this kind of linguistic analysis; it's not enough for him to read the Prologue to the Canterbury Tales, shake his head in admiring disbelief, and murmur, "Isn't that wonderful!" or "Isn't that Chaucerian?"

Specifically, the intuitive point about Chaucer's verse to which we will attempt to give some kind of non-intuitive substance has to do with one widely-shared, pleasurable, positive reaction to his poetry; it's light; it doesn't weigh too much; it moves better than anyone else's verse that we know of in Middle English. Eleanor Hammond, in her book English Verse Between Chaucer and Surrey, notes that one of the characteristics of Chaucer as a writer of narrative is what she calls the "underweighting" of his verse. This "swift fluid narrative," she says, comes from his tendency to include only a small number of stressed, grammatically important words in any one line. She feels that he was greatly aided by the Middle English syllabic final -e, certainly not a sound that is going to slow a line down, even if it is pronounced; thus, she reasons, Chaucer was able to fill the required number of syllable-slots in each line without using as many words as a modern poet would have to; or, to put it another way, the ratio of syllables to words is higher than would be possible in Modern English. A Modern English rendering of Chaucer, if it attempts to keep the same meter, must therefore fill up the slots with something else--more words or longer words--and is thus heavier. And Paul Baum is another critic who speaks of Chaucer's practice of "allowing in the place of the normal five stresses four, three, or even two rhetorical emphases," meaning presumably primary lexical stress.<sup>2</sup>

This all sounds very logical, but it's difficult to believe that the secret of Chaucer's light line rests entirely upon his avoidance of stressed syllables; even with the help of the final -e, that most convenient and unobtrusive of syllables, good poetry is not usually made up of prepositions, conjunctions, and auxiliaries.

In 1966 Morris Halle and Samuel Jay Keyser suggested a new system, or at least a new notation, for describing a verse form and for separating metrical from unmetrical lines according to this description.<sup>3</sup> They described iambic pentameter as a line of 10 positions, the odd-numbered positions weak, receptive to unstressed syllables, and the even-numbered ones strong, receptive to stress. They defined an entity which they named stress maximum: "a fully stressed syllable occurring between two unstressed syllables within the same syntactic constituent within a line of verse."<sup>4</sup> The Halle-Keyser theory was the basis of a computer-assisted study of samples from five Middle English poets, including Chaucer. This investigation pointed toward somewhat different explanations for Chaucer's light line, at the same time that it pointed up, incidentally, some possible shortcomings of the Halle-Keyser theory itself.

From verse samples that had been marked for binary or contrastive stress, the computer tallied, among many other features, the number of stressed syllables, the number of stress maxima, and the comparison of these counts to the total number of syllables. The first item to be noted is that Elinor Hammond and Paul Baum have missed their guess: Chaucer's rapid line movement is in fact not the result of fewer stressed syllables, not even by comparison with the lines of John Lydgate, again an intuitive choice but this time as the man who wrote

the heaviest, most non-fluid lines in Middle English. Thirty-two percent of Lydgate's syllables were stressed syllables, whereas in fact thirty-four percent of Chaucer's were. Nor does a comparison of stress maximum percentages yield any clues as to lightness, either in the ratio of stress maxima to stressed syllables, nor in the total stress maximum percentages. These figures were very much the same for Chaucer, Hoccleve, Lydgate and Dunbar.

The source of Chaucer's lightness must lie elsewhere. The data gathered by the computer shows two interesting distinctions which may constitute at least a partial explanation. The first item of interest has to do not with the number of stresses--we have seen that these figures tell us nothing useful. Instead, it's the placement of stresses that seems to be a key difference between Chaucer and poets not noted for their light lines. According to Halle and Keyser, as long as the syllable-count of a line falls within appropriate limits for a particular meter, the only way that the line can be classified as unmetrical is if a stress maximum--again, a stressed syllable flanked immediately on both sides by a syllable of lesser stress--appears in a weak position, an odd-numbered position or syllable-slot in the case of iambic pentameter. So a poet can write a line with stressed syllables in all five weak positions, if he wants to. The line passes the test of metricality with any number of weak-position stresses, just as long as no weak-position stress qualifies as a stress maximum. And how does a poet neutralize a potential stress maximum in a weak position? In other words, how does he write variant but metrical lines? He surrounds the weak-position stress with adjacent stress or an adjacent syntactic break; the potential stress maximum is thus changed into a simple stress, allowable in any position in the line.

Chaucer certainly used stress syllables in odd-numbered positions; in fact, positions 1, 3, 5, 7, and 9 each contain just over 1% of his total stressed syllables. Adjacent neutralizing elements surrounding these odd-position stresses make these lines, though complex, still metrical. But compare this percentage with Hoccleve's distribution of 2 or 3% in each odd-numbered position, and Lydgate's of as many as 5%. The implications are clear. Though Hoccleve and Lydgate wrote metrical lines, and though they could have found a precedent for this weak-position stress in Chaucer's verse, it's the frequency of this feature, not just its existence, that's important. Chaucer, Hoccleve, and Lydgate each used roughly one stressed syllable for every three they wrote, but Hoccleve and Lydgate spread these syllables out into weak positions as well as strong ones, making more frequent and more cumbersome use of this allowable deviation from the basic pattern.

It might be useful to express this same point, in general terms, from another approach. Chaucer's reluctance to use stressed syllables in weak positions meant in addition that most of his strong-position stresses, since they had not stressed neighbors, would be actualized as stress maxima. And in fact, the odds turn out to be almost nine in ten that if Chaucer placed a stressed syllable in a strong position, this syllable would emerge

as a stress maximum. With Lydgate, the actualization of stress as stress maximum in these positions drops to only eight in ten. It seems to me that in this evidence may lie, in part, the real nature of Chaucer's much-discussed "lightness." When a stress or stress maximum occurs in a normal place in the line, the expected stress, set up by the metrical pattern, does not combine with the actual lexical stress to throw the word into greater relief; rather, the reader's or hearer's anticipation of the stress lessens the obtrusiveness of the stressed syllable, and the line is therefore lighter. Whether it was conscious or unconscious, Chaucer's realization that the features which neutralize stress maxima are the same features which load weight upon the line was possibly very influential in his artistic handling of the iambic pentameter form.

Halle and Keyser's system for assigning a complexity count to each line is a good index of the features discussed above, since complexity depends upon weak syllables in strong positions and stressed syllables in weak positions. As the complexity count approaches 10 or 12, the line may not easily be apprehended as iambic pentameter, for example, on the first reading. Chaucer's average complexity is very low--only 1.8, in fact, as compared with an average complexity of 2.6 for Hoccleve and 3 for Lydgate.

The second significant distinguishing feature of Chaucer's verse which might help account for his fluid movement is the number of possible assignments of syllable to position. The iambic pentameter pattern presupposes ten syllable-slots; traditionally, one slot may go unfilled at the beginning of a line, and one or two extra slots may be added to the end. If an eleven-syllable line needs to fit into a ten-syllable pattern and has only one elision, that's simple enough; there's no debate. But if a line needs two elisions, and there are five possible sonorant sequences or optional syllabic -e's, then the question is more complicated, because there are ten possible ways, not all of them metrical of course, of distributing these twelve syllables over the ten slots. When a long line contains a number of unstressed syllables and optional final -e's, and word-initial and word-final consonants like s, m, n, r, and h--all of which Chaucer seemed happy to slide over--there may be a great many possibilities indeed. The first version of the computer program was designed to accommodate as many as thirty possible distributions for any one line, but this limit turned out to be a naive estimate, to say the least. For one basically fourteen-syllable line from the *Wife of Bath's Tale*--"Somme seyde honour, somme seyde holynesse"--there are 126 possible ways of making it a 9, 10, 11 or 12-syllable line. This isn't just a game; it tells us something important about Chaucer's phonetic choices. His lines were somewhat longer than the next highest sample, but only by a tenth of a syllable, an insignificant difference which might vary with another sample. And yet for each of his lines there were, on the average, 4.5 possible assignments of syllable to position; no other poet had even half as many. Lydgate again is at the other extreme, with only 1.3 possibilities for each line; there are 1.5 for each line of Dunbar, 1.6 for Hoccleve. Consciously or unconsciously, Chaucer wrote highly elidable lines--often more elisions than he needed. These vowels and consonants elide in traditional poetic practice because they are the least obtrusive,

the easiest spoken in combination with other sounds. They move quickly, and may well be an important element in Chaucer's fabled lightness.

In discussion of stress and light-weight lines, it seems more and more that the traditional prosodic distinction of simple contrastive stress is perhaps not sufficient. As one indication, Chaucer's critics praise him for his skill in not weighing down his lines with stresses in every stress position; but when the critics perceive what seems to be exactly the same technique in Hoccleve, it's called "Hoccleve's clumsy forced stress."<sup>6</sup> Are the two manifestations really the same, colored only because we hate to say anything bad about Chaucer? Or is there really a difference, if we were to examine finer distinctions among the stresses, in the syllables that Chaucer uses in these positions? How about compounds and tri-syllables? There may be significant differences in Chaucer's placement of varying levels of stress, even though his percentage of contrastive stress does not, as we have seen, set his verse apart from anyone else's. So it may be well to remark, in conclusion, that Halle and Keyser's failure to treat these stress distinctions is one deficiency in their theory that Paul Kiparsky has cited recently. One advantage of his new system is that it accommodates a four-fold distinction in stress, carrying a more exact and meaningful accounting of lexical stress over into the comparison with traditionally binary metrical patterns. Like Halle and Keyser's, Kiparsky's system is methodical and eminently programmable, alluring, in fact, to the student who wants to know how poets write poetry but who realizes that art is long and life is short.

#### FOOTNOTES

- 1 Eleanor Hammond, English Verse Between Chaucer and Surrey (Durham, N.C.: 1902), p. 19.
- 2 Paul Baum, Chaucer's Verse (Durham, N.C.:1961), p.77.
- 3 The theory was first presented in Morris Halle and Samuel Jay Keyser, "Chaucer and the Study of Prosody," College English, 28 (December 1966), 187-219. A much more readable statement appears in Samuel Jay Keyser, "The Linguistic Basis of English Prosody," Modern Studies in English (Englewood Cliffs, N.J.: 1969), pp: 379-394.
- 4 Halle and Keyser, "Chaucer and the Study of Prosody," p. 197.
- 5 For a fuller description of the study and the computer programs, see Karen Lynn and Robert Dilligan, "Computers and the History of Prosody," College English, 32 (May, 1973).
- 6 Paul Baum, p. 85, for example.
- 7 Paul Kiparsky, "Syntax, Stress, and Meter," 1974, unpublished.