

LUCRETIUS 1.136-139 AND THE PROBLEMS OF WRITING *VERSUS LATINI*

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I_N 1.136-139, Lucretius writes:

*Nec me animi fallit Graiorum obscura reperta
difficile inlustrare Latinis versibus esse,
multa novis verbis praesertim cum sit agendum
propter egestatem linguae et rerum novitatem.*

Since the difficulties mentioned by Lucretius are so apparent, and his success in surmounting them is for the most part so impressive, we may well take these lines at face value and pass on, according the poet our tacit sympathy and admiration. But possibly there is more here than meets the eye at first sight; possibly Lucretius has not merely made his point discursively here but also, in 139, illustrated it.

Much may be said both in praise and in censure of 139. To end a Latin sentence, whether in prose or poetry, with a long pendant prepositional phrase is awkward; and the phrase is here coextensive with a hexameter line, a fact which emphasizes the structure of the sentence and makes the awkwardness more apparent, since the sentence is apparently complete at the end of 138. On the other hand, the chiasitic order of the words after *propter*, the metrical equivalence of *linguae* and *rerum* and the syllabic, if not metrical, equivalence of *egestatem* and *novitatem* combine to produce a finely balanced phrase.¹

Of the rhythm of this line, however, the editors have found nothing, or nothing good, to say. They note "the bad close of the line," and pass on.² The "bad close," of course, is created by the quadrisyllabic word of rhythm - - - in final position; the heinousness of which is increased when such a word is preceded by a word longer than a monosyllable.

The more polished Latin hexameter poets generally avoid ending their lines in this manner; and at least since the time of Ritschl a theory to explain the avoidance has been available.³ Since Latin was a stress-

¹The line also contains the only elision of *-ae* genitive in Lucretius. So, e.g., W. A. Merrill, *Lucreti De Rerum Natura Libri Sex* (New York, Cincinnati and Chicago 1907) *ad loc.* (hereafter referred to as Merrill).

²So e.g. Merrill *ad loc.* (Giussani, however, says that the verses are not *musaeo contacti lepore*, but nevertheless grants that they possess *una prosaica gravezza*.)

³*Opuscula Philologica* (1868) 2. xii, cited by L. P. Wilkinson, "The Augustan Rules for Dactylic Verse," *CQ* 34 (1940) 30-43, where the case for the stress-accent is argued on the basis of the compositional preferences of the Augustan poets. Throughout this paper I assume the orthodox theory that the accent of Latin was (at least primarily) a stress accent.

accented language, it would have been natural for the Latin poet, like the English poet, to compose stress-accented verse: verse, that is, in which the verse-ictus and the prose accent coincide, wholly or for the most part, and define the rhythm of the line. Under the cultural domination of Greece, however, Roman poets elected to write in Greek metres, in which the quantity of the syllables, not the prose-accent, was the important factor.⁴

The resulting problem was urgent and evident: how to ensure that, when the Latin was spoken, or read silently with due sensitivity, the quantity of the syllables was not overwhelmed by the prose stress-accent. It is difficult—I should say impossible—to suppose that the more sensitive Roman readers of Latin poetry emphasized merely the quantity and the verse-ictus, the heavier beat falling on the first syllable of the dactyl or spondee, thus:⁵

⁴On the question of the nature and behavior of the Latin accent, see e.g. W. M. Lindsay, "The accentual element in early Latin verse," *TPhS* 1891-4, 405-43, *The Captivi of Plautus* (London 1900) 359-60; C. E. Bennett, "What was ictus in Latin prosody?" *AJP* 19 (1898) 361-83; F. Skutsch, "Der lateinische Accent," *Glotta* 4 (1913) 187-200; W. R. Hardie, *Res Metrica* (Oxford 1920) 209-10; W. M. Lindsay, *Early Latin Verse* (Oxford 1922) 18-34, 316-23; C. W. E. Miller, "The pronunciation of Latin prose, or ictus, accent and quantity in Greek and Latin prose and poetry," *TAPA* 53 (1922) 169-97; F. Vollmer, *Römischer Metrik*, in Gercke-Norden, *Einleitung in die Altertumswissenschaft* (Leipzig and Berlin 1923) 11-12; E. H. Sturtevant, "The ictus of classical verse," *AJP* 44 (1923) 319 ff., "Harmony and clash of accent and ictus in the Latin hexameter," *TAPA* 54 (1923) 51-73, "Harmony and clash of accent and ictus in the Latin elegiac distich," *TAPA* 55 (1924) 73-85; G. Murray, *The Classical Tradition in Poetry* (Cambridge, Mass. 1927) 113 n.; E. Fraenkel, *Ictus und Akzent im lateinischen Sprechvers* (Berlin 1928); F. W. Shipley, "Problems of the Latin Hexameter," *TAPA* 59 (1938) 134-60; W. F. J. Knight, *Accentual Symmetry in Virgil* (Oxford 1939) 8-9; E. Kapp, "Bentley's Schediasma 'De Metris Terentianis' and the modern doctrine of ictus in classical verse," *Mnemosyne* 9 (1941) 187-94; E. Pulgram, "Accent and ictus in spoken and written Latin," *ZVS* 71 (1954) 218-37; W. Beare, *Latin verse and European song* (London 1957) *passim* (hereafter referred to as Beare); J. Soubiran, "Intremere omnem et si bona norint: Recherches sur l'accent de mot dans la clause de l'hexamètre latin," *Pallas* 8 (1949) 23 ff.; C. G. Lepsky, "Il problema dell'accento latino," *ASNP* 31 (1962) 199 ff.; J. J. Delgado, "El hexámetro virgiliano," *EClés* 7 (1963) 146-61; R. J. Getty, "Classical Latin metre and prosody 1935-1962," *Lustrum* 8 (1963) 103-60 (hexameter 110-117, pentameter and elegiac 118-141); D. Norberg, "La récitation du vers latin," *NPhM* 66 (1965) 496 ff.; W. S. Allen, *Vox Latina* (Cambridge 1965), "The Latin accent; a restatement," *JL* 5 (1969) 193-203, *Accent and Rhythm* (Cambridge 1973) (hereafter Allen 1965, 1969, 1973); G. E. Duckworth, *Virgil and classical hexameter poetry. A study in metrical variety* (Ann Arbor 1969); E. Lienard, "Réflexions sur l'accent latin," *Mél. M. Renard* (= coll. Latomus 101, 1969), 551 ff. There are careful analyses of Lucretian practice in writing verses in W. A. Merrill, *Lucretius and Cicero's verse*, University of California Publications in Classical Philology 5.9, 142-54 (Berkeley 1921), *The Lucretian Hexameter* 1, 2, *ibid.* 5.12, 253-96 and 13, 297-334, *The Characteristics of Lucretius' verse*, *ibid.* 7.7, 221-37, *The metrical technique of Lucretius and Cicero*, *ibid.* 7.10, 293-306, and *Lucretian and Virgilian Rhythm*, *ibid.* 9.10, 373-404.

⁵In all such discussions we are referring to an ideal of reading. Then, as now, there must have been insensitive readers. For evidence that Lucretius himself was sensitive to

Arma virúmque canó Troiaí qui primus ab óris.

(a) such a pronunciation would have been extremely monotonous; (b) there is papyrus evidence that prose accents were pronounced;⁶ (c) were the prose accents ignored, any assemblage of long and short syllables which collectively made up a dactylic hexameter would have been satisfactory, from the point of view of rhythm, and the increasing avoidance of such phenomena as quadrisyllabic and double-disyllabic endings would be an incomprehensible prejudice.⁷ There must be some reason why certain word-lengths in certain positions are avoided by Latin, but not by Greek, hexameter poets; and the avoidance seems to indicate not merely that prose accents were observed, but that they were given *more* emphasis than whatever may have been allotted to ictus.

If we acknowledge that prose-accent was in some way observed, and that "a long penult was accented, as *pepér-ci*, *inimíc-us*; but if the penult was short, the antepenult received the accent, as in *exíst-í-mo*, *confíc-i-unt*, *té-ne-bræ*" while "disyllables were necessarily accented on the penult, as in *té-go*, *tó-ga*," the behaviour of the Latin hexameter poet becomes more comprehensible.⁸ As Ritschl maintained, the goal is—generally—non-coincidence between verse-ictus and prose-accent in the first four feet of the line, coincidence in the last two.⁹ Given the accentual rules stated above, a disyllabic or trisyllabic ending to the line (– x or – x) will produce such coincidence, provided that a word longer than a monosyllable precedes the final word. So, in the Lucretian passage above, *obscura reperta* (136) and *versibus esse* (137) furnish 'smooth' endings.

139, however, is a different matter. *Novitatem*, like other quadrisyllables

prose-accent in his composition of verses, see below, 156. (I propose to discuss the question of Lucretius' 'rough' line-endings more fully on a subsequent occasion.)

⁶*Papiri greci e latini* (Pubb. della soc. ital. per la ricerca dei papiri greci e latini in Egitto) 1 (1912) 47 and Plate 21. Discussed by C. H. Moore, "Latin exercises from a Greek schoolroom," *CP* 19 (1924) 317–328; F. W. Shipley, "Problems of the Latin hexameter," *TAPA* 69 (1938) 134–60; A. Kabell, "Metrische Studien II: antiker Form sich nähernd," *UUA* (1960) 6 ff.; Allen (1973) 345. Allen (1973, 346) adduces Horace's practice of quoting Terence's—quantitative—senarii in hexameters (*Epist.* 1.19.41 *hinc illae lacrimae* from *And.* 126, and *Serm.* 2.3.264 *exclusit; revocat; redeam?* from *Eun.* 49) as evidence for accentual reading.

⁷As has frequently been argued; see, e.g., Allen (1965) 83–88, (1973) 151–99.

⁸R. G. Kent, *The Sounds of Latin* (Language Monograph no. 12: Baltimore; reprinted New York 1966) 66 (quoted by Allen 1973, 155). An ancient account may be found in Quintilian 1.5.30. For problems caused by the Latin grammarians' employment of Greek terminology to discuss the Latin accent, see, e.g., Allen (1965) 83 ff., (1973) 151 ff. For ancient sources, see F. Schoell, *Acta Societatis Philologiae Lipsiensis* 6 (1876); and for more modern discussions G. C. Lepscky, *Annali della scuola normale superiore di Pisa*: Lettere, etc., ser. 2, 31 (1962) 199 ff.

⁹See also, e.g., C. R. Bailey, *Lucreti De Rerum Natura Libri Sex* (Oxford 1947) 115 ff. (hereafter referred to as Bailey), for tables showing the preferences of Ennius, Cicero, Lucretius and Virgil.

with a long penult, has its primary accent on the penult, and a secondary—not necessarily weaker¹⁰—accent on the first syllable. That is to say, in terms of its prose accent the rhythm of this word is trochaic. So far, we might say, so bad. But let us regress further along the line, to *rerum*; also a trochee by prose accent. Then to *linguae et*: another trochee! (I assume that, as in other stress-accented languages, unemphasized ‘and’ was pronounced unstressed.) *Egestatem* supplies two more, *propter* yet another, giving, by prose accent,

própter ěgestátem línguae et rĕrum nŏvítátem.

We have here, it appears, a line which is both a quantitative dactylic hexameter and a line containing seven regular stressed trochees.

Scholarly discussion has very properly been directed primarily to the problems experienced by Roman poets in their attempts to write smooth quantitative dactylic hexameters in Latin. However, there is an allied problem, to which a few pages may reasonably be devoted. If due attention is given to the prose accent when Latin hexameters are read, the poet may inadvertently—or, of course, purposely—produce a line which, when read, is not merely a quantitative dactylic hexameter but also possesses a regular, and non-dactylic, stress-rhythm. I shall discuss here (a) the likelihood of the accidental occurrence of such a phenomenon in Latin dactylic hexameters; (b) in the light of (a), the likelihood that Lucretius produced the effect deliberately here; (c) Lucretius’ possible motive, if any, for so doing.

To discover the incidence of regular, non-catalectic, stress-trochaic lines in Lucretius’, or any other Latin poet’s, dactylic hexameters, it is unnecessary to examine every line in detail. Any line which does not end in a quadrisyllabic word, or in two disyllabic words (*nŏvítátem*, *fúit ánte*) may be ruled out at once, since its ending will not be trochaic.¹¹

¹⁰I mark primary accent /, secondary //. For the secondary accent, see, e.g., Allen (1973) 90. Were the secondary accent weaker, so that the first syllable of *nŏvítátem* were more lightly accented than the first syllable of *loca* in *lóca píscēs*, one might expect Virgil to be more willing to write quadrisyllabic than double disyllabic hexameter endings, as giving a less rough rhythm. In fact, the figures—from Bailey—are (quadrisyllabic words first): *Georgics*, 4:25, *Aen.* 1–3, 5:14. Lucretius’ overall figures are 173:181, Cicero’s 3:23. Ennius has 35:26; but it would be difficult to argue that Ennius was more sensitive to such matters than were the other poets mentioned; and the figures for Ennius do not show a statistically significant preference. My own count for Lucilius gives 31:43 (using the text of W. Krenkel, *Lucilius Satiren* [Leiden 1970]).

¹¹C. Exon, “The secondary accentuation of words of the type *consuluisti*,” *CP* 2 (1907) 341–44, argues for the accentuation *consŭluisti* on the analogy of *consŭluit*. If his arguments were accepted, a pentasyllabic ending would furnish stress trochees. A line of regular trochees would require a preceding monosyllable, which alone could carry stress-accent. Lucretius (e.g., 1.916, 2.26, 42, 508, 544, 735) Ennius (201 Vahlen) and Lucilius (e.g., 165, 257, 262, 309, 329 Krenkel) sometimes write lines in which monosyllables precede pentasyllabic endings; but even if we allow Exon’s pronunciation for

Furthermore, I suppose that only a *regular* stress-accented line would be likely to be noticed in reading or hearing what is, after all, composed as an example of a quite different kind of line.¹² Accordingly, a seven trochee line such as Lucretius 1.139 can occur only in a fourteen-syllable hexameter; and hence in a line containing three quantitative spondees, two quantitative dactyls and the quantitative catalectic dactyl in the sixth foot. It is unnecessary that one of the dactyls should occur in the fifth foot: a spondaic quadrisyllabic ending (*húlmanárum*), or spondaic words in each of the last two feet (*íllis rébus*), produces stress-trochees. A regular stress-trochaic octonarius could occur in a quantitative dactylic hexameter, since such a line requires sixteen syllables, and the longest form of the dactylic hexameter (five dactyls and a catalectic dactyl) contains seventeen; but, as will appear, the production of stress-trochees from quantitative dactyls is so difficult as to render the composition of such a line, at all events by accident, very unlikely.¹³

Regular stress-iambics can occur, but only under even more closely specified conditions: a final monosyllable preceded by a disyllable is needed to produce an appropriate rhythm at the end of the line. Only a final monosyllable will give prose-stress on the last syllable of the line. Another stress-accent is needed on the antepenult; and the antepenult of a dactylic hexameter, where the fifth foot is a dactyl, must be short.¹⁴

all words of form $-\bar{v}\bar{v}-$, only Lucilius 188 Krenkel *lērodēsque simul tōtum ac sit meirāciōdes* and 309 Krenkel *quārum et ābundēmus rērum et quārum indāgeāmus* have any claim to be regarded as trochaic throughout. For a reply to Exon, see A. G. Harkness, *CP* 2 (1907) 344. Allen (1973) 190 takes the generally accepted view that such words were accented $\bar{\bar{v}}\bar{v}\bar{\bar{v}}$.

¹²Similarly, those who, in their reading of Dickens' prose, notice that author's predilection for blank verse rhythms in passages of heightened emotion are noting the presence of a regular five-stress iambic rhythm, though blank verse, particularly in the hands of the later Shakespeare, admits of much greater freedom. The freer blank verse rhythms would pass unnoticed in prose.

¹³A stress-accented iambic septenarius (catalectic octonarius) could in principle occur; but if we take the view that such a rhythm will only be noticed in stress-verse where both the final syllable and the penult are stressed (././././././././), the septenarius must end in two monosyllables. Lines with such an ending occur in Lucretius (113 according to Bailey), Ennius (7, Bailey) and Lucilius (20, by my count); but none has such a rhythm throughout. If an unstressed final syllable were acceptable, a quadrisyllabic or double disyllabic ending would suffice; but I find no lines with such endings in Ennius or Lucilius which exhibit this rhythm; and in Lucretius only 2.480, *finita vāriāre fīgurārum rātiōne*. Furthermore, the generally trochaic rhythm of the Latin prose accent (which I discuss below, 155) would render it unlikely that any such line, whether ending in two monosyllables, a double disyllable or a quadrisyllable, would be felt to be iambic. Every word in Lucretius 2.480 has a trochaic ending, and three are ditrochaic words.

¹⁴Where the last two feet are spondaic, a spondee or molossus preceding the final monosyllable would give iambs: *fácti súnt, húmánas rēs*. Such endings occur: Ennius 207 Vahlen: *dono ducite doque volentibus cum mágnis dīs*; but none is iambic throughout.

Such a syllable, when followed, as in this position in the dactylic line must be the case, by a longum, will carry the prose accent only as the first syllable of a disyllabic word. So *pótest rés* (Lucr. 1.443) is iambic, *fáciēt quíd* (Lucr. 1.440) not iambic, as the close of a line. A stress-iambic octonarius might occur in a quantitative dactylic hexameter containing only one spondee, while a line of seven regular stress-iambic feet will require three quantitative spondees, two quantitative dactyls and the catalectic dactyl. A stress-trochaic septenarius (catalectic octonarius) will require two quantitative spondees, three quantitative dactyls and the catalectic dactyl, and must end with a disyllabic and monosyllabic word (*húmi bós*), for reasons already given.

Since this paper takes its rise from Lucretius 1.139, I shall discuss in most detail the conditions necessary to produce a regular trochaic rhythm of the type there found. Much of the discussion, as I shall show, is relevant also to the other types of line just mentioned.

Since the appropriate line-endings may be more readily defined, I begin from the end of the dactylic hexameter. Moving backwards from the quadrisyllable or double disyllable, we may exclude any line in which these are preceded by a monosyllable, as in Lucr. 6.59:

si tamen interea mirantur quá rãtióne.

The monosyllable interrupts the trochees at once. Moreover, on the basis of the more likely theory of the effect of elision upon accent,¹⁵ we may exclude also lines in which an elided disyllable or longer word precedes the quadrisyllable or double disyllable, as in Lucr. 1.194:

nec porro secreta cibo natúra ánimántum.

Where the quadrisyllabic word, or two disyllables, has the rhythm ~ - - -, a longum must precede; and a line with hepthemimeral caesura will quantitatively require ~ - preceding that longum, while a line with penthemimeral caesura will require ~ - - ~ preceding. With hepthemimeral, an anapaestic word preceding the final four syllables will break the trochaic rhythm, as in Lucr. 1.148 (= 2.61, 3.93):

discutiant, sed naturae spécies rátióque.

However, a quantitatively spondaic word will maintain stress trochees, as in Lucr. 2.184:

nunc locus est, ut opinor, in his illud quóque rébus.

An elision within the anapaest breaks the trochaic rhythm, as in Lucr. 1.250:

postremo pereunt imbres úbi éos páter aether.

¹⁵That the position of the accent is unaffected by the elision. See Allen (1973) 179 f.

Any split anapaest has a similar effect, as in Lucr. 2.804:

interdum quodam sensu fit úti vīdeátur.

With penthemimeral caesura, $\sim\sim - \sim\sim -$ will occupy that part of the line between the caesura and the final four syllables. Where all the intervening syllables are long, two spondaic words or a monosyllable followed by a molossus (*inter vivos, rés humánae*), but not a molossus followed by a monosyllable (*humánae rés*) will produce trochees, as will a dispondaic word (*hūmánarum*) or $\sim - - -$ (*fīgūrárum, vócant vénti*). So, in Lucr. 4.38, 2.480:

*effugere aut umbras inter vivos vōlitāre
finita variare fīgūrárum rātíōne*

In 2.480 the caesura in the third foot is trochaic, a type of caesura which Lucretius does not avoid. A trochaic caesura evidently increases the possibility of writing a stressed trochaic line: here *vāriāre* too is trochaic.¹⁶ (Possibly this is one reason why Virgil and later Latin hexameter poets avoid this caesura, which in the Greek hexameter is rather more common than the strong penthemimeral.)¹⁷

We may now turn to the dactylic possibilities in the second half of lines with penthemimeral caesura. With hepthemimeral, only a disyllable (and hence a spondaic word) preceding the final $\acute{\sim} \sim \acute{\sim} -$ gives stress-trochees, as we have seen. With penthemimeral this disyllable might be $\acute{\sim} -$, preceded by the rhythm $\sim\sim - \sim$. Single words of rhythm $- \acute{\sim} \sim$, $\acute{\sim} \sim \acute{\sim} \sim$, and dibrach plus quantitative trochaic word (*bóna dícta*), all furnish trochees; but $- \acute{\sim} \sim$ is unlikely to sustain a trochaic rhythm before the caesura, since only a monosyllable immediately before the caesura¹⁸ would give stress on the syllable immediately preceding $- \acute{\sim} \sim$. Long monosyllable plus trochee (*nón vénit*) does not furnish trochees. Of the foregoing possibilities, $\acute{\sim} \sim \acute{\sim} \sim$ followed by $\acute{\sim} -$ and $\acute{\sim} \sim \acute{\sim} -$ will give more than seven trochees in a complete line; but might appear in an octonarius.

To turn to the stress-rhythm of quantitative dactyls more generally: a quantitative dactylic word will give a stress-dactyl (*créscere*). A quadrisyllabic word $- \sim \sim -$ will carry prose accent on the second syllable, again producing (as does a quantitative anapaestic word) a stress dactyl. So Lucr. 1.148 (= 2.61, 3.93):

discútiant sed naturae spécies ratioque.

¹⁶For the line as a whole, see above, note 13.

¹⁷So in Homer, Callimachus and Nonnus; but the hexameters found in Greek drama show a preference for masculine caesura (Paul Maas, *Greek Metre*, tr. by H. Lloyd-Jones [Oxford 1962] 82 ff., and other authorities there cited).

¹⁸Lucretius does not exclude monosyllables from this position, e.g. 1.23, 1.356; but their occurrence is not frequent.

Nor will a monosyllable followed by a word beginning with two short syllables produce a trochaic effect. So Lucr. 1.1038:

nám véluti privata cibo natura animantum.

A spondaic word preceding the two short syllables, however, gives trochees, as in Lucr. 1.139: *rérum nóvitátem*; but only if the second word contains an even number of syllables.

Otherwise, a stress trochaic effect is produced only when the quantitative dactylic foot is divided at the trochee,¹⁹ as in *própter égestátem* in Lucr. 1.139, or by a dibrachic word (*béne*). So, Lucr. 6.902:

quam tetigit flammam, taedámque pari ratione.

A word with an odd number of syllables which contains both short syllables of the dactyl will always break the stress trochees. So, Lucr. 1.809:

scálicet et nísi nos cibus áridus et téner umor,

a line which exemplifies both this phenomenon and the dibrach.

I now turn to the beginning of the line. In the light of what has already been said, it is clear that a stress-trochaic line might begin with a quantitative trochaic or spondaic word (*própter*, *cúrrere* with elided 'e', *énses*), or with a quadrisyllabic word whose first three syllables are long (*ígnor-átur énim* or *ímmortáli*); but if a dispondaic word is followed by a word of molossus or choriambic rhythm (*natúra*, *príncípio*), the trochaic sequence is broken. However, if the dispondaic word is followed by a monosyllable to give penthemimeral caesura, or by a quantitative trochee to give a trochaic caesura in the third foot, the stress-trochees are maintained.

A word of molossus rhythm in the first position of the line does not give trochees: Lucr. 1.97 *perfécto pósset*; not yet does a monosyllable followed by a disyllable: Lucr. 1.194 *néc pórró*; and *néc béne* would have a similar effect. A monosyllable followed by a trisyllable whose second syllable is long produces trochees: Lucr. 3.388 *néc repéntis ítum*. Monosyllable plus molossus is equivalent to a dispondaic word, or to two spondaic words, and may be followed by the types of words enumerated above.

A quantitative dactylic rhythm in the first foot, save where the dactyl is broken at the trochee, breaks the stress-trochaic rhythm at once, for reasons already given.

In short, the requirements for a line stressed like Lucretius 1.139 seem to be:

- (a) The line should contain two dactyls, three spondees and a catalectic dactyl.
- (b) The quantitative dactyls should be broken either at the trochee

¹⁹An elided dactylic word (*cúrrere ápod*) would give a similar effect.

(*própter égestátem*) or after the longum, where the longum is contained in an unelided disyllabic or longer word whose penult is also a longum (*rérum nŏvitatem*).

(c) The words should each contain an even number of syllables, save that a trisyllabic word whose first two syllables are long may be preceded by a long monosyllable or elided disyllable (*néc repéntis*, or *íre húmána*, but not *pórro repéntis*).

(d) The line should have a quadrisyllabic or double disyllabic ending not preceded by a monosyllable or elided polysyllable.

These specifications are quite precise; and very few lines in Lucretius fully satisfy them.²⁰ These are, in addition to 1.139: (with double disyllabic ending)

néc sentímus éum táctu, vérum mágis ípsu (4.267)

With quadrisyllabic ending there are none certain; but see

íre húmána támen quaéram cúr é sápiénti (3.761)

and as an additional possible line with double disyllabic ending

pósse dári finem? vél cúm sól et vápor ómnis (5.383)

In 3.761, the rhythm is only regularly trochaic if *e* is pronounced unstressed; but such evidence as there is suggests rather that the prepositional phrase *e sapienti* functions as a pentasyllable (and so was pronounced, it would appear, *é sapiénti*);²¹ while in 5.383 in order to obtain trochees it would be necessary not merely to pronounce *et* unstressed but also to stress *vel cum* as *vél cum* (which is improbable).²²

In addition, I find one line with spondaic ending that satisfies the conditions, namely 5.1156:²³

²⁰On Bailey's figures, there are 173 quadrisyllabic and 181 double disyllabic line-endings, of which 116 quadrisyllabic and 154 double disyllabic are preceded by monosyllables, and may be ruled out at once. (My own figures differ slightly, but give essentially the same picture.) Furthermore, in 38 of the remaining 84 lines the quadrisyllabic or double disyllable is preceded by an elision, reducing the number of possibly trochaic lines to 46.

²¹See Allen (1973) 25–26.

²²5.1339, *út núnc sáepe bóves lúcae férro mále máctae* comes close, but it would be difficult to treat *nunc* as an unaccented monosyllable; and on the less likely theory of the effect of elision, which holds that the accent recedes (discussed by Allen [1973] 159 f.), one might add 1.112: *ígnorátur énim quáe síi nátura ánimái*, though the accentuation of *sit* remains problematical.

²³If the double spondaic ending is preceded by a dactylic foot, only a dibrach (*génus*) or elided anapaestic word (*rátio*) will preserve a trochaic rhythm. With fourth foot spondee, a word with spondaic ending and an even number of syllables, or monosyllable followed by molossus, will serve.

etsi fállit énim dívom génuš húmanúmque.

Furthermore, lines of the type of Lucretius 1.139 seem to be rare in other early hexameter poetry, and some pains seem to be taken to avoid them. In Lucilius' hexameters there are forty quadrisyllabic (dactylic) endings, of which eleven are preceded by a monosyllable, six by an elision; and forty-two double disyllabic (dactylic) endings, of which twenty-three are preceded by a monosyllable, five by an elision. In Ennius' hexameters, of thirty-five quadrisyllabic (dactylic) endings, fourteen are preceded by a monosyllable, six by elision; and of twenty-six double disyllabic endings, thirteen are preceded by a monosyllable.²⁴ There may be additional reasons for the poets' liking for monosyllables and elisions in this position; but it seems not implausible to ascribe as one motive the desire to avoid emphasizing a trochaic rhythm over six syllables at the end of the line, where the quantitative dactylic rhythm should be most marked; and the effect is inevitably to reduce the number of lines in which a trochaic stress-rhythm might accidentally occur throughout.

In fact, the only lines of this type in Lucilius and Ennius seem to be

dégrumábis, úti cástris ménsor fácit ólim (Lucilius 101)

áegro córde cómis spársis pássis látú' pálmis (Ennius 352)

The latter line is very doubtful. I have printed Vahlen's text. Warmington more prudently obelizes *comis* and (reading *late* for *latu'*) treats the words as fragments of two lines.²⁵ There is accordingly no certain line of this type in the extant fragments of Ennius.

Stress-trochaic septenarii (or close approximations) occur at Lucretius 6.139

nám quíd[?] póssit íbi flátus mánifesta dócet rés

(but only if *quid* was pronounced unstressed, which is very doubtful) and at 1.304

tángere énim et tángi nísi córpus núllo pótest rés

(assuming yet again that *et* was pronounced unstressed). Lucilius furnishes 1245

²⁴Bailey's figures for Ennius' quadrisyllabic and double disyllabic endings, and for preceding monosyllables. (Again my count differs from Bailey's, but not significantly.) My figures for Lucilius, and for preceding elisions in Ennius.

²⁵J. Vahlen, *Ennianae Poesis Reliquiae* (Leipzig 1854); E. H. Warmington, *Remains of old Latin* (Cambridge, Mass. and London 1935) vol. 1. The fragment is derived from Nonius, p. 370 M. The text is very uncertain. For example, Quicherat (Paris 1872) reads *Aegro corde, comis passis . . . / . . . passis late palmis pater.*

nēquam et māgnus hōmo, lāniōrum immānis cānes ūt

(once again, if *et* was pronounced unstressed). Otherwise, the nearest approximation is 883

cōtra vēnis vėl qui[?] in nūptis vōluisse nēges tē

where an unstressed pronunciation for *qui in* seems most unlikely. Ennius has no stress-trochaic septenarii among his dactylic hexameters.

Iambic lines are no more common, and rather rougher in rhythm. A line of seven iambic feet occasionally occurs,²⁶ as in the following Ennian lines:

contēdunt Graēcos, Graīos mēmōrāre sōlent sōs (358)

Hispāne, nōn Romāne mēmōrētis lōqui mē (495)

contēmpsit fōntes quību' sēse erūgit āquae vīs. (546)

The position of the stress-marks indicates that the lines are formally iambic; and a determinedly insensitive reading might produce some kind of iambic effect. But the fact that virtually every *word* has trochaic rhythm renders it almost impossible to feel the lines as iambic; while the iambic first foot would render it less likely that the ear would detect a trochaic rhythm, when the lines were in fact intended as examples of quantitative dactylic hexameters.

Lucretius furnishes no lines containing seven iambic feet. There are, however, two approximations to stress-iambic octonarii in his dactylic hexameters:

nēc rēgiōne lōci cērtā, sēd ūbi[?] īpsa tūlit mēns (2.260)

nēc rēperīre pōtes tībi quīd sīt saēpe māli, cūm (3.1050)

However, presumably both *ubi* and *sit* would in fact carry some stress, and possibly *nec* also; and the absence of diaeresis after the fourth iamb (though common enough in Plautine quantitative iambic octonarii), combined with the generally trochaic rhythm of the individual words, renders it even less likely that an iambic rhythm would be noticed. The principles of Latin accentuation of course render the composition of satisfactory stress iambs virtually impossible: few words have an iambic rhythm.²⁷

²⁶The general rules for stress-iambics are the same as those for trochaics; but now a molossus will be needed in the first position, except insofar as light monosyllabic conjunctions (*nec*, *et*, etc.) could be pronounced unstressed.

²⁷The few (e.g. *adhūc*) certainly do not suffice for the composition of satisfactory stress-iambic verse. Contrast the frequency of words with iambic rhythm, and of stressed monosyllables, in English.

In the light of the extreme rarity even of trochaic lines, not only in Lucretius but also in poets such as Lucilius and Ennius, generally regarded as rough versifiers, we may now raise a more speculative question: did Lucretius produce the regular stress-trochaic rhythm deliberately in 1.139? To anyone who regards Lucretius as satisfied if only his lines will scan as quantitative dactylic hexameters, however rough, the question must appear absurd; but (a) I find it difficult to suppose that any native Latin-speaker with any feeling for the speech-rhythms of his own tongue could miss the trochaic rhythm of this line; (b) the line is carefully composed in other respects; (c) the line does not contain an abstruse philosophical doctrine, capable of being expressed only in this manner in dactylic hexameters; (d) I seem to discern Lucretius using the effects which arise from prose-stress elsewhere.

I have discussed (b) above.²⁸ To demonstrate the truth of (c), I offer as examples either of the following lines:

- (i) *res quoniam tracto insolitas atque indiga lingua est*
- (ii) *rebus in insolitis versanti et paupere lingua*

Both lines are markedly inferior to Lucretius' admirably balanced verse, but are Latin hexameters nonetheless, without trace of a sustained trochaic or iambic rhythm; and hexameters of a kind, I would suggest, that a poet of any competence, not to say Lucretian genius, would hit upon, and reject, *before* arriving at the excellences of 1.139.

As evidence for (d) I would adduce many of Lucretius' monosyllabic endings, some of which seem to me, making due allowances for difference of subject matter, comparable with the ox, sow and mouse of world-wide renown.²⁹ In 1.116 the close of

an pecudes alias divinitus insinuet sé

²⁸P. 1. As evidence that Lucretius might have composed a regular stress-accented line without noticing it, one might look for Virgilian examples; for if Virgil could write such lines accidentally, then *a fortiori* Lucretius could surely do so. There are two possible examples. *Ílle cómam móllis íám tondébat hýacínthi* (*Georgics* 4.137) is *prima facie* as clear an example as Lucretius 1.139. Possibly, however, the unusual lengthening of *-bat* in *tondebat* introduced phenomena of pronunciation sufficiently unusual to distract the ear from the regular stresses. *Ecl.* 3.62 is a much weaker example, this time of a stress-trochaic septenarius: *Ét mé Phóebus ámat; Phóebo súa sémpér ápud mé*. The sense surely demands greater stress upon the former *me* than on *et*; and this breaks the rhythm. Neither line (and there appear to be no more in Virgil) seems to me sufficient to indicate that Virgil could compose a line with a perfectly regular stress-rhythm without noticing it; and still less sufficient to outweigh the evidence I have offered in the text in favour of Lucretius' trochees in 1.139 having been deliberately composed.

²⁹*procumbit humi bos*, Virg. *Aen.* 5.481, *inventa sub ilicibus sus*, *ibid.* 3.390, *nascetur ridiculus mus*, Hor. *A.P.* 139. Lucretius' *Arcadius sus*, 5.25, seems comparable with

seems to me admirably to represent by its contorted rhythm the writhings of the *anima* ironically pictured by Lucretius as transmigrating with some difficulty (*insinuare*) into a new body. Again, in 1.485-6

*sed quae sunt rerum primordia, nūlla pōtest vīs
stinguere*

the rough rhythm suits the sense of effort; while 1.32 ff.,

*quoniam belli fera moenera Mavors
omnipotens regit, in gremium qui saepe tūum sē
reicit*

seems to suit rhythm to sense in a manner (*mutatis mutandis*) to Virgil's *procūmbit hūmi bōs*.³⁰

If these points be granted, it remains necessary to try to suggest some motive for writing a line of the remarkable form of 1.139 precisely in this context in the *De Rerum Natura*. The lines quoted at the head of this paper seem to furnish the poet with a suitable occasion. Lucretius is acknowledging the difficulty of writing Greek philosophy in Latin hexameter verse: what more apposite an illustration than 1.139, which has the excellences mentioned above, but combines them with a stress-rhythm which plays havoc with the quantitative dactylic hexameter? By so doing, Lucretius adds to the problems which he explicitly mentions (*linguae egestas, novitas rerum*) an illustration of a third problem, the greater difficulties, consequent upon the stress-accented nature of the

Virgil's. Pace T. E. Page, *The Aeneid of Virgil* (London 1894) and R. D. Williams, *The Aeneid of Virgil* (London 1972) ad loc., 3.390 seems to me an instance not simply of 'archaic simplicity and rudeness'. Virgil builds carefully up to his final word in 389-390: "When by you, anxious as you are, by the stream of a remote river, there is found a huge—under the holm-oaks by the shore—sow." The rhythm, and the delayed noun, create suspense and express surprise, possibly shock: is a sow quite the kind of omen an ancient hero expects? In 5.25, Lucretius is certainly rather contemptuous of the *Arcadius sus*, as is evident from the context. Whether or no the effects are the same, however, is not my point: I am contending that both are deliberately contrived, for purposes more positive than 'archaic simplicity and rudeness' would suggest. (I intend to discuss this question more fully elsewhere.)

³⁰It is true that the monosyllable *res* closes many of these lines, suggesting *prima facie* merely that Lucretius found the position convenient for this word; but, to take only two examples, in 1.304 the 'rough' *nūlla pōtest rēs*, when read aloud with due attention to prose accent, might well convey the firm resolution of Lucretius' assertion; and 1.339 *nūlla dāret rēs* by its rhythm reflects the impossibility of all motion, were the theory under discussion true. Virgil ends lines with *res*, e.g., *Aen.* 7.592, *et saevae nutu Iunónis ēunt rēs*; and here too the rough rhythm reflects the sense. Other examples with *res* are *Aen.* 5.638, 9.320, 9.723 (6.846 is an Ennian imitation).

language, of composing elegant hexameters in Latin than in Greek.³¹ To achieve all this in one line is surely fine writing, and a further indication of Lucretius' possession of poetic skills of a very high order.

UNIVERSITY OF CHICAGO

³¹I am tempted to see in *Latinis versibus* (137) a conscious ambiguity of language. The phrase evidently denotes "verses in a Greek metre and the Latin tongue," since it denotes the *De Rerum Natura*. But the words in themselves, without context, could also denote "verses in a Latin metre and the Latin tongue." If it be granted that a line of regular stress-accented verse would appear characteristically Latin to Lucretius, the phrase might also ironically refer to the unusual qualities of 139. That such verses appeared characteristically Latin seems likely. The debate over the nature of the Saturnian verse continues, and seems unlikely to be finally resolved. (See recently Bruno Luisello, *Il verso saturnio* [Rome 1967]. Luisello believes in a musical accent for early Latin; but the phonetic development of Latin, on which see, e.g., C. D. Buck, *Comparative Grammar of Greek and Latin* [Chicago 1933] and the authorities cited in earlier notes, renders this the less likely hypothesis.) Certainly the Saturnian was not a regular metre of any kind. However, (a) it is usual for stress-accented languages to produce stress-accented verse; (b) when the cultural domination of Greece waned, Romans wrote literary stress-accented verse; (c) such popular verse as we possess from the classical period, e.g. the bawdy verses sung at Julius Caesar's triumph (Suet. *Div. Jul.* 51) are indicative of stress-accentuation. It is true, as Beare (1957) 15-19 points out, that no short syllables carry the accent, in the few specimens of such popular verse that we possess; but if no regard is given to stress, little sign of metre is apparent in some lines, e.g., *ūrbāni, sērvātē ūxorēs: mōēchūm cālūm addūcīmūs*. I offer my interpretation of *Latinis versibus* tentatively; but it is appropriate to this carefully composed passage.