

μη λέγε κτλ.) and from the Laurentian epitome (αὐλητῆς μη Πινθαύλης). Πινθαύλης is not cited before Roman times (LSJ) and this is presumably why Phrynichus condemned it.

(2) Λίβανον (p. 187 Lobeck) . . . Μένανδρος ἐν τῇ Σαμία (F 1 Körte)
φέρει τὴν λιβανωτόν· σὺ δ' ἐπίθες τὸ πῦρ, Τρύφῃ.

The quotation is likely to be a confused reminiscence⁵⁾ of *Samia* 158:

σπείσας τε καὶ λιβανωτόν ἐπιθεις [

The feminine gender of λιβανωτός goes back to Nuñez' edition and is attested only here. S, with the other mss. I have checked, reads τόν and I suspect that τήν is nothing more than a typographical error.

(3) Ἐπιχειμάζεις σαντόν (p. 387 Lobeck), Μένανδρος (F 845) εἴρηκεν ἐπὶ τοῦ λυπεῖν καὶ Ἀλεξανδρεῖς ὁμοίως. πειστέον δὲ τοῖς δοκίμοις, τοῖς μηδ' εἰδόσι τοῦνομα. ἐπιχειμάζειν is not otherwise attested and Meineke thought the reference the same as in Ammonius, *de adj. vocab. diff.* 511 Nickau: χειμάζειν οὐ μόνον τὸ παραχειμάζειν ἀλλὰ καὶ τὸ ἐνοχλεῖν, ὡς Μένανδρος ἐν Ἡνιόχῳ (F 184). Meineke's suggestion is supported by the reading of S⁶⁾: τί χειμάζεις αὐτόν. Since χειμάζειν is elsewhere used by Menander with a reflexive force (F 335, P. Oxy. 2654, line 6), the true reading is likely to be τί χειμάζεις σαντόν (σ:ε:αντόν Snell).

(4) In his article⁷⁾ on (the unlikely named) Γαγιανός ὁ Σμυρναῖος (s.v. Σύσσημον, p. 418 Lobeck), W. Schmid suggested that the true reading might be Γαιανός. This is the reading of S and is doubtless correct, although Gaianus cannot be further identified.

A new Approach to Greek Prosody

By M. L. WEST, Oxford

My aim is to formulate boldly and severely something that professional metricians already know: that the conventional classification of syllables as long or short is too crude for the detailed understanding of Greek metre. I shall argue that it is necessary to distinguish at least seven different syllabic quantities.

⁵⁾ This was suggested by R. Kasser, Papyrus Bodmer XXV, 65.

⁶⁾ Again, the letter *T* is in the hand of the rubricator.

⁷⁾ RE 7, 467.

The beginner is told that a hexameter is made up of dactyls, $- \cup \cup$, and that two shorts equal one long, so that a long can be substituted for the double short, $- \infty$. The advanced metricalian knows that this is incorrect. If two shorts were equal to any long, there would be no reason why they should not replace it in the arsis, $\infty \infty$, just as in anapaests $- \cup \cup$ may stand for $\cup \cup -$. There would be no reason why what is called 'lengthening in arsis' should not occur just as readily in thesis; or why a long vowel should be allowed to stand in hiatus in arsis far more often than in thesis; or why a short final vowel in arsis should make a long syllable with following mute and liquid far more often than in thesis; or why a short final syllable in thesis should seldom be lengthened by following digamma. All these phenomena point clearly to one conclusion: the thesis, ∞ , was longer than the arsis, $-$. Some types of long syllable were admitted in either, others only in the arsis, and the reason is evidently that the latter were not as long as the former. This conclusion agrees with the explicit statement of Dionysius of Halicarnassus, *de comp.* 17¹).

Or take the tragic trimeter. In three positions in the line, either a long or a short is admitted. We cannot say that those longs are equivalent to *two* shorts. Can we even say they are longer than the shorts at all? As Maas l.c. reasons:

"If we suppose that the time value differed according to whether the syllable was long or short, it follows that the line as a whole has no fixed rhythm. But the apparent metrical licence may have arisen simply because the time value of the anceps lay somewhere between that of the longum and that of the breve, and this assumption involves fewer difficulties than the former one."

In other positions, a long may be replaced by two shorts. But not by any two shorts. Not, for example, by two shorts separated by word-division, or (usually) by two shorts one of which is followed by mute + liquid. In the unacceptable reading of *PV* 2 given by the Homer scholia,

Σκύθην ἐς οἶμον, ἄβροτον εἰς ἐρημίαν,

the syllables *αβρο* are certainly short, but they are not short enough for this place. In other words, the shorts of a resolved longum are shorter than other shorts in the trimeter, and if the latter are our unit, we must say that a long equals less than two shorts²).

¹) See A. Wifstrand, *Von Kallimachos zu Nonnos*, 26ff.; P. Maas, *Greek Metre*, § 51.

²) Cf. B. Snell, *Griech. Metrik*³, 11, 12, 55, 57.

Some 'long' syllables, it appears, are longer than others, and some 'short' syllables are longer than others; and the same is true of the abstract longs and shorts in our metrical schemes. It is important to make this distinction between actual syllables and metrical positions. Syllables, as I will proceed to set out, can be divided into seven quantity-categories, no two of which are treated identically in all types of Greek verse. Metrical positions seldom admit one of these categories exclusively. The great majority of them tolerate any quantity within a certain range. Each position is characterized by the limits of its particular tolerance. We may imagine a row of different-sized slots in a frame made of slightly elastic material: each slot must be reasonably filled, without being unreasonably stretched.

Another distinction which must be clearly apprehended is that between a syllable and a vowel. There was obviously more diversity in the natural quantities of Greek vowels than is implied in our dichotomy 'long : short', but it is seldom significant for the study of metre, and for the moment I shall continue to speak freely of long and short vowels (diphthongs being counted with the former) while refining away the concept of long and short syllables. A long vowel may appear in a 'short' syllable, or a short vowel in a 'long' one.

To denote the seven quantity-categories I have retained the familiar symbols $\cup \times -$, adding diacritics. I considered using a more completely objective notation, simply lettering them from a to g, but decided that that would be more difficult to assimilate, or to use in conjunction with the cruder $\cup \times -$, which will remain useful for everyday purposes. The make-up of the categories is subject to minor dialectal variation. The following table is designed to apply to Homeric epic in the first instance, though the distinctions between \cup and \cup^* and between \perp and \perp^* are not effective in epic.

- \cup short vowel in non-final syllable followed by vowel or single consonant, e.g. $\acute{\epsilon}\theta\epsilon[\tau\sigma]$.
- \cup^* short final vowel followed by simple stop consonant, e.g. $\acute{\epsilon}\theta\epsilon[\tau\sigma][\chi\alpha\iota]$.
- \cup° short vowel followed by final ν , ρ , σ and initial vowel, e.g. $\alpha\upsilon[\tau\alpha\sigma][\acute{\epsilon}\tau\epsilon\iota]$.
- \times (1) short vowel followed by final ν , ρ , σ and digammated vowel, e.g. $\chi\alpha[\mu\omicron\nu][\epsilon\acute{\iota}\pi\omicron\iota]$.
- (2) short final vowel followed by initial continuant consonant ($f \lambda \mu \nu \rho \sigma$) or by mute + liquid (other than $\beta\lambda$, $\gamma\lambda$).
- (3) long final vowel or diphthong in hiatus.

- * (1) short vowel before mute + liquid in the same word (or closely cohering word-group, as τὸ πρῖν, τὸ πρῶτον). ἐκ counts as a separate word, even when prefixed to a verb.
- (2) long final vowel followed by digammated vowel.
- ⊥ (1) short vowel before other double or triple consonant in the same word.
- (2) long vowel in non-final syllable.
- ⊢ (1) short vowel in final syllable followed by double or triple consonant other than initial mute + liquid.
- (2) long vowel in final syllable followed by single consonant.
- (3) long vowel in final syllable followed by double or triple consonant.

For a greater quantity, two syllables are needed. Even the shortest possible disyllabic sequence (⊢⊢) is effectively longer than the longest syllable. Then there is a whole range of disyllabic sequences after ⊢⊢: ⊢⊢ (by which I denote the sum of adjacent ⊢ and ⊢ syllables in whichever order they stand), ⊢⊢ and ⊢⊢, ⊢⊢, ⊢⊢, ⊢⊢, ⊢⊢, and so on.

The hexameter

The hexameter contains twelve positions in six metra, with quantity-tolerances as follows (brackets indicate tolerance in rare cases). I shall refer to individual positions by the number of the metron with α , β .

1	(⊢)	(⊢)	2	⊢	⊢	3	⊢	⊢	4	⊢	⊢	5	⊢	⊥	6	⊢	⊢
	⊢	⊢		⊢	⊢		⊢	⊢		⊢	⊢		⊢	⊥		⊢	⊢
	⊢	⊢		⊢	⊢		⊢	⊢		⊢	⊢		⊢	⊥		⊢	⊢

This presentation of the outer form of the hexameter eliminates the need for a lengthy and complicated set of special prosodic rules, without which analysis in terms of longs and shorts is incomplete. It does not replace the *rhythmical* rules which deal with the positioning of words according to their metrical shape³). Nor can it show that from the point of view of genesis and actual technique, the

³) E. G. O'Neill, Yale Class. Studies 1942, 102–176. The importance of O'Neill's approach, which relates to a simple principle what is otherwise an unintelligible medley of caesuras and bridges, has not been sufficiently appreciated by metricians.

hexameter is a rhythmically regulated conjunction of two D-cola⁴). It can only show the result of the regulation, the pervading alternation of $\underline{\cup}$ and $\frac{\times}{\times\times}$.

A regular beat of some sort is a requisite of any metre. We must assume that position 6β in the hexameter was actually no less capacious than the other β positions. If in practice it may be occupied by a much shorter quantity (\cup to \times), and does not admit any quantity greater than \cup , we may suppose either that final position in the verse is itself a lengthening factor, so that the apparent tolerance $\underline{\cup}$ is based on wrong classification of the syllables found, or that part of the position is reserved for a pause, so that the actual $\underline{\cup}$ is made up to the theoretical $\frac{\times}{\times\times}$ by the addition of a 'silent component'.

The third \cup type, which has been called 'overlength' or 'surallongement', tends to be avoided within formulaic phrases, and is accordingly rare in position $5a$ ⁵).

The Ionic trimeter

The quantity-categories as set out above are here subject to the following modifications:

The first \times type ceases to be separate from \cup .

The second only involves initial ϱ or mute + liquid, the remaining types are classed as \cup .

The third is avoided.

There are twelve positions in three metra. Practice varies from poet to poet. In the three main iambographers it is as follows (peculiarities in cartouche):

Archilochus

1	$\underline{\cup}$	\times	$\underline{\cup}$	\times	2	$\underline{\cup}$	\times	$\underline{\cup}$	\times	3	$\underline{\cup}$	\times	$\underline{\cup}$	$\underline{\cup}$
	$\underline{\cup}$	$\underline{\cup}$	$\underline{\cup}$	$\underline{\cup}$		$\underline{\cup}$	$\underline{\cup}$	$\underline{\cup}$	$\underline{\cup}$		$\underline{\cup}$	$\underline{\cup}$	$\underline{\cup}$	$\underline{\cup}$

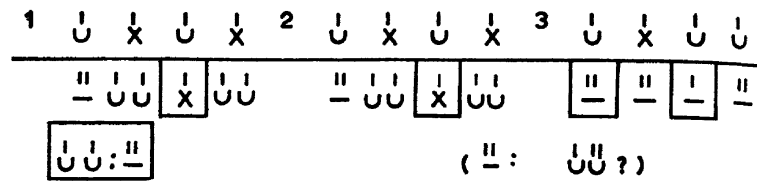
Semonides

1	$\underline{\cup}$	\times	$\underline{\cup}$	\times	2	$\underline{\cup}$	\times	$\underline{\cup}$	\times	3	$\underline{\cup}$	\times	$\underline{\cup}$	$\underline{\cup}$
	$\underline{\cup}$	$\underline{\cup}$	$\underline{\cup}$	$\underline{\cup}$		$\underline{\cup}$	$\underline{\cup}$	$\underline{\cup}$	$\underline{\cup}$		$\underline{\cup}$	$\underline{\cup}$	$\underline{\cup}$	$\underline{\cup}$

⁴) The lyric form of the colon differs slightly from the Sprechvers form: it may be represented as $\frac{\times \cup \times \cup \times}{\underline{\cup} \cup \times \underline{\cup} \cup \times \underline{\cup}}$. The reason for the insistence on disyllabic elements in the second and fourth places may be melodic. I hope to discuss the question in connexion with Stesichorus.

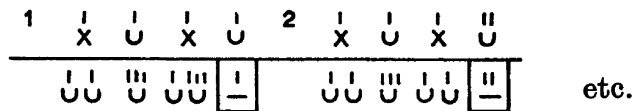
⁵) Cf. J. A. J. Drewitt, CQ 2, 1908, 100ff.; M. Parry, L'Épithète traditionnelle dans Homère, 52 n. 1, 237f.

Hipponax



Hipponax is more tolerant in several positions than the others, but his peculiar treatment of position 3γ, in which he actually prefers ∗/⏑ to ⏑, calls for special explanation.

The distinction between ⏑ and ⏑ now manifests itself, in that ⏑⏑ is admitted where ⏑⏑ is not. Likewise, the distinction between ⏑ and ⏑ is here seen to be effective, as it was not in the hexameter⁶). So in the beginning of the trochaic tetrameter:



As Snell puts it (p. 11): 'Besonders wichtig ist, daß im strengen Stil folgendes Wortende ein langes anceps unerträglich längt.' (His fo mulat on does not cater for the rhythmically fixed caesura-position, 2α in the trimeter = 2δ in the tetrameter.)

In the final position of the trimeter we see again a restriction on quantity in comparison with the parallel positions 1δ, 2δ.

Hipponax's exceptional admission of a disyllabic quantity in positions 1α and 3α involves a phenomenon which may be described as 'neighbour-limited tolerance'. The admission of the disyllable in these positions is conditional upon its not being simultaneously admitted in 1β and 2δ respectively. To recall the image of the slotted frame of slightly elastic material: if one slot is stretched to its maximum capacity, the next will not be able to take as much⁷).

It becomes difficult in such cases to treat the adjacent positions separately. In Hipp. fr. 26.4 (Masson),

κατέφαγε δὴ τὸν κλῆρον κτλ.,

the first two positions are clearly filled by ⏑, ⏑⏑. In fr. 67,

ὀλίγα φρονεῦσιν οἱ χάλιν πεπωκότες,

⁶) The avoidance of ⏑ in positions 2β, 4β, 5β of the hexameter is a consequence of the rhythmical rules, since both greater and smaller quantities are admitted there.

⁷) Anacalasis is not the same but a similar phenomenon. There the partition slides rather than stretches.

we may say that they are filled by \cup , $\cup\ast$; or is the first $\cup\cup$ and the second \ast ? In fr. 30.2

Κρίτης δ' Χῖος,

we must divide $\cup\cup$, \cup ; for if we said that the second position admitted $\cup\cup$ (provided the first was only occupied by \cup), we would have to allow that it might admit the same syllables in reverse sequence, $\cup\cup$, and that is contrary to all experience. By the same criterion the division $\cup\cup$, \ast must be preferred in fr. 67.

Time-values

I shall not prolong my discussion unnecessarily by working out schemes for other metres or genres. The method has been sufficiently illustrated for anyone to apply it if he has the required facts at his disposal. It remains for me to add some general observations.

Approximate time-values for the quantity-categories can be estimated in the following way, taking \cup as the unit. In the range between \cup (= 1.0) and $\cup\cup$ (= 2.0), six different quantities (\cup to $\cup\cup$) are distinguished. The absolute difference between \cup and \cup should be equal to that between \cup and \cup , as it depends on the same factor, word-end. This difference will be smaller than the other differences, since it alone is not effective in the hexameter. We can also say that $\cup + \ast$ is greater than $\ast\ast$, being less readily tolerated in the hexameter β positions. Starting from these data and working by eye, we can construct a rough scale as follows:

\cup	\cup	\ast	\ast	\cup	$\cup\cup$
1.05	1.15	1.25	1.6	1.75	1.8

Of course there was no two-decimal precision in the reality. The purpose of the arithmetic is to give an idea of the magnitude of quantity-differential that we are dealing with.

It may also enable us to estimate the time-ratio obtaining between different metrical positions, such as the arsis and thesis of the hexameter. The normal tolerance of the arsis is $\frac{\cup}{\cup}$, which on my numerical scale corresponds to $\frac{1.15}{1.8}$. The thesis is $\frac{\ast}{\ast\ast} = \frac{1.6}{2.5}$. It says something for the numerical estimates that the tolerance comes out proportionately the same for both; $\frac{1.15}{1.8} = \frac{1.6}{2.5} = \frac{1}{1.56}$. The theoretical mean time-ratio of arsis to thesis comes out as 1 : 1.4, with extremes of 1 : 2.2 and 1 : 0.9. In practice the preponderance of the types $\cup\cup\cup$, $\cup\cup\cup$, $\cup\cup\cup$ makes the normal ratio lower than this. I have calculated ratios for each of the first four metra in Od. 1.1–25,

and found that in 84 of the hundred metra it fell in the range 1 : 1.0 to 1 : 1.3; 62 were between 1 : 1.1 and 1 : 1.25. There was one example of the extreme limit 1 : 0.9 (*νόσ*]του κεχρ[ημένον); the thesis was nowhere greater than 1.6 times the length of the arsis (two cases)⁸⁾.

In Archilochus' trimeter the metron appears thus when converted on the numerical scale: $\frac{1}{1.8} \frac{1.25}{2} \frac{1}{1.15} \frac{1.25}{2}$. The time-ratio of 'breve' to 'longum' in the abstract scheme is thus variable between 1 : 2 and 1 : 1.1; that of 'breve' to 'anceps' between 1 : 1.8 and 1 : 0.87.

'Anceps'

This prompts a general remark on the nature of 'anceps' positions. On the ordinary view they are distinguished by exceptional tolerance: they admit 'either' a 'long' 'or' a 'short'. On my view this apparent eccentricity is simply a reflection of the fact that it is in these positions that the conventional long-short dichotomy is most conspicuously inadequate. The tolerance is actually little greater than in the 'longa'. 'Anceps' positions are really positions of medium capacity.

In the same way, 'anceps' syllables are really syllables of medium length. If an epic poet writes *κακὴν ἐφράσσατο τέχνην* in one place and *κακὴν ἐπεφράσσατο τέχνην* in another, he is not 'scanning *εφρ* long' here and 'scanning it short' there, he is filling his thesis with * in one place and with ∪* in the other. When Callimachus writes *ἐκάς ἐκάς ὅστις ἀλιτρός*, we need not say that the first *ἐκάς* is scanned long and the second short: both are what they are, ∪∪⁹⁾, and the metre admits ∪∪ in both positions. Instead of saying that the Athenians pronounced *πικρός* as *πι-κρός* and not as *πικ-ρός*, we had better say that the comic trimeter admits nothing less than ∪ in the β and δ positions where the tragic trimeter admits *. Instead of saying that the form *πικρότερος*, by not being *πικρώτερος*, shows that the first syllable was treated as long in early Greek, we had better say that *-ό-τερος* becomes *-ώτερος* when the quantity of the preceding syllable is less than * (that is, when it is ∪, since ∪∪* are distinct only in final syllables).

⁸⁾ The initial *ἄνδρα μοι* (∪***) contains the only thesis longer than ∪*. This is interesting in connexion with the irregular accentuation (*ἄνδρα* instead of *ἄνδρά*); see my Hesiod, *Theogony*, p. 439.

⁹⁾ In Homer the first would be classed as ∪* because of the effect of the digamma.

Vowel quantity

For vowels, as I have said, the simple long-short distinction is almost always sufficient for metrical purposes. However, there may be a few circumstances in which it can be improved on.

When we find a syllable with a short vowel, and no external lengthening factors, occupying a position that normally requires something longer, we speak of metrical lengthening. As there is a strong tendency for this to occur only with certain words or types of word, it is justifiable to treat it as a peculiarity of these words rather than as a laxity in the metrical scheme.

Where the lengthened vowel falls between two syllables of length * or greater, it may occupy the thesis of the hexameter:

ὕπεροπ]λί[ηισι, ἰσ]τί[η, ἰζον δὲ σ]πεῖ[ος, κρινάμενος]
τρι[ηκόσι'.

It must therefore itself attain the length *; and there is no reason to suppose that it is lengthened further, i.e. more than is necessary ad hoc. In other circumstances, vowels so lengthened (e.g. ᾀ[νήρ, Ἀ[πόλλων(-)) will not, I believe, be found occupying the thesis¹⁰). It follows that they do not attain the length of a natural long vowel (= ♀), but something like the quantity ∪ or *. This suits such a case as Ἄρεσ Ἄρεσ βροτολογέ, where the first metron can be scanned ∪, ∪∪ without assuming two different prosodies in the repeated vocative.

When adjacent vowels contract, a reduction in quantity occurs. For example, the change φάος > φῶς represents on my numerical scale a reduction from 2.15 to 1.8. If one of the vowels is long, it may swallow up the other, and the reduction will attain the value of 1.0 (♂ ♀ / ♀ ♂ > ♀, ♂ ♀ > ♀, ♀ ♂ > ♀). Clearly such changes were not instantaneous. There is a possibility that they might temporarily produce such a phenomenon as a syllable of greater length than the normal maximum ♀, and that it might be detectable in epic verse. For example, if a certain contracted form occurs only in positions where the uncontracted form would be admissible, the reason might be that the contracted syllable is still too long to go in positions whose maximum tolerance is ♀. But this is only one of several possible explanations. The form might be a product of the transmission; or the word might have stayed put in its original formulaic position.

¹⁰) Hymn. Dem. 381 οἶθ' ἔδωρ may be an exception; but it is possible to admit a hiatus (οἶτε), or ♂ in position 1 β.

The phenomenon of diectasis may represent the kind of effect we are looking for. What is *δράαν* but the disyllable *δρᾶν* with the second syllable prolonged beyond the normal syllabic maximum α — not necessarily to the face value of *ρᾶν* (α), but say to $\alpha\alpha$? There is no need to treat such a prolongation as an artifice. It may reflect the ordinary pronunciation of a certain transitional period. The artifice consists in admitting the device of syncopated rhythm into the delivery, so that the super-longs produced by contraction can be accommodated in the positions formerly occupied by the ingredients as distinct syllables. Where the first syllable had been allowed to occupy the whole thesis by metrical lengthening, e.g. **ῥ̄]γά[εσθε* (as *ὑπεροπ]λί[ησι*), the same licence is granted to the super-long, *ῥ̄γᾶσθε*.

In conclusion, I should like to point out that what is sketched in the foregoing pages is not a 'theory' to be accepted or rejected, but a formula for classifying empirical data; it is no more conjectural than the Dewey system of classifying books, it is neither true nor false. It must be judged on its ability to match the complexity of the facts.

On Lesbian Accentuation

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The statements of ancient grammarians on Aeolic accentuation, collected most fully by Ahrens¹⁾ and Meister²⁾, are now augmented by a considerable amount of papyrus evidence, which has been dealt with very thoroughly and well by E.-M. Hamm in her *Grammatik zu Sappho und Alkaios*, pp. 42–44. The papyri are remarkably (though not absolutely) consistent in the principles they follow. They are, no doubt, handing on the accentuation of an Alexandrian edition, perhaps Aristophanes' ³⁾, made by, or with the assistance of,

¹⁾ *De Graecae linguae dialectis*, i. 10ff.

²⁾ *Die griech. Dialekte*, i. 32ff.

³⁾ It certainly will not go back to the time of Theocritus, and it is a question whether his Aeolic poems should be given the recessive accentuation of which there are distinct traces in the manuscript tradition. If all his knowledge of the dialect came from texts of Sappho and Alcaeus, and he was not familiar with the sound of spoken Lesbian, he must have been unaware of the