THE ANALOGICAL FORMULA IN HOMER

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Nearly ten years have elapsed since A. B. Lord issued a plea for more formular analysis.¹ While his call has been answered by students of medieval European and other literatures, it has gone unheeded by classical philologists.² The reason for this is obvious: it is the lack of agreement upon the question of what a formula is. In an earlier discussion I drew attention to this problem and suggested two steps which might bring us closer to a solution.³ In this paper I should like to examine some of the difficulties in the concept of the analogical formula.

It may be convenient to begin by examining the theoretical difficulties. Milman Parry first noted the importance of analogy in his L'épithete traditionnelle; but at this stage in the development of his thought, his emphasis was upon the role of analogy in the creation of the Homeric language as a whole.⁴ In his "Studies in the Epic

¹ "Homer as an Oral Poet," HSCP 72 (1967) 1-46. See especially 15-34.

² M. Parry's theory and technique were first applied to the medieval field by F. P. Magoun, Jr., "Oral Formulaic Character of Anglo-Saxon Narrative Poetry," Speculum 28 (1953) 446–67, and publication has continued unabated ever since. Both A. B. Lord, "Perspectives on Recent Work on Oral Literature," Forum for Modern Language Studies 10 (1974) 187–210, and Edward R. Haymes, A Bibliography of Studies Relating to Parry's and Lord's Oral Theory (Publications of the Milman Parry Collection: Documentation and Planning Series no. 1, Cambridge, Mass. 1973), provide useful surveys. James P. Holoka, "Homeric Originality: A Survey," CW 66 (1973) 257–93, also lists relevant bibliography to which should be added M. Nagler, Spontaneity and Tradition. A Study of the Oral Art of Homer (Berkeley and Los Angeles 1975), William C. Scott, The Oral Nature of the Homeric Simile (Leyden 1974), and Anne Amory Parry, Blameless Aegisthus: A Study of ἀμύμων and other Homeric Epithets (Leyden 1973).

^{3 &}quot;Another Dimension of the Homeric Formula," Phoenix 26 (1972) 111-22.

⁴L'épithete traditionnelle dans Homère (Paris 1928) 85–95; 218–38 translated and reprinted by A. Parry in The Making of Homeric Verse: The Collected Papers of Milman Parry (Oxford 1971) 68–75; 173–89, hereinafter abbreviated MoHV. Parry remarks, "Analogy is perhaps the single most important factor for us to grasp if we are to arrive

Technique of Oral Verse-Making. I. Homer and Homeric Style," Parry again discusses analogy; but now his emphasis has shifted, for analogy has become part of the oral hypothesis, a means of facilitating the creation of new phrases and extemporaneous composition.⁵ After defining the formula, he says there are two sorts: formulas unlike any others, for example ονείαθ' έτοιμα προκείμενα (Il.3x, Od. IIX) and formulas which are "like one or more which express a similar idea in more or less the same words, as, for example, $i\epsilon\rho\delta\nu$ $\pi\tau$ $\delta\lambda i\epsilon\theta\rho\rho\nu$ $\epsilon \pi \epsilon \rho \sigma \epsilon$ is like $\epsilon \epsilon \rho \delta \nu \pi \tau \delta \lambda (\epsilon \theta \rho \rho \nu \epsilon \lambda \delta \nu \tau \epsilon s)$ (85; MoHV 275). The reason for this distinction is that Parry wishes to differentiate between those formulas which are in a sense unique and those which fall into formular systems, a concept he introduces at this point.⁶ In his formular analysis, he places a solid line under word-groups "which are found elsewhere in the poems unchanged" and a broken line under word-groups "which are of the same type as others" (117; MoHV 301). The sameness, he later points out, is in rhythm, parts of speech, and one important word (132-33; MoHV 312-13). Both types, in his view, are unequivocally formulas.⁷ At the end of the paper he argues that the aural nature of analogical creation (that is, its basis in similarity of sound) is further proof of oral verse-making in Homer (140-46; MoHV 319-23).

Parry's student and collaborator, A. B. Lord, further refined the concept of analogy in his description of how the Yugoslavian guslar acquires the art of oral verse-making. At first the young singer, by listening to his elders sing, builds up a foundation of formulas to

at a real understanding of Homeric diction. To understand the role of analogy in the formation of epic language is to understand the interdependence of words, ideas, and metre in heroic poetry. It is to see to what extent the hexameter and the genius of the bards influenced epic style. And finally, it is to recognize that there are limits beyond which analogy could no longer advance the simplification of the technique, so that some formulae remained more or less unexampled" (85; MoHV 68).

⁵ HSCP 41 (1930) 73-147; MoHV 266-324.

⁶ He continues, "... any group of two or more formulas make up a system, and the system may be defined in turn as a group of phrases which have the same metrical value and which are enough alike in thought and words to leave no doubt that the poet who used them knew them not only as single formulas, but also as formulas of a certain type" (85; MoHV 275).

^{7 &}quot;We have thus brought into the category of formulas not only the repeated expressions, but those which are the same type as others" (133; MoHV 313).

express the names of the characters in the story, the main actions of the story, and the time and place of the action. He must then organize these formulas into systems of the sort described by Parry in order to retain them in his memory and to substitute different but metrically equivalent components to meet the needs of his narrative. According to Lord it is only when the singer's diction is organized thus into analogical systems that he can create extemporaneous songs.⁸

Most scholars would perhaps be prepared to admit the utility of the "formular system" in this narrow definition. Parry himself pointed out that a similarity existed between certain other word-groups which coincide in metrical shape, grammatical type, syntactic function, and sentence structure, although not sharing any individual words.9 But he excluded such phrases from his underlining in his formular analysis, thereby withholding from them recognition of formular status. Subsequent scholars have been less circumspect. J. A. Notopoulos, for example, compared the unique phrase Κύνθιον ὅχθον (Hymn to Apollo 17) "to a system with a pattern - - localized at the end of the hexameter" and terms it "a formula by analogy." 10 But this is to apply the term "formula" to a purely metrical structure. J. B. Hainsworth thinks that this is to extend the concept of the formula too far. In support of his contention, he presents statistics indicating that such "phrase patterns" as he calls them contributed little to the formation of new diction.11

Α 10 νοῦσον ἀνὰ στρατὸν ὧρσε κακήν, ὀλέκοντο δὲ λαοί Α 20 παῖδα δ' ἐμοὶ λύσαιτε φίλην, τὰ δ' ἄποινα δέχεσθαι." (HSCP 41 (1930) 133; MoHV 313)

¹⁰ AJP 83 (1962) 356–57, note 60(59). The "system" he cites is comprised of ἐύκτιτον Αἰπύ II. 2.592, τείχεα Θήβης II. 2.691, θουρίδος ἀλκῆς II. 5.718, καμπύλα κύκλα II. 5.722, οἴνοπα πόντον II. 5.771, and ὄβριμον ἔγχος II. 5.790. W. McLeod, TAPA 92 (1961) 322, note 18, adduced a similar analogue when he sought to put Φάναν πυργήρεα κώμην into the same system as Πύλου αἰπὺ πτολίεθρον.

¹¹ CQ n.s. 14 (1964) 155-64. "The vice of the extension of the term 'formula' to cover structural features in the epic diction is that unless it is hedged about by more

⁸ The Singer of Tales (Cambridge, Mass. 1960) 33-37.

^{9 &}quot;... but there are more general types of formulas, and one could make no greater mistake than to limit the formulaic element to what is underlined. $\Gamma_{i\gamma\nu}\dot{\omega}\sigma\kappa\omega$ of $\theta\epsilon\dot{\alpha}$ in E 815 is like $\mu\hat{\eta}\nu\nu$ å $\epsilon i\delta\epsilon$ $\theta\epsilon\dot{\alpha}$ in A 1, because in both cases one has a complete clause of the same length, followed by the vocative $\theta\epsilon\dot{\alpha}$... Π 0 $\lambda\lambda\dot{\alpha}_S$ δ^* $i\phi\thetai\mu$ 0 ν 0 ν 0 ν 0 ν 0 ν 0 ν 1 is an accusative phrase of the same length as π 0 $\lambda\lambda\dot{\alpha}_S$ $\delta\dot{\epsilon}$ $\delta\rho\hat{\nu}_S$ $\delta\dot{\zeta}$ 0 $\delta\dot{\epsilon}$ 0 $\delta\dot{\epsilon}$ 0 $\delta\dot{\nu}$ 0 $\delta\dot{\epsilon}$ 1 (494). ... $T\epsilon\hat{\nu}$ 1 ϵ 2 ϵ 2 ϵ 2 ϵ 3 ϵ 3 is like $\delta\hat{\omega}$ 2 ϵ 4 ϵ 4 ϵ 5 ϵ 4 ϵ 6 ϵ 6 ϵ 9 ϵ 6 ϵ 9 ϵ 7 (988) ϵ 9 ϵ 9 ϵ 9. Often one finds the same verse pattern where the words are different:

Into this context J. A. Russo introduced his notion of the structural formula.12 In his doctoral dissertation (Word Localization and the Formulaic Nature of the Homeric Hexameter, [Yale] 1962), he showed that "within the localization pattern for each metrical type there are, as it were, subpatterns, showing distinct preferences for the use of certain grammatical types in certain places." 13 He suggests further that "localized phrases whose resemblance goes no further than the use of identical metrical word-types of the same grammatical and syntactic pattern...truly represent certain more general types of formulaic systems" (p. 237). For such metrical-grammatical patterns Russo invented the term "structural formulas," and in a later study he reiterates his views, maintaining that the "structural patterns of the Homeric hexameter at times reach a frequency of repetition so surprisingly high, and so clearly exceed in importance the repetitions found in any other literary style, that it is pointless to deny that these repetitions have to do with the formulaic style itself; and we already know that this style is of oral formulaic composition" (p. 223).14

Russo's discovery that the positioning of words in the hexameter is influenced by grammatical function as well as metrical form is clearly important, but as he has recently noted, these structural patterns function on a level different from that of the verbal repetitions.¹⁵

conditions than are visible in the practice of present-day Homeric scholarship the statement that the epics are nine-tenths formulae is likely to be vacuously, and so uselessly true" (157).

¹² TAPA 94 (1963) 235-47.

¹³ TAPA 94 (1963) 240. For the concept of the "localization pattern for each metrical type" see the discussion of Eugene O'Neill Jr., "The Localization of Metrical Word-Types in the Greek Hexameter," YCS 8 (1942) 103-78.

¹⁴ YCS 20 (1966) 219-40. W. Minton, "The Fallacy of the Structural Formula," TAPA 96 (1965) 241-53, has pointed out that such grammatical patterns which are to be found in Apollonius Rhodius are a feature of the Greek hexameter and are not necessarily characteristic of oral formular poetry. A. Hoekstra, Homeric Modifications of Formulaic Prototypes: Studies in the Development of Greek epic Diction (Verh. Amsterdam, Letterkunde, n.s., 71.1 [1965]) 12, also sees structural patterns as "inherent in the hexameter itself, whether formulaic or nonformulaic, whether oral or written" and adduces a few examples from Callimachus (note 3). This fact explains M. W. Pope's "discovery" of formular systems in Vergil in Acta Classica 6 (1963) 17 and the analogues in Lucretius which I found in Phoenix 25 (1971) 230-31.

¹⁵ "Is 'Oral' or 'Aural' Composition the Cause of Homer's Formulaic Style," a paper read to a conference on Oral Literature and the Formula held in Ann Arbor in November, 1974. J. B. Hainsworth, "Homer," Greece and Rome, New Surveys in the

By recognizing different levels of regularity in Homer's diction, Russo has gone a long way towards answering his critics; he has also suggested a useful way to approach the problem of clarifying the nature of the analogical formula. But before examining this new approach, it may be useful to consider some of the practical problems involved in attempting to identify analogical formulas.

One of the greatest difficulties encountered in the identification of analogues is the different degrees of plausibility the parallels exhibit. Lord's analysis of the first verse of the *Iliad* may be taken as an example.

With this verse, Parry compared Il. 5.444 = 16.711

and underlined the word $\mu \hat{\eta} \nu \nu$ with a broken line to indicate the analogical relationship (HSCP 41 [1930] 118–19; MoHV 301–02). In his analysis (Singer of Tales 291), Lord adds

There is an evident resemblance between

μῆνιν
$$\| - - - \| \Pi \eta \lambda \eta$$
ϊάδεω Άχιλῆος μῆνιν $\| - - - \| - \|$ έκατηβόλου Απόλλωνος μῆνιν $\| - - - \| - \|$ μεγαθύμου $\Pi \eta \lambda \epsilon$ τωνος

and one might add

Blind chance can certainly be invoked to account for many marvels; but it will want a religious faith in blind chance to insist that the resemblance among these lines is fortuitous.

In his analysis of the first hemistich, Lord goes further. From the entries in the concordance under $\mu\hat{\eta}\nu\nu$ he lists

$$\mu \hat{\eta} \nu \nu \begin{cases} \hat{\alpha} \lambda \epsilon \nu \hat{\alpha} \mu \epsilon \nu \sigma s & \textit{Il. 5.444} = 16.711 \\ \hat{\alpha} \pi \epsilon \iota \pi \hat{\omega} \nu \tau \sigma s & \textit{Il. 19.75} \\ \hat{\alpha} \pi \sigma \epsilon \iota \pi \hat{\omega} \nu & \textit{Il. 19.35} \end{cases}$$

Classics, no. 3 (Oxford 1969) 19-20, distinguishes ten types of repetition in Homer's diction.

Lord next compares the system

This group corresponds closely to the expression $\mu \hat{\eta} \nu \nu \tilde{\alpha} \epsilon \iota \delta \epsilon$; there is a trochaic noun-object in the accusative case followed by a form of $\hat{\alpha} \epsilon \iota \delta \omega$, shaped $\sim - \simeq$. But it differs in one important particular. These expressions are all located at the verse-end. Whether such a system could have encouraged the poet to create the initial expression $\mu \hat{\eta} \nu \iota \nu \tilde{\alpha} \epsilon \iota \delta \epsilon$ is less certain, but still within the realm of possibility. ¹⁶

Finally Lord compares the group

This list includes every occurrence in Homer of $\theta \epsilon \acute{a}$ used as a vocative before the penthemimeral caesura. To be sure, each member shares a common metrical shape and verse-position; but surely this is because

¹⁶ J. A. Russo, *TAPA* 94 (1963) 241, points out that the combination of a trochaic noun and amphibrachic verb, which is normal at the verse-end, is anomalous initially.

¹⁷ Lord includes all occurrences of the formula " $H\rho\eta \ \pi\rho\epsilon\sigma\beta a \ \theta\epsilon\dot{a}$, even those where $\theta\epsilon\dot{a}$ is in the nominative case, but excludes all other cases of $\theta\epsilon\dot{a}$ in the nominative before the penthemimeral caesura.

 $\theta \epsilon \acute{a}$ before the penthemimeris can only be preceded by the shape $-\infty$ —. There is no similarity of sound, no common parts of speech, no common syntactic structure. The word $\theta \epsilon \acute{a}$ in the vocative case is the only feature these expressions have in common. Is this an analogical system? Did the poet feel any influence from this group when he created the hemistich $\mu \hat{\eta} \nu \nu \, \check{a} \epsilon \iota \delta \epsilon \, \theta \epsilon \acute{a}$? It would seem rather that the poet preferred to place $\theta \epsilon \acute{a}$ in the vocative in this verse position. To

As Lord's analysis of the expression $\mu \hat{\eta} \nu \nu \nu \tilde{a} \epsilon \iota \delta \epsilon \theta \epsilon \tilde{a}$ illustrates, the plausibility of analogical systems may vary considerably; while the first system adduced is persuasive, the last carries little conviction. Furthermore, once the criterion of similarity of sound is invoked, subjectivity becomes unavoidable. For example, could the combination $\sigma \dot{\nu} \delta \dot{\epsilon} \phi \rho \dot{a} \sigma a \iota (Il. 1.83)$ have been created on the analogy of the formula $\sigma \dot{\nu} \delta \dot{\epsilon} \phi \rho \epsilon \sigma i (Il. 19.174, h. Ap. 544, h. Merc. 467, h. Ven. 289)? What of the phrase <math>\sigma \dot{\nu} \delta \dot{\epsilon} \sigma \phi \iota \sigma \iota (Il. 8.204)$, or the expressions $\beta \dot{a} \lambda \lambda \lambda \dot{a} \iota \dot{\epsilon} \iota \dot{a}$ and $\delta \lambda \lambda \dot{a} \dot{a} \iota \dot{\epsilon} \iota \dot{a}$ found at the beginning of $\delta \dot{a} \iota \dot{a} \iota \dot{a}$ found such uncertainty, Hainsworth's strictures become very appealing.

Lord's citation of all the expressions preceding the word $\theta\epsilon\dot{\alpha}$ employed in the vocative case before the penthemimeral caesura focuses attention upon another problem involved in formular analysis. Anyone who attempts a formular analysis such as Parry and Lord carried out for Il. I.I-25 and Od. I.I-25 soon becomes aware of the striking manner in which the poet tended to restrict particular words to a very few of the verse-positions available to them. The word $\mu\hat{\eta}\nu\nu$, for example, from the first verse of the Iliad, as a trochee, might theoretically occupy the trochaic portion of any of the hexameter's six feet. As a matter of fact, a mere two positions account for twelve of the fifteen occurrences of this word. Similar patterns of localization can be found for almost every word in the Homeric corpus.

What is the reason for this phenomenon? Eugene O'Neill Jr. has

¹⁹ Of the twenty-six occurrences in Homer, the vocative singular is used eleven times in this position, nine times after the feminine caesura, and six times after an initial trochee.

provided a point of departure for this inquiry.²⁰ In his study of metrical word-types, he counted and tabulated according to metrical shape every word in representative samples (1000 verses wherever feasible) of the hexameters of Homer, Hesiod, and the Alexandrians.²¹ Among his more important discoveries are the following. One-third of the positions theoretically possible account for about 90% of the occurrences of the longer word-types. The shorter word-types also have preferred and avoided positions, but these are less rigorously adhered to than is the case with the longer shapes. Not only is localization found in all the texts studied, but the preferred and avoided positions are the same throughout, with the Alexandrian authors allowing fewer exceptions.²²

O'Neill did not address himself to the question how "so extraordinary an artistic phenomenon" came into being.²³ This was left to Howard N. Porter who perceived that the colometric structure of the hexameter "accounts for all the remarkable phenomena of word 'localization'" documented by O'Neill.²⁴ To Porter this was undoubtedly self-evident, and he only mentions it in support of the fourcolon theory.²⁵ But inasmuch as this theory has not found universal

²⁰ "The Localization of Metrical Word-Types in the Greek Hexameter," YCS 8 (1942) 105–78. In what follows, I shall adopt O'Neill's numerical scheme for the positions of words in the hexameter.

When I say a word is employed in position $1\frac{1}{2}$, this means that the final syllable of that word falls in position $1\frac{1}{2}$. The distribution of $\mu \hat{\eta} \nu \nu$: six times in position $1\frac{1}{2}$ (II. 1.1,75; 5.444; 16.711; 19.35 and 75); six times in position 12 (II. 5.34, 178; 13.624; Od. 2.66; 5.146 and 14.283); once in position $5\frac{1}{2}$ (II. 9.517); and twice in position $9\frac{1}{2}$ (II. 15.122 and 21.523).

²¹ O'Neill's study, thorough and careful though it is, leaves much to be desired on theoretical grounds. His treatment of the anceps as invariably long renders many of his statistics inaccurate. See also the criticisms by A. Hoekstra (above, note 14) 20–24.

²² O'Neill, YCS 8 (1942) 131–32.

²³ O'Neill purposely avoided this question so that he might keep his paper "wholly in the realm of observed fact." Nevertheless, he only seems vaguely aware that word-localization is not entirely independent of the hexameter's structure. See, for instance, O'Neill's remarks on localization as "a most remarkable manifestation of the pervasion of Form in Greek poetry" (114–15) and the relationship of his study to earlier discussions of the hexameter (160).

24 "The Early Greek Hexameter," YCS 12 (1951) 17.

²⁵ The four-colon theory was first put forward by Hermann Fränkel in "Der

acceptance, it may be useful to examine more closely the relationship between the colometry and "the localization of metrical word-types" in the hexameter.²⁶

A few examples will shed light on this relationship.²⁷ So far as the sequence of dactylic feet is concerned, a word scanned as a second paeon ($\sim-\sim$) may occupy several positions in the verse. First it could come after the A2 caesura (i.e., after an initial trochee), but in so doing it would create a caesura at position 4 which, as Fränkel's diagram illustrates, is avoided. Accordingly, O'Neill found only two words of this shape in this position (1.6% of all the second paeon words) in his 1000 verse *Iliad* sample and only five (2.9%) in the verses taken from the *Odyssey*.²⁸ The next position available to words of this shape is between positions $3\frac{1}{2}$ and 6. But here it would create two avoided breaks in the line and so O'Neill found no words

kallimachische und homerische Hexameter," in the Nachrichten von der Gesellschaft der Wissenschaften zu Göttingen (Phil.-Hist. Klasse), 1926, pp. 197-229. This paper was rewritten as "Der homerische und kallimachische Hexameter," in Wege und Formen frühgriechischen Denkens (Munich 1960²) 100-156. A brief description may also be found in Fränkel's Dichtung und Philosophie des frühen Griechentums (Munich 1962²) 32-37. Fränkel's normal caesural positions will be most easily grasped from the following diagram.

Evidently a line with three caesuras is divided into four segments or "cola." To speak of the "colometry" or the "colometric structure" of the hexameter, then, is merely another way of referring to the position of the caesuras. From the standpoint of composition, however, it seems preferable to treat of cola rather than of caesuras, since the verse is obviously made up of words rather than of breaks in the sense.

²⁶ A. M. Dale, Lustrum 2 (1957) 34, maintains that the phenomenon of word-localization is "merely the positive, obverse side of the known rules and habits of caesura and zeugmata in the hexameter." In my "The Structure of the Homeric Hexameter: A Review," Phoenix 24 (1970) 1–12, I deal with her criticisms of Fränkel's theory and give my reasons for preferring Fränkel's original colometry to the modifications of it suggested by Porter in YCS 12 (1951) 1–63.

²⁷ For the purposes of this illustration I have taken all of the four syllable word-types which occur more than 100 times in O'Neill's sample. Longer metrical word-types are used because they have a more striking pattern of localization. (O'Neill 131-32)

²⁸ These and the other figures for this metrical shape have been taken from O'Neill's table 11 (p. 143).

of this shape in this position in either sample. The next possible location is between the B2 or feminine caesura and the C2 caesura or bucolic diaeresis. Here the words satisfy both meter and colometry; it is not surprising that O'Neill found 122 words scanned thus in his *Iliad* sample (or 95.3% of the total) and 128 (or 95.6% of the total) in the *Odyssey* sample. Finally, words of this metrical shape may also occupy the portion of the verse between positions $7\frac{1}{2}$ and 10. Again usage in this position creates two avoided caesuras. Hence O'Neill found only four words of this shape here in his *Iliad* sample (3.2% of the total) and two (1.5% of the total) from the *Odyssey*.

These facts may be illustrated as follows. First it is possible to diagram where second paeon words may theoretically fall in the verse, marking the "avoided" caesuras with an x.

Secondly, O'Neill's results for the second paeon words may be tabulated as follows:²⁹

	Location	4	6	C2	10
Iliad	Number	2		122	4
	Percentage	1.6		95.3	3.2
Odyssey	Number	4	_	128	2
	Percentage	2.9		95.6	1.5

²⁹ This table is extracted from O'Neill's table 11 (p. 143). The first row of figures horizontally refers to the four locations available to second-paeon words as illustrated immediately above. The second gives the number of occurrences of words scanned as second paeons in the 1000 verse *Iliad* sample. The third expresses these figures as percentages of the total. The fourth gives the occurrences of the second paeon word-types in the *Odyssey* sample, and the fifth converts these figures into percentages of the total.

The second metrical word-type which we may select to illustrate the relationship between word-localization and colometry is the third paeon (~~-~). The five locations which words scanned as third paeons might occupy in theory may be represented as follows, again with "avoided" caesuras marked x.

O'Neill's findings for words of this shape may be tabulated as follows:30

	Location	3 ½	В2	$7\frac{1}{2}$	9 1	12
Iliad Odyssey	Number Percentage Number Percentage	4 1.6 5 2.5	95 37.6 85 43.0	2 0.8 I 0.5	66 26.0 45 23.0	86 34.0 63 31.0

The third shape which we may use to illustrate is the choriamb (---) whose locations may be diagrammed as follows:

³⁰ This table is extracted from O'Neill's table 13 (p. 143) corrected according to table 29 (p. 151) which gives the actual lengths of the final syllable.

O'Neill's findings for this metrical word-type may again be tabulated as follows:³¹

	Location	A4	Ві	Сі	9	11
Iliad Odyssey	Number Percentage Number Percentage	73 42.2 66 37.3	65 37.6 86 48.6	4 2.3 0	18 10.4 16 9.02	13 7.5 9 5.1

In general the three word-types selected illustrate the intimate relationship between localization and colometry. There are however two slight anomalies which call for explanation. The first relates to the findings for the third paeon words. It is a little surprising to find such a large number of words at the two final positions, $9\frac{1}{2}$ and the verse-end; for while the first is not properly a licit caesura according to Fränkel, the second involves a word-end at 9, again an avoided position. The reason for this is, I suspect, that in neither case does the word in this position disarrange the normal colometric structure of the verse. The segment of the verse after the CI caesura is long ($\infty - \infty - \infty$) and seldom filled with a single word.³² There must be a break in the colon. But where such breaks occur, they do not disrupt the normal colometry, for this has already been established by breaks in the three normal caesural locations. In Il. 1.8, for example,

τίς τ' ἄρ σφω
ε
$$\theta$$
εῶν ἔριδι \parallel ξυνέηκε \mid μάχεσθαι

although the third paeon, $\xi \nu \nu \epsilon \eta \kappa \epsilon$, ends at $9\frac{1}{2}$, the verse still has a

³¹ This table is extracted from O'Neill's table 15 (p. 144) corrected according to table 29 (p. 151).

 $^{^{32}}$ O'Neill found nine verses ending in single words shaped $\varpi - \varpi - \varpi$ in the 2000 verses of his *Iliad* and *Odyssey* samples.

normal colometric structure (A bridged by a heavy word-group, B, C).³³ Similarly in *Il.* 1.3,

the third paeon, $\pi\rho o ta\psi \epsilon\nu$, occupies the final segment of the verse created by a word-end at position 9, but again this is in a verse with normal colometry, viz. A3, B1 and C1. Alternatively, in verses where the C caesura is bridged and the normal colometric structure is disrupted, it is by means of a heavy word or word-group. For example, in Il. 1.9,

$$Λητοῦς$$
 καὶ $Διὸς$ νίός· \parallel ό-γὰρ-βασιλῆϊ \parallel χολωθεὶς

the third paeon, $\beta a \sigma \iota \lambda \hat{\eta} \hat{\iota}$, which ends at $9\frac{1}{2}$, is a component of a heavy word-group beginning at the B2 caesura and bridging the normal C caesural locations. In like manner, in Il. 1.1,

the third paeon, $A\chi\iota\lambda\eta\sigma$ s, is preceded by the heavy word, $\Pi\eta\lambda\eta\iota\dot{\alpha}\delta\epsilon\omega$, which bridges the C locations. Thus, while a large number of words scanned as third paeons do occur in the unexpected positions $9\frac{1}{2}$ and the verse-end, these examples illustrate that such a deployment need not disarrange the normal colometric structure; or if it does, the disruption is carried out in a way completely consistent with Fränkel's theory.

The second anomaly is the unusually high number of words of choriambic shape in what ought to be avoided positions. Here A. Hoekstra has provided the answer. In his discussion of O'Neill, Hoekstra points out that words which are the components of formulas do not always occupy the locations otherwise preferred by their "metrical word-type." The employment of the actual choriambic word, $o\partial \lambda o\mu \dot{e}\nu \eta/-\eta s/-\eta \nu$, follows the pattern observed by O'Neill. The first two positions, from the beginning of the verse to the A4 caesura and between the A3 and B1 caesuras, account for ten of the

heavy word or word-group (schweres Wort[bild]), i.e., a word or word-group of at least six morae, i.e., — oo —. See further Phoenix 24 (1970) 3.

³⁴ Hoekstra (above, note 14) 21-24.

twelve occurrences of this word in Homer. But it also occurs twice in position 9 where it is the component of the formula $oi\lambda o\mu \acute{e}\nu\eta s$ $\dot{a}\lambda\acute{o}\chi oio$. In this stereotyped phrase, presumably the epithet and its noun are so closely bound together that (so far as the "inner metric" is concerned) the phrase operates not as two words (choriamb plus third paeon) but as a single unit. Another choriamb $i\sigma\acute{o}\theta eos$ is found only in position 11. But again Hoekstra notes "Homer did not use $i\sigma\acute{o}\theta eos$ as a single word; but as a component part of the formula $i\sigma\acute{o}\theta eos$ the formula (metrical type: -vv--) conforms to the scheme (position 12, 100%)." 35

A different type of anomaly appears if words of the ionic a minore shape $(\ \ \ \ \ \ \)$ are examined. Such words may appear in the following positions:

On the basis of the theory, we should expect to find words scanned as ionics a minore avoided in positions 4 and 6 and employed before the bucolic diaeresis and the verse-end. But such is not the case. Words of this metrical shape are almost exclusively restricted to the end of the verse.³⁶

The explanation of this anomaly can be found in another aspect of the hexameter which has received scant attention from Homeric scholars despite its relevance to formular studies. Not only was the

³⁵ Hoekstra 22.

³⁶ 91.2% of the *Iliad* sample and 100% of the *Odyssey* sample according to O'Neill's table 16 (p. 145) corrected in accordance with table 29 (p. 151).

colometry a factor when placing words in the verse but so also was the sequence of dactyls and spondees and the preference for either in particular feet.³⁷ According to the evidence of statistics and artificial linguistic forms adduced by K. Meister, it is clear that the poets avoided spondaic word-ends before the bucolic diaeresis. This explains why ionics a minore are eschewed between B1 and C2, the position which most satisfies the colometry.³⁸ Furthermore, the facts that the poets preferred dactyls in the fifth foot and that spondees outnumber trochees as the final foot go a long way towards explaining the virtual restriction of ionics a minore to the verse end.³⁹

Although metrical factors are enough to explain the localization pattern of the ionics a minore, the influence of formulas cannot be ignored. Many of the words of this metrical shape are the components of formulas long embedded in the tradition, such as $\mathring{a}va\xi \mathring{a}v\delta\rho\hat{\omega}v A\gamma a\mu\dot{\epsilon}\mu\nu\omega\nu$, $\kappa\rho\alpha\tau\dot{\epsilon}\rho\dot{\delta}s \Delta\iota o\mu\dot{\eta}\delta\eta s$, $\Pi o\sigma\dot{\epsilon}\iota\delta\dot{a}\omega\nu \dot{\epsilon}vo\sigma\dot{\iota}\chi\theta\omega\nu$ and $\Delta\iota\dot{\delta}s \theta\nu\gamma\dot{a}\tau\eta\rho A\phi\rho\sigma\dot{\delta}\iota\tau\eta$. Thus, we have both meter and formular usage dovetailing to restrict the deployment of ionics a minore in the hexameter.

³⁷ F. P. Jones' two recent studies, "A Binary-Octal Code for Analyzing Hexameters," *TAPA* 96 (1966) 275-80, and with F. E. Gray, "Hexameter Patterns, Statistical Inference and the Homeric Question: An Analysis of the La Roche Data," *TAPA* 103 (1972) 187-209, have refocused attention upon this phenomenon which O'Neill calls the "outer metric" of the verse. But these papers are concerned with the relative frequency of the different possible combinations of dactyls and spondees, not with the frequency of either scansion in particular feet. K. Meister, *Die homerische Kunstsprache* (Leipzig 1921, repr. Stuttgart 1966) 6-27, discusses previous views and attempts to develop a coherent theory. His treatment is vitiated by insufficient data and the failure to see the colometric pattern discerned by Fränkel five years later.

³⁸ Meister II-27. From the statistics presented by I. Bekker, *Homerische Blätter* I (Bonn 1863) 144, it appears that roughly 60% of Homeric verses contain a bucolic diaeresis and that before this break dactyls far outnumber spondees. F. Solmsen's *Untersuchungen zur griechischen Laut- und Verslehre* (Strassburg 1901) 64 reached similar conclusions using different data. K. Witte, "Zur homerischen Sprache," *Glotta* 3 (1912) 105-53; reprinted in *Zur homerischen Sprache* (Darmstadt 1972) 29-77, discusses a variety of interesting linguistic developments resulting from the preference for dactyls in the fourth and fifth feet.

³⁹ Meister 7 gives statistics for the number of spondees in the first twenty books of the *Iliad* (12,866 verses). While over 5000 occur in both the first and second feet, he reports a mere 778 for the fifth foot. O'Neill (table 29 [pp. 151-52]) found more long than short finals in his samples: *Iliad* 554:446 and *Odyssey* 540:460.

⁴⁰ For a discussion of these formulas and their analogical progeny see K. Witte, Glotta 3 (1912) 129-53; Zur homerischen Sprache (Darmstadt 1972) 53-77.

By now it should be apparent that the phenomenon of word localization is in large measure the result of the colometric structure of the verse. But in itself the colometry is not enough. Two other factors are involved: the "outer" metric and formular usage of the words in question. But in all, metrical factors can go a long way towards explaining why certain words gravitate toward so few positions in the verse.

With this improved understanding of the phenomenon of word localization, it is possible to obtain a clearer picture of how it relates to the analogical formula. Words do gravitate to certain positions in the verse. The reasons for this may be purely metrical, metrical and formular, or purely formular. Before identifying analogical formulas or drawing up formular substitution systems, it is necessary to ascertain why the repetition occurs. As Hainsworth and Russo have suggested, repetition in the hexameter operates on a variety of levels.⁴¹ There are repetitions of dactyls and spondees, of colometric patterns, of grammatical-structural patterns (Russo's structural formulas), of analogical patterns (what Hainsworth terms substitution systems), of phrases, clauses, whole lines and whole passages. Thus when a word recurs, one must first determine why. If metrical reasons are not in themselves sufficient, then a substitution system should be sought to which the word may belong.

If such procedures are followed in dealing with analogical formulas, Homerists too might answer Lord's call for more formular analysis and produce more reliable and accurate information on which to base pronouncements upon the workings of the formulas in Homer.

⁴¹ See note 15 above.