THE STRUCTURE OF THE HOMERIC HEXAMETER: A REVIEW

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When students begin to read Homer they are taught first that the dactylic hexameter is composed of a series of long and short syllables in one of several permitted sequences. But there is more to the metre than this purely quantitative pattern; there are also "rules" which regulate the positions within the verse where words may end. The study of these rules began, as far as is known, with M. Terentius Varro, who observed that word-ends are very frequent after the first syllable of the third foot.¹ During the nineteenth century, German metricians, by the analysis of thousands of lines, discovered other restrictions about the locations of ends of words.² Most of these were concerned with isolated phenomena, and little attempt was made to integrate them into any theory of the structure of the hexameter as a whole.

Accordingly Hermann Fränkel's paper "Der kallimachische und homerische Hexameter" was greeted by Giorgio Pasquali as marking the beginning of a new era in the study of Greek spoken verse.³ In it he synthesized the several laws inhibiting word-ends in various positions in the verse and concluded that the hexameter had three regular caesuras, and was therefore composed of four cola. Yet while his paper is everywhere praised, his major thesis has been largely neglected or misunderstood. A number of English-speaking metricians—most recently G. S. Kirk, who has justly won high respect in Homeric studies—have renewed the discussion, and challenged Fränkel's theory.⁴ When authoritative scholars disagree, which one are we to follow? The first step in dealing with this problem is to ensure that the facts have been rightly reported and logically interpreted.

Fränkel derived his theory of the fourfold colometric structure of the

¹Aulus Gellius 18.15. See further Eugene O'Neill Jr., YClS 8 (1942) 160-161.

²These laws are conveniently collected by Paul Maas, Greek Metre (tr. H. Lloyd-Jones, Oxford 1962) 59-65. For a historical summary see O'Neill YClS 8 (1942) 160-178.

³Gnomon 3 (1927) 241. Fränkel's theory was first published in the Nachrichten von der Gesellschaft der Wissenschaften zu Göttingen (Phil.-Hist. Klasse) 1926, pp. 197-229, hereinafter abbreviated Fränkel, NGG. This paper was rewritten and published as "Der homerische und kallimachische Hexameter," in Wege und Formen frühgriechischen Denkens (Munich 1955, 2nd edition 1960) 100-156, hereinafter abbreviated Fränkel, Wege und Formen. A brief description of the theory is also found in Fränkel's Dichtung und Philosophie des frühen Griechentums (New York 1951) 39-50; 2nd edition (Munich 1962) 32-37.

^{4&}quot;Studies in Some Technical Aspects of Homeric Style," YClS 20 (1966) 74-152.

hexameter from a consideration of the several laws inhibiting word-ends in the various positions in the verse. Wilhelm Meyer had enunciated one such law for the first half of the Callimachean hexameter: "A trochee or dactyl in the second foot must not be formed by the end of a word of three or more syllables beginning in the first foot." The only reasons that Meyer could suggest for his rule were purely subjective. Fränkel thought them inadequate; and he also failed to see how so illogical and complex a rule could have sustained its force for almost a millennium—until the latest successors of Nonnus, in the seventh century of our era. He therefore attempted a reformulation. Meyer had said in effect that trochees and dactyls in the second foot could not be formed by the end of a word beginning in the first foot. As Fränkel saw, this means that a word which begins in the first foot may avoid spilling over into the second as a trochee or dactyl in only three ways: (a) it may end before the first syllable of the second foot; or (b) it may end after the first syllable of the second foot; or (c) it may extend right through the second foot, and into the third. These facts Fränkel summed up as follows: "A word-end comes before or after the second arsis [the first syllable of the second foot], unless a single word beginning in the first foot reaches to the caesura in the third foot." This statement, though it treats the phenomenon which Mever had noticed, looks completely different. As Fränkel notes, "It no longer treats of second trochees and dactyls at all; but it has become a rule governing caesuras."7

Fränkel's next step was a statistical test of the reformulated rule; he found that with very few exceptions the rule was applicable. This investigation enabled him to add further refinements. The final stage in the reformulation of Meyer's law had been reached: "The hexameter of Callimachus has a caesura mostly after the second arsis, otherwise before it. If a caesura is absent from both positions, then a word which begins in the first foot, and indeed usually at its second short syllable, extends to the caesura in the third foot."

By proceeding in this manner, Fränkel was able to convert the various

I shall only be concerned with the first of these studies entitled "The Structure of the Homeric Hexameter," 76-104.

^{5&}quot;Zur Geschichte des griechischen und lateinischen Hexameter," SB Munich (Phil. Klass.) 1884, 980.

^{6&}quot;Gründe für solche metrische Regeln aufzustellen, ist Geschmacksache. Mir scheint der trochaeische oder gar der daktylische Wortschluss im 2. Fusse gemieden zu sein, weil der Schluss eines längeren Wortes schwerer in das Ohr fällt als ein selbständiges trochaeisches oder daktylisches Wort... weil also durch den schweren Wortabschnitt im 2. Fusse die gesetzmässige Caesur im 3. Fusse von vorherein ihrer Wirkung beraubt scheint" (Meyer, op. cit. 983).

⁷Fränkel, NGG 198.

⁸Fränkel, NGG 200.

laws governing the positions of word-ends into three simple rules for the location of caesuras in the hexameter:

- (1) In the Homeric hexameter breaks in the sense (Sinneseinschnitte), even if they are very weak, are found only in the following positions:
 - (A) $\frac{1}{2} \sim 1$ or $\frac{1}{2} \sim \frac{3}{2}$ |. Less frequent is $\frac{1}{2} \sim 1$, even rarer $\frac{1}{2} \mid .9$
 - (B) $\frac{5}{}$ or $\frac{5}{}$.
 - (C) $\frac{7}{2}$ or $\frac{7}{2}$ \sim \sim |.
- (2) A B- and a C-caesura should be present in every verse, at least in the form of a word-end.
- (3) The caesural positions, however, may also be "bridged" by a heavy word or word-group (*Wortbild*)¹⁰ (i.e., of at least six morae, e.g., ————) at the end of which a caesura must fall; and further:

the A-positions will be bridged by a word or word-group beginning the verse,

the B-positions by a word or word-group ending at the hephthemimeris, the C-positions by a word or word-group beginning at the B-caesura or the fourth foot.¹¹

Fränkel's normal caesural positions will be most easily grasped from the following diagram: 12

In the same year that Fränkel's Dichtung und Philosophie des frühen Griechentums appeared, Professor Howard N. Porter published a paper in

⁹While the hexameter of Callimachus limits itself to two positions for the A-caesura, Fränkel's researches persuaded him that the Homeric hexameter was more elastic at the beginning of the line. He accordingly increased the number of possible A-caesuras to four. Fränkel referred to parts of the hexameter by numbering the feet. For the sake of consistency within this paper, I have adopted the system introduced by Eugene O'Neill Jr. YCIS 8 (1942) 113, which numbers the half-feet, thus:

¹⁰Fränkel adopts the concept of the *Wortbild* from Paul Maas, *Griechische Metrik* (Leipzig and Berlin 1923) now reprinted as *Greek Metre* (tr. H. Lloyd-Jones, Oxford 1962) 84-85: "The whole group formed by an important part of the sentence (i.e. noun, verb, &c.) together with any prepositives (i.e. article, prepositions, monosyllabic conjunctions, and pronouns, &c.) and postpositives (i.e. monosyllabic enclitics, conjunctions, &c.) that go with it." See also Anhang I of Fränkel's "Der homerische und kallimachische Hexameter," *Wege und Formen*, 142-147.

¹¹Fränkel, NGG 221.

¹²After Wege und Formen 104 and Dichtung und Philosophie 49.

which he endeavoured "to describe as precisely as possible the generic form, i.e. such formal elements as are common to all Greek poetry composed in the hexameter." What he produced in fact was a restatement of Fränkel's theory, a restatement he deemed necessary because "Professor Fränkel failed to buttress his brilliant synthesis with [an] adequately comprehensive and detailed statistical demonstration" (9), and because he believed that "the evidence warrants certain modifications in detail of Professor Fränkel's description" (10). Porter made two important contributions to our knowledge of the Greek hexameter. First, he provided statistics from a relatively large sample for the frequency of word-ends in each position in the hexameter. Secondly, he shifted the emphasis from the three caesuras to the four cola into which they divide the line; it is the varying length and metrical shape of these cola that gave the Greek hexameter both its normative pattern of expectancy and its ever-changing form. 15

Porter's count of the number of word-ends in each position in the verse demonstrated that the three commonest positions are 3, $5\frac{1}{2}$, and 8. These he adopted as the main caesural locations, calling them A^1 , B^1 , and C^1 . The deviations from these he classified into three types: (1) "common variations, freely used by all poets, which occur in at least 15% of the lines of most of the texts"; (2) "less common variations, including usages which occur in all texts but which are limited in number either because they introduce danger of confusion of form or because they demand word-types of limited availability"; and (3) "rare variations, which it must be assumed, distort normal form, used by some poets in particular circumstances to achieve special effects and never used by other poets" (11). For each of his main caesuras he accepted one alternative position (called A^2 , B^2 , and C^2); and we are left with the impression that these are identical with the "common variations" to which he had called attention. His schema for the verse is then:

This schema differs from Fränkel's in two respects; Porter has reduced the number of positions available to the A-caesura from four to two, and he has located the alternative C-caesura at position 9 instead of position 7.

¹³"The Early Greek Hexameter," YClS 12 (1951) 1-63. The quotation is from p. 3. ¹⁴On p. 50, Porter gives the necessary information about the texts used for his statistics. For the *Iliad*, the sample is approximately 1/16 or 6.25%, and for the Odyssey, 1/12 or 8.33%.

¹⁶Porter makes many valuable observations concerning metrics in general and its

Since Porter found that Fränkel's treatment of the hexameter lacked an "adequately comprehensive and detailed statistical demonstration," it is ironic that he should have made available the very statistics which suggest that Fränkel's view is closer to the facts. Porter includes tables detailing how frequently words of various metrical patterns end in each position in the hexameter (Tables 8-24, pages 57-63), for samples of Homer, Hesiod, and the major Homeric hymns. Table I, compiled from Porter's data, gives the number of word-ends in each position in the 1000 verse samples of the *Iliad* and *Odyssey*. 16

TABLE I

Position	1	1 1/2	2	3	31	4	5	5 1	6	7	71	8	9	91	10	11	12
Iliad	387	303	525	548	156	195	499	608	220	454	47	628	227	437	350	30	1000
Odyssey	383	335	618	602	127	250	529	577	244	517	53	625	273	505	316	32	1000

This table makes it clear that as far as the second half of the verse is concerned, the evidence of word-end frequency supports Fränkel's line division over Porter's. The sequence of positions in descending order of frequency, first for the *Iliad*, next for the *Odyssey*, and finally the combination of both, may be tabulated as shown in Table II.

TABLE II

Iliad	8	51	3	2	5	7	91	1	10	1 1/2	9	6	4	31/2	71/2	11
Odyssey	8	2	3	5 <u>1</u>	5	7	9 <u>1</u>	1	11/2	10	9	4	6	$3\frac{1}{2}$	71/2	11
Combined	8	5 1	3	2	5	7	91	1	10	$1\frac{1}{2}$	9	6	4	31/2	$7\frac{1}{2}$	11

Not only is the word-ending at position 7 (the location of Fränkel's alternative C-caesura) more common than that at position 9 (the location of Porter's alternative C-caesura), but position 7 is in the top half of the frequency sequence, while position 9 is in the bottom half, that is, 7 evidently belongs to the sequence of frequent word-breaks, whereas 9 does not. Indeed, even Fränkel's additional alternative A-

normative quality in particular. For example, regarding the normative colometric structure of the hexameter, he states: "This system of norms is no mere scholar's abstraction but is rather a pattern of expectancy present in the mind of the listener or reader. Indeed, a metrical system can hardly be said to exist until it is present in the mind of the listener or reader as an abstraction with which he compares the words of the poet as they come. The poet sometimes satisfies the demands of this ideal form, though constantly varying his method of doing so, and sometimes by distorting the form he creates for his own purposes tension between what is expected and what is actually spoken" (8-9).

¹⁶These samples consist of the first 1000 verses beginning with the fifth book in each poem.

caesuras at 1 and $1\frac{1}{2}$, rare as they are, are more common that Porter's C^2 , at 9.

In his discussion of the relationship between the cola and units of meaning, Porter (23) presents the following table (see Table III) taken from figures compiled by W. Hartel, *Homerische Studien* (Berlin 1873), which gives the frequency of punctuation at each verse position for 3404 lines of Homer (*Iliad* books 1, 3, 4, and 10; *Odyssey* books 1, 2, and 6).¹⁷

Table III														
Position	1	1 ½	2	3	3½	4	5	5 1 /2	6	7	7½	8	9	91/2
Frequency	21	61	204	245	9	2	400	313	1	109	0	387	4	4

Here again position 7 counts as a significant break, whereas position 9 does not. Positions 1 and $1\frac{1}{2}$, moreover, while obviously far less common than 7, are nonetheless far more common than positions $3\frac{1}{2}$, 4, 6, $7\frac{1}{2}$, 9, and $9\frac{1}{2}$.

Perhaps in response to Porter's criticism, Fränkel used a different set of statistics to support his theory in his "Der homerische und kallimachische Hexameter". This list is taken from a table constructed by A. Ludwich giving the distribution of punctuation in the first and final books of the *Iliad* and the first book of the *Odyssey*. 18 Of the 2421 punctuation marks in these passages, 1282 or 53% are found at the verse end. The following list gives the distribution of the remainder.

C ² (position 8)	2 56	22%
B ¹ (position 5)	223	20%
B^2 (position $5\frac{1}{2}$)	219	19%
A ³ (position 2)	140	12%
A4 (position 3)	137	12%
C1 (position 7)	7 7	7%
A^2 (position $1\frac{1}{2}$)	49	4%
A ¹ (position 1)	18	2%
Other	20	2%
Total	1139	100%

This list affords further statistical proof that position 7 is a normal location for a break in the sense. Positions 1 and $1\frac{1}{2}$, moreover, though again less frequent, are followed by punctuation more often than the other positions excluded by Fränkel, including position 9.

¹⁷Our text of Homer does not show a single punctuation mark in positions 10 and 11 in the samples used.

¹⁸In Rossbach and Westphal, Metrik der Griechen (Leipzig 1889) 64, reproduced in Fränkel, Wege und Formen 105.

Why did Porter feel constrained to modify Fränkel's colometry, even at the cost of disregarding this evidence? He did so because he increased the emphasis on the colon. For Fränkel, the colon was at first simply a portion of the verse bounded by the caesuras whose locations he had deduced from the various laws governing the positions of word-ends. For Porter, on the other hand, the focus of attention has shifted more to the cola, and he devoted much of his paper to a study of them, not only as isolated metrical entities but also as metrical blocks put together to form the hexameter. Apparently he came to feel that the cola should be more or less balanced. He therefore rejected Fränkel's alternative C-caesura at position 7, the evidence of word-end and punctuational frequency notwithstanding, because it could produce verses with a third colon consisting of a single iambus, such as

Such an unbalanced colometric structure with units of 6, 5, 3, and 10 morae strikes Porter as "improbable." The verse

he states, Fränkel would regard as lacking a C-caesura. He points out that the acceptance of the caesura at position 9 produces a "neatly balanced line consisting of cola of 4, 7, 7, and 6 morae." He then adds the following footnote: "Professor Fränkel writes me that he now treats such cases as examples of 'Caesur verschoben durch schweres Wort'. In any such schematization of data as I am proposing here one cannot afford to be arbitrary. The C1 caesura [the bucolic diaeresis] clearly serves an aesthetic and structural function. It does not, as far as I can see, matter very much whether we regard the word-end in position 9 as a normal alternate C caesura or not. On the one hand it certainly is not in the same class with the other normal alternative caesurae, those in positions 2 and 5, as far as the frequency of occurrence is concerned; on the other hand it occurs sufficiently often to be considered a 'general utility' element and to need no excuse or special explanation." (14, note 28). If "it does not . . . matter very much whether we regard the word-end in position 9 as a normal alternate C caesura or not," it might be sounder to rely on the objective evidence of word-end and punctuational frequency and to replace it with the more common caesura at position 7.

Finally Porter attempts to modify Fränkel's concept of the colon.¹⁹ Although Fränkel discovered his line divisions through a consideration of purely metrical phenomena, his term *Sinneseinschnitte* implies that

¹⁹Porter, YClS 12 (1951) 20-26.

he regarded the cola created by these caesuras as units of meaning.²⁰ Porter, on the other hand, was not satisfied with the colon as a unit of meaning, but he could do no more than demonstrate that it is less obviously so in some cases than in others. He adduces, for example, the verse

δαῖ
$$\epsilon$$
 οὶ $|\dot{\epsilon}$ κ κόρυθός $\tau \epsilon$ $|\dot{\kappa}$ αὶ ἀσπίδος $|\dot{\epsilon}$ ακάματον π \hat{v} ρ (Il. 5.4)

which is neatly divisible into four cola, each of which he regards as an independent unit of meaning. On the other hand, he points out that the verse

$$\dot{\alpha}\lambda\lambda'$$
 οὕ οἱ | τότε γ ε | χ ραῖσμ' "Αρτεμις | $\dot{\epsilon}$ οχέαιρα (Il. 5.53)

is less obviously composed of semantic units. In this case, Porter thinks that the only reason that the verse can be divided into four cola is our expectation, established by the metre, that it will be. The colon is not, he concluded, invariably a semantic unit; but because of our expectancy that it will be, it may be called "normatively and essentially a unit of meaning."²¹

The evidence which Porter adduces again seems rather to favour Fränkel.²² First, he notes that the most common means of filling a colon is with a single word. No matter how difficult it may be to recognize certain word groups as "units of meaning," there can be no doubt about single words. A word is invariably and unambiguously a unit of meaning. As we have seen, Porter had reduced the number of positions available to the A-caesura, and preferred position 9 as the alternative C-caesura But when he came to discuss the relationship between cola and units of meaning, he discovered, paradoxically, that sense-breaks, indicated by punctuation marks, occur within the first colon and within the third colon. This is strange indeed, and reduces the colon to an almost meaningless concept, based neither on the statistical distribution of word-ends, nor on the observed units of sense. But these breaks within the colon occur precisely at positions 1, $1\frac{1}{2}$, and 7—Fränkel's A^1 , A^2 , and C^1 caesuras. Had Porter accepted Fränkel's colometry, he would have

²⁰These Sinneseinschnitte may be starke (die Perioden- und Satzgrenzen) or schwache (die blossen Wortfugen) (Wege und Formen 103-104). Fränkel points out, "(a) Jede stärkere Sinnesfuge (Satzgrenze u. ä.) liegt an einer der genannten Stellen, und (b) schwächere oder schwächste Sinnesfugen (Wortfugen) übernehmen die Funktion der Gliederung da wo stärker fehlen" (Wege und Formen 111). See further Fränkel, Wege und Formen 103-104.

²¹Porter, YClS 12 (1951) 22. He continues with his reasons, "because theoretically the only kind of unit which word limits can define is a unit of meaning and because in practice the colon normally does provide a separate and distinct single element of meaning to the sentence or clause of which it is part." This, surely, is essentially the same as Fränkel's view.

²²Porter YClS 12 (1951) 22-23.

"discovered" no such anomalies, nor would he have attempted to suggest that the colon was anything other than unit of meaning.

A. M. Dale also briefly touches upon Fränkel's theory in her report on the progress of Greek metrics (Lustrum 2 [1957] 29-32). She rejects Fränkel's claim to have rendered the "rules" of the hexameter intelligible, asserting that "The doctrine of zeugmata [bridges] will ... continue to be necessary to give sufficient precision to our knowledge of stichic verserhythm" (31). No one can guarrel with this assertion. The reader should only be reminded that Fränkel's starting point was in fact the doctrine of zeugmata, and his method was to reformulate the rules associated with them, which are largely prohibitions, in affirmative form; and that in fact the colometric structure is intended to include the various laws for bridges. It is hard, then, to see how it can be any less precise than the doctrine of zeugmata. It has, moreover, the added advantage of immediate comprehensibility, as a comparison of the diagram representing Fränkel's colometry with the rules governing the location of zeugmata (set out, for example, on pages 59-65 of Paul Maas' Greek Metre) will make abundantly clear.23 Thus Frankel's schema provides both the precision that Miss Dale rightly believes will be necessary and expresses this information in a much simpler and more intelligible manner. Miss Dale has three other criticisms. First, "The categorical imperative which ought to attach to B has been rather arbitrarily obscured by assigning caesura after the fourth long to C" (31-32). But only those who maintain, with Miss Dale, that "the fundamental division of the hexameter into two cola stands the test better than F[ränkel]'s postulate of a fourfold line" will attach a categorical imperative to B. Secondly, adducing the opening verse of the *Iliad*, where she hestitates between the colometry μηνιν | ἄειδε θεὰ | (A^2, B^1) and μηνιν ἄειδε | θεὰ | (verschobenes A, B^1), she suggests that the A-caesura is often ambiguous. It may be, but how often? Surely the frequent occurrence of punctuation in the four positions assigned to the A-caesura suggests that verses such as the first line of the Iliad are but rarely found.²⁴ Finally, she notes that "in the second half of the line the denial of any cut later than C (except where C is verschoben) looks rather arbitrary." Certainly it may look arbitrary, but again it is strongly supported by the evidence of punctuational frequency. In the 3404 Homeric verses used by Hartel for the table quoted above (p. 6), only eight punctuation marks are located after the regular C caesura. Clearly there is no need for "any cut later than C (except where C is verschoben)."

²³This point was stressed by G. Pasquali, Gnomon 3 (1927) 241-242.

²⁴J. A. Russo (*TAPA* 94 [1963] 241-242) has recently drawn attention to the unusual structure of the first hemistich of *Il.* 1.1. In the analysis of approximately 300 verses I have only occasionally found the A-caesura ambiguous.

It is now time to turn to Kirk's paper in Yale Classical Studies for 1966. He begins with a description of how Fränkel arrived at his synthesis. He then continues, "It is part of the theory... that in each of the three regular areas of division between cola there is one commonest position for caesura and one or more substitute or secondary positions" (77). Now no one who had read neither Fränkel nor Porter would suspect that this part of the theory was only put forward by Porter and is not part of Fränkel's formulation. This failure to differentiate between the views of Porter and Fränkel runs throughout the paper and is often prejudicial to Fränkel's position.

The same fault is apparent in Kirk's claim that "neither Fränkel nor Porter can suggest satisfactory alternative positions for the caesuras separating their first two, and their last two, cola" (82). He expresses sympathy for Porter's view that a "third colon of trochaic [i.e., iambic] or spondaic value merely, as entailed by Fränkel's feeling that position 7 must be the alternate C caesura, is unrealistic, and prejudicial to the idea of the colon as any kind of a word group" (81). He correctly rejects Porter's attempt to change the alternative C-caesura to the statistically negligible position 9. He then concludes: "But that still leaves us with the difficulty that Fränkel's third colon, in the case of the C² caesura at 7, is absurdly short, not really a colon at all" (82). There are two points to notice here. First, only Porter makes the claim that the colon should be thought of as a word group. Frankel was quite prepared to regard single words as independent cola. Secondly, the size of Fränkel's third colon is determined by the position of the caesura. The position of the caesura is established by the evidence of word-end and punctuational frequency. Viewed in this light, Kirk's rejection seems arbitrary.

Kirk also rejects Fränkel's first two caesural positions at 1 and $1\frac{1}{2}$. "Fränkel also thinks that breaks at 1 or $1\frac{1}{2}$ can serve as substitutes, where there is no break at 3 or 2. In this case, however, the first 'colon' is reduced to the length of a trochee or even a single long syllable..." (77–80). Once again Kirk offers no argumentation, but simply rejects Fränkel's thesis as patently untenable. Once again this seems arbitrary and subjective.

Kirk next raises the question of whether the colon is a semantic unit, as Fränkel implied,²⁵ or a rhythmical unit that exercised a normative effect on the meaning, as Porter suggested. Since Kirk thinks that "many Homeric verses . . . simply do not fall into four sense-units," he prefers Porter's view. He then illustrates his position by marking both the sense divisions and cola in a short passage in the *Iliad* (16.426–449). His analysis apparently offers the strongest possible support for his position, for as he notes, "only 12 of the 24 verses are divided into the

²⁵Fränkel did not claim for his colon the semantic qualities attributed to it by Porter and Kirk. See above, note 20.

assumed four cola; and only two verses, 427 and 433, have four rhythmical cola which can reasonably be regarded as corresponding exactly with possible sense-divisions" (89). Yet these results are achieved only because of Kirk's arbitrary preconceptions of what caesuras are significant; he excludes not only Fränkel's first two A-caesuras, thereby aligning himself with Porter—but also Porter's C² caesura. As a result, he totally rejects any break in the second half of the verse apart from the bucolic diaeresis. Although the caesuras accepted by Kirk are the most common, he overlooks the fact, substantiated by the tables given above (pp. 5-6), that breaks occur elsewhere in a substantial number of verses. In so doing, he naturally precludes the possibility of much concurrence between colometric and semantic units.

It may be interesting to offer a colometric analysis of the same passage, accepting Fränkel's caesuras—which are, remember, based on observed metrical facts, and not on *a priori* notions of what constitutes a colon.

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*Η ρ΄α, | καὶ ἐξ ὀχέων | σὺν τεύχεσιν | ἄλτο χαμᾶζε.
                                                                        (A^2, B^2, C^2)
       Πάτροκλος δ' | ἐτέρωθεν, | ἐπεὶ ἴδεν, | ἔκθορε δίφρου.
                                                                         (A^4, B^2, C^2)
       οὶ δ' | ὥς τ' αἰγυπιοὶ | γαμψώνυχες | ἀγκυλοχεῖλαι
                                                                         (A^1, B^1, C^2)
       πέτρη έφ' | ύψηλη | μεγάλα | κλάζοντε μάχωνται,
                                                                         (A^3, B^1, C^1)
                                                                         (A<sup>3</sup>, B<sup>2</sup>, versch. C)
430
       ως οὶ | κεκλήγοντες | ἐπ' ἀλλήλοισιν | ὅρουσαν.
       τοὺς δὲ ἰδών | έλέησε | Κρόνου πάις | ἀγκυλομήτεω,
                                                                         (A^4, B^2, C^2)
                                                                        (A4, B2, versch. C)
       "Ηρην δὲ | προσέειπε | κασιγνήτην | ἄλοχόν τε.
       \ddot{\omega} μοι έγών, |\ddot{o} τέ μοι |\Sigmaαρπηδόνα, |\phiίλτατον ἀνδρ\hat{\omega}ν, (A^4, B^2, C^2)
       μοῖρ' | ὑπὸ Πατρόκλοιο | Μενοιτιάδαο | δαμῆναι.
                                                                         (A<sup>1</sup>, B<sup>2</sup>, versch. C)
435
       διχθά δέ μοι | κραδίη | μέμονε | φρεσὶν δρμαίνοντι,
                                                                        (A^4, B^1, C^1)
                                                                        (A^3, B^2, C^2)
       η μιν | ζωὸν ἐόντα | μάχης ἄπο | δακρυοέσσης
       \theta \epsilon i \omega \mid \dot{a} \nu a \rho \pi \dot{a} \xi a s \mid \Lambda \nu \kappa i \eta s \mid \dot{\epsilon} \nu \pi i o \nu \iota \delta \dot{\eta} \mu \omega
                                                                        (A^2, B^1, C^1)
       η ήδη | ὑπὸ χερσὶ | Μενοιτιάδαο | δαμάσσω.
                                                                        (A4, B2, versch. C)
          Τὸν δ' | ἡμείβετ' ἔπειτα | βοῶπις | πότνια "Ηρη •
                                                                        (A^1, B^2, C^2)
       αἰνότατε | Κρονίδη, | ποῖον τὸν | μῦθον ἔειπες.
                                                                        (A^4, B^1, C^2)
440
                                                                        (A^3, B^2, C^1)
       άνδρα θνητὸν ἐόντα, πάλαι πεπρωμένον αἴση,
                                                                        (A^4, B^2, C^2)
       άψ έθέλεις | θανάτοιο | δυσηχέος | έξαναλῦσαι;
       έρδ' · | άτὰρ οὕ τοι πάντες | ἐπαινέομεν | θεοὶ ἄλλοι.
                                                                        (A<sup>1</sup>, B<sup>2</sup>, versch. C)
       άλλο δέ τοι | ἐρέω, | σὰ δ' ἐνὶ φρεσὶ | βάλλεο σῆσιν ·
                                                                        (A^4, B^1, C^2)
445
       αι κε ζών | πέμψης | Σαρπηδόνα | ονδε δόμονδε,
                                                                        (A^4, B^1, C^2)
       φράζεο | μή τις ἔπειτα | θεῶν | ἐθέλησι καὶ ἄλλος
                                                                        (A^3, B^2, C^1)
       πέμπειν | δν φίλον υίὸν | ἀπὸ | κρατερῆς ὑσμίνης
                                                                        (A^3, B^2, C^1)
       πολλοὶ γὰρ | περὶ ἄστυ | μέγα | Πριάμοιο μάχονται
                                                                        (A^4, B^2, C^1)
       υίέες | άθανάτων, | τοῖσιν κότον | αἰνὸν ἐνήσεις.
                                                                        (A^3, B^1, C^2)
```

How different from Kirk's analysis! Every verse is divisible into four cola. Wherever the normal caesura is bridged, it is by means of either a heavy

word or Wortbild (ἐπ' ἀλλήλοισιν, 430; κασιγνήτην, 432; Μενοιτιάδαο, 434 and 438; and ἐπαινέομεν, 443). Furthermore, only two verses, 444 and 449, do not fall into reasonable sense divisions. This is hardly strange. Fränkel's caesuras are found in eight of the ten most common positions for word-ends and in the eight most common locations of punctuation. They automatically produce four cola which are units of sense. Since this is the case, Fränkel's four cola are reasonable building blocks of the verse in a way that non-sense-units could never be. Kirk's rejection of the colon as a unit of sense is therefore unacceptable.

The rest of Kirk's paper is devoted to answering the question: "Are there other factors which might explain, as well as or better than the four-colon theory, the prevalence of word-end in certain positions in the verse, and also the inhibitions on word-end in other positions?" (85-86). He puts forward a plausible combination of factors, such as word availability, which could account for the same phenomena, but need not exclude the operation of Fränkel's colometry in the creation of verses.

Now that Milman Parry's theory of oral verse composition has found relatively wide acceptance, scholars are beginning to study the formular style. Kirk has rightly observed that a greater understanding of "other and neglected aspects of the style of the *Iliad* and *Odyssey*, ... notably their rhythmical structure, and the relation of the verse and its component parts to the sentence and lesser units of meaning" may well be "prerequisite for any serious advance in our knowledge of formular technique." This is almost certainly true, but the way to this understanding lies not in rejecting Fränkel's theory, but in a greater knowledge and appreciation of it.²⁷

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²⁶The careful reader who may have difficulty in seeing expressions such as \ddot{o} τέ μοι in 433 or $\ddot{\eta}$ μιν in 436 as units of sense may connect them with the nearest "important part of the sentence" (Σαρπηδόνα in 433 and ζωὸν ἐόντα in 436) to form a word group (Wortbild) as defined above, note 10.

²⁷I should like to express my gratitude to the anonymous referees appointed by the Editorial Committee; their full and incisive criticisms helped me to focus the discussion more clearly.

Only after this article was in the hands of the Editor was I able to consult Hermann Fränkel, Noten zu den Argonautika des Apollonios (Munich 1968) 6-19. He does not undertake a full critique of Kirk's suggested modifications of his theory; he does however reject, e.g., the manner in which Kirk divides Il.16.426, since it entails (a) separating a preposition from its object; (b) passing over the punctuation mark; and (c) creating a colon by the combination of a formula which is complete in itself (H $\dot{\rho}a$) with the unrelated words $\kappa a \dot{\iota}$ and $\dot{\epsilon} \xi$. He also disclaims the notion of "substitute and secondary positions" which Kirk attributes to him (pp. 10-11, n.25). He observes further that the passage chosen by Kirk to illustrate his discussion of enjambment shows that, for the end of run-over sentences, the A-caesura is as much favoured as the B and C locations (pp. 8-9, n.23).