FORMULAR DENSITY IN THE SIMILES OF THE ILIAD

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The Homeric simile, long an object of interest to classical scholars, has now claimed the attention of a new generation of critics who take as their starting point the insights of Milman Parry. Most recently, William C. Scott² and Carroll Moulton³ have each devoted full-length studies to the subject. Scott deals with such matters as placement, subject matter, extension, and repetition of the similes and concludes that they have been produced by a technique of oral composition. Moulton eschews the question of composition but sees profit in making "some effort with Scott to view the similes within the matrix set up by Parry" (13). He examines the relationship of the similes to the narrative, characterization, and themes and finds them an integral component of the imagistic structure of both epics.

While the combined work of these scholars has added greatly to our understanding of the Homeric simile, it is strange, given the purpose of

1For Parry's views, see *The Making of Homeric Verse*, ed. A. Parry (Oxford 1971). Among those who have taken account of Parry's hypothesis when discussing the similes are: M. Coffey, "The Similes of the Odyssey," *BICS* 2 (1955) 27, and "The Function of the Homeric Simile," *AJP* 78 (1957) 113–32; G. S. Kirk, "Objective Dating Criteria in Homer," *MH* 17 (1960) 201–03 = *The Language and Background of Homer* (Cambridge 1964) 186–88, *The Songs of Homer* (Cambridge 1962) 201–03 and 345–47 and *Homer and the Oral Tradition* (Cambridge 1976) 216–17; T. Krischer, *Formale Konventionen der homerischen Epik* (Munich 1971) 13–75; A. B. Lord, "Homer's Originality: Oral Dictated Texts," *TAPA* 84 (1953) 133; J. A. Notopoulos, "Homeric Similes in Light of Oral Poetry," *CJ* 52 (1957) 323–28; M. W. M. Pope, "The Parry–Lord Theory of Homeric Composition," *Acta Classica* 6 (1963) 1–21; and D. Porter, "Violent Juxtaposition in the Similes of the *Iliad*," *CJ* 68 (1972) 11–21.

²The Oral Nature of the Homeric Simile (Leiden 1974) (hereinafter cited as Scott). ³Similes in the Homeric Poems (Göttingen 1977).

⁴In "Similes in the *Iliad*," *Hermes* 102 (1974) 381-97, Moulton discusses the major issues relating to composition and concludes that it is impossible to prove conclusively that the similes were composed orally.

their studies, that they have largely ignored, or more correctly, treated inadequately, the use of formulas in the similes. Scott, for example, analyses two verses of one simile with "disappointing" results, while Moulton asserts, "A search for typical elements in the language of the similes yields little; very few similes, or phrases within them, are repeated."

Now the presence of formulas may not be quite the "litmus test" of oral composition that J. A. Notopoulos suggested.⁶ But it was on this aspect of the style that Parry focused, and it was on the formula that Parry based his theory of oral composition. While Parry's followers have suggested other tests of orality, the presence of formulas remains the most obvious aspect of the style by which oral composition can be identified.⁷

The purpose of this paper is to repair the omission of these earlier studies by investigating the formular nature of the similes. Specifically, an attempt will be made to ascertain more precisely the formular density of the similes and to determine how these results compare with the findings from a passage of narrative. With such information, it should be possible to make a more accurate assessment of the oral nature of the similes.

Before such a study can be undertaken, however, certain fundamental theoretical and methodological questions must be dealt with. The first of these, of course, is the question: what is a formula? In an earlier discussion, I reviewed this question and suggested, first, that Parry's definition be abandoned, since it is based on a single formula type, and second, that the formula's colometric dimension be taken into consideration. Since then, only one important contribution to the question has appeared. Berkley Peabody approaches the formula from the point of view of colonic composition. Observing that the typical way of filling the single colon is

³Scott 144-46 analysing *Iliad* 4.244-45; Moulton (above, note 4) 383. M. W. M. Pope, *Acta Classica* 6 (1963) 14-18, has examined the formulas in the similes, but restricted his analysis to noun-epithet combinations. Significant though these be, they are only one formula type. See my remarks in *Phoenix* 26 (1972) 111-14.

6"Studies in Early Greek Oral Poetry," *HSCP* 68 (1964) 19. Similar statements are found in "Homer, Hesiod, and the Achaean Heritage of Oral Poetry," *Hesperia* 29 (1960) 178-79, and "The Homeric Hymns as Oral Poetry: A Study of the Post-Homeric Oral Tradition," *AJP* 83 (1962) 353-54. Cf. also W. McLeod, "Oral Bards at Delphi," *TAPA* 92 (1961) 319.

⁷A. B. Lord, *The Singer of Tales* (Cambridge, Mass. 1960) 130–32, identifies three features of style which reflect oral composition: the presence of formulas, composition by theme and a lack of necessary enjambement. To these Berkley Peabody, *The Winged Word* (Albany 1975) 3–5, adds two more tests of orality: a phonemic test, which he states "requires consistency in the pattern of language sounds used by a singer" and the song test, which "requires consistency in the pattern of discourse generated by a singer." He never, however, really makes clear what these tests are or how to apply them.

8"Another Dimension of the Homeric Formula," Phoenix 26 (1972) 111-22.

⁹Peabody (above, note 7) 96-117. In Spontaneity and Tradition: A Study of the Oral Art of Homer (Berkeley and Los Angeles 1974) 1-63, M. Nagler has attempted to clarify his concept

with a single word, he takes the step of identifying single words as well as combinations of set phrases as formulas. Peabody could not take this position, were it not for the phenomenon of word localization first discussed by Eugene O'Neill, Jr. 10 But I have pointed out elsewhere that word localization is mainly the result of colometry with other factors, both metrical and formular, involved. 11 It is, therefore, not enough to identify single words as formulas without further clarification.

For the purpose of this study, a formula is defined as a "recurrent group of words." This will include any combination of two or more words, regardless of length, provided that it is repeated at least once either verbatim or with minor modifications such as are involved in conjugation or declension, or with the substitution of particles, enclitics, personal pronouns or the like. Sometimes, such minor modifications alter the metrical shape of the combination. For example, $i\pi\pi\sigma\nu s$ $i\pi\kappa\nu\pi\delta\delta\alpha s$ may become $i\pi\pi\nu s$ $i\pi\kappa\nu\pi\delta\delta\epsilon\sigma\sigma\nu$, but it remains the same formula. Again, occasionally, the same word group may be used in a different part of the verse with a consequent change in metrical shape. The formula $i\pi\kappa\alpha s$ $i\pi\kappa$

While there may be some difficulty in finding agreement on the question of what a formula is, that difficulty is even greater when faced with the analogical formula. The parallels cited vary considerably in plausibility and persuasiveness, and some degree of subjectivity seems unavoidable. It is, moreover, often difficult to disentangle formular from other factors affecting the placement of words and the possible creation of analogues.¹³ Hence, statistics including analogical formulas should be viewed with suspicion.

Nevertheless, analogues have been included in this study, for it seems desirable to give the results from as thorough an analysis as possible. In the analysis on which the statistics presented in this study are based, an attempt was made to restrict the citation of parallels to word-groups having at least

of the formula as an "allomorph of a preverbal Gestalt" first put forward in "Towards a Generative View of the Oral Formula," TAPA 98 (1967) 269-311. For the purposes of this study, Nagler's concept is of limited utility, however suggestive it may be for describing how formulas came into being in the mind of the oral bard. Cf. my remarks in Phoenix 26 (1972) 111-22.

¹⁰ The Localization of Metrical Word-Types in the Greek Hexameter," YCS 8 (1942) 104-78.

^{11&}quot;The Analogical Formula in Homer," TAPA 106 (1976) 211-26.

¹²These examples have been taken from J. B. Hainsworth, "The Homeric Formula and the Problem of its Transmission," *BICS* 9 (1962) 57-68.

¹³See further TAPA 106 (1976) 211-26.

one member in common, and a metrical, a grammatical (broadly conjunctive, substantival, or verbal), or an acoustic similarity.¹⁴ This means that the grammatical phrase pattern or structural formula, rightly criticized by Hainsworth and Minton, has been excluded. 15 In the case of phrases which are repeated several times elsewhere verbatim (or within the limits set above), there has been no attempt to seek out analogues. But when a combination is repeated only once, an endeavour has been made to find analogous expressions in order to determine whether the repetition is due to chance (the fortuitous juxtaposition of "localized" words, for example) or whether the expression has analogical precedents. In the statistical summaries, however, analogues have been separated from the verbatim formulas for two reasons. First, it seems best to exclude the subjective and doubtful element inherent in the citation of analogues from the conclusions so that the comparison of formular densities may be made on a rigorously objective basis. Second, it may be useful to compare the figures for formular content, which are quite narrowly defined, with those for analogical material, which are more broadly based, so as to get a more accurate notion of the amount of formular material in the Homeric epics.

Finally, certain theoretical and methodological problems related to the concept of formular density and its use merit discussion. First, is formular density an indicator of oral composition and, if so, what quantity reflects that mode of composition? These questions have been raised in a slightly different form by G. S. Kirk and have been answered by A. B. Lord. In reply to Kirk's concern that the qualities of the oral style were being overlooked in a zeal to prove orality by quantitative measures, Lord states: "There are ways of determining whether a style is oral or not, and I believe that quantitative formula analysis is one of them, perhaps the best" (16). Lord, moreover, is prepared to go farther. On the basis of a body of formular analysis drawn from a variety of literatures, Lord concludes that "a pattern of 50 to 60 per cent formula or formulaic, with 10 to perhaps 25 per cent straight formula, indicates clearly literary or written composition" (24).

Several estimates have been made of the formular density in Homer, but none of them has been very reliable. They have been, for the most part,

¹⁴See W. McLeod, "Studies on Panyassis—An Heroic Poet of the Fifth Century," *Phoenix* 20 (1966) 104-05, note 43.

¹⁵See J. B. Hainsworth, "Structure and Content in Epic Formulae: The Question of the Unique Expression," *CQ* N.S. 14 (1964) 155-64, and W. Minton, "The Fallacy of the Structural Formula," *TAPA* 96 (1965) 241-53.

¹⁶See G. S. Kirk, "Formular Language and Oral Quality," YCS 20 (1966) 155-74, reprinted with changes in notation in *Homer and the Oral Tradition* (Cambridge 1976) 183-200, and A. B. Lord, "Homer as Oral Poet," HSCP 72 (1968) 1-46, especially 16-29.

either impressionistic or based on tiny samples. C. E. Schmidt has provided the best estimates. According to him, there are 9253 repeated verses or verses made up of repeated phrases (5605 for the *Iliad* and 3648 for the *Odyssey*). To this total, Schmidt added an estimate of the number of verses which could be made up from other individual repeated phrases, which produced a total of roughly 16,000 verses.¹⁷ As W. Minton notes, this sum is equivalent to 57.5 per cent of the Homeric corpus,¹⁸ and is clearly well in excess of the 10 to 25 per cent deemed indicative of literary composition by Lord. This problem need not detain us, however, as the purpose of this paper is to give some indication of the oral nature of the similes, not the poems as a whole, and this will be done by comparing the formular density of a control passage of typical narrative with a sampling from selected similes.

As Minton has seen, one of the great failings in earlier attempts to estimate formular frequency has been the rather dubious methods used to calculate formular density.¹⁹ He suggests that the only meaningful basis for determining density is from a calculation of line equivalents. Thus, he gives for each verse in his analysis an indication of what fraction is straight formula and what is analogical or "formulaic" material. This method would indeed provide reliable statistics, if the caesuras divided the verse into equal sections. But such is not the case as Minton himself is well aware.²⁰

A more accurate method is to divide each verse into twenty-four morae and to count the number of morae in each verse which contain verbatim formulas. Each figure is then divided by twenty-four and multiplied by one hundred to give the percentage of formular morae per individual verse. Next, the number of morae containing both verbatim formulae and analogues is counted. This result is similarly expressed as a percentage of twenty-four.

One method of determining the formular density of the similes would be to confine the study to an analysis of the similes and compare the results with the level of density which Lord suggests is indicative of oral composition. A further comparison is possible with the level of density calculated by Minton from Schmidt's estimate. To do so, however, is to use figures whose accuracy cannot be verified. Therefore, it seemed best to compare a control passage of "normal *Iliad* narrative."

¹⁷Parallel-Homer (Göttingen 1885; reprinted 1965) vii.

¹⁸ The Frequency and Structuring of Traditional Formulas in Hesiod's *Theogony*," *HSCP* 79 (1975) 30.

¹⁹Minton (above, note 18) 25-30.

²⁰Minton (above, note 18) 32-33.

Now, no matter what passage is chosen as "normal narrative," serious objections can be raised to it. Since it is impossible to select a passage which would satisfy all scholars, I have settled upon the first one hundred verses of the *Iliad*. Parry has analysed the first twenty-five lines of the selection for which Minton has provided a statistical summary.²¹ Since Parry's analysis and Minton's statistics differ slightly from mine, they will provide a useful standard of comparison. Although G. S. Kirk has impugned the normality of the prologue,²² the sample is large enough to offset any irregularities and the statistics for the prologue do not appear unusual in any respect.

The similes were chosen on a different basis, but one which ought to give greater credibility to the results. In my unpublished dissertation, Studies in Homeric Formulae: Linguistic Lateness and Formular Irregularity in the Homeric Iliad (Toronto 1971), I sought to discover, by formula count, whether formular usage diminished in passages with an unusually high proportion of late linguistic features. For this purpose, a sample of twenty similes was selected from those containing no fewer than three forms designated as late by G. P. Shipp.²³ For ease of comparison in the present study, this one hundred and seventy-four verse sample was reduced by taking the first twelve similes and omitting the eleventh to get an even one hundred lines.

It should be noted that both the protasis and apodosis are included in the similes of the sample.²⁴ While it may be argued that the apodosis sometimes contains "narrative" formulas and should in some sense be more properly defined as narrative, it cannot be denied that the apodosis remains an integral part of the simile. If, persuaded by the arguments of G. P. Shipp and D. J. N. Lee,²⁵ one were to excise similes from the text, obviously both protasis and apodosis would have to go. Left by themselves, the apodoses make no sense. It should also be observed that Shipp found the late features

²¹Parry's analyses are found in "The Epic Technique of Oral Verse Making: I. Homer and the Homeric Style," *HSCP* 41 (1930) 118-21 = *The Making of Homeric Verse* ed. A. Parry (Oxford 1971) 301-04, for which Minton gives statistics (above, note 18) 31, note 17.

²² YCS 20 (1966) 117 and Homer and the Oral Tradition (Cambridge 1976) 155.

²³ In the first edition of his *Studies in the Language of Homer* (Cambridge 1953; reprinted Amsterdam 1966). The forms which Shipp discusses are mainly those identified as late by P. Chantraine in his authoritative *Grammaire homérique* I (Paris 1942 now revised in a third edition, Paris 1958). Although Shipp has subsequently produced a second edition of his *Studies* (Cambridge 1972), he has only rarely changed his views on the late features in question.

²⁴This terminology is taken from D. J. N. Lee, *The Similes of the Iliad and Odyssey Compared* (Melbourne 1964) 3 (hereinafter cited as *Lee*), and corresponds to H. Fränkel's terms, "Wiesatz" and "Sosatz" in *Die Homerischen Gleichnisse* (Göttingen 1921; reprinted 1977).

²⁵In the first edition of his *Studies*, Shipp refrained from drawing explicit conclusions about the authenticity of the similes, but he does speak of "the poets of the similes" (p. 29), and his

equally distributed between protasis and apodosis. The first simile of the sample, for example, the bee simile of the second book (87-94), consists of eight verses, four in the protasis and four in the apodosis. Of the four late features in the simile, three are located in the apodosis. The evidence of language and organic unity would thus seem to suggest that the similes of the sample ought to include both protasis and apodosis.²⁶

Finally, it should also be noted that the sample contains one simile whose protasis is repeated (6.506-16) and one which is repeated *in toto* save for the first two verses (11.548-57). While the inclusion of these similes will have some effect on the statistics, it does seem arbitrary to exclude them.²⁷

The ideal manner to present the findings of this study would be to provide a formular analysis of the one hundred verse narrative passage and the selected similes with a statistical summary. But such a presentation, however desirable, would swell the bulk of this paper to unmanageable length. A less desirable, but more feasible, method could be to present the statistics with a typical analysis as an appendix. The following tables, then, present the results of the analysis. (All passages are taken from the *Iliad*.)

Number of Verse	Verbatim Formular Morae	%	Formular Morae (including analogues)	%
1	14	58.3	24	100.0
2	16	66.6	21	87.5
3	24	100.0	24	100.0
4	5	20.8	19	79.2
5	13	54.2	24	100.0
6	11	45.8	24	100.0
7	24	100.0	24	100.0
8	21	87.5	24	100.0

TABLE I 1.1-100

other comments reveal that he often regards "late" or "recent" to mean post-Homeric. On the isolated transitive use of the present in $-\sigma\kappa$ - in $\ell\pi\iota\beta\alpha\sigma\kappa\ell\mu\epsilon\nu$ in Iliad 2.234, for example, he comments, "Zenodotos' athetesis of 231–4 is supported by the subjunctives 232 $\mu\iota\sigma\gamma\epsilon\alpha\iota$, 233 $\kappa\alpha\tau\iota\sigma\chi\epsilon\alpha\iota$ also" (38). Lee argues on the basis of Shipp's findings that many similes are interpolations, a view supported by Shipp in his second edition, pp. 208–22.

²⁶Another related problem is to decide where the apodosis ends. My practice was to extend the apodosis to the end of the sentence (marked by a period in the *OCT*).

²⁷See Scott 127-40 for some good remarks on repeated similes.

Number of Verse	Verbatim Formular Morae	%	Formular Morae (including analogues)	%
9	9	37.5	24	100.0
10	11	45.8	24	100.0
11			24	100.0
12	18	75.0	24	100.0
13	24	100.0	24	100.0
14	24	100.0	24	100.0
15	24	100.0	24	100.0
16	24	100.0	24	100.0
17	24	100.0	24	100.0
18	24	100.0	24	100.0
19	16	66.6	24	100.0
20	6	25.0	6	25.0
21	18	75.0	24	100.0
22	24	100.0	24	100.0
23	24	100.0	24	100.0
24	24	100.0	24	100.0
25	24	100.0	24	100.0
26	16	66.6	24	100.0
27	8	33.3	24	100.0
28	16	66.6	24	100.0
29	10	41.7	22	91.7
30	24	100.0	24	100.0
31	10	41.7	24	100.0
32	19	79.2	19	91.7
33	24	100.0	24	100.0
34	18	75.0	24	100.0

35	24	100.0	24	100.0
36	24	100.0	24	100.0
37	24	100.0	24	100.0
38	24	100.0	24	100.0
39	11	45.8	20	83.3
40	18	75.0	18	75.0
41	24	100.0	24	100.0
42	_	_	18	75.0
43	24	100.0	24	100.0
44	24	100.0	24	100.0
45	14	58.3	24	100.0
46	10	41.7	16	66.6
47	8	33.3	13	52.4
48	14	58.3	24	100.0
49	20	83.3	24	100.0
50	17	70.8	23	95.8
51	19	79.2	24	100.0
52	9	37.5	24	100.0
53	24	100.0	24	100.0
54	16	66.6	24	100.0
55	24	100.0	24	100.0
56	6	25.0	19	79.2
57	24	100.0	24	100.0
58	24	100.0	24	100.0
59	24	100.0	24	100.0
60	16	66.6	24	100.0
61	5	20.8	24	100.0
62	14	58.3	14	58.3

Number of Verse	Verbatim Formular Morae	%	Formular Morae (including analogues)	%
63	15	62.5	24	100.0
64	8	33.3	24	100.0
65	20	83.3	24	100.0
66	16	66.6	16	66.6
67	10	41.7	10	41.7
68	24	100.0	24	100.0
69	14	58.3	24	100.0
70	24	100.0	24	100.0
71	17	70.8	22	91.7
72	14	58.3	24	100.0
73	24	100.0	24	100.0
74	16	66.6	24	100.0
75	~	_	24	100.0
76	24	100.0	24	100.0
77	14	58.3	24	100.0
78	11	45.8	24	100.0
79	20	83.3	24	100.0
80			18	75.0
81	7	29.2	12	50.0
82	24	100.0	24	100.0
83	24	100.0	24	100.0
84	24	100.0	24	100.0
85	11	45.8	18	75.0
86	20	83.3	24	100.0
87	12	50.0	24	100.0
88	20	83.3	24	100.0

89	22	91.7	22	91.7
90		_	24	100.0
91	24	100.0	24	100.0
92	18	75.0	24	100.0
93	22	91.7	24	100.0
94	4	16.7	17	70.8
95	15	62.5	19	79.2
96	11	45.8	19	79.2
97	17	70.8	24	100.0
98	20	83.3	24	100.0
99	10	41.7	13	54.2
100	15	62.5	24	100.0

TABLE 2 2.87-94

Number of Verse	Verbatim Formular Morae	%	Formular Morae (including analogues)	%
87	7	29.2	11	45.8
88	10	41.7	24	100.0
89	18	75.0	18	75.0
90	4	16.6	4	16.6
91	24	100.0	24	100.0
92	_	_	24	100.0
93	20	83.3	24	100.0
94	24	100.0	24	100.0
Total 8	Average 13.4	55.7	Average 19.1	80.9

TABLE 3 3.10-14

Number of Verse	Verbatim Formular Morae	%	Formular Morae (including analogues)	%
10	9	37.5	21	87.5
11	_	_	18	75.0
12	5	20.8	13	54.2
13	11	45.8	24	100.0
14	24	100.0	24	100.0
Total 5	Average 9.8	40.8	Average 20	83.3

TABLE 4 3.23-29

Number of Verse	Verbatim Formular Morae	%	Formular Morae (including analogues)	%
23	20	83.3	20	83.3
24	20	83.3	20	83.3
25	16	66.6	18	75.0
26	18	75.0	18	75.0
27	18	75.0	24	100.0
28	24	100.0	24	100.0
29	24	100.0	24	100.0
Total 7	Average 20	83.3	Average 21.1	88.1

TABLE 5 5.87-94

Number of Verse	Verbatim Formular Morae	%	Formular Morae (including analogues)	%
87	18	75.0	24	100.0
88	8	33.3	24	100.0
89	_		13	54.2
90	7	29.2	24	100.0
91	24	100.0	24	100.0
92	11	45.8	19	79.3
93	22	91.7	24	100.0
94	20	83.3	20	83.3
Total 8	Average 13.75	57.3	Average 21.5	89.5

TABLE 6 5.137-43

Number of Verse	Verbatim Formular Morae	%	Formular Morae (including analogues)	%
136	17	70.8	24	100.0
137	16	66.6	20	83.3
138	8	33.3	8	33.3
139	16	66.6	16	66.6
140	7	29.2	10	41.7
141	17	70.8	17	70.8
142	12	50.0	24	100.0
143	21	87.5	21	87.5
Total 8	Average 14.25	59.35	Average 17.5	72.9

TABLE 7 6.506-16

Number of Verse	Verbatim Formular Morae	%	Formular Morae (including analogues)	%
506	24	100.0	24	100.0
507	24	100.0	24	100.0
508	24	100.0	24	100.0
509	24	100.0	24	100.0
510	24	100.0	24	100.0
511	24	100.0	24	100.0
512	19	79.2	22	91.7
513	18	75.0	24	100.0
514	20	83.3	20	83.3
515	15	62.5	24	100.0
516	10	41.7	20	83.3
Total 11	Average 20.5	85.5	Average 23.1	96.2

TABLE 8 11.172-80

Number of Verse	Verbatim Formular Morae	%	Formular Morae (including analogues)	%
172	19	79.3	19	79.3
173	14	58.3	21	87.5
174	14	58.3	14	58.3
175	24	100.0	24	100.0
176	24	100.0	24	100.0
177	20	83.3	24	100.0
178	24	100.0	24	100.0
179	18	75.0	22	91.7
180	18	75.0	24	100.0
Total 9	Average 19.4	81.1	Average 21.8	90.8

TABLE 9 11.473-84

Number of Verse	Verbatim Formular Morae	%	Formular Morae (including analogues)	%
473	24	100.0	24	100.0
474	6	25.0	6	25.0
475	14	58.3	16	75.0
476	10	41.7	20	83.3
477	10	41.7	10	41.7
478	24	100.0	24	100.0
479	5	20.8	13	54.2
480	12	50.0	14	58.3
481	4	16.7	20	83.3
482	24	100.0	24	100.0
483	24	100.0	24	100.0
484	14	58.3	14	58.3
Total 12	Average 14.25	59.4	Average 17.5	73.3

TABLE 10 11.492-501

Number of Verse	Verbatim Formular Morae	%	Formular Morae (including analogues)	%
492	6	25.0	24	100.0
493	11	45.8	18	75.0
494	12	50.0	24	100.0
495	13	54.2	19	79.3
496	8	33.3	8	33.3
497	18	75.0	24	100.0
498	17	70.8	24	100.0
499	19	79.3	19	79.3
500	20	83.3	20	83.3
501	12	50.0	24	100.0
Total 10	Average 13.6	56.6	Average 20.4	85.0

TABLE 11 11.548-57

Number of Verse	Verbatim Formular Morae	%	Formular Morae (including analogues)	%
548	15	62.5	24	100.0
549	24	100.0	24	100.0
550	24	100.0	24	100.0
551	24	100.0	24	100.0
552	24	100.0	24	100.0
553	24	100.0	24	100.0
554	24	100.0	24	100.0
555	24	100.0	24	100.0
556	24	100.0	24	100.0
557	24	100.0	24	100.0
Total 10	Average 23.1	96.25	Average 24	100.0

TABLE 12 12.278-89

Number of Verse	Verbatim Formular Morae	%	Formular Morae (including analogues)	%
278	16	66.6	20	83.3
279	24	100.0	24	100.0
280	13	54.2	24	100.0
281	13	54.2	24	100.0
282	24	100.0	24	100.0
283	16	66.6	24	100.0
284	13	54.2	19	79.3
285	7	29.2	7	29.2
286	14	58.3	24	100.0
287	21	87.5	24	100.0
288	17	70.8	21	87.5
289	14	58.3	24	100.0
Total 12	Average 16	66.6	Average 21.6	90.0

SUMMARY

Locus	Number of Lines	Verbatim Formular Morae	Formular Morae as Per Cent	Formular Morae Including Analogues	Formular Morae Including Analogues as Per Cent
2.87-94	8	13.4	55.7	19.1	80.9
3.10-14	5	9.8	40.8	20.0	83.3
3.23-29	7	20.0	83.3	21.1	88.1
5.87-94	8	13.8	57.3	21.5	89.5
5.137-43	8	14.3	59.4	17.5	72.9
6.506-16	11	20.5	85.5	23.1	96.2
11.172-80	9	19.4	81.1	21.8	90.8
11.473-84	12	14.3	59.4	17.5	73.3
11.492-501	10	13.6	56.6	20.4	85.0
11.548-57	10	23.1	96.3	24.0	100.0
12.278-89	12	16.0	66.6	21.6	90.0
Totals	100	178.2	742.0	227.6	950.0
Average	9.09	16.2	67.5	20.7	86.3

What conclusions can be reached from this evidence? If the passages of Homeric verse were consistent in their formular texture, it would be simple to add up the statistics for all the similes and compute an average number both of verbatim formular morae and formular morae including analogues. The results would be as follows:

- 1. Average number of verbatim formular morae: 16.2 or 67.5%.
- Average number of formular verse including analogues: 20.7 or 86.3%.

Now these figures may be compared with those for the control passage of typical narrative, where the average number of verbatim formular morae is 16.7 or 69.5% of the verse and the average number of formular morae including analogues is 22.6 or 94.2%. The results are strikingly similar. This result is surprising, given the greater number of hapax legomena and frequently unique subject matter of the similes. On the average, the verses of the control passage are more formular by .5 mora per line. As far as the formular morae including analogues is concerned, the difference is only 1.9 morae. From these results it might be concluded that the formular texture of the similes is little different from that of the narrative.

But the matter is complicated because the texture varies so from passage to passage. Thus, whilst 69.3% of the one hundred verse control passage consists of formulas, if the size of the sample is decreased, the percentage begins to deviate from the average. For ten-verse samples within *Iliad* 1.1-100, it varies from a low of 55.8% (verses 2-11) to a high of 87.5% (32-41). If the size of the sample is decreased further, the percentage of formulas fluctuates even more wildly. For five-verse groups, it varies from 21.7% (verses 77-81) to a high of 100% (13-17, 14-18).

Just as evidently, the amount of traditional language in the similes varies widely from a low of 40.8% (*Iliad* 3.10-14) to a high of 96.2% (*Iliad* 11.548-57). But, and this is important, only in one simile (*Iliad* 3.10-14) does the average fall short of the minimum value for a group of verses of comparable length in the "control" passage.²⁸ Furthermore, it should be noted that the lowest percentage is found in the shortest simile: 3.10-14 with 40.8%. Although the evidence is hardly adequate, it does suggest that these lines are too few to provide meaningful statistics. But the fact remains that, despite differences in language, both in terms of age and content, the similes show little deviation from the norm of the narrative passage.

Thus far, the statistical interpretation has been confined to the simple comparison of averages, and although the results suggest that the formular

²⁸The average of 3.10-14 is 40.8% compared with 43.3% in five verses 1.77-81, a difference of less than one mora.

style of the *Iliad* is uniform throughout, the wide variation in formular density in the similes raises some doubt. There is, however, another mode of dealing with the statistics which permits a more accurate and meaningful comparison between narrative and similes. This is to count the number of verses in the two types of passage containing from zero to twenty-four formular morae per verse and compare the results. The outcome can be seen in the following table. The first column gives the number of verbatim formular morae per verse; the second, the number of verses in the one hundred verse normal narrative sample containing from zero to twenty-four formular morae per verse; the third, the same number from the one hundred verses selected from the similes.

No. vm/v	Nar.	Sim.	No. vm/v	Nar.	Sim.
0	5	3	13	1	4
1	_	_	14	7	6
2	-	_	15	3	2
3	_	_	16	8	5
4	1	2	17	3	4
5	3	2	18	5	8
6	2	2	19	2	3
7	1	4	20	6	7
8	3	3	21	1	2
9	1	1	22	2	1
10	5	4	23	_	_
11	6	4	24	34	30
12	1	4			

The uniformity of the two samples is made abundantly clear by this table. Verses composed of zero to twenty-three formular morae are fairly evenly distributed throughout the two samples, and none is found in any great abundance. There are, moreover, no verses in either sample with one, two, three or twenty-three formular morae, though this, like the small number of verses of twenty-two formular morae, doubtless more reflects the minimum length of formular combinations than anything else. Finally, roughly one-third of each sample is made up of wholly formular verses. In general, then, the overall similarity of the two samples is striking and confirms the conclusions suggested by the comparison of the average number of formular morae per verse in the two samples.

To sum up: an investigation of the formular density of a selection of similes and of a "control" passage of narrative reveals a uniform formular texture in the *Iliad*. In other words, in so far as can be judged from the samples compared in this study, the poet's use of traditional formular language in the similes is not different from that in the rest of the poem, and

may be added to the roster of evidence suggesting that the similes, too, were composed orally. Moreover, although the authenticity of many of the similes used in this study has long been suspect because of the number of linguistically late features they contain, the results of this study should give pause to those who would excise them from the text.

APPENDIX

Formular Analysis of *Iliad* 2.87-94

This simile has been selected to illustrate the method of analysis described above on p. 89 on the grounds that it is the first of the series and with 55.7% verbatim formular and 80.9% formular including analogues it is fairly close to the norm. All book references are to the *Iliad* unless otherwise indicated.

ηΰτε έθνεα είσι 87.

This combination is analogically related to the half-line $\eta \ddot{v} \tau \epsilon$ πάρδαλις είσι (21.573) and ηΰτε ταῦρον ἔπεφνε (16.487). Although the rest of this line cannot be paralleled, compare 2.469, ηΰτε μυιάων άδινάων έθνεα πολλά.

πέτρης έκ γλαφυρής 88.

 $\pi \epsilon \tau \rho \eta$ ὕπο γλαφυρη is found in *Od.* 14.533. This expression may also be compared with the following system: $\pi \epsilon \tau \rho \alpha \iota \tau \dot{\eta} \lambda \iota \beta \alpha \tau o \iota$ (16.35, Od. 13.196), πέτρη ἐπ' ἢλιβάτω (Η. 4.404), πέτρη τ''Ωλενίη (2.617), πέτρης τ' 'Ωλενίης (11.756), and the formula νηὸς ὕπερ γλαφυρής (Od. 12.406, Od. 14.304).

αίεὶ νέον ἐρχομενάων

This hemistich never recurs. It may, however, be analogically related to the expression $\epsilon \pi \iota \sigma \chi \epsilon \delta \delta \nu \epsilon \rho \chi o \mu \epsilon \nu o \iota o (H. 3.3)$ which is in turn obviously related to the combination ἐπήϊεν ἐρχομένοιο (17.741).

89. βοτρυδὸν

This word is a hapax legomenon.

δὲ πέτονται

This combination recurs in the formular verse 23,372 ΐπποις οἱ δὲ πέτοντο κονίοντες πεδίοιο

23,449 ίππους τοὶ

Obviously related also is the verse κλαγγη ταίγε πέτονται ἐπ' 'Ωκεανοῖο ῥοάων (3.5).

άνθεσιν είαρινοῖσιν

This combination never recurs in Homer. The fact, however, that it is found in Hesiod's Op. 75 and Theog. 279 and Cypria 4.2 suggests strongly that it was a formula in the Greek tradition. The two other Homeric occurrences of $\epsilon i\alpha\rho\nu\delta$ appear to be related:

καρπῷ βριθομένη, νοτίησί τε
$$\delta$$
 ἄνθεσι γαῖ εἰάδεσιν εἰαριν- δ οῖσι δ 8.307 οῖσι δ 1.2.401

90. αὶ μέν τ'

This combination recurs in 5.141 and Od. 22.305. The formula $\tau o \hat{\nu}$ $\mu \acute{e} \nu \tau \acute{e}$ is found again in 13.706, 16.28, 21.260, 23.519, at the beginning of the verse though variously inflected. It is also found in a different position in the verse $\phi \acute{\nu} \lambda \lambda \alpha \tau \grave{\alpha} \mu \acute{e} \nu \tau$ $\check{\alpha} \nu \epsilon \mu o s \chi \alpha \mu \acute{\alpha} \delta \iota s$ $\chi \acute{e} \iota \iota$, $\check{\alpha} \lambda \lambda \alpha \delta \acute{e} \theta$ $\check{\nu} \lambda \eta$ (6.147). For the rest of the verse, compare of $\mu \grave{e} \nu \delta \nu \sigma o \mu \acute{e} \nu o \nu v$ $\Upsilon \kappa \epsilon \rho \acute{e} \sigma v$, où δ $\check{\alpha} \nu \acute{e} \nu \tau v$ (Od. 1.24) and $\tau \grave{o} \nu \mu \grave{e} \nu \dot{\alpha} \tau \alpha \iota \nu \nu \iota \mu e \nu o \nu \kappa \lambda \nu \tau \grave{\alpha} \tau \epsilon \iota \iota \chi \epsilon \alpha$, $\tau \grave{o} \nu \delta$ $\check{e} \tau \grave{\epsilon} \gamma \alpha \iota \eta$ (17.85).

91. This verse recurs as 2.464. The combination $\tilde{\epsilon}\theta\nu\epsilon\alpha$ π 0 $\lambda\lambda$ $\dot{\alpha}$ is found finally in 2.459 and 469, and $\nu\epsilon\hat{\omega}\nu$ $\tilde{\alpha}\pi$ 0 $\kappa\alpha$ 1 $\kappa\lambda$ 1 σ 1 α 03, 14.146, 16.45, 376.

92. ἤϊόνος προπάποιθε

This combination never recurs. It may be related to η ιόνες βοόωσιν (17.265), η ιόνος στόμα μακρόν (14.36), and η ιόνας τε παραπληγας λιμένας τε θαλάσσης (Od. 5.418 = 440).

Compare a	lso	
ύμείων `		4.348
Ίλίου	προπάροιθε	15.66, 21.104, 22.6
εἰράων Αἰγύπτου		18.531 Od. 4.355

βαθείης ἐστιχόωντο

This combination may be related to the expressions

	ωσαν 'Αχαιούς	8.336
βαθείης	ποσσὶν ἐρείπων	15.356
	τέλσον ϊκέσθαι	18.547

The word $\dot{\epsilon}\sigma\tau\iota\chi\delta\omega\nu\tau\sigma$ is employed in this position in the formular verses

τοῖς δὲ τριήκοντα
$$\begin{vmatrix} \gamma \lambda \alpha \phi v \rho \alpha i \\ v \acute{\epsilon} s \end{vmatrix}$$
 εστιχόωντο $\begin{vmatrix} 2.516=680=733 \\ i \acute{\epsilon} στιχόωντο \end{vmatrix}$ εστιχόωντο $\begin{vmatrix} 2.602 \\ 3.266=341 \end{vmatrix}$

This may have exerted an influence upon the poet when he created 2.92.

93. ίλαδὸν είς ἀγορήν

 $i\lambda\alpha\delta\delta\nu$ is found only here. The hemistich is analogically related to the expression $\kappa \lambda \dot{\eta} \delta \eta \nu \epsilon i s \dot{\alpha} \gamma o \rho \dot{\eta} \nu$ (9.11). The formula $\epsilon i s \dot{\alpha} \gamma o \rho \dot{\eta} \nu$ is found in this position in 1.490, 18.34, Od. 1.272, Od. 2.10, Od. 8.109, Od. 16.361, Od. 20.146, Od. 24.420, H. 2.296. It also occurs initially in Od. 1.90, Od. 8.12, Od. 16.377, Od. 20.362.

μετὰ δέ σφισιν

This combination never recurs verbatim. It appears to be, however, the lengthened version of the formula $\mu \epsilon \tau \dot{\alpha} \sigma \phi_i \sigma_i$ which is found in 1.368, 10.208, 311, 11.413.

"Οσσα δεδήει

This combination recurs in 12.466 with a slight modification $(\delta\sigma\sigma\epsilon)$. The expression appears to be related to the following:

and

and the formular half-line $\tau \partial \nu \delta \hat{\epsilon} \sigma \kappa \delta \tau \sigma s \delta \sigma \sigma \epsilon \kappa \hat{\alpha} \lambda \nu \psi \epsilon(\nu)$ (4.461 = 6.11, 4.503, 526, 13.575, 14.519, 16.316, 325, 20.393, 471, 21.181, H. 3.370).

94. ότρύνουσ' ιέναι

This expression recurs in 2.451. It is also related to:

ότρύνοντι ότρύνων	μάχεσθαι	$4.414 \\ 5.496 = 6.105 = 11.213$
and		
ηθελέτην	,,	17.433
ἐσκίδαντ'	<i>ί</i> έναι	24.2

Διὸς ἄγγελος

This combination is also found in 1.334, 7.274, 24.169.

οί δ' ἀγέροντο

This expression recurs with slight modifications in Od. 8.321, Od. 11.36, Od. 20.277.

SUMMARY

<u>ἠΰτε ἔθνεα είσι</u> μελισσάων ἁδινάων,	87
πέτρης έκ γλαφυρής αἰεὶ νέον έρχομενάων	
βοτρυδον δε πέτονται έπ' ἄνθεσιν είαρινοῖσιν	
αὶ μέν τ' ἔνθα ἄλις πεποτήαται, αὶ δέ τε ἔνθα	90
ῶς τῶν ἔθνεα πολλὰ νεῶν ἄπο καὶ κλισιάων	
ηϊόνος προπάροιθε βαθείης έστιχόωντο	
<u>ἰλαδὸν εἰς ἀγορήν μετὰ δέ σφισιν "Όσσα δεδήει</u>	
ότρύνουσ' ιέναι, Διὸς ἄγγελος οι δ' ἀγέροντο.	94

Number of Verse	Verbatim Formular Morae	%	Formular Morae (including analogues)	%
87	7	29.2	11	45.8
88	10	41.7	24	100.0
89	18	75.0	18	75.0
90	4	16.6	4	16.6
91	24	100.0	24	100.0
92		_	24	100.0
93	20	83.3	24	100.0
94	24	100.0	24	100.0
Total 8	Average 13.4	55.7	Average 19.1	80.9