

# THE SINGING OF HOMER AND THE MODES OF EARLY GREEK MUSIC

## I. THE SINGING OF HOMER (I)

In their invocations of the Muses the early epic poets use indifferently verbs meaning 'tell', 'speak of' (ἔννεπε, ἔσπετε, εἰπέ, εἴπατε) and the verb which we normally translate as 'sing' (ἄειδε, ἀείδω, ἀείσατε).<sup>1</sup> When they refer directly to their own performance they may use the non-committal μνήσομαι, or ἐρέω, ἐνισπεῖν, but more often it is ἀείδω, ἄρχομ' ἀείδειν, or something of the sort; and they will pray for good ἀοιδή, or hope for reward from it.<sup>2</sup> We cannot make a distinction between two styles of performance, one characterized as ἀείδειν, the other as ἐνέπειν: the *Iliad* begins μῆνιν ἄειδε θεά, but later has ἔσπετε νῦν μοι Μοῦσαι; Hesiod moves straight from χαίρετε τέκνα Διός, δότε δ' ἡμερόεσσαν ἀοιδήν to εἴπατε δ' ὡς . . . ταυτά μοι ἔσπετε Μοῦσαι . . . καὶ εἴπατε (*Th.* 104–15); the author of the Hymn to Pan begins ἔννεπε Μοῦσα and ends ἴλαμαι δέ σ' ἀοιδῆ . . . καὶ σεῖο καὶ ἄλλης μνήσομ' ἀοιδῆς.

The performers described in Homer who entertain audiences or themselves with accounts of famous deeds are called ἀοιδοί, and their performances ἀείδειν.<sup>3</sup> They accompany themselves on the φόρμιγξ or κίθαρις.<sup>4</sup> They are often likened to the Anglo-Saxon *scop* who sang heroic lays in the banqueting hall to the accompaniment of his *hearpe*, to the Yugoslav *guslar*, and to other 'Singers of Tales'. There is little doubt that they are a reflection (perhaps a little idealized as regards the honour in which they are held) of the Homeric poets themselves.

But what does ἀείδειν, in its application to the performance of epic, actually mean? Is it 'sing' in the true sense, as one sings a song? Is it just a conventional word for 'recite' or 'express in verse', like *cano* in *arma uirumque cano*? Or is it something in between, some sort of chanting or intoning which differed from ordinary speech delivery but which we would not include within our definition of singing? The indications appear somewhat contradictory. The word ἀείδειν certainly puts the performance of epic in the same category as the singing of songs, however loose that category may be. Accompaniment on an instrument also implies sung rather than spoken delivery; recitation to music, παρακαταλογή, was regarded as an invention of Archilochus.<sup>5</sup> In Athenaeus (632d) we find the theory that the notorious metrical imperfections in Homer (στίχοι ἀκέφαλοι etc.) are accounted for by the fact that he, unlike the elegists, set all his poetry to music. Other considerations, however, would favour something closer to recitation than to singing:

(i) Classical writers distinguish rhapsodes from citharodes. The latter sang the poetry of Homer and others to melodies of their own, accompanying themselves on the cithara, and they looked back to Terpander as the famous exponent of this art.<sup>6</sup> Homer was thought of as a

<sup>1</sup> We also find κλείετε (*Hes. Th.* 105), ὕμνει (*h. Herm.* 1, *h.* ix 1, xiv 1, cf. xxxi 1).

<sup>2</sup> *Hes. Th.* 104, *h. Dem.* 494, *h.* vi 20, ix 7, x 5, etc.

<sup>3</sup> *Od.* i 154 f., 328, 339 ff., iii 267, iv 17, viii 43 ff., 250 ff., 471 ff., ix 3, xi 368, xiii 9, 27, xvi 252, xvii 358, xxii 330 ff., xxiii 133, xxiv 439; *Il.* ix 186–91.

<sup>4</sup> Besides the passages cited see *Il.* ii 599 f. (*Thamyris*), xiii 731, xxi 406; *h. Herm.* 425 ff. (where the instrument is a λύρη). For Hesiod see my note on *Th.* 30.

<sup>5</sup> *Ps.-Plut. de mus.* 1140f/1a; but this only means that it was not used for Homer in the later classical period.

<sup>6</sup> Heraclides Ponticus *fr.* 157 *W. ap. Ps.-Plut.* 1132c, καὶ γὰρ τὸν Τέρπανδρον ἔφη κιθαρῳδικῶν ποιητῆν ὄντα νόμων κατὰ νόμον ἕκαστον τοῖς ἔπεσι τοῖς

ἑαυτοῦ καὶ τοῖς Ὀμήρου μέλη περιτιθέντα ἄδειν ἐν τοῖς ἀγῶσιν ἀποφῆναι δὲ τούτων λέγει ὀνόματα πρῶτον τοῖς κιθαρῳδικοῖς νόμοις. Cf. 1133c τὰ γὰρ πρὸς τοὺς θεοὺς ὡς βούλονται ἀφοσιωσάμενοι (citharodes before Phrynis) ἐξέβαινον εὐθὺς ἐπὶ τε τὴν Ὀμήρου καὶ τῶν ἄλλων ποίησιν. δῆλον δὲ τοῦτ' ἐστὶ διὰ τῶν Τέρπανδρου προοιμίων. (Citharodes' prooimia were evidently ascribed *en masse* to Terpander, as rhapsodes' prooimia to Homer. Cf. below n. 24.) Heraclides treated Homer's Demodocus and Phemius as citharodes, 1132b. Timomachus *FGrH* 754 F 1 gives the honour of being the first citharode to perform Homer's battles to one Stesandros of Samos (or Cyprian Salamis?).

rhapsode,<sup>7</sup> and a rhapsode was evidently less of a musician than a citharode. ἄδειν can be used of him,<sup>8</sup> but more often it is λέγειν.<sup>9</sup> He does not normally seem to play an instrument; some explained *ῥαψωδός*, as = *ῥαβδωδός*, because he held a *ῥάβδος*.<sup>10</sup> He was noted for histrionic rather than musicianly qualities.<sup>11</sup> Such was the rhapsode of the classical period, and it was considered that he descended directly from the poet-rhapsode such as Homer.

(ii) The Alexandrian scholars and the grammatical tradition that derived from them attached importance to the study of Homeric accentuation, and record a number of particular accentuations that cannot have been established either from the living Greek language or from theory and analogy, but must have been preserved by a continuous tradition of oral performance from early times: such accentuations as *ἀλεωρή, γάρ αὐτον, δημοτής, θαμειαί, ταρφειαί, καυστειρή, ἀγνυαί, Τρωιούς, ὄθι σφισι*, and others.<sup>12</sup> That rhapsodes continued to perform Homer in Hellenistic times, and indeed much later, is known from agonistic inscriptions.<sup>13</sup> It is not the case that Alexandrian scholars kept their noses in books and ignored performing artists of their times. The scholia to Euripides' *Orestes* contain several comments on the practice of later actors. The ancient commentator responsible (perhaps Callistratus) had seen the play on the stage—as most theatre-goers had—and did not regard the spectacle as irrelevant to his work, though he was clear that the actors were no reliable guides to Euripides' intentions and sometimes perverted them. Homeric scholars were naturally familiar with the sound of rhapsodes' voices. These rhapsodes performed Homer in such a way that the word accents were audible, and they were taken to have at least some authority in the matter. Rightly so, seeing that their accentuation had peculiar features which appear genuinely ancient. How ancient? As ancient as the times when the words concerned were in use in the living language. That implies a delivery in something not too far removed from speech tones at least as early as Homer, if not earlier.

There are two ways open to us to reconcile the conflicting indications. We may postulate a dual tradition from the time of Homer, sung delivery to the accompaniment of the phorminx on the one hand, recitation in speech tones on the other. Homer's own allusions to heroic *ᾠοιδή* would all refer to the first, while the classical rhapsodic tradition would be a continuation of the second. Alternatively, the eighth-century *ᾠοιδός* with his phorminx and the classical rhapsode without it stand in a single line of tradition, the manner of delivery throughout being a kind of recitative that preserved the natural word accents but was (at least so long as the phorminx remained in use) pitched on definite notes.

In favour of the dual-tradition hypothesis it might be urged that a distinction between performers with and without an instrument can be traced back in art to the early fifth century (*sc.* citharodes and rhapsodes), and in literary tradition to Hesiod, who received only a bay staff from the Muses (*Th.* 30). But the ancient inference from Hesiod's staff was not that he did not sing, but

<sup>7</sup> Pl. *Leg.* 658b εἰκός που τὸν μὲν τινα ἐπιδεικνύναι καθάπερ Ὀμηρος ῥαψωδιάν, ἄλλον δὲ κιθαρωδιάν, κτλ.; *Rep.* 600d Ὀμηρον δ' ἄρα οἱ ἐπ' ἐκείνου . . . ἢ Ἡσίοδον ῥαψωδεῖν ἂν περιούνας εἴων; *Cert. Hom. et Hes.* 5 ποιήσαντα γὰρ τὸν Μαργίτην Ὀμηρον περιέρχεσθαι κατὰ πόλιν ῥαψωδοῦντα; 17 ἐκείθεν δὲ παραγενόμενος εἰς Κόρινθον ἐρραψώδει τὰ ποιήματα.

<sup>8</sup> Pl. *Ion* 535b ἢ τὸν Ὀδυσσεά ὅταν ἐπὶ τὸν οὐδὸν ἐφαλλόμενον ἄδῃς; [Pl.] *Eryx.* 403d τῶν ῥαψωδῶν οἱ τὰ Ὀμήρου ἔπη ἄδουσιν; *Vit. Hom. Scorial.* I περιῶν δὲ τὰς πόλεις ἤδε τὰ ποιήματα; Ps.-Hdt. *Vit. Hom.* 32 ὁ δὲ Ὀμηρος ἀεῖδει αὐτοῖς τὰ ἔπεα τάδε, ἃ καλέεται Κάμινος; 33. The word *ῥαψωδός* itself implies ἄδειν. It is not attested before the fifth century (*GDI* 5786 [Dodona], Hdt. v 67, S. *OT* 391), but best interpreted as referring to formulaic composition. Cf. 'Hes.' fr. 357. 2

μέλομεν ἐν νεαροῖς ὕμνοις ῥάψαντες ᾠοιδήν; Pind. *N.* ii 1 Ὀμηρίδαι ῥαπτῶν ἐπέων . . . ᾠοιοί.

<sup>9</sup> Pl. *Ion* 535b, c bis, e, 537a; Ps.-Hdt. 9, 11, 14, 16, 17, 22, 30, 31, 35, *Cert.* 7–8, 12; 15 ὁ δὲ Ὀμηρος . . . περιερχόμενος ἔλεγε τὰ ποιήματα, 17, 18.

<sup>10</sup> Schol. Pind. *N.* ii 1d, Eust. in Hom. p. 6. 17, schol. Pl. *Ion.* 530a = *Suda* s.v. ῥαψωδοί. Cf. below, p. 124. Note, however, that Plato classes Homer's Phemius as a rhapsode (*Ion* 533c, even if *ῥαψωδοῦ* be removed from the text).

<sup>11</sup> Pl. *Ion* 532d, 535b–6a, *Rep.* 395a, Alcid. *Soph.* 14, Arist. *Rhet.* 1403b22, *Poet.* 1462a6.

<sup>12</sup> See J. Wackernagel, *Kl. Schr.* 880–1, 1102–7, 1154–78.

<sup>13</sup> E.g. *SIG*<sup>3</sup> 711 L 31, 958. 35, 959. 9; *IG* vii 1773.17, 1776.15.

that ἐπὶ ῥάβδου δάφνης ἦδε.<sup>14</sup> The implication is that the lyre was a valuable adjunct, but its use or non-use did not determine the nature of the vocal performance. This is in line with what we find in several other oral epic traditions. The Serbian bard normally played the *gusle*, but occasionally did without it, holding a staff or a tobacco-pipe instead and singing in the usual manner.<sup>15</sup> In central and western Yugoslav Macedonia and in northern Russia, epics are sung without accompaniment, and there is evidence that in former times an instrument was used: its disappearance has not put an end to singing.<sup>16</sup>

In fact the dual-tradition hypothesis is supported by no ancient testimony, and it lacks intrinsic plausibility. We have seen that no differentiation between singing and reciting can be extracted from the use of ἀεῖδαι and ἐνέπειν in the language of hexameter poetry. On the contrary, the interchangeability of the words, which is paralleled by the indiscriminate use of ᾄδειν and λέγειν for the later rhapsode's delivery, favours the single-tradition alternative.

I conclude that Homeric 'singing' was truly singing, in that it was based on definite notes and intervals, but that it was at the same time a stylized form of speech, the rise and fall of the voice being governed by the melodic accent of the words. It is the rule in later Greek music that it shows a general correspondence with the word accents, except in the case of strophic poetry, where the pattern of accents is always different from one strophe to the next.<sup>17</sup> The turning away from strophic to astrophic composition in the late fifth century was no doubt due to the desire to exploit to the full the power of music to enhance the sense of the words. Correspondence of melody and accent was part of this; but it need not have been a new idea. No one singing Greek ignored or negated the natural quantities of the words. Why should he ignore or negate their natural accents, when not under the constraint of strophic responsion?

As a feature of the language, of course, the melodic accent was an inheritance from Indo-European times. It is possible that the practice of 'singing' texts by disposing the syllables over a limited set of fixed notes according to their accents was also Indo-European. This is the traditional method of singing the hymns of the Ṛgveda, in use to this day. The origins of the Ṛgveda are agreed to lie centuries before Homer, and its text has been preserved almost unchanged from a time that cannot be significantly later than Homer, by written tradition on the one hand, by scrupulous oral instruction on the other. The ancient pitch accents, which disappeared from Sanskrit perhaps two thousand years ago, are marked in the texts and realized in performance, each syllable being sung on one of three notes within the compass of a major or minor third. 'The melodic line follows the text in every detail; the words prescribe the rhythm and the flow; there is one note to each syllable, pitch is independent of duration. One might say that the melody only supports the words.'<sup>18</sup>

## II. THE MODES (I)

It is time to turn our attention to the phorminx and its capabilities. It was a member of the lyre family. According to literary tradition, Terpander increased the number of strings on the lyre from four to seven.<sup>19</sup> Everyone put Homer before Terpander, so the inference is that the Homeric phorminx was believed to have had four strings. Such evidence is of slight value by

<sup>14</sup> Paus. ix 30. 3; cf. x 7. 3, λέγεται δὲ καὶ Ἡσίοδον ἀπελαθῆναι τοῦ ἀγωνίσματος (the hymn competition at Delphi) ἅτε οὐ καθαρίζων ὁμοῦ τῆ ᾠδῆ δεδιδαγμένον. See further my note on Hes. *Th.* 30.

<sup>15</sup> M. Murko, *Neue Jb. f. das Kl. Alt.* xliii (1919) 285.

<sup>16</sup> H. M. and N. K. Chadwick, *The Growth of Literature* (Cambridge 1932-40) ii 22, 452; A. B. Lord in A. J. B. Wace, F. H. Stubbings (edd.), *Companion to Homer* (London 1962) 181.

<sup>17</sup> For a full account of the correlation of accent and

melody see R. P. Winnington-Ingram in *Symb. Osl.* xxxi (1955) 64-73; E. Pöhlmann, *Griechische Musikfragmente* (Nürnberg 1960) 17-29.

<sup>18</sup> A. Bake in *The New Oxford History of Music* i 200. Earlier four notes were used; see A. H. Fox Strangways, *Sammelband der Internationalen Musikgesellschaft* ix (1907-8) 482-3.

<sup>19</sup> Strabo xiii 2. 4 p. 618, Clem. *Str.* vi 144. 1, Cleonid. p. 202 Jan, *An. Par.* i 56. 10.

itself. Archaeology, however, confirms that the lyre in general use in the late Geometric period was a four-stringed instrument, and that this was superseded in the course of the seventh century by one of seven strings, or less often eight.<sup>20</sup> We need not, of course, accept that this was due to Terpander's personal initiative. He was simply the first famous practitioner on the new instrument, and naturally he was taken as the *πρῶτος εὑρετής*. The authors of the *Iliad* and *Odyssey* may have known the seven-stringed lyre, if (as I believe) they lived in the seventh century; but the tradition in which they worked was one that came to flower not later than 750, and we are bound to assume that the epic bard's established instrument was the one with four strings only.

Four strings means four notes, since it is very unlikely that extra notes could have been obtained by finger-stopping or otherwise manipulating the strings.<sup>21</sup> The voice was presumably limited to the same four notes: in archaic music, we are led to believe, instrumental accompaniment went in unison with the voice.<sup>22</sup> There is nothing *a priori* objectionable in this limitation.<sup>23</sup> For a recitative based on word accents, four notes was ample. We have seen that the R̥gveda has been done at different times on four notes and on three.

It is uncertain whether the lines ascribed to Terpander (*fr.* 5 Bergk; Page, *PMG* p. 363),

σοὶ δ' ἡμεῖς τετράγηρυν ἀποστέρξαντες ἀοιδὴν  
ἑπτατόνω φόρμιγγι νέους κελαδήσομεν ὕμνους,

preserve a genuine memory of tetratonic song or are a literary-historical forgery.<sup>24</sup> At least they presuppose that the pre-Terpandrian four-stringed phorminx went with a four-note song. We also hear of a citharodic nome (established, of course, by Terpander) called the *τετραοίδιος νόμος*,<sup>25</sup> which may or may not have been based on four notes.

To what four notes were the strings of the phorminx tuned? If we could answer that, we would be some way towards reconstructing the vocal melody, as we have the accents of the text to guide us. I do not think it is such an impossible question as it may seem, if we work back from what is known about early Greek modal scales.

Greek theory recognizes three musical genera, the enharmonic, the chromatic, and the diatonic. The first is characterized by the occurrence in the scale of a tetrachord segment, spanning the interval of a fourth, in which the notes are separated by very unequal intervals, of the order  $\frac{1}{4} + \frac{1}{4} + 2$  tones (e ē f a).<sup>26</sup> In the chromatic genus the inequality is somewhat reduced, the paradigm being  $\frac{1}{2} + \frac{1}{2} + 1\frac{1}{2}$  tones (e f #a). In the diatonic it is reduced further, the second and third intervals becoming more or less equal,  $\frac{1}{2} + 1 + 1$  (e f g a). Fractions of a tone cannot, of course, be very accurately measured by the ear or reliably achieved in performance, and the boundary between enharmonic and chromatic in particular was imprecise. Aristoxenus allows

<sup>20</sup> See O. J. Gombosi, *Die Tonarten und Stimmungen der antiken Musik* (Kopenhagen 1939) 35–40; M. Wegner, *Archaeologia Homérica U (Musik und Tanz)* (Göttingen 1968) 2–12. Seven- and eight-stringed lyres had earlier been in use among the Minoans and Mycenaeans (Wegner 26–7).

<sup>21</sup> See Winnington-Ingram, *CQ* vi (1956) 183–6. He is concerned with the classical cithara, but the same arguments hold for the phorminx.

<sup>22</sup> Ps.-Plut. 1141b, οἰονταὶ δὲ καὶ τὴν κροῦσιν τὴν ὑπὸ τὴν ᾠδὴν (heterophonic or pararhythmic accompaniment) τοῦτον (the dithyrambist Krexos) πρῶτον εὔρειν, τοὺς δ' ἀρχαίους πάντας πρόσχορδα κρούειν (played in unison with the voice).

<sup>23</sup> The same is true of a good deal of Anglican chant. A number of the specimens of primitive music given by M. Schneider in *The New Oxford History of Music* i 61–82 have an equally restricted melodic range; some of

them are on only three notes, or two. See nos 1–3, 5, 7–10, 14, 27–8, 56, 58, 61, 86; and p. 152.

<sup>24</sup> They suit the transition at the end of a prooimion, and might genuinely be the work of some early citharode who contributed to the corpus of prooimia later attributed to Terpander. Most but not all of these were in hexameters; see *CQ* xxi (1971) 307–9. For their non-integral character cf. Cic. *de Orat.* ii 325, *cónexum citharoedí prooemium adfictum aliquid sed cohaerens cum omní corpore membrum esse videatur*.

<sup>25</sup> Ps.-Plut. 1132d, Poll. iv 65, *Suda* iii 477. 16 Adler (*τετραόιδιος* codd.: a genuine variant?).

<sup>26</sup> All note values are to be understood in terms of relative, not absolute pitch. Successive octaves are represented as C–B, c–b, and c'–b' (c' = Middle C). A line over a letter (ē) indicates that the note is raised by a quarter tone.

for a range of tunings within each genus, with only an arbitrary line dividing one genus from another.<sup>27</sup>

He contended that the diatonic genus was the most natural and (therefore) the most ancient of the three, and apparently thought that the enharmonic, which he considered the most sophisticated and beautiful, was the last to develop.<sup>28</sup> Some modern writers repeat this as if it were a historical fact about the evolution of Greek music and not merely a theoretical standpoint.<sup>29</sup> All the evidence indicates that it was actually the enharmonic type that was characteristic of archaic and classical music down to the latter part of the fifth century, and that the chromatic developed from it. *ἐναρμόνιος* itself means 'in tune', and the enharmonic genus is quite often referred to simply as *ἡ ἀρμονία*, whereas the *χρωματικὸν γένος* (or *χρῶμα*) is marked by its name as something secondary, 'coloration', a deviation from the standard. The antithesis of the two appears in the anonymous sophist, probably of the early fourth century B.C., a fragment of whose work is preserved in P. Hibeh 13. He is attacking the doctrine (which may be Damon's) that adherence to *ἀρμονία* makes men manly, while *χρῶμα* makes them effeminate. He knows the category 'diatonic', but appears to subsume it under *χρῶμα*; he argues that although the music of the Aetolians and Dolopes and all those round Thermopylae is diatonic, they are manlier than the tragic actors, whose songs are enharmonic, and immediately follows this with [ὥστε οὔτε] *χρῶμα* *δειλοῦς οὔτε ἀρμονία* *ἀνδρείους ποιεῖ.*] Other sources tell us that the enharmonic genus was typical not only of tragedy,<sup>30</sup> but also of Simonides, Pindar, and the old style generally;<sup>31</sup> it was invented by Olympus himself;<sup>32</sup> pre-Aristoxenian theorists had concerned themselves with it exclusively.<sup>33</sup>

Originally, we are told, the semitone interval e-f was not divided into microtones. The melodies of Olympus and Terpander were *ἀπλᾶ καὶ τρίχορδα*.<sup>34</sup> In other words the tetrachord e ē f a developed from a trichord e f a, and this simpler structure was to be heard in some archaic music that was still played when pseudo-Plutarch's source (apparently Aristoxenus) wrote. It survived particularly in ritual contexts: Ps.-Plut. 1133e (Olympus the elder) *τοὺς νόμους τοὺς ἀρμονικοὺς ἐξήνεγκεν εἰς τὴν Ἑλλάδα οἷς νῦν χρῶνται οἱ Ἕλληνες ἐν ταῖς ἑορταῖς τῶν θεῶν.* The old Spondeion scale<sup>35</sup> belongs in this context. It was apparently formed from the five notes e f a b c̄.<sup>36</sup> The  $\frac{3}{4}$ -tone interval e-f has a chromatic appearance, and the ceremonial melodies in which the scale was used may have come to be played more chromatically in the fourth century than they were at an earlier period; but if that is the explanation, it underlines the fact that the shift from enharmonic to chromatic was essentially a change in style of performance. The *raison d'être* of the enharmonic f was not to make a pure major third with the a—an interval not recognized by the Greeks as concordant.<sup>37</sup>

Six other early scales are recorded. Aristides Quintilianus i 9 (pp. 18 f. W.-I.) describes them, saying that they were used by *οἱ πάνυ παλαιότατοι*, and that they are the scales mentioned by Plato in *Rep.* 398e–399a. His immediate source must be post-Platonic, as he could not have made the connexion with Plato on his own initiative; ultimately, it is to be presumed, they go back to

<sup>27</sup> *Harm.* i 26.

<sup>28</sup> *Harm.* i 19, 23; fr. 83 Wehrli.

<sup>29</sup> E.g. S. Michaelides, *The Music of Ancient Greece. An Encyclopaedia* (London 1978), under Diatonon genus and Enharmonion genus; M. Pintacuda, *La Musica nella Tragedia Greca* (Cefalù 1978) 59 f., 160, 163.

<sup>30</sup> *Arist. Probl.* xix 15, *Plut. de aud.* 46b, *Ps.-Plut.* 1137de, *Psellus π. τραγωδίας* 5 (ed. R. Browning in *ΓΕΡΑΣ, Studies Presented to G. Thomson* [Prague 1963] 67 ff.). Chromaticism was introduced to tragedy by Agathon (*Plut. Quaest. conv.* 645de) or Euripides (*Psellus*). On *Psellus'* remark that some tragic enharmonic had an admixture of the diatonic, see below, p. 128.

<sup>31</sup> *Ps.-Plut.* 1137f, 1145a.

<sup>32</sup> *Ibid.* 1141b, 1143b.

<sup>33</sup> *Aristox. Harm.* i 23, fr. 83; *Ps.-Plut.* 1143c.

<sup>34</sup> *Ps.-Plut.* 1135ab, 1137ab.

<sup>35</sup> *Ibid.* 1134f–5b, 1137b–d, cf. *Arist. Probl.* xix 32, *Nicom.* p. 253 Jan.

<sup>36</sup> *Winnington-Ingram, CQ* xxii (1928) 83 ff.

<sup>37</sup> Cf. *Fox Strangways* (n. 18) 477 f. 'The actual sound of these intervals, as sung in modern European Folksong (by all reports) or in India, does not present itself as either major or minor Third, but as something which is neither and yet perfectly suitable. . . . It seems quite clear that though major Thirds and minor Thirds may incidentally be sung often enough, the intervals are not *thought* so; and it is the "functions" of notes that really matter.'

one of the earliest writers on music—perhaps Damon, whom Aristides mentions elsewhere as having recorded some irregular *ἀρμονίαι*.<sup>38</sup> They may be translated as follows:

Lydian	Ā B <sup>b</sup> d e ē f a ā	Ionian	e ē f a c' d'
Dorian	d e ē f a b b̄ c' e'	Mixolydian	e ē f g a ā b <sup>b</sup> e'
Phrygian	d e ē f a b b̄ c' d'	Syntonolydian	e ē f a c'

There is no doubt that they are genuinely ancient, not some later reconstruction or fraud.<sup>39</sup> They bring us much closer to actual musical practice in the classical period than the tidy, regular scales set out by the later handbooks. The scale of the *Orestes* fragment is in fact identical with Aristides' Phrygian, except that the additional note *c* appears in the instrumental part. The use of defective or 'gapped' scales is very widespread among the peoples of the world. Some of the Greek ones are comparable with scales used in the music of the Far East. For example the Spondeion e f̄ a b c̄' is scarcely different from the Chinese scale e f# a b c#, while the Japanese *kumoi-zyoosi* mode on e f a b c' e' only needs one additional note at the lower end to become the Dorian scale with undivided semitones, d e f a b c' e'. The trichord of the form e f a, semitone + major third, is employed over a large area in the Far East, and in China and Java there seems to have been a development from it in the direction of e f# a, paralleling the development of the chromatic genus in Greece.<sup>40</sup>

Of course, we cannot take Aristides' account as a comprehensive record of classical scales, but we can take it as a record of the form that six of the main ones (including the basic triad Dorian, Phrygian, Lydian) had at a particular epoch. This epoch may be located in the latter part of the fifth century, say *c.* 420, on the following grounds.

(i) The enharmonic style is still dominant, but the divided semitone is well established.

(ii) The Hypodorian and Hypophrygian modes, which were a novelty in the late fifth century, do not appear.<sup>41</sup>

(iii) Several of the scales have too many notes to be played on a seven-stringed instrument. If we eliminate the division of the semitones e-f and b-c', the Dorian, Phrygian and Lydian scales are all reduced to exactly seven notes, but as it stands they seem to date from a time when nine-stringed citharas were in use.<sup>42</sup> The nine-stringed cithara is attributed by Plutarch to Phrynis,<sup>43</sup> and it appears in vase-painting after *c.* 450.<sup>44</sup>

When the early scales—Aristides' six, the Spondeion, and the Phrygian of the Euripides fragment—are analysed and compared, it is found that they are all constructed according to a common formula. Each contains the enharmonic tetrachord (or trichord) e (ē) f a, and from one to five other notes which make consonances of a fourth or fifth with notes of the tetrachord. There is only a single note in the whole set which is not accounted for by this formula: the diatonic g in the Mixolydian scale. We must conclude that the tetrachord, whether it came high or low in the scale, had primary status in the melody, it was a nucleus, while the notes outside the tetrachord derived their significance from their relation to it.

This conclusion tallies with the fact that in the Perfect Systems, the comprehensive scales in which theorists sought to incorporate all individual scales and give each note a fixed identity, the tetrachord appears as the segment *Hypate-Parhypate-Lichanos-Mese*. *Mese*, we know, was of special importance. It was called the *ἡγεμών*, other strings were tuned from it, and if it was out

<sup>38</sup> ii 14, p. 80. 29 W.-I.; Winnington-Ingram, *Mode in Ancient Greek Music* (Cambridge 1936; repr. Amsterdam 1968) 59. For the immediate source L. Laloy, *RPhil* xxiv (1900) 33, plausibly suggested a commentary on Plato. Thrasyllus may be a possibility.

<sup>39</sup> See J. B. Mountford, *CQ* xvii (1923) 126-9; Winnington-Ingram (n. 38) 21 ff. (with reservations about the Lydian scale).

<sup>40</sup> See L. Picken in *The New Oxford History of Music* i 145 f., 166 f.

<sup>41</sup> Agathon is said to have introduced them to tragedy (Psellus, π. τραγ. 5). Of course if the source is a commentary on Plato, they do not appear because Plato does not mention them in the passage concerned.

<sup>42</sup> Unless we say they are just aulos-scales; but harmonic theory was always based on the cithara.

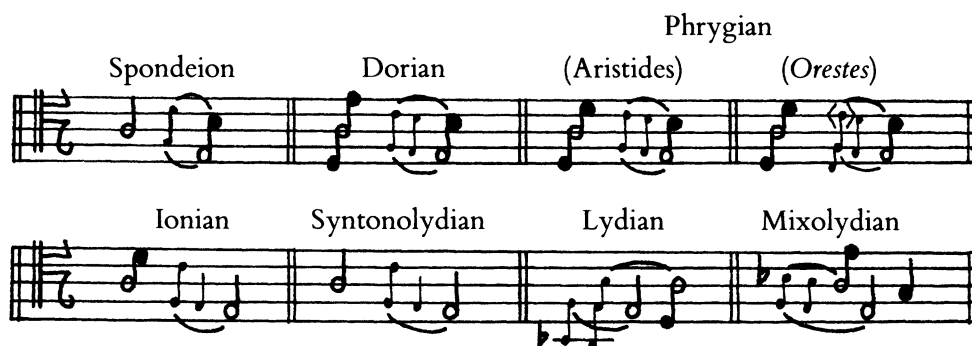
<sup>43</sup> *Agis* 10. 7, *de profic. in virt.* 84a, *Lac. Apophth.* 220c. Others say Timotheus (Plin. *NH* vii 204) or Prophrastus of Pieria (Nicom. p. 274 J., Boeth. *Inst. Mus.* i 20).

<sup>44</sup> Gombosi (n. 20) 67 ff.

of tune the whole melody sounded wrong, not just the one note; good melodies kept returning to it.<sup>45</sup> From the *Orestes* fragment and other musical texts we see that *Hypate*, a fourth below, often served as a cadence. We may assume that the notes of the tetrachord had similar functions in all the old scales; and we may be allowed for the moment to call the outer ones *Mese* and *Hypate*, even though the terms do not here refer either to a particular accordatura or to a particular Perfect System.

The inner notes of the tetrachord did not make consonances with the outer ones. Their position close above *Hypate*, and the variability of their exact pitch as between enharmonic and chromatic and within each genus, suggests that they served as leading-notes, decorating or preparing the way for *Hypate*. This is borne out by their use in the *Orestes* fragment, where we see the sequence  $f \bar{e} e$  twice, and also  $e \bar{e} f e \bar{e} \dots f \bar{e} f \dots e \bar{e} a$ . The development of the original trichord  $e f a$  into  $e \bar{e} f a$  is easy to understand: two leading-notes allowed more effective and varied figuration than one. The division of the semitone was probably first made by pipers, voluntarily or involuntarily, by partial uncovering of a finger-hole.<sup>46</sup>

The internal hierarchy of the old scales may be represented on the tenor clef (in which the second line down is middle C) in this way:



*Mese* and *Hypate* are shown as minims, their consonances as crotchets on the same stem. The leading-notes are shown as small crotchets (offset from the line in the case of quarter-tone positions), with a legato-mark linking them with their focal note. Their consonances are again shown as if making chords with them.

In some cases notes consonant with the leading-notes to *Hypate* are well placed to serve themselves as leading-notes to *Mese* or to the note a fifth above *Hypate* (*Paramese*); but in the *Orestes*, Lydian, Ionian, and Syntonolydian scales we find such consonant notes floating on their own. In the case of the last two it is interesting to observe that the leading-note of the original trichord ( $f$ ) is answered by the consonant note a fifth higher ( $c'$ ), but the secondary  $\bar{e}$  is not answered by  $\bar{b}'$ , as if the  $f$  retained some primacy;  $c'$  is accompanied by  $\bar{b}'$  only where  $b'$  is also present, so that the function of the  $\bar{b}'$  may be to divide the semitone progression  $c'-b'$  rather than to make a consonance with the  $\bar{e}$  below. The differences of character between the modes no doubt depended on several other factors—rhythm, tempo, expression—but the use of different consonances must have helped to determine them.

Can we now draw any conclusions about the tuning of the Homeric phorminx? Sceptics will deny the possibility. Why should there be any continuity between the sort of melody played on the Geometric phorminx and those played on the classical cithara? Why should a 'Dorian' scale, let alone a 'Phrygian' or a 'Lydian' one, have any relevance to the minstrelsy of Ionian bards two or three centuries before the earliest evidence for the structure of those scales?

<sup>45</sup> Arist. *Probl.* xix 20, 33, Ps.-Plut. 1135a, Dio Chrys. li 7 (ii 174. 3 Arnim).

<sup>46</sup> According to Ps.-Plut. 1135b (apparently from Aristoxenus) it originated in the Lydian and Phrygian modes. The name given to the smallest interval, *δίεσις*,

means 'a letting through', *sc.* of an extra quantum of air; the unit of measurement based on the lyre is *τόνος*, 'a tightening', *sc.* the tightening required to increase a fourth to a fifth.

Certainly the spread of the seven-stringed lyre in the seventh century betokens a revolution in music. That is just the time when the distinction between 'Dorian', 'Lydian', and 'Phrygian' styles is likely to have been established. The earliest evidence for the nomenclature comes from Alcman at the end of the seventh century and Stesichorus in the sixth, both of whom mention a 'Phrygian melody'.<sup>47</sup> Whether or not the 'Lydian' and 'Phrygian' styles were genuine importations from barbarian music,<sup>48</sup> they must have become established under these names at a period when the Phrygian and Lydian civilizations flourished, were in lively contact with the Greeks, and were viewed by them without contempt. We might go as early as the eighth century for Phrygia or as late as Croesus for Lydia, but taking the two together the seventh century is the likeliest time. Now, we have seen that with the elimination of divided semitones, the Dorian, Lydian and Phrygian scales of Aristides all emerge as heptatonic and suitable for playing on the seven-stringed lyre.<sup>49</sup> It is unlikely that they changed significantly between the seventh century and the fifth, except for the division of semitones: any more fundamental alteration would have destroyed their identity. They were after all identifiable in such seventh-century music as continued to be heard in the classical period, in Alcman's Partheneia (Dorian, Ps.-Plut. 1136f), Terpander (*PMG* 698), and the nomes attributed to Olympus.

The gap in time, then, between the Homeric *φορμικτῆς* and the source of Aristides is largely bridgeable. What about the gap in technique? The introduction of the cithara made it possible to execute more varied melodies on strings, perhaps to imitate the facility of the pipes and the figurations of barbarian song. But it is not likely to have signified a fundamental departure from traditional melodic structure, from the accustomed relationships between 'key-note' and cadence, for example. We are justified in looking for a tetratonic phorminx scale behind the heptatonic cithara scales, the more so as one feature of the nomenclature of the strings may provide an indication of continuity. The strings of the seven-stringed cithara and lyre were apparently called

ὑπάτη	'top' (i.e. at the top of the instrument as held; its note was the lowest)
παρυπάτη	'next to top'
λιχανός	'forefinger'
μέση	'middle' (string; or 'middle-finger string?')
τρίτη	'third' (string; or 'third-finger string?')
παρνήτη	'next to bottom'
νήτη	'bottom'.

The terms *ὑπάτη* and *νήτη* must be quite old, because the superlatives *ὑπατος* and *νεατος* disappeared from ordinary speech at an early date.<sup>50</sup> They may well have been applied to strings of the phorminx. *μέση* may have been also, but if so it must have been in the sense 'middle-finger string', since there is no string that is the middle of four. The most interesting name is *λιχανός*, which links a string with a particular finger. On the seven-stringed lyre such a definite connexion hardly makes sense: the fingers had to move from string to string, at least some fingers, and the forefinger was surely one of the most mobile.<sup>51</sup> It is easiest to account for the name on the supposition that it was originally the name of the second string (from the top) of the four-stringed phorminx. Its transfer to the cithara would presuppose some continuity of melodic function.

<sup>47</sup> Alcman. 126 *Φρύγιον αὐλησε μέλος τὸ Κερβήσιον*, Stes. 212 *τοιάδε χρῆ Χαρίτων δαμώματα καλλικόμων ὕμνεϊν Φρύγιον μέλος ἐξευρόντας ἀβρῶς ἦρος ἐπερχομένου*.

<sup>48</sup> See below, p. 126.

<sup>49</sup> The Phrygian mode, admittedly, is more strongly associated with the pipes (*cf.* Alcman. *loc. cit.*, Arist. *Pol.* 1342b); it was supposedly invented by the piper Hyagnis or Marsyas. But no mode is peculiar to one

instrument.

<sup>50</sup> They are practically confined to poetry. *νεατος* survives in Hippocratic writing and in the Arcadian dialect. The choice of *στρατηγός ὑπατος* as the Greek for *consul* is unexplained; see H. J. Mason, *Greek Terms for Roman Institutions* (Toronto 1974) 165 ff.

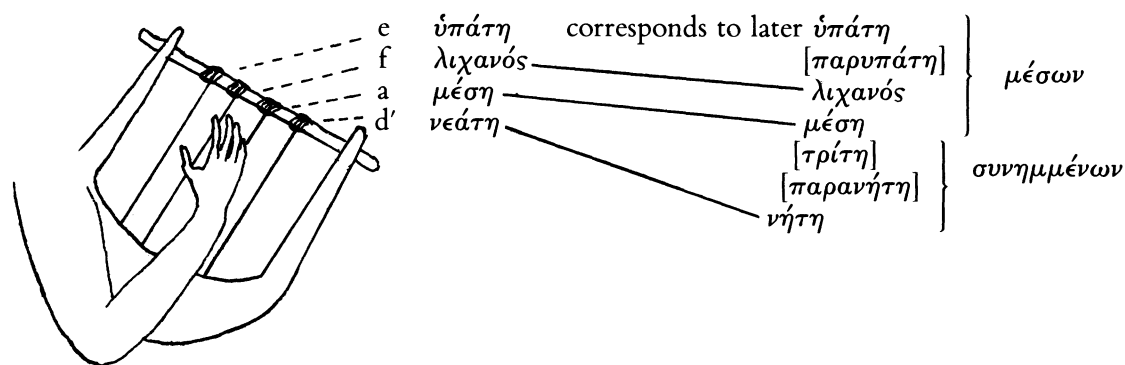
<sup>51</sup> Artistic representations, for what they are worth, sometimes show the forefinger on the third string, sometimes on the second (Gombosi [n. 20] 121 f.).



It is reasonable to assume that the phorminx scale was based on the same fundamental trichord as all the archaic scales, e f a, with a fourth note above or below providing a consonance. Now in the later Systems these three notes are identified as *Hypate*, *Lichanos*, *Mese*. But e was not in fact the lowest note in at least two of the three most important *ἄρμονίαι* (Dorian, Phrygian; nor in Lydian, unless Aristides' Syntonolydian is taken as the main form). The nomenclature must have been fixed at a stage before the common use of the tone below e, at first called *Hyperhypate*.<sup>52</sup> It is tempting to assume that it goes back to a phorminx-tuning, and that the strings called *Hypate*, *Lichanos*, and (?) *Mese* on that instrument were tuned to the trichord. *Nete* then gave a higher note, for which there would be five possibilities: the fifths above the notes of the trichord (b, c', e'), and the fourths above *Lichanos* and *Mese* (b<sup>b</sup>, d').

If one accepts the argument that a number of modal scales were preserved from the seventh to the fifth century with little change—this does not, of course, preclude the decline of some and the emergence of others during that period—it follows that a scale called Ionian is likely to be closer to that of eighth-century Ionian minstrelsy than are scales called Dorian, Lydian, or Phrygian. The Ionian scale of Aristides presents in fact a more archaic appearance than any of the others in the set apart from the Syntonolydian, having only six notes, or five if the division of the semitone be discounted: e f a c' d'. It agrees with the scale postulated for the phorminx in having no notes below the trichord. But it leaves us with two above it to choose between. It is the c' (*Lichanos* + *ς*) that is the more likely to be a secondary feature, being common to most of the scales, whereas the d' is distinctive of Ionian and Phrygian. e f a d' would still be recognizably Ionian, but e f a c' would be Syntonolydian. The d' as *Nete*, moreover, will correspond to the *νήτη συνημμένων* of the later nomenclature; c' would not correspond to any sort of *νήτη*.<sup>53</sup>

The tuning suggested for the Homeric phorminx is therefore:



### III. THE SINGING OF HOMER (2)

With four notes in his scale, the *αοιδός* had a measure of freedom. The accent might dictate when he went up or down, but he might have the choice of two or three different notes that he could go up or down to. His procedure cannot have been aleatoric. He must have been guided by familiar melodic patterns. We may surmise that he gave prominence to *Mese*—harped on it, so to speak. If the cadential function of *Hypate* was already established, there might have been a general pattern, within a melodic period, of progression from a *Mese*-centred part to a part in which *Hypate* became the focus.<sup>54</sup> The reconciliation of the accentual melody to this overall

<sup>52</sup> Thrasyllus *ap.* Theon. Smyrn. p. 88 Hiller; Boeth. *Inst. Mus.* i 20 p. 208 Friedlein. An alternative name is *διάπεμπος* (in the *ὄρμασία*, p. 32 Pöhlmann).

<sup>53</sup> It may be of interest to note that Gombosi, by quite different arguments, arrives at a tuning for the four-stringed lyre which differs in only one note from that suggested here (*op. cit.* [n. 20] 41, 77: e a b d').

<sup>54</sup> This sort of downward progression is common in primitive melodies. See the examples in Schneider (above n. 23), nos 14, 26, 56, 68, 71, and p. 152 ex. 247, p. 178 exx. 284 and 286. Often these songs end on the note a fourth, fifth, or octave below that on which they began. It may be relevant that the earlier Greek practice was to read scales downwards.



βουλήσομαι—θρεττανελό—τὸν Κύκλωπα μιμούμενος κτλ. Apuleius, describing a statue of a youth singing, writes, *manūs eius tenerae, prócérulae: laeva distantibus digitīs nervós mólitur, dextra psallentis gestú pulsábulum citharae admovet, ceu paráta percutere cum vóx in canticó interquíevit* (Flor. 15). The extended ἀναβολαί for which Melanippides was criticized may be considered as a development of this technique.

It is interesting to compare the practice of the modern Yugoslav epic singer as it is seen in Béla Bartók's transcription of Salih Ugljanin's 1934 performance of *The Captivity of Đulić Ibrahim*.<sup>59</sup> Despite the difference of melodic style and the use of a bowed instrument, it shows some similarities with what has been postulated for Homer. Salih begins with nine bars on the *gusle*, and then starts to sing. He rests his voice at the end of each verse, even when there is no syntactical pause. In some verses the vocal line is based on a single repeated note with ornamental shakes, in others there is a descending pattern. There is almost always a fall on the final syllable, most commonly of a fifth. Little is attempted on the *gusle* while the verse is being sung; often it simply sustains a single continuous note. But as soon as the verse is complete it launches into a decorative figure, the equivalent of eight or twelve semiquavers. Occasionally the voice holds the last syllable while this is proceeding. After 105 verses there is a longer passage on the *gusle* alone. The transcription is not continuous after this point, but the notes (pp. 463 ff.) record further instrumental interludes following verses 163 and 508. At line 763 Salih stopped, and showed that he was doing so by delaying the last syllable to the end of the instrumental figure and then singing it on a prolonged note in unison with the *gusle*. After an interval for conversation he resumed with a new thirteen-bar prelude on the *gusle*. At the end of the whole song (line 1811) he repeated the technique used at 763; there was no postlude, voice and *gusle* fell silent together.

We cannot know exactly how Homer was sung, how Homer sang. But the arguments that have been presented, however frail, are rational, and an *exempli gratia* reconstruction based on them may bring us nearer than we have been to an idea of the kind of thing Homeric singing was. Here is such a reconstruction for the opening of the *Iliad*.



Μῆνιν ἄειδε θεὰ Πηληϊΐ-άδεω Ἀχιλῆος (τοφλαττοθρατ)



οὐλομένην, ἣ μυρὶ Ἀχαιοῖς ἄλγε' ἔθηκεν,




πολλὰς δ' ἰφθίμους ψυχὰς Ἄϊ-δι προΐ-αψεν



ἥρώων, αὐτοὺς δὲ ἐλώρι-α τεύχε κύνεσσιν

<sup>59</sup> M. Parry and A. B. Lord, *Serbo-croatian Heroic Songs* (Camb. Mass. 1953) i 437-62.



The rhythmic value assigned to the dactyl, , is merely an approximation.<sup>60</sup> Oxytone words, be it noted, did not at this period (or indeed in the classical period) lose their acute within the phrase.<sup>61</sup>

In the eighth century the bard always 'sang', and normally accompanied himself on the four-stringed phorminx. The spread of the cithara in the following century caused a schism. Some adopted it, and evolved a more elaborate, heptatonic style of vocal melody to go with it. Others, out of conservatism, or finding the new instrument technically too demanding, persevered in the traditional style. They had the advantage of being able to go on longer without strain, and they therefore retained the loyalty of the public interested in the narrative rather than in musical virtuosity. For musical interest, however, they could not compete with the citharodes, and they soon disencumbered themselves of their obsolescent instruments. The vocal melody, no longer underpinned by a tuned instrument, may in time have lost its definite outlines and become less sharply differentiated from speech-melody. The musical writers take no notice of rhapsodes at all, and no one associates them with singing in any specific mode. But some differentiation from speech-melody may have been maintained. A fragment of evidence for its modification by melodic convention may survive in the Homeric scholia. As a general rule, trochaic paroxytone words followed by an enclitic monosyllable were given a double accent, e.g. *ἄνδρά τε, θάρσός μοι*, syllables such as *άν|, θάρ|*, being in effect diphthongs with a fall of tone on the second element (*άν*).<sup>62</sup> But on the opening words of the *Odyssey*, *ἄνδρα μοι ἔννεπε Μοῦσα*, the scholiast notes: *ἔδει μὲν ἐν τῷ ἄνδρα δύο εἶναι ὀξεΐας, ὡς τὸ 'ἄνδρά τε καὶ οἶκον'* (vi 181), *ἀλλὰ ἐφυλάξατο ὁ Ἀρίσταρχος διὰ τὸ μὴ ἐν τῇ εἰσβολῇ τῶν λέξεων κακοφωνίαν ποιῆσαι*. In ancient texts, even scholarly ones, accents were normally written only sporadically. It is hard to believe that a commentator with an interest in accentuation would have inferred from the mere absence of an accent on *δρα* in the text before him that Aristarchus had prohibited it: he would simply have applied the rule and said 'ἄνδρα must have two acutes'. He must have had record of an explicit statement by Aristarchus and, if so, it must have been based on rhapsodes' practice. The 'cacophony' explanation may have been formulated by Aristarchus himself; but if the rhapsodes diverged from the usual accentuation here, he was surely right to connect this with its being the opening of the poem. That is one place where we might expect some tension between natural accent and melodic convention—as in two later Greek songs which otherwise show correspondence of melody and accent, the opening word is set on a rising fifth in contradiction of its accent.<sup>63</sup> Without knowing what the rhapsode's convention was, we can appreciate that three ups and downs in the five opening syllables, *ἄνδρά μοι ἔννε*, may have been found unseemly.

The staff which the rhapsode adopted in place of the phorminx appears to have had a certain significance in his performance; it was not merely something to lean on or clench. Hesiod's was the gift of the Muses themselves, linked with the gift of fine singing. Pindar says that Ajax has honour among men from Homer, *ὃς αὐτοῦ πάσαν ὀρθώσας ἀρετὰν κατὰ ῥάβδον ἔφρασεν θεσπεσίων ἐπέων λοιποῖς ἀθύρειν* (I. iii/iv 55–7). Whatever exactly this means, *ἐπέων* must depend on *ῥάβδον*, so that the staff somehow stands for the movement of the verse; perhaps it guides it straight (cf. *ὀρθώσας*).<sup>64</sup> Callimachus fr. 26. 5, *καὶ τὸν ἐπὶ ῥάβδῳ μῦθον ὑφαινόμενον*,

<sup>60</sup> Georgiades (n. 55) 98–121, points out that this is the rhythm of the commonest of modern Greek dances, the *συρτός Καλαματιανός*. See also S. Baud-Bovy, *Revue de Musicologie* liv (1968) 12.

<sup>61</sup> See *Gnomon* xlvi (1976) 5.

<sup>62</sup> See my *Hesiod. Theogony* (Oxford 1966) 438 ff.

<sup>63</sup> Mesomedes 1; Seikilos' song.

<sup>64</sup> Cf. Wilamowitz, *Pindaros* (Berlin 1922) 339 n. He renders 'nach dem Faden seiner Verse', appealing to the fact that *ῥάβδος* can mean 'stripe' in woven fabric (Poll.

suggests an analogy between the staff and the cross-bar of a loom.<sup>65</sup> I have quoted Pausanias' phrase about Hesiod, ἐπὶ ῥάβδου δάφνης ἦδε, where ἐπὶ must signify something more than 'holding'. Possibly the rhapsode turned his staff in different directions while he sang, as the Homeric orator apparently did while he spoke.<sup>66</sup>

The classical rhapsode did not restrict himself wholly to epic. Κλέαρχος δὲ ἐν τῷ προτέρῳ περὶ γρίφων (92 Wehrli) 'τὰ Ἀρχιλόχου φησὶ Σιμωνίδης ὁ Ζακύνθιος ἐν τοῖς θεάτροις ἐπὶ δίφρου καθήμενος ἐραιψώδει'. Λυσανίας δὲ ἐν τῷ πρώτῳ περὶ ἰαμβοποιῶν Μνασίωνα τὸν ῥαψωδὸν λέγει ἐν ταῖς δειξέσει τῶν Σημωνίδου τινὰς ἰάμβων ὑποκρίνεσθαι. τοὺς δὲ Ἐμπεδοκλέους Καθαρμοὺς ἐραιψώδησεν Ὀλυμπίασι Κλεομένης ὁ ῥαψωδός, ὡς φησὶ Δικαίαρχος (87 W.) ἐν τῷ Ὀλυμπικῷ.<sup>67</sup> These testimonia, however, relate only to the fourth century, or the end of the fifth at the earliest. In the archaic period the rhapsode's repertoire, like the citharode's, presumably included gnomic hexameter poetry such as Hesiod and Phocylides.<sup>68</sup> But there is no reason to think or expect that it included elegy or iambus. Elegy was everyday poetry, mainly composed for the symposium or other particular settings. So far as we can tell, the custom was to sing it to the pipes.<sup>69</sup> That implies conventional melodies, νόμοι, not an accentual rendering, since the piper can hardly have known in detail the words that the singer intended to sing. Iambus is a name that covers various kinds of popular performance. It had its own performers, buffoons and jesters.<sup>70</sup> Some of it involved simple song-forms, like the epodes of Archilochus and Hipponax. Some of the rest may have had musical accompaniment, but the attribution to Archilochus of παρακαταλογία (though this must have been on the basis of later practice) implies recitation which was not itself melodic.<sup>71</sup>

#### IV. THE MODES (2)

Early citharodes, like early rhapsodes, were not all mere interpreters. Some of them were creative poets, who, especially in mainland Greece, developed a separate style of lyric epic, mainly dactylic but not in regular hexameters. The wider melodic range afforded by the seven-stringed instrument suited a larger unit than the hexameter line, and sizable strophes with a recognizable shape could be built up. This branch of the tradition surfaces in the west with Xenocritus of Locri and Stesichorus.<sup>72</sup> Stesichorus seems to imply that his *Oresteia* has a 'Phrygian' melody.<sup>73</sup> If this means that he is using the Phrygian scale recorded by Aristides Quintilianus, only without the divided semitones, that would be d e f a b c' d'. It contains the

vii 53). 'Recht alt, von Menaichmos von Sikyon (Schol. N. 2, 1) [FGH 131 F 9] ist die Deutung, ῥάβδος wäre στιχός; aber sie ist kaum mehr als ein Autoschediasma.'

<sup>65</sup> The idea of poetry as something 'woven' (cf. Pind. N. iv 44, fr. 179, Bacch. v 9, xix 8) is Indo-European: see M. Durante, *Rend. Acc. Naz. Lincei* xv (1960) 238 f. = R. Schmitt (ed.), *Indogermanische Dichtersprache* (Innsbruck 1973) 272-4.

<sup>66</sup> Cf. Il. iii 218 f., σκῆπτρον δ' οὐτ' ὀπίσω οὐτε προπηγνές ἐνώμα, ἀλλ' ἀστεμφές ἔχεσκεν, αἰδρὶ φῶτι ἔοικώς.

<sup>67</sup> Ath. 602cd. Cf. Pl. *Ion* 531a, where Ion is asked whether he is an expert only on Homer or also on Hesiod and Archilochus. Dionysius I hired rhapsodes to perform his own poetry at Olympia (Diod. xiv 109).

<sup>68</sup> Cf. *JHS* xcvi (1978) 164 with n. 3. For Hesiod sung to the lyre cf. also Plut. *Quaest. conv.* 736e.

<sup>69</sup> See my *Studies in Greek Elegy and Iambus* (Berlin 1974) 12-14.

<sup>70</sup> I must refer to the second chapter of the work just cited.

<sup>71</sup> Ps.-Plut. 1141a. Theoc. *epigr.* 21. 5 f. celebrates

Archilochus as ἐπιδέξιός ἐπέα τε ποιεῖν πρὸς λύραν τ' αἰεῖδεν. Phillis of Delos (Ath. 626b) knew a stringed instrument called ἰαμβύκη, to which τοὺς ἰάμβους ἦδον.—Nothing useful can be inferred from D.L. ix 18 on Xenophanes, γέγραφε δὲ ἐν ἔπεσι καὶ ἐλεγείας καὶ ἰάμβους . . . ἀλλὰ καὶ αὐτὸς ἐραιψώδει τὰ ἑαυτοῦ.

<sup>72</sup> Cf. CQ xxi (1971) 306-14.

<sup>73</sup> PMG 212. 2, quoted above (n. 49). This is consistent with Glaucus of Rhegium's statement (fr. 2 Lanata, ap. Ps.-Plut. 1133f) that Stesichorus used the ἀρμάτειος νόμος, which derived from the Phrygian Olympus. The Phrygian slave in *Orestes* 1384 calls his song ἀρμάτειος νόμος, and as he keeps emphasizing the barbarian nature of his lament, the mode was presumably the Phrygian. The scholiast identifies it with the νόμος Ἀθηναίος, and we are told that this was in the Phrygian mode (Ps.-Plut. 1143b). Alexander was so aroused by the sound of the ἀρμάτειος νόμος played on the pipes that he rushed for his weapons (Plut. *Alex. fort. aut virt.* 335a): cf. Cassiod. *Varia* ii 40 *Phrygius (modus) pugnās excitat et vōtum furōris inflammat.*

four notes conjectured for the Homeric phorminx, supplemented by fifths below *Mese* (d) and above *Hypate* and *Lichanos* (b, c').

Did this augmentation contain anything genuinely Phrygian? Was the Lydian mode genuinely Lydian? The names cannot have been completely arbitrary. On the other hand Aristides' old scales all show a distinct family likeness. They all have the same basic tetrachord, and other notes derived from it on similar principles. The ones with Greek names have no common feature which distinguishes them from the ones with barbarian names, or *vice versa*. Judging on the basis of these scales, we should be inclined to say either that the 'barbarian' modes had become hellenized to a degree which we are unable to control, or that they were really Greek in origin and received their designations on account of superficial resemblances to Lydian or Phrygian styles of music. Certainly instruments and performers came in from Anatolia: in the early archaic period the Lydian harp, and Phrygian pipers.<sup>74</sup> But we should take note of the judgment of the author of a wide-ranging survey of primitive music:

Native elements and those borrowed from other cultures often exist side by side within one tribe. Nevertheless, foreign forms are not adopted so much as is generally supposed. Even when two races of different culture are in constant economic or military contact there is little evidence that they adopt each other's musical forms. It is true that a tribe that is stronger economically or militarily often uses musicians from subject tribes for its festivities . . . but the degree of reciprocal influence appears to be relatively small. Even when foreign musical instruments are adopted, the relevant literature seems to be taken over only to a small extent or in mutilated form.<sup>75</sup>

The applicability of these generalizations to archaic Greece is supported by the evidence of metre. For all their diversity, the metres of archaic poetry appear as branches of a single national tradition which can be traced back to Indo-European origins.<sup>76</sup> If the metre and rhythm of archaic music is all Greek, foreign influence on that music cannot go very deep.

The Dorian scale differs from the Phrygian only in that the top note is a tone higher, a fifth above *Mese* instead of a fourth. The invention of this 'Dorian *Nete*' was ascribed to Terpander, together with *ὁ τῆς ὄρθιου μελωδίας τρόπος* (Ps.-Plut. 1140f., cf. Arist. *Probl.* xix 32). The so-called *ὄρθιος νόμος* involved high notes,<sup>77</sup> and the Dorian *Nete*, a major third above the next highest note, was the most taxing. The *ὄρθιος νόμος* perhaps differed from other music in the Dorian scale not in absolute pitch but in tessitura, in the frequency with which the higher notes were required. In the terminology of Aristides Quintilianus it was *νητοειδής*.<sup>78</sup>

References in classical poets and in Plato to particular modes being high or low are perhaps capable of interpretation along these lines. Thus when Lasus says he is singing *Αἰολίδ' ἀμ βαρύβρομον ἀρμονίαν* (PMG 702. 3), he may mean not that the Aeolian mode belongs in a low register, but that it is *ὑπατοειδής*.<sup>79</sup> The pitch at which a song was sung must have depended chiefly on the singer's vocal register and on the instrument used in its accompaniment. The barbitos, for instance, had a lower register than the ordinary lyre, and some auloi were deeper in tone than others.<sup>80</sup> No doubt there was an association between choice of instrument and mode. But there is no reason to suppose that the three modally contrasted movements of the *τριμελής*

<sup>74</sup> The Lydian harp: Pind. *fr.* 125, Soph. *fr.* 412 Radt, Diogenes *TrGF* 45 F 1. 6 ff. Phrygian pipers: besides the legendary Olympus, Marsyas, and Hyagnis, cf. Ath. 624b, and Hipponax 163.

<sup>75</sup> M. Schneider (n. 25) 29.

<sup>76</sup> See *Glotta* li (1973) 161–87; *CQ* xxiii (1973) 179–87.

<sup>77</sup> Arist. *Probl.* xix 37 οἱ νόμοι <οἱ> ὄρθιοι καὶ οἱ ὀξεῖς χαλεποὶ ἔσσι διὰ τὸ ἀνατεταμένοι εἶναι.

<sup>78</sup> P. 28. 12 W.-I. He characterizes the nomic style generally as *νητοειδής*, the dithyrambic as *μεσοειδής*, the tragic as *ὑπατοειδής*, p. 30. 1–4.

<sup>79</sup> Other passages are Pratinas 712(a) *μήτε σύντονον δίωκε μήτε τὰν ἀνειμέναν* {*Ἰαστι*} *μούσαν, ἀλλὰ τὰν μέσαν νεῶν ἄρουραν αἰόλιζε τῷ μέλει* (not quite in accord with Lasus); Telestes 810. 4 *τοὶ δ' ὀξυφώνοις πηκτίδων ψαλμοῖς κρέκον Λύδιον ὕμνον*; Pl. *Rep.* 398c, Arist. *Pol.* 1340a40 ff., 1342b20 ff., cf. 1290a19 ff.

<sup>80</sup> Barbitos: Pind. *fr.* 125 says Terpander invented it, inspired by the Lydian harp's *ψαλμὸς ἀντίφθογγος*, i.e. its octave chords, its doubling of the melody in the bass. Auloi: Poll. iv 81, Ath. iv 174f–182e, Aristid. *Quint.* p. 85. 4 ff W.-I.

*vómos* ascribed to Sacadas or Clonas<sup>81</sup> were played at different pitches, or that the modulations achieved by Pythagoras of Zacynthus on his 'tripod' (Ath. 637c) involved changes of register. It is true that in later theory the names Dorian, Lydian, etc., are applied not only to different modes (in the sense of octave-species) but to different keys (in the sense of pitches at which *Mese* and the other notes are played). But this is a device to counteract the spurious differences of pitch implied by treating the modal scales as different, overlapping segments from a single universal scale.<sup>82</sup>

This universal scale was the end product of long struggles to solve the practical difficulties of modal convertibility. To appreciate these difficulties we must forget our modern way of thinking, according to which the whole range of musical pitch is mapped out in grid fashion. For us each note in the octave, with its sharps and flats, exists at a fixed pitch with a definite identity, and each octave is succeeded by another above and another below. The Greek invention of the Perfect System was a major step in this direction. But in the archaic period the note produced by a particular lyre-string or pipe had no identity except in relation to the other notes given out by the same instrument in the same melody. The *ἀρμονίαι* existed in a void. We for convenience may represent the reconstructed Phrygian heptatonic scale, with its intervals of 1,  $\frac{1}{2}$ , 2, 1,  $\frac{1}{2}$ , 1 tones, by d e f a b c' d', and the Lydian ( $\frac{1}{4}$ , 2, 1,  $\frac{1}{2}$ , 2,  $\frac{1}{4}$ ) by  $\bar{A}$  B<sup>b</sup> d e f a  $\bar{a}$ , giving the two scales four notes in common; but for the player on a seven-stringed lyre, who kept his strings in order of pitch, changing from the one *ἀρμονία* to the other meant re-tuning at least five strings. If the Phrygian tuning was d e f a b c' d', the Lydian might be  $\bar{e}^b$  e a<sup>b</sup> b<sup>b</sup> b e<sup>b</sup>  $\bar{e}^b$ , or  $\bar{c}\#$  f g g# c' c'. To minimize the inconvenience which such re-tunings involved, musicians must have striven to find as much common ground between different modes as they could, and to identify certain notes in one where possible with notes in another; different results were obtained at different times. The process began quite early. Alcman's eleven Sirens may represent an early Perfect System, since eleven is the number of notes required to accommodate the heptatonic Dorian, Phrygian, and Lydian scales.<sup>83</sup> The Athenian Lamprocles in the first half of the fifth century is said to have 'realized' that the Mixolydian mode 'does not have its *διάζευξις* (the tone between *Mese* and *Paramese*) where it was generally thought to, but high up', and to have established its form as that of the note-series from *Paramese* down to *Hypate Hypaton* (Ps.-Plut. 1136d). The terminology is very probably anachronistic, but the meaning is not in doubt.<sup>84</sup> Earlier musicians had evidently matched the scales like this:

Mixolydian	e f g a b <sup>b</sup>	e'
Phrygian	d e f a	b c' d'
Dorian	d e f a	b c' e'

—taking the obvious course of lining up the trichords e f a, and equating the Mixolydian top note with the Dorian, but at the expense of introducing an awkward g and b<sup>b</sup> into the sequence. Lamprocles achieved a better fit by equating the upper fifth of the Mixolydian with the fifth from *Hypate* to *Paramese* in the others:

Mixolydian	B c d e f b
Phrygian	d e f a b c' d'

etc. This bold departure, this discovery of the principle of modulation by transposition, opened the way towards the later Perfect Systems, and also towards the invention of modulating instruments. As the experiments of Sacadas and Pythagoras of Zacynthus show, musicians were well aware of the effects to be got by modal contrast. But instant modulation was not a practical proposition until the creation of an extended scale of which different segments yielded different

<sup>81</sup> Ps.-Plut. 1134ab. Xylander's *τριμελῆ* and *τριμελοῦς* for *τριμερ-*, after 1132d, makes the name more meaningful, and fits the early use of *μέλος* for 'mode' seen in Alcman. 126, Stes. 212, Prat. 712(a).

<sup>82</sup> See Winnington-Ingram (n. 38) 49 ff.

<sup>83</sup> Alcman. 1. 96–9. This improves on the musical

interpretation put forward in CQ xvii (1967) 11 f. I referred there to the Pythagorean symbolon *τί ἐστι τὸ ἐν Δελφοῖς μαντεῖον; τετρακτύς, ὅπερ ἐστὶν ἡ ἀρμονία, ἐν ἧ αἱ Σειρήνες*, and to the eight Sirens who sing the notes of the octave in Pl. *Rep.* 617b.

<sup>84</sup> Cf. J. Chailley, *Acta Musicologica* xxviii (1956) 157.

modes. This was the precondition for Pronomus' multimodal pipes<sup>85</sup> and for the eleven-stringed modulating lyre hailed by Ion of Chios.<sup>86</sup>

Aristides gives note-values for his six old scales which imply the following tabulation; he is thought to have taken them over from his source.<sup>87</sup> (The bracketed c in the Phrygian is added from the *Orestes* fragment.)

Syntonolydian	B $\bar{B}$ c e	g
Ionian	B $\bar{B}$ c e	g a
Mixolydian	B $\bar{B}$ c d e $\bar{e}$ f	b
Lydian	$\bar{B}$ c e	f# $\bar{f}\#$ f <sup>x</sup> b $\bar{b}$
Phrygian	(c) d e $\bar{e}$ f	a b $\bar{b}$ c' d'
Dorian	d e $\bar{e}$ f	a b $\bar{b}$ c' e'

Consider this table from the point of view of someone designing a Perfect System. The first two scales can be ignored, as they merely duplicate notes contained in the others. Combination of the rest gives us a System

B  $\bar{B}$  c d e  $\bar{e}$  f f#  $\bar{f}\#$ - g a b  $\bar{b}$  c' d' e'

Intervals:  $\frac{1}{4}$   $\frac{1}{4}$  I I  $\frac{1}{4}$   $\frac{1}{4}$   $\frac{1}{2}$   $\frac{1}{4}$   $\frac{1}{4}$  I I  $\frac{1}{4}$   $\frac{1}{4}$  I I

What is distasteful here is the crowd of small intervals between e and g. It reminds us of the *καταπύκνωσις* which Aristoxenus complains of in his predecessors' systems (*Harm.* vii 2, xxxviii 2). It is only the Lydian scale that makes it so. The difficulty is solved by transposition, as it had been with Mixolydian. Compare the corresponding part of Aristoxenus' enharmonic table:

Mixolydian	B $\bar{B}$ c e $\bar{e}$ f a b
Lydian	$\bar{B}$ c e $\bar{e}$ f a b $\bar{b}$
Phrygian	c e $\bar{e}$ f a b $\bar{b}$ c'
Dorian	e $\bar{e}$ f a b $\bar{b}$ c' e'
Hypolydian	$\bar{e}$ f a b $\bar{b}$ c' e' $\bar{e}'$

Aristides' Lydian has been shifted up to become 'Hypolydian'  $\bar{e}$ - $\bar{e}'$ , and its place taken by a new 'Lydian', perhaps created for the sake of the scheme. Other adjustments have been made. The Dorian pattern of successive symmetrical tetrachords of the form  $\frac{1}{4}$   $\frac{1}{4}$  2 has been imposed on the whole System, in order to achieve a clear separation between the enharmonic and diatonic genera. Mixolydian, Phrygian and Dorian have accordingly been purged of their d (in the case of Dorian this has the advantage of reducing it to an octave); Phrygian suffers most from this Procrustean operation, losing its upper d' as well. The enharmonic Phrygian in this revised form c-c' probably had no more than a theoretical existence. Aristoxenus found that *προσῆκει εὖ μάλιστα τὸ ἐναρμόνιον γένος τῇ Δωριστὶ ἀρμονίᾳ καὶ τῇ Φρυγιστὶ τὸ διάτονον* (*ap. Clem. Str.* vi 88). To account for the genuine Phrygian as used in tragedy, and for the anomalous d in its Dorian and Mixolydian numbers, it was necessary to say that the tragedians employed, besides the enharmonic genus, a mixture of the enharmonic and diatonic.<sup>88</sup>

Aristoxenus' series of octave-species continues with Hypophrygian f-f' and Hypodorian

<sup>85</sup> Paus. ix 12. 5, Ath. 631c.

<sup>86</sup> *Fr.* 32. The *συμφωνοῦσαι ἀρμονίας τρίοδοι* are nodal points from which the player could choose which modal path to take. When Pherocrates *fr.* 145 speaks of Phrynis getting twelve *ἀρμονίαι* on five strings, this may be a comic inversion of 'five *ἀρμονίαι* on twelve strings', which would be credible.

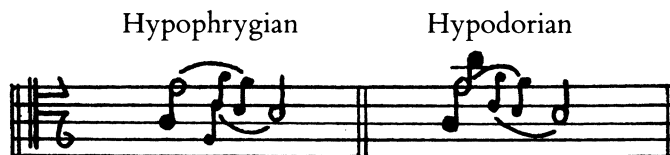
<sup>87</sup> Laloy (n. 38) 33; Winnington-Ingram (n. 38) 27.

<sup>88</sup> Psellus *π. τραγ.* 5 ἢ δὲ παλαιὰ τραγικῆ

*μελοποιᾶ γένει μὲν τῷ ἐναρμονίῳ ἐχρήσατο ἀμιγῆ καὶ μικτῷ γένει τῆς ἀρμονίας καὶ δι(α)τόνων, χρώματι δὲ οὐδεὶς φαίνεται κεχρημένος τῶν τραγικῶν ἄχρις Εὐριπίδου.* Dorian and Mixolydian are given as the modes chiefly used in earlier tragedy (*Aristox. fr.* 81 *ap. Ps.-Plut.* 1138d; Psellus *loc. cit.*). The Phrygian was introduced to the theatre by Sophocles (*Aristox. fr.* 79 *ap. Vit. Soph.* 23, Psellus *loc. cit.*).



a–a'. These are presumably related to the modes of the same names introduced to tragedy by Agathon and said to be dithyrambic in character.<sup>89</sup> As they stand, they can be analysed



The Hypo- names seem explicable only in the light of the schematic System, where the sequence Lydian–Phrygian–Dorian is continued by Hypolydian–Hypophrygian–Hypodorian, each Hypo- scale being a fourth higher in the System (and hence a fourth lower on the scale of *τόνοι*) than its eponym. Hypolydian, as we have seen, had been a ‘Lydian’ scale in name and character, but Hypophrygian and Hypodorian do not appear closely related to Phrygian and Dorian, and may once have had other names. Heraclides Ponticus (*ap. Ath. 624e*) identified the Hypodorian with the old ‘Aeolian’, on the ground that Lasus’ ‘Aeolian’ song (above, p. 126) was sung in Hypodorian. Later writers of the Aristoxenian tradition identify it with the Locrian mode, which was said to have been invented by Xenocritus of Locri.<sup>90</sup> As Xenocritus was in some sense a forerunner of Stesichorus, it is interesting to note the similarity between the Hypodorian scale,  $d \bar{e} \bar{e} f a \bar{a} b^{\flat} d'$ , and the Phrygian,  $d \bar{e} \bar{e} f a b \bar{b} c' d'$ . Both have *Mese* + 4 as well as *Mese* – 5, and they differ only in that Phrygian also has *Hypate* + 5, with leading-notes over it instead of over *Mese*.

Our understanding of the archaic and classical modes remains extremely sketchy. Although they underlie Aristoxenus’ neat scheme of octave-species and keys, we should really have no conception of what they were like but for the precious page of Aristides Quintilianus that preserves the scales of *οἱ πάνυ παλαιότατοι*. But that page gives us the means to break into a lost world. The ground is marshy, and we must tread carefully. But we should not be too timid to enter.<sup>91</sup>

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<sup>89</sup> Psellus *loc. cit.*

<sup>90</sup> Cleonid. p. 198. 13, Bacchius p. 309. 9, Gaudentius p. 347. 10 Jan. Xenocritus: schol. Pind. O. xi 17. Ath. 625e says the Locrian mode was neglected after the time of Pindar, but this may be based on the fact that the

name fell into disuse.

<sup>91</sup> I owe gratitude to Professor R. P. Winnington-Ingram not only for much illumination from his published work but also for reading the present article and saving me from some errors.