

TELESTES AND THE ‘FIVE-RODDED JOINING OF STRINGS’

ἄλλος δ' ἄλλαν κλαγγὰν ἰεῖς
κερατόφωνον ἐρέθιζε μάγαδιν
πενταρράβδω χορδὰν ἄρθμῳ
χέρα καμψιδίουλον ἀναστρωφῶν τάχος

(Telestes fr. 4, PMG 808)

Athenaeus (637a) records these lines from the dithyramb *Hymenaios*, along with a number of other snippets of poetry, in the course of an inconclusive discussion about the characteristics of the instrument (if it is an instrument) called the magadis. Athenaeus had good reasons for being puzzled; the word *μάγαdis* first appeared in Greek, so far as we know, in the seventh century B.C., and its sense was already a matter of some doubt in the fourth.¹ As to this particular fragment, even Telestes' original audience might be forgiven some bafflement in the face of the third line, on which I shall initially focus here. What can be meant by ‘the five-rodDED joining of the strings’?

Athenaeus interprets the phrase as meaning that the musician depicted by Telestes is playing an instrument with just five strings; and almost the only point on which modern scholars are apparently agreed is that he is wrong.² For one thing, it has commonly been assumed (by Athenaeus among others) that the reference here is to a specific type of instrument, and that it is the same instrument as the one called *μάγαdis* in a well known fragment of Anacreon (PMG 374):

ψάλλω δ' εἴκοσι χορδαῖσι μάγαδιν ἔχων,
*Ω Λεύκασσι, σὺ δ' ἥβᾱς.

A five-stringed instrument can hardly be identical to a twenty-stringed instrument. Instruments can of course evolve while retaining the same name; and one might offer the desperate hypothesis that Telestes' instrument is a radically simplified (or degenerate?) form of Anacreon's. But we have no evidence at all of a tendency towards a reduction in the number of strings on instruments in the lifetime of Telestes—quite the contrary, in fact.³ Further, the twenty-stringed instrument that Anacreon has in mind must certainly be some kind of harp, and in the Greek context a five-stringed harp would be a mere absurdity.⁴ Even if we found some way of dismissing Anacreon's evidence, or argued, as I have done elsewhere,⁵ that *μάγαdis* is not the name of any

¹ See Aristoxenus frs. 97–101 (Wehrli) ap. Ath. 182f, 634d–635e.

² E.g. M. Maas and J. M. Snyder, *Stringed Instruments of Ancient Greece* (New Haven and London, 1989), p. 149.

³ Our sources repeatedly refer to the addition of extra strings or notes by musicians of this period. For a convenient discussion see M. L. West, *Ancient Greek Music* (Oxford 1992), ch. 12; cf. Maas and Snyder (n. 2), pp. 62–3.

⁴ Instruments of the harp type are regularly assumed to be ‘many-stringed’ in our sources (e.g. Plato *Rep.* 399c–d). Representations in art tend to confirm this. Most examples show at least a dozen strings; a tally of twenty or more is not unusual. See Maas and Snyder (n. 2), pp. 150–5.

⁵ ‘Che cos’ era la magadis?’, in B. Gentili and R. Pretagostini (edd.), *La musica in Grecia* (Rome and Bari, 1988), pp. 96–107.

determinate kind of instrument, it would still be quite implausible, I think, to construe *πενταράβδω* in Athenaeus' way. Strings are not rods. It may be objected that the dreary literal-mindedness betrayed by such a comment is unlikely to get much purchase on the slippery usage of a late fifth-century dithyrambist. True; but it remains reasonable to look at each particular manifestation of linguistic excess with a view to discerning some purpose or significance in it. In this expression, under Athenaeus' interpretation, I can find none.

Scholars have sometimes suggested that the problematic phrase might refer, not to five strings, but to five distinct groupings of strings, perhaps five groups of four strings each, if we take Anacreon's 'twenty strings' to be both literally intended and an enduring feature of instruments of this sort.⁶ Some justification for a division into groups of four can be gleaned from the Greek practice of analysing extended runs of notes ('scales') as sequences of tetrachords. But a colourful dithyramb seems an odd locus for such technicalities;⁷ and even if it were not, it seems still more awkward to refer to a group of strings as a 'rod' than to apply the term to a single string. I doubt that even the most discerning member of Telestes' audience could have divined so arcane an intention.

More promising, on the face of it, is an approach which takes the word *ράβδος* literally and construes the rods as plainly visible components of an instrument's wooden frame. This strategy led Giovanni Comotti to the most fully argued account of the *μάγadis* that has been offered to date.⁸ Beginning from the assumption that it was an instrument of a well-defined sort, and extracting from the passages quoted in Athenaeus the hints that point us towards the family of harps, he found himself able to identify, among the harps painted on vases of the Classical period, precisely one type that fitted the relevant description. That is, it was a harp whose frame would present itself to any observer (not merely to the craftsman who made it) as consisting of five long, wooden battens or rods.⁹

I shall not reopen here the question of whether the term *μάγadis* is genuinely the name of a type of instrument: I do not think it is, but let us temporarily assume that on this point I am wrong. Even so, there are difficulties in Comotti's ingenious interpretation. For one thing, the business of counting the 'rods' that form the framework of the vase-painters' harps is not as straightforward as he seems to have thought; there are decisions to be made about which of the painted lines represent identifiably distinct elements in the structure and which do not, and about which apparently 'structural' elements are prominent enough to help motivate a descriptive epithet. For another, even if the five elements which Comotti identified in the pictures he studied do indeed represent visibly distinct strips of wood, they

⁶ Maas and Snyder (n. 2), p. 149.

⁷ The amount of musicological detail that scholars have excavated from passages of verse, and especially from comedy, might seem to cast doubt on this judgement. But few of the poets' references presuppose prior knowledge of musical analysis (a science still in its infancy at this date) at the level that would be required of an audience here. Compare West's remarks on the reading 'pentachords' in Pherecrates fr. 155 (West [n. 3], pp. 360–1).

⁸ G. Comotti, 'Un' antica arpa, la *magadis*, in un frammento di Teleste (fr. 808P)', *QUCC* NS 15 (1983), 57–71.

⁹ The picture with which he illustrates his thesis comes from a *lebes gamikos* by the Washing Painter (New York, Metropolitan Museum 07.286.35), though another *lebes* by the same painter and in the same museum, M.M.16.73, might have served his purpose rather better. Both images are shown in D. Paquette, *L' instrument de musique dans la céramique de la Grèce antique* (Paris, 1984), p. 195 (figures H1, H2).

certainly do not appear as such in all the pictures in which harps of this kind are displayed;¹⁰ there is nothing to show that they were essential to this variety of instrument or specially characteristic of it.

If Comotti's hypothesis is at best insecure, it seems clear that any other hypothesis of the same general sort is bound to be just as doubtful. With a little ingenuity we could probably succeed in counting five 'elements' in almost any of the Greek instruments; but none of them presents itself as uncontroversially more 'fivefold' than the others. That fact should suggest to us, I think, that this approach to the question is after all misconceived. There is no reason to think that a fifth-century audience would be better placed than we are to recognize any particular kind of instrument in the description 'five-rodde'; and in that case it seems unlikely that Telestes meant his phrase to remind them of some instrument's special peculiarities. I do not think it is capable of doing anything of the sort.

There is another possible interpretation which avoids these difficulties; it is attractively simple, and has the great advantage of offering a sense which an audience could be expected to recognize. Scholars (from Athenaeus on) have missed it, I think, because their dedication to the quest for serious organological information in Telestes' words has diverted them from the possibility that there simply is none there. I suggest that once we put that assumption behind us, the natural reference of the word 'five-rodde' becomes rather obvious. The 'five-rodde' is the human hand. It would be extraordinary if anything else were intended.¹¹

In Telestes' phrase here, of course, *πενταρράβδω* does not simply mean 'hand'. It is an adjective qualifying the rather unusual noun *ἄρθμῳ*, a 'bond' or 'joining';¹² and the straightforward word for 'hand' appears in the next line and in a different grammatical case. But this explicit reference to the hand confirms, rather than undermines, the interpretation I am offering. *πενταρράβδω χορδᾶν ἄρθμῳ χέρα . . . ἀναστρωφῶν* means 'repeatedly turning his hand back and forth in a five-rodde joining of the strings'. The 'joining' of the strings to make from their separate sounds a musical sequence or melody involves the 'five-rodde' activity of all the fingers of the hand. Line 3, then, says nothing directly about the structure of the instrument; it goes closely with line 4 (as surely it should), to elaborate that line's already colourful description of the action of the hand.

My argument has been independent of any interpretation of the disputed term *μάγαδης*. It might be the name of some specific kind of instrument; equally, as I suggested some years ago (see n. 5 above), it might refer to a special kind of

¹⁰ The two-limbed upright post, essential to Comotti's account, is absent or not recognizable in e.g. Ferrara T.127, New York M.M.37.11.23 (shown in Maas and Snyder [n. 2], pp. 161, 164), Ferrara T.270 (well reproduced in F. Berti and D. Restani [edd.], *Lo Specchio della Musica* [Bologna, 1988], pl. XVII).

¹¹ οὐκ ἐμός ὁ λόγος. The idea was offered to me in conversation by Dr Maurice Byrne, though the responsibility for shortcomings in its presentation here is my own. It is worth recalling Hesiod's use of *πέντοζος* for the hand, in a bizarre figure at *Op.* 742. Telestes' *πενταρράβδω*, if taken in the sense Dr Byrne suggests, is certainly no more obscure.

¹² LSJ supply only three examples, all in the psychological or social sense conveyed by the phrase *ἄρθμῳ καὶ φιλότῃ*. The MSS have *ἀριθμῳ* in our passage of Telestes, which Wilamowitz defended, simultaneously adopting the reading *πενταράβω* from C. Of the other MSS, A has *πενταράβδω* and E has *πενταρόδω*. I am grateful to CQ's reader for drawing these textual difficulties to my attention. Page's version of the text seems to me to incorporate the likeliest sources of the MSS variants, but I have to recognize that Wilamowitz's remains perfectly possible (*πεντάραβος* would be an adjective coined on the basis of the 'noise' word *ἄραβος*). I see no way of settling the matter conclusively.

performing practice, one in which a melody is doubled or 'answered', on any sort of instrument, at the octave above the original. The reading of πενταρράβδω . . . ἄρθμῳ that I have offered here does not affect that issue decisively, but a plausible inference might nevertheless be made about the instrument that Telestes has in mind. Whether or not the word μάγαδις actually means 'harp', it may be argued, it is surely a harp-player that is intended here. Stringed instruments of the other familiar sorts—lyres and kitharas—were standardly struck (κρούειν) with a plectrum rather than plucked (ψάλλειν) with the fingers, and their players were regularly represented as 'strikers' rather than 'pluckers';¹³ whereas our sources repeatedly inform us that instruments of the harp family are finger-plucked, not played with a plectrum.¹⁴ Hence in most contexts ψαλτήριον, 'plucked instrument', unambiguously refers to a harp, ψάλτης and ψάλτρια to harpists, and so on. Then if a performance is described as involving rapid back-and-forth movements of the hands in which the strings are 'joined' through the action of all five fingers, it is the image of a harpist, not a player of the lyre or kithara, that it will inevitably conjure up.

Sensible though this line of thought may seem, I am not convinced by it. For one thing, it is a well attested fact that the lyre and the kithara could on occasion be played with the fingers as 'plucked' instruments.¹⁵ More importantly, my reading of πενταρράβδω . . . ἄρθμῳ has eliminated one otherwise promising interpretation of the associated adjective κερατόφωνον. If I am right, that is, the epithet 'horn-voiced' cannot refer to the fact that the instrument is played with a plectrum made of horn (as plectra sometimes were); for it is not. In that case, if the instrument is a harp, we are required to find some other sense in which a harp can intelligibly be called 'horn-voiced'; and I can find no plausible candidate. No part of a Greek harp, so far as we know, was made of this substance. A dithyrambic poet might, just conceivably, call an instrument 'horn-voiced' if it was sounded by means of the fingernails rather than the fingertips; but I have found no parallel for this usage. If the reference is not to something made of horn but to a similarity in the quality of the sounds made by the μάγαδις and by a horn, a harp would seem very unlikely to deserve the epithet.

The adjective κερατόφωνος is apparently unique to this passage. Our interpretation of it is likely to be obstructed, I believe, by associations drawn mainly from our own culture; we automatically think of the tootling of huntsmen or the round and fruity sounds of a French horn in a Mozart concerto. But though the Greeks did indeed use cattle-horns to make bugling signals, and called them κέρατα,¹⁶ such devices are

¹³ There are exceptions; both forms of playing were possible on a lyre (e.g. Plato, *Lysis* 209b). But it is plain both from the frequent literary uses of κρούειν and from many hundreds of paintings that the standard image of a lyrist or kitharist was as 'striker with plectrum' rather than 'pluckers with fingers'.

¹⁴ See e.g. on the harp called *πηκτίς* Aristoxenus fr. 99 and Telestes himself at *PMG* 810; on the harp called *τρίγωνος*, Diogenes trag. ap. Ath. 636a–b. Only one painting known to me shows a harpist playing with a plectrum (Stockholm 12; a strange picture in several respects—for some comments see Maas and Snyder [n. 2] pp. 181, 183; reproduced in A. D. Trendall, *The Red-Figured Vases of Lucania, Campania and Sicily* (Oxford, 1967), pl. 36.4).

¹⁵ In addition to passages like that in the *Lysis* (n. 13 above), we have the interesting information that the kind of kithara that was played by professional soloists without song, τό... τῶν ψιλῶν κιθαριστῶν ὄργανον δὲ καὶ Πυθικὸν ὀνομάζεται, was also sometimes called δακτυλικόν, 'finger-instrument' (Pollux 4.66), presumably because rapid, virtuosic finger-plucking played a prominent part in these people's performances. (On ψιλὴ κιθαριστικὴ see especially Ath. 637f–638a, Strabo 9.3.10.)

¹⁶ E.g. Xenophon, *Anabasis* 2.2.4, ἐπειδὴ δὲ σημήνη τῷ κέρατι.

mentioned surprisingly rarely; and when words of this family appear in musical contexts their reference is almost always quite different.

There seem to be relevant usages of three distinct sorts.

(i) Occasionally there is a clear reference to a wind instrument made from a horn or shaped like one. Thus the *κεραύλης* of Archilochus fr. 269 (West) is presumably a wind-player; and the *κεράτιον* mentioned by Diodorus Siculus at 29.32 is plainly a blown instrument. But neither Archilochus' instrument nor Diodorus' is likely to be a horn sounded in the manner of a brass player. Diodorus' appears to be a kind of busker's instrument, suitable for playing at casual parties; and Pollux, our source for the Archilochus fragment, interprets its *κεραύλης* as *ὁ τοῖς αὐλοῖς χρώμενος* (4.71). Both instruments are probably varieties of reed-blown aulos (Pollux at 4.76 attributes the use of auloi made from horns to the Etruscans).

(ii) Secondly, we sometimes hear of a horn, or part of one, attached to the end of the pipe of an aulos to form a 'bell'. The instruments in question are those known as 'Phrygian' auloi, or *ἐλυμοί*; they were used especially in the rites of the Mother Goddess and are depicted on a number of sculptures of the Roman imperial period. 'The *elumos* aulos,' says Pollux (4.74), '... has an upwards-curved horn on one of the pipes, and it plays to the Phrygian goddess.' 'They fit to it a horn, analogous to the bell of a trumpet,' says Athenaeus (185a). Hesychius has the word *ἐγκεραύλης*, which he glosses as *ὁ τοῖς Φρυγίοις αὐλῶν*, explaining further that the left-hand pipe of this Phrygian instrument has a horn attached to it, *προσκειμένον κέρας*. The Phrygian aulos is plainly the instrument referred to in two charming pieces from the Palatine Anthology, the *διδύμους* ... *λωτὸς κεροβάας* of 6.94, and the *λωτῶ κερῶντι* of 7.223. In both poems it is associated with percussion instruments and frenzied dancing, and with the wild cults of Rhea or Cybele.

(iii) The third common reference is to parts of stringed instruments, and specifically to parts of the lyre and the kithara. At Pollux 4.62, Eustathius 1165.26, and a scholium to Aristophanes, *κέρατα* or *κεράτια* are structural elements of the lyre whose function was performed in Aristophanes' time by a piece or pieces of reed, the *δόναξ ὑπολύριος* mentioned at *Frogs* 233. This reed *πάλαι ἀντὶ τοῦ κέρατος ὑπετίθετο τῇ λύρᾳ*, says the scholiast. What its function 'under' the lyre was is uncertain. Possibly it was to brace the unstable sides of the soundbox;¹⁷ that would fit well with our sources' citation, in this context, of the Sophoclean tag *ὑφ' ἡρέθη σοι κάλαμος ὥσπερ εἰ λύρας* (fr. 33 Nauck). But in other cases, and specifically with fifth-century authors, the identity of the 'horns' of the lyre or kithara is in little doubt. They are the 'arms', made of horns or shaped to resemble them, which rise from the soundbox of the instrument and support the cross-bar. Two of the tragedians give tolerably straightforward examples:

*ῥηγνὺς χρυσόδετον κέρας,
ῥηγνὺς ἁρμονίαν χορδοτόνου λύρας,*

and

*ὦ τὰς ἐπταφθόγγου μέλπων
κιθάρας ἐνοπᾶν, αἶτ' ἀγραύλοισ
κέρασιν ἐν ἀψύχοις ἀχεῖ
μουσᾶν ὕμνους εὐαχῆτους ...*¹⁸

¹⁷ For this suggestion, supported by practical experience, see Helen Roberts, 'Reconstructing the Greek tortoise-shell lyre', *World Archaeology* 12 (1981), 303–12.

¹⁸ Sophocles, fr. 244 Radt, from the *Thamyras*; Euripides *Ion* 881–4.

Here, then, we have an unproblematic way in which horns may be referred to in connection with stringed instruments. But if that is relevant to our passage of Telestes, we need to find some point in the description of an instrument, or of a performance on an instrument, as ‘horn-voiced’; some allusion to the quality of the sound seems to be intended. Three sources offer fairly consistent pointers to an interpretation.

Dionysius of Halicarnassus, in *De comp. verb.* 14, discusses the sounds made by each of the letters of the alphabet. Among many other things, he asserts that of the semi-vowels, lambda is particularly pleasing and sweet, while rho is rough, and is the ‘noblest’ (γενναιότατον) of this class. Mu and nu, he goes on, are intermediate between them:

μέσως δέ πως διατίθῃσι τὰ διὰ τῶν ῥωθῶνων συνηχοῦμενα τό τε μ καὶ τό ν κερατοειδεῖς ἀποτελοῦντα τοὺς ἥχους.

If the sounds, or ‘resonances’, ἥχοι, of the letters mu and nu are well described as κερατοειδεῖς, the implication is that a ‘horn-like’ sound is one incorporating a muted sort of humming, a soft reverberation. Something similar is suggested by a passage of Theophrastus.¹⁹ Here the less penetrating but allegedly more omnidirectional movements of lower-pitched notes are said to be paralleled by the reverberations of instruments equipped with a κέρας or a χάλκωμα (a bronze bell), since these are περιηχητικώτερα; and if one touches the soundbox, or the ‘horn or arm’ of an instrument (τοῦ ὀργάνου . . . τῆς χέλυος ἢ ἀγκῶνος), it will be found to vibrate more when a lower note is played. The softer but more pervasive reverberations of the lower notes are apparently picked up and transmitted more effectively by these horns than are the ‘sharper’ sounds of the higher pitches.²⁰

The fullest discussion of these matters appears in the Peripatetic treatise *De Audibilibus* (802a17–b18). I cannot examine it in detail here; but two points are of particular importance. The author’s opening statement on the subject reads as follows.

ἀπὸ δὲ τῶν ἄλλων ὀργάνων οἱ τῶν κεράτων ἥχοι πυκνοὶ καὶ συνεχεῖς πρὸς τὸν ἀέρα προσπίπτοντες ποιοῦσι τὰς φωνὰς ἀμαυράς· διὸ δεῖ τὸ κέρας τὴν φύσιν ἔχειν τῆς αὐξήσεως ὁμαλὴν καὶ λείαν καὶ μὴ ταχέως ἐκδεδραμηγκυῖαν. (802a17–21)

The structure of the first part of this sentence is unclear; but the only way in which I can make sense of the claim that these ἥχοι, when ‘dense and continuous’, make the φωναί ‘dim’ is by sharply distinguishing the ἥχοι from the φωναί,²¹ and constructing τὰς φωνὰς with ἀπὸ τῶν ἄλλων ὀργάνων at the beginning. The idea is then that effective ‘reverberations’ (ἥχοι) from horns attached to other instruments make the intrinsic sounds of those instruments—the sounds which they emit independently of the horns’ contribution, and which the author calls their φωναί—more ‘dim’ or muted than they otherwise would be. The latter part of the sentence plainly presupposes that this result is desirable, and implies that horns which produce these strong reverberations are to be preferred; the implication is amply confirmed in the sequel.

The second point to be made about this passage is simply its length, and the amount of careful detail it contains. The author discusses the qualities of horns grown quickly or slowly, illustrates with various examples the way in which reverberations in

¹⁹ Fr. 716.91–8 Fortenbaugh = Porphyry *In Ptol. Harm.* 64.8–15 Düring.

²⁰ These, on Theophrastus’ account, are differently ‘shaped’ and travel in a more direct, linear trajectory rather than ‘all around’: see fr. 716.88–90 = Porph. *In Ptol. Harm.* 64.5–7.

²¹ It is likely to be significant that all these sources use ἥχος of the sound emerging from the horn, rather than the commoner φωνή or φθόγγος.

a solid medium can be checked by cracks or obstructions, and offers remarks on the effects of baking (ὄπτησις) on the acoustic qualities of horns. He also implies that people who use horns for purposes connected with sound take trouble in selecting them, deciding how old they are, and so on. All this attention to the qualities of horns would be inexplicable if they were to be used merely as rustic signalling devices; but it fits perfectly with the hypothesis that they are to form parts of sophisticated instruments whose sonorous qualities are aesthetically important. That hypothesis, as I have said, also makes sense of the crucial opening sentence; and the horns' musical function, in that case, seems beyond serious dispute. As the passages of Dionysius and Theophrastus hinted, they serve to add reverberations which mute or mellow the fundamental sound of the instrument of which they form parts.

If we now apply this idea in the interpretation of our fragment of Telestes, two conclusions will follow. One is that the stringed instrument in question is probably some sort of lyre or kithara, and not a harp, since it is only in the construction of the former that horns are known to have had a place. Secondly, the epithet *κερατόφωνος*, contrary to our 'natural' expectations, means in effect 'soft-voiced' or 'mellow', not 'penetrating' or 'brassy' or 'loud'. There is no connection at all with military trumpetings or with the hunt.

This does not mean, of course, that Telestes intended the word *μάγαδης* to serve as a name meaning 'lyre' or 'kithara', or as the title of any specific type of instrument belonging to that class. It is most unlikely to be any such thing. If we insist on treating it as the name of an instrument, and if it is not a harp, the remaining possibility, as Dr Byrne has reminded me, is that it is not a stringed instrument of any sort, but a wind instrument, a type of *αὔλος*.²² A double-reed pipe of some sort (perhaps of the 'Phrygian' variety which I mentioned above) might well merit the description *κερατόφωνος*, and the activity of the fingers upon it could motivate *πενταρράβδω . . . ἀρθμῶ* in line 3 very satisfactorily. But Athenaeus' citations inspire no faith in this hypothesis, and there is nothing else in the ancient literature to support it. There will in any case remain the awkwardness of the word *χορδᾶν*, 'strings', which despite the frequently cited authority of Plato *Rep.* 399d4 is far more likely to mean what it says (as in non-technical contexts it almost invariably does) than to carry only the vaguer signification 'notes'. Then if *μάγαδης* is not the name of a stringed instrument, at least in this passage, and if for other reasons it seems unlikely to be that of a wind instrument, we are driven back by a new route to the conclusion that it is not the name of an instrument at all. It strikes me as perfectly plausible that a finger-plucked musical echo or 'answer' to a melody might be described as 'horn-voiced' in the sense that our discussions have unearthed. But I shall not now embroider that thesis further.

University of Birmingham

ANDREW BARKER

²² This notion is floated, and supported by quotations from poetry, at Athenaeus 177d. Authorities are cited for and against the thesis at 634c–635a; in the remainder of Athenaeus' discussion (to 637a) a stringed instrument is plainly intended.