# LASUS OF HERMIONE, PINDAR AND THE RIDDLE OF S

The aim of this article is to examine a tantalizing cluster of clues to the nature of musical theory and practice in its early phases, especially as these pertain to the shadowy but clearly impressive figure of Lasus of Hermione. Lasus' *floruit* is put in the last quarter of the sixth century B.C.E. and he is said in later sources to have been Pindar's teacher. If we can trust the ancient record, he was a musical innovator on several fronts: he wrote the first treatise on music and conducted empirical acoustic experiments; he introduced the dithyrambic competitions in Athens at around 508 after the death of his patron Hipparchus, and was himself a composer and innovator in the genre; he also innovated in auletic technique, choral arrangements (having invented the circular chorus), and the sounds of choral songs. This is an impressive list of achievements, but it only begins to hint at their boldness.

Let's start with the last-named of these. From various sources we know that Lasus wrote at least two compositions for the voice in which he suppressed the sigma, which is to say the sound 's'. To suppress the s-sound in Greek—'one of the commonest sounds in the Greek language'2—is no easy feat, and it puts one in mind of the contemporary French author Georges Perec (1936–1982), whose ludic achievements included lipogrammatic novels which deliberately left out one or more vowels, for instance La Disparition (1969; Engl. trans. A Void, 1994), which abjures the vowel e and in fact turns on the mysterious disappearance of that letter from the alphabet (and of many other things from reality as well). He also wrote a short story whose only vowel was a. But if Perec had no obvious reason to do what he did, he at least had a precedent in Lasus (as he was well aware), and in fact he was working in an entire tradition of lipogrammatic writing.<sup>3</sup> But what could have motivated Lasus' proto-Oulipian gesture, the earliest known of its kind?<sup>4</sup> No reason is given in the direct testimonies, but inferences can be drawn from adjacent contexts. According to Aristoxenus, earlier unnamed musicians rejected the sigma because it was 'difficult to pronounce' or 'harsh-sounding'  $(\sigma \kappa \lambda \eta \rho \delta \sigma \tau o \mu o \nu)$  'and ill-suited to the *aulos*'.<sup>5</sup>

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- <sup>1</sup> See Privitera, *Laso di Ermione*, a full-length study, with fragments and discussion; *GMW* 1, s.v. 'Lasus' in the index; West, *Ancient Greek Music*, 342–3, for a convenient summary of Lasus' achievements; and D'Angour, 'Dithyramb' for a striking reappraisal of some of the key evidence.
  - <sup>2</sup> West, Ancient Greek Music, 40.
- <sup>3</sup> See G. Perec, 'Histoire du lipogramme', in Oulipo (Association) (ed.), *La Littérature potentielle (créations, re-créations, récréations)* (Paris, 1988), 73–89, esp. 77–8 (on Lasus).
- <sup>4</sup> 'Oulipo' is an acronym for 'Ouvroir de littérature potentielle' ('Workshop of Potential Literature'), a literary movement founded in 1960 by R. Queneau and F. Le Lionnais in the name of the unlimited production of literature under limiting constraints. Other members have included M. Duchamp, I. Calvino and G. Perec. See their site: http://www.oulipo.net/.
  - <sup>5</sup> Ath. 11.467a = fr. 87 Wehrli.

Aristoxenus is echoed by Dionysius of Halicarnassus, who in *On the Composition of Words* finds the s-sound to be 'neither charming nor pleasant'. It can even 'cause pain' when used excessively, for it produces a 'hiss', a surigmos, like that of 'an irrational beast'. And while language, Dionysius believes, can be irrational to the extent that it is musical (it affects the ἄλογος αἴσθησις, or irrational faculty of the ear, giving rise to pleasure and even ecstasy), he also implicitly believes that language must so to speak be rationally irrational: its unreason knows constraints and conventions of all kinds. As a result, 'some of the ancient writers used the sigma sparingly  $(\sigma \pi a \nu i \omega s)$  and with caution, some even composing entire odes without sigmas'. As proof, Dionysius adduces the first two verses of a dithyrambic fragment from Pindar that is partially completed by an Oxyrhynchus papyrus (the papyrus fragment goes on for another thirty-one lines):

Formerly the singing of dithyrambs crept along  $(\mbox{\'e}\rho\pi\epsilon)$ , stretched out like a rope  $(\sigma\chi\sigma\nu\sigma\tau\dot{\epsilon}\nu\epsilon\iota\alpha)$ , and the 's'  $(\tau\dot{\phi}\mbox{\'o}\dot{\alpha}_{l}\nu)$  came out [sounding] base-born  $(\kappa(\beta\delta\eta\lambda\sigma\nu)$  to men.

( $Dithyramb\ 2.1-3$ )

Both Aristoxenus and Dionysius, then, hint at the existence of asigmatic composition prior to Pindar. Neither names Lasus, but further sources do. A drama begins to unfold, pitting Pindar against his predecessor, and rather unremorsefully at that. If Lasus suppressed the sigma, Pindar foregrounds it with a vengeance: the opening salvo bristles with sibilants; it literally hisses like a snake—an image that is also conjured up by the phrases 'creeping along' and 'stretched out like a rope' (if that is the meaning of the much-disputed word  $\sigma_{\chi o \nu o \tau} \epsilon \nu \epsilon \iota a$ ). Nor is Pindar's practice in the remainder of the ode any different: there is even a mention of 'the hissing  $(\kappa \lambda a \gamma \gamma a \hat{\iota}s)$  of ten thousand snakes', as though the intention were to take the initial imagery to an unheard of limit.<sup>8</sup>

# I. CLEARCHUS AND THE RIDDLE OF S

The exact meaning of Pindar's verses and their polemical intent, if that is what we have, is probably irrecoverable. The closer the ancient sources come to fingering Lasus as the recipient of Pindar's 'attack', the more confusing the details grow. According to Athenaeus, Clearchus of Soli, a learned Peripatetic and pupil of Aristotle's, called the first two verses of the dithyrambic fragment, or at least these two verses, 'a kind of riddle set forth in lyric composition ( $\epsilon \nu \mu \epsilon \lambda o \pi o \iota (a \mu)$ )—unless he meant 'a kind of riddle set forth in the area of musical [or 'lyrical'] composition'. The phrase  $\epsilon \nu \mu \epsilon \lambda o \pi o \iota (a \mu)$  is peculiar, and it appears only here: it smacks of academicism on the part of Clearchus, which could lend support to the second alternative. Unfortunately, Clearchus' detection of a riddle in Pindar's dithyramb is itself somewhat enigmatic, and rather enigmatically preserved.

His report comes in two different versions in Athenaeus. The first is a direct quotation, which shows that the original seat of the fragment was a book *On Riddles*. Much like W. K. Wimsatt, Clearchus counted seven kinds of riddles in the world, the

<sup>&</sup>lt;sup>6</sup> Comp. 14; trans. Usher.

<sup>&</sup>lt;sup>7</sup> Fr. 70b Snell–Maehler; trans. after *GMW* 1.59–60.

<sup>8</sup> Cf. D'Angour, 'Dithyramb', 338 and 342.

 $<sup>^9</sup>$  'In song' is surely wrong; that would be  $\epsilon \nu \mu \epsilon \lambda \epsilon \iota$ , vel sim. See also Privitera, *Laso di Ermione*, 31: 'fu usata nella melopea' (his other variant misrenders  $\pi \rho o \beta \lambda \eta \theta \epsilon \nu \tau o s$ ; cf. n. 21, below.)

first of which 'depend[s] on a letter' (of the kind, 'Tell me the name of a fish that starts with an a'), one sub-species of which is named after letters present or missing, 'like the so-called  $\alpha \sigma \iota \gamma \mu o \iota$ -riddles [those lacking a sigma]; whence even Pindar wrote an ode with reference to the letter s, as if a kind of riddle were being set forth in lyric composition/in the area of  $\mu \epsilon \lambda \sigma \sigma \iota \iota \iota a$ '. The second report is more expansive (unlike the first, it offers the example of Pindar's two verses, as in Dionysius 11), and it appears to be interlarded with Athenaeus' own comments (wherever else he may have culled his information). Deciding on where to draw the exact lines between Clearchus' words, their paraphrase and external information is probably an impossible task. But even so, given the direct report, which was centered on the special case of the missing sigma, we can be quite certain that the kernel of the second report is genuine: 'Pindar composed these verses [from Dithyramb 2] with reference to the ode composed without a sigma  $(\pi \rho \dot{o}s \tau \dot{\eta} \nu \dot{a} \sigma \iota \gamma \mu o \sigma \iota \eta \theta \epsilon \dot{\iota} \sigma a \nu \dot{a} \dot{\delta} \dot{\eta} \nu$ ', 12 presumably Lasus' ode, Centaurs, which is mentioned by Athenaeus by title in the immediate sequel. 13 This is about all that is clear. The rest is a hopeless tangle. 14

Before moving on, we need to pause a moment and take stock of Clearchus' report. One of its oddities is that it attributes 'a kind of riddle' to Pindar, *just when we would expect him to attribute it to Lasus.* Recall how Pindar gets introduced, namely on the heels of the riddles of the 'missing sigma' type. But Pindar's ode has no missing sigmas. D'Angour is the only scholar to parse the problem correctly: 'Clearchus may have been alluding to a particular  $\gamma\rho\hat{\iota}\phi$ os [riddle], whose riddling terms were *echoed* in Pindar's lines.' But D'Angour's solution , while plausible as an account of musical practice, is less plausible as an account of a riddle. The musical solution he proposes has to do with Lasus' discovery that the disturbing hissing of the sigma could be minimized by reorganizing the Chorus into a circular formation around the conducting aulete: in this way the chorus' singing could be coordinated, and trailing sibilants could be made to vanish. Somewhere *en route* to this formal solution Lasus decided to test out the effects of sigma-suppression by composing an asigmatic ode (in addition to an asigmatic *Hymn to Demeter*, some of which is preserved). <sup>16</sup> Satisfied

<sup>&</sup>lt;sup>10</sup> Ath. 10.448c–d (= fr. 86 Wehrli).

<sup>&</sup>lt;sup>11</sup> Both reports curiously omit the final two words, åπδ στομάτων, 'from (the) mouths' (of men). This is doubly odd, given the traditional phraseology (see S. Lavecchia [ed.], *Pindari dithyramborum fragmenta* [Rome, 2000], 131). The likeliest reason is that all three instances derive from the same source, which omitted the final two words (although at 467b Athenaeus quotes the pair of verses again, this time including åπδ στομάτων but omitting διθνράμβων and åνθρώποιs). This is not to deny that ancient readers were free to construe the partial quotation in different ways. Cf. D'Angour, 'Dithyramb', 335 and 342 (the latter discussion matching up nicely with Dionysius' view).

<sup>&</sup>lt;sup>12</sup> Pace G. A. Privitera, 'L'Asigmatismo di Laso e di Pindaro in Clearco Fr. 88 Wehrli', *Rivista di cultura classica e medioevale* 6.2 (1964), 164–70, at 167, the second statement accurately reflects the first. For an additional consideration, see n. 21, below.

<sup>&</sup>lt;sup>13</sup> By title and title alone—possibly because it no longer existed in his day (as it does not for us). But its authenticity was contested (as were other poems by Lasus since the Hellenistic period; see Ael. *NA* 7.47; Privitera, *Laso di Ermione*, 28), and Athenaeus is eager to use this ancient controversy, and Clearchus' authority, to establish the authenticity of the ode. Evidently because Clearchus did not mention the ode by name, Athenaeus has to struggle to piece together whatever facts he can to build a coherent picture. He did not wholly succeed, or things would have been much clearer for us.

<sup>&</sup>lt;sup>14</sup> I attempt to sort out the interpolations from the original language of Clearchus in *The Origins of Aesthetic Inquiry in Antiquity: Matter, Experience and the Sublime* (Cambridge, forthcoming).

<sup>&</sup>lt;sup>15</sup> D'Angour, 'Dithyramb', 331–2; italics added.

 $<sup>^{16}</sup>$  *PMG* 702 = Ath. 14.624e.

with the euphonic results of these experiments, he somehow hit upon a superior way of enforcing them across a wider spectrum of sounds, which involved rearranging the Chorus in a circle, and abandoned the asigmatic experiments as being, in the long run, 'impracticable'.

This is all well and good—more than that, it proposes a neat reconstruction of Lasus' musical reforms—but wherein lies Lasus' riddle? Unable to discover one in this scenario, D'Angour has to invent one: 'What crawls like a snake but does not hiss?' Answer: 'An asigmatic dithyramb'. 17 One problem with this ersatz-riddle is that it is not asigmatic (asigmos), it is merely about asigmatism. 18 But surely Clearchus, who must have adduced the asigmatic ode Centaurs mentioned by Athenaeus (and also by Dionysius of Halicarnassus), 19 has in mind an entire class of lipogrammatic riddles that suppress the s ('the so-called asigmoi riddles'); it is hard to imagine what class of riddles could refer to asigmatism. If Lasus presented his ode in a riddling fashion, we would expect it to be of this class.<sup>20</sup> Pindar's riddle, by contrast, is adduced as a quasi-member ('as if it were a kind of riddle') of the class that contains asigmoi riddles (riddles that hang on the presence or absence of a letter), as would any riddle that refers to hissing noises. Nothing prevents Lasus from having presented his ode by way of an additional riddle that referred to hissing noises. But the explicit mention by Clearchus of asigmoi griphoi and then of 'asigmatic ode', and Clearchus' own definition of a riddle (which we happen to have), suggest that this extra step is unnecessary, as I will try to show.

Athenaeus gives us Clearchus' definition of what a riddle is in the same context as the first of the two reports about Pindar. According to Clearchus in his On Riddles, 'a riddle is a problem  $(\pi\rho\delta\beta\lambda\eta\mu\alpha)$  put in jest  $(\pi\alpha\iota\sigma\tau\iota\kappa\delta\nu)$ , requiring, by searching the mind, the answer to the problem  $(\tau \dot{o} \pi \rho o \beta \lambda \eta \theta \dot{\epsilon} \nu)$  to be given for the sake of saving or losing face'.21 The ludic character of riddling as a practice is re-emphasized a few pages later: 'Like Theodectas, according to Clearchus, Dromeas of Cos and Aristonymus the harp-virtuoso used to play at riddles ( $\ddot{\epsilon}\pi\alpha\iota\zeta\epsilon\,\gamma\rho\iota\phiovs$ ). 22 Riddles are keenly intellectual games. In their 'most archaic' and purest form, they are sheer logical conundrums, meant to embarrass or reward the players. That Lasus, a kind of proto-sophist and author of witticisms that later were collected under the name of Lasismata, should have been drawn to riddles, particularly of the linguistic sort that turned on amphibolies and double entendres, seems only natural.<sup>23</sup> A delightful example was recorded in a book on Lasus by Chamaeleon of Heraclea, another Peripatetic. Once Lasus stole in jest  $(\pi \alpha i \zeta \omega \nu)$  a fish from some fishermen and handed it over to bystanders. When asked, 'he swore [to the fishermen] he did not have  $(\epsilon i \chi \epsilon \nu)$ it himself nor did he know of anybody else who had taken  $(\lambda \acute{a}\beta o\nu\tau\iota)$  it, because he had taken it himself, but somebody else had it, and this person he had instructed to say

<sup>&</sup>lt;sup>17</sup> D'Angour, 'Dithyramb', 342.

<sup>&</sup>lt;sup>18</sup> See the Greek version supplied exempli gratia in D'Angour, 'Dithyramb', 342, n. 68.

<sup>&</sup>lt;sup>19</sup> PMG 704.

<sup>&</sup>lt;sup>20</sup> As would, necessarily, any asigmatic ode written by any author. Dion. Hal. *Comp.* 14 assures us some ancients 'composed whole odes without sigmas ( $\frac{\partial \sigma i \gamma \mu \sigma v}{\partial \sigma}$ )', before quoting the Pindaric verses. Lasus' songs would have stood out as special cases if they were novelties, which is likely.

<sup>&</sup>lt;sup>21</sup> Ath. 10.448c; trans. Gulick (Loeb), adapted. Note the words  $\pi \rho \delta \beta \lambda \eta \mu a$ ,  $\tau \delta \pi \rho \sigma \beta \lambda \eta \theta \delta v$ , which reoccur in the second version of the Clearchean report at 456c: οἶονεὶ γρίφου τινδς ἐν μελοποιία ποβληθέντος.

<sup>&</sup>lt;sup>22</sup> Ath. 10.452f.

<sup>&</sup>lt;sup>23</sup> Cf. Privitera, *Laso di Ermione*, 47–60. G. F. Brussich (ed.) *Laso di Ermione: Testimonianze e frammenti* (Pisa, 2000), T6-9 is incomplete.

on oath, in turn, that he had not *taken* it himself nor did he know of anyone else who *had* it. For Lasus had *taken* it, but he himself *had* it.'<sup>24</sup> He seems to have been a kind of Oulipian after all.

With this example in mind we can turn back to Pindar and Lasus. A simpler scenario for Lasus' original riddle suggests itself, one that need not involve any references to snakes, or indeed to anything at all. Let us imagine that Lasus merely composed an asignatic ode, and then a hymn, each quite possibly the first of its kind, but also that he failed—deliberately—to note the absence of the sigma in each. The puzzle, or the joke, would have lain in the very absence of the designation that each song was demonstrating an absence. They would have been true lipograms. Lipograms generally do not call attention to the fact that they are lipograms: they conceal their secrets out in the open. That is, their riddle lies in their very form, not (or only secondarily) in what they say. 'Ils ne le disent pas.' They don't say what they are, they simply are.<sup>25</sup> That is their whole point, and the source of their pleasure (or sting): one has to discover the code in order to appreciate the technique of their construction. For this reason they are closely related to cryptograms.<sup>26</sup>

An example cited by Perec, but also by E. G. Turner, who edited a papyrus that turned out to be the remains of either a fifth-century or a Hellenistic lipogrammatic (asigmatic) satyr-play, is the rewriting of the Iliad by Nestor of Laranda under Septimius Severus: in the first book there were no alphas, in the second no betas, in the third no gammas, and so on.<sup>27</sup> Triphiodorus of Sicily (third century C.E.) is known to have followed the same procedure for the *Odyssey* (neither poem has survived). The inverse of a lipogram is a pangram, a sentence or other unit that contains every letter of the alphabet.<sup>28</sup> There are quasi-pangrams that are also lipograms (suppressing one or more letters of the alphabet). <sup>29</sup> To determine or verify whether you have a lipogram before you, and then what kind it is, you simply have to start counting the letters. And at the limit, Perec warns, any phrase you like has every chance of being lipogrammatic. (My last sentence has no z's, q's, or v's, etc; Iliad 7.364 contains no sigmas.<sup>30</sup>) Taking a swipe at literary history and philology, Perec notes that the terms for lipogram have themselves been suppressed from academic discourse and its apparatuses (including lexicons), and treated as non-serious outsiders, 'aberrations', 'pathological monstrosities', tricks of cleverness, or signs of madness. 'Literary history seems deliberately to ignore writing as a practice, as work, as play'. 31 Nevertheless, he writes at the close of his essay, the lipogram has a genuine power, in that it

<sup>&</sup>lt;sup>24</sup> Ath. 8.338cd; trans. Gulick. Did Lasus influence Heraclitus' riddle about Homer, the (fisher)boys, and the lice? (ὅσα εἴδομεν καὶ ἐλάβομεν ['got', i.e. 'killed'],  $\tau αῦτα ἀπολείπομεν$ , ὅσα δὲ οὔτε εἴδομεν οὔτ' ἐλάβομεν,  $\tau αῦτα φέρομεν$ , DK 22B56 ~ Cert. 328 Allen).

<sup>&</sup>lt;sup>25</sup> Perec (n. 3), 74: 'la plupart du temps, ils ne le disent pas'. There are exceptions, of course, such as Jacques Arago's *Voyages autour du monde sans le lettre A* (1853)—which is only a partial exception, however, for just what is a 'voyage around the world *without the letter A*?

<sup>&</sup>lt;sup>26</sup> Perec (n. 3), 77.

<sup>&</sup>lt;sup>27</sup> Perec (n. 3), 78–9; E. G. Turner, 'Papyrus Bodmer XXVIII: a satyr-play on the confrontation of Heracles and Atlas', *MH* 33.1 (1976), 1–23, at 20. Turner inadvertently demonstrates the point that lipograms are difficult games: the fact that the papyrus he was editing was asigmatic, probably the most striking fact about the papyrus at all, had to be pointed out to him by a colleague: 'neither I nor two American audiences had observed this absence' (ibid., 5).

<sup>&</sup>lt;sup>28</sup> E.g. 'The quick brown fox jumps over the lazy dog.'

<sup>&</sup>lt;sup>29</sup> At least according to Perec (n. 3), 86–7.

<sup>&</sup>lt;sup>30</sup> Detecting asigmatic verses like this and other alphabetic anomalies in Homer was evidently a (pre-Perecian) literary pastime at some point in antiquity, according to Athenaeus (10.458a–e).

<sup>&</sup>lt;sup>31</sup> Perec (n. 3), 75.

operates somewhat 'like the zero degree of constraint, on the basis of which everything becomes possible'. I believe that something of the same spirit must have infused Lasus' lipogrammatic experiments. It was through a suppression of (a) sound that Lasus discovered how to enable and unleash sound, in the name of musical reform. And I believe we can demonstrate this through Pindar's example, on the reasonably safe assumption that Pindar was following in Lasus' wake.

# II. PINDAR'S RHETORIC OF INNOVATION AND THE NEW POETICS OF SOUND

Let's turn one last time to Pindar's second *Dithyramb*, and attend to it a bit more closely, this time as a whole poem, starting with the opening verses again: <sup>32</sup>

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Formerly (\pi\rho\hat{\iota}\nu) the singing of dithyrambs crept along (\tilde{\epsilon}\rho\pi\epsilon), stretched out like a rope (\sigma\chi\sigma\iota\nu\sigma\epsilon\dot{\epsilon}\nu\epsilon\iota a), and the 's' came out from human mouths (\tilde{\alpha}\pi\dot{\sigma}\ \sigma\tau\sigma\mu\acute{\alpha}\tau\omega\nu) [sounding] base-born (\kappa\dot{\iota}\beta\delta\eta\lambda\sigma\nu) to men, [but now] youths<sup>33</sup> are spread out wide [in well-centred] circles / [but now] let us send forth a new [cry] to the altar in circles.<sup>34</sup> (Dithyramb 2.1–5)
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In the sequel, Pindar proclaims himself the 'chosen' and 'appointed herald' of a new style of poetry for all Greece—a style that is Bacchic, frenzied, and above all, noisy and loud. The verses that follow are in fact chock-full of sound terms, with an effect that can be elevating, terrifying, baroque, and even grotesque all at once: whirling tambourines, clattering castanets, 'loud-sounding wails and frenzies and shouts', lightning bolts 'breathing fire', 'the strong aegis of Athena [that] resounds  $(\phi\theta \circ \gamma\gamma \acute{a}\zeta \epsilon \tau a\iota)$  with the hissing  $(\kappa\lambda a\gamma\gamma a\hat{\iota}s)$  of ten thousand snakes', before a transition (in the preserved portion) into a mythological invocation of Cadmus' bride Harmonia, whose name inevitably takes on an acoustic overtone here, not least of all given her immediate context (her name is adjacent to the phrases, 'the report ( $[\phi] \dot{\alpha} \mu \alpha$ ) to say that Pindar's poem, charged though it may be in ritual motifs, is heavily programmatic in literary terms: it deliberately takes a proud polemical stand on the poetics of sound; it broadcasts that position 'loudly'; and it weaves its poetics into the poetry itself. Whatever else the first few verses may be doing (and these are the subject of unresolved dispute today), Pindar's poem as a whole is a literal celebration

<sup>32</sup> The bracketed words reflect the new readings, supplements, and renderings by D'Angour, 'Dithyramb'. D'Angour's revised text of *P. Oxy.* 1604 fr. 1 col. II.1–5, with underdots and lower half-brackets restored, reads:

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Πρὶν μὲν ἔρπε σχοινοτένειά τ' ἀοιδὰ διθιυράμβων καὶ τὸ σὰν κίβδηλον ἀνθρώποισιν ἀπὸ στομάτων, διαπέπ[τ]α[νται δὲ νὺν εὐο]μφάλ[οις κύ]-κλοισι νεαν[ίαι εὖ ε]ἰδότες 5
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The text is far from stable or certain. The most recent text of Pindar's dithyrambs by Lavecchia (n. 11) is more conservative, and diverges at a few key points:  $\delta\iota\alpha\pi\epsilon\mu[.]$  . [;](.)?...[κύ]|κλοισι.  $^{33}$  νέαι [ Snell-Maehler:  $ν\epsilon\alpha\nu[\iota\alpha\iota$  D'Angour:  $ν\epsilon\alpha\nu(?)$  Lavecchia.

 $<sup>^{34}</sup>$ ]  $\pi\dot{\nu}\lambda\alpha[\iota \kappa\dot{\nu}]|\kappa\lambda o\iota\sigma\iota$  Grenfell-Hunt:  $\dot{\epsilon}\dot{\nu}o]\mu\dot{\rho}\dot{\alpha}\dot{\lambda}[o\iota\varsigma \kappa\dot{\nu}]|\kappa\lambda o\iota\sigma\iota$  D'Angour (who renders the last line 'but now youths are spread out wide in well-centred circles'):  $\dot{\epsilon}\pi'$   $\dot{\delta}]\mu\dot{\rho}\dot{\alpha}\dot{\lambda}\dot{\delta}\nu$  (?)  $\kappa\dot{\nu}[|\kappa\lambda o\iota\sigma\iota$  Lavecchia (n. 11), 133 ad loc.

of the open mouth: it opens the floodgates of sound in an absolute torrent. That torrent is not only announced in the opening verses, but it is also performed by them. The first two verses, we saw, bristle with the sibilants they denounce as  $pass\acute{e}$ , while the prominent if elusive word  $\underline{\sigma\chi ouv} \underline{\sigma\tau\acute{e}\nu\epsilon\iota\underline{a}}$ , in combination with  $\underline{\tau'}\,\grave{aou}\delta\underline{a}$ , makes for a striking if unseemly phonic cluster that simultaneously names and caricatures the forbidden  $\sigma\acute{a}\nu$  (sigma) of the second verse.<sup>35</sup>

Remarkably, it is these same aural qualities in Pindar's ode which are singled out for comment in a papyrus fragment of late date, which looks to be either a commentary on Pindar and his dithyrambs or else a general treatise on the ancient dithyramb, but in either case belonging to the Peripatetic school and probably stemming from the fourth century B.C.E. <sup>36</sup> The anonymous author quotes precisely the 'noisy' verses from Dithyramb 2 (vv. 8–18), setting them off as such ('the poet says the following',  $\lambda \epsilon | \gamma \epsilon \iota$  $\gamma(\dot{\alpha}\rho)$  o $\tilde{v}[\tau\omega s]$ , and tagging the lemma with his own words, 'full . . . [,] and noises/ sounds'  $(\pi \lambda \eta \rho [\epsilon \iota]_S \kappa \alpha \iota \psi \delta \phi o \nu_S)$ , as if expressing part of a comment that described Pindar's verses as containing loud noises or sounds. What else the commentator had in mind with this observation we cannot say.<sup>37</sup> The remark does seem, however, to be of an aesthetic and literary critical cast, given the context, which is aimed at metrical details and powerful psychagogic effects. This is not a piece of religious history or the like. <sup>38</sup> An earlier parallel might be the characterization of Aeschylus, by Aristophanes in Clouds, as 'full of noise/sound'  $(\psi \dot{\phi} \phi o \nu \pi \lambda \dot{\epsilon} \omega \nu)$ .<sup>39</sup> And later echoes in a similar vein, in Aristotle and in Dionysius of Halicarnassus, confirm that this observation had its origins in a specifically aesthetic context.<sup>40</sup> With one crucial difference. In this tradition of aesthetic criticism, the sonorities of the earlier dithyramb would be assimilated to the later manifestations of the New Music, which were roundly

- <sup>35</sup> For another 'noisy' ode, see Pind. *Pyth.* 12.4–27, this time celebrating the mythical birth of the *Polukephalos nomos*, which likewise 'wove into [the] music [of the *aulos*] the deathly dirge of the fierce [ophidian] Gorgon'. For an analysis, see R. P. Martin, 'The pipes are brawling: conceptualizing musical performance in Athens', in C. Dougherty and L. Kurke (edd.), *The Cultures Within Ancient Greek Culture: Contact, Conflict, Collaboration* (Cambridge, 2003), 153–80, at 162–3.
- <sup>36</sup> *P. Berol.* 9571v, ed. W. Schubart, 'Über den Dithyrambus', *Archiv für Papyrusforschung* 14 (1941), 24–30 (dated by the hand to the early third century C.E.). The suspicion of its genre (as commentary) was raised by Lobel (*ap.* Schubart).
- <sup>37</sup> Schubart's observation (n. 36), 29, 'Aus der Pindarstelle, die der Verfasser als Beispiel heranzieht, sieht man, daß es sich um den bakchantischen Lärm handelt', while true, does not go far enough.
- <sup>38</sup> One lesson of the anonymous author of *P. Berol.* seems to be that Pindar's second dithyramb is capable of 'powerfully changing the inner states' of its listeners through excitation; by contrast, his or another's (Simonides'?) song, in a different style, can 'calm down the mind' (lines 52–7), though through what means is unclear—perhaps through a more 'static' rhythm (Lavecchia [n. 11], 130). There is metrical comment about 'sculpting a verse' at line 55.
- <sup>39</sup> Ar. *Nub.* 1367 (said of Aeschylus). The comment is doubtless in part aimed at capturing cacophony, in addition to capturing meaningless 'bombast'. A scholiast glosses the phrase with  $\tau \alpha \rho \alpha \chi \omega \delta \eta$ , 'baffling', but this looks more like a paraphrase of the next part of the same verse,  $\dot{\alpha} \xi \dot{\nu} \sigma \tau \alpha \tau o \nu \sigma \tau \dot{\omega} \mu \dot{\phi} \alpha \kappa \alpha$ . See further M. Griffith, 'The vocabulary of Prometheus Bound', *CQ* n.s. 34 (1984), 282–91, at 287, n. 23.
- <sup>40</sup> Arist. *Rhet.* 3.3.1406b1: dithyrambic poets are 'full of sound' or 'noisy' (ψοφώδεις); Dion. Hal. *Dem.* 7, equating a style (Plato's, in the *Phaedrus*) that is full of 'sounds' (ψοφοί) with one that is full of 'dithyrambs'; cf. E. Csapo, 'The politics of the New Music', in P. Murray and P. Wilson (edd.), *Music and the Muses: The Culture of 'Mousikê' in the Classical Athenian City* (Oxford, 2004), 207–48, at 228–9. According to Arcesilaus, head of the Middle Academy, reading Pindar was 'terrific for filling one's voice to the brim ( $\delta \epsilon \iota \nu \dot{\rho} \nu \epsilon \dot{\ell} \nu a \iota \phi \omega \nu \hat{\eta} s \dot{\epsilon} \mu \pi \lambda \hat{\eta} \sigma a \iota$ )' (Diog. Laert. 4.31).

censured. <sup>41</sup> Thanks to these and similar verses Pindar may have seemed like a precursor of the New Music to later historians of literature and music, but he was no Timotheus. We should bear in mind that the pseudo-Aristotelian *Problems* called the Aeolian tuning in which Lasus innovated 'magnificent and stately', while Sacadas was said to have clung to the 'nobility of style' that Terpander first introduced into music. Lysander's style, inspired by these predecessors, is called  $\epsilon \tilde{v}o\gamma\kappa os$ , 'full' and 'rich', for all its sigmatic whistling  $(\sigma v\rho v\gamma\mu \acute{o}s)$ . <sup>42</sup> One should be wary of importing back into the earlier material anachronistic assumptions about genre and value, a point whose full significance will emerge below. <sup>43</sup>

The contrast Pindar draws in the second *Dithyramb* between a poetic, voluble 'now' and a quieter 'then' is, moreover, similar to one he draws in another fragment, where he sets himself up against a Locrian rival, a certain Xenocritus from a century earlier (so the scholia inform us): 'Hearing him playing his few notes  $(\pi \alpha \hat{v} \rho \alpha \mu \epsilon \lambda [\iota] \zeta o \mu \epsilon \nu]$ , and busying myself with my loquacious [art]  $(\gamma \lambda \omega) \sigma \sigma \alpha \rho \gamma \rho \nu \stackrel{?}{\alpha} \mu \phi \stackrel{?}{\epsilon} \pi \omega [\nu]$ , <sup>44</sup> I am roused to rival his song  $(\frac{\partial \rho}{\partial t} \theta i \zeta_1 \rho \mu \alpha \iota \pi \rho \delta s \ d \ddot{\upsilon} \tau \dot{a} [\nu)$ , like a dolphin of the sea, moved by the lovely melody ( $\mu \epsilon \lambda o_s$ ) of auloi in the flood of the waveless ocean. '45 And elsewhere, too, Pindar is happy to sing out his projects in loud and ringing tones. 46 In retrospect, it looks as though Pindar may have coined a rhetoric of innovation that would reappear two generations later in the poetry of Ion of Chios, one pivoting on the renunciation of the musty, dated old-timers ('formerly',  $\pi \rho (\nu)$ ) and their narrow bandwidth of sound ('scanty  $[\sigma\pi\alpha\nu'\alpha\nu]$  Muse', 'few  $[\pi\alpha\hat{\nu}\rho\alpha]$  notes').<sup>47</sup> But it is more probable that he inherited this rhetoric rather than inventing it, just as Ion did, the rhetoric of invention being the most suspect cliché there is in poetry. And in fact, this kind of contrast, which was by no means just a matter of rhetoric, would recur repeatedly over the next few centuries, as music restlessly expanded its scope and found new ways to break through old forms. An extreme culmination of this tendency is described by Polybius (30.22) and then put into anecdotal form by Athenaeus (14.615a-e). In 167 B.C.E., the Roman general Lucius Anicius celebrated his victory over the Illyrians with musical contests in which he deliberately perverted Greek musical performances. A large stage was built in the Circus and the most distinguished musicians from Greece were summoned to perform, the catch being that they were to perform all at once. Aulos-players, dancers and choristers appeared, and then were directed to play not together, but against one another, combat-style. Confusion (σύγχυσις) reigned, licentiousness was encouraged, notes were blown 'unintelligibly'

<sup>&</sup>lt;sup>41</sup> See generally Csapo (n. 40).

<sup>&</sup>lt;sup>42</sup> Sacadas: [Plut.]  $De\ mus.$  1134c; cf. Proclus ap. Phot. 320b12-18 (describing the early nomos generally as 'stately': ἀνείται τεταγμένως καὶ μεγαλοπρεπῶς); ps.-Aristotle: n. 69, below; Lysander: Ath. 14.637f–38a. Incidentally, to the ancient ear, poetic obstreperousness and loftiness can go hand in hand, for instance in Homer (and epic poetry generally). See Plin. Ep. 9.26.6, affirming the sublime style and quoting as examples three verses from Homer which are descriptive of loud, crashing sounds on a celestial or (super-) natural scale (II. 21.38, 5.356, 14.394).

<sup>&</sup>lt;sup>43</sup> For the general point, see J. C. Franklin, 'Dithyramb and the "demise of music"', in B. Kowalzig and P. Wilson (edd.), *Song Culture and Social Change: The Contexts of Dithyramb* (forthcoming).

<sup>&</sup>lt;sup>44</sup> Grenfell–Hunt supply  $\mu\epsilon\lambda[\iota]\zeta o\mu\epsilon\nu[ov \tau\epsilon\chi\nu\alpha\nu]$ , from which 'hearing' can be inferred and providing a noun to attach to 'loquacious'.

<sup>&</sup>lt;sup>45</sup> Fr. 140b.11–17 Snell–Maehler, trans. after *GMW* 1.60–1.

 $<sup>^{46}</sup>$  E.g. Ol. 1.7–9: αὐδάσομεν, ὁ πολύφατος ὕμνος, κελαδεῖν.

 $<sup>^{47}</sup>$  πρὶν μέν σ' έπτάτονον ψάλλον διὰ τέσσαρα πάντες/ Έλληνες, σπανίαν μοῦσαν ἀειράμενοι (fr. 32.3–4 W.). Cf. Lavecchia (n. 11), 131.

and 'at odds with one another', warlike gestures were mimed, and a veritable concerto for *auloi* against orchestra was waged. Even boxers were finally led onto the stage to the accompaniment of trumpets and horns. 'The result was unspeakable ( $\aa\lambda \epsilon \kappa \tau \sigma v$ )', Polybius concludes, unable to conceal his displeasure. Polybius' account is already anticipated by Plato in his *Laws* (unless the Platonic critique is not in fact being alluded to). Lasus of Hermione certainly deserves a place in this story, as we shall see, even if the exact details must of necessity remain shrouded in speculation.  $^{50}$ 

None the less, one suspects there is some particular innovation lurking behind Pindar's Dithyramb 2. Putting the two Pindaric fragments together, it might be thought possible to construe 'stretched out like a rope' as characterizing an earlier simplicity and austerity that contrasts with Pindar's embrace of a new aural complexity and abandon.<sup>51</sup> Lasus' avoidance of the sigma, a simplification of the aural spectrum under any description, could perhaps count as a simplicity of sorts. Therefore, it would naturally seem to follow (and there are ancient sources to promote and corroborate the suspicion), that Pindar must have been attacking Lasus of Hermione in *Dithyramb* 2.<sup>52</sup> But there are problems with this conflation of the two polemics, and possibly with this version of musical evolution: Lasus was an older contemporary, Xenocritus lived much earlier, and there is little to connect them. 'In earlier times' (or 'formerly'  $[\pi\rho i\nu]$ ) ill-suits Lasus, unless Pindar was attempting to put some distance between himself and the man later reputed to have been his teacher, or unless Lasus was exacerbating an older tendency—which is not unlikely in itself, though it is unlikely that he was exacerbating a tendency to musical austerity.<sup>53</sup> To make matters worse, Lasus was an innovator and exponent of, precisely, a new kind of music. And Pindar might be thought to have borrowed as much from Lasus as he was reputed to have objected to him.<sup>54</sup> It is far safer to assume, then, that Pindar in both poems has joined forces with Lasus, but with a Lasus who has surmounted, in whatever way he did, the inhibitions regarding the sigma.

To anticipate the argument in what follows: the words  $\tilde{\epsilon}\rho\pi\epsilon$   $\sigma\chi\omega\nu\sigma\dot{\epsilon}\nu\epsilon\iota\alpha$ , translated above as 'crept along, stretched out like a rope', *could* be understood to support

- <sup>48</sup> The symbolism of the event is nicely summed up in D. Musti, 'Musica greca tra aristocrazia e democrazia', in A. C. Cassio, D. Musti and L. E. Rossi (edd.), *Synaulia: cultura musicale in Grecia e contatti mediterranei* (Naples, 2000), 7–55, at 41.
- <sup>49</sup> Pl. Leg. 3.700D1-E1, not least the idea of musical pandemonium: 'The result [of radical musical innovations frowned upon by the Athenian, viz. Plato] was a total confusion of styles (πάντα εἶs πάντα συνάγοντες)' (trans. T. J. Saunders).
- <sup>50</sup> See West, *Ancient Greek Music*, 327–85, for a historical survey; also Privitera, *Laso di Ermione*, 77; P. Wilson, 'The musicians among the actors', in P. Easterling and E. Hall (edd.), *Greek and Roman Actors: Aspects of an Ancient Profession* (Cambridge, 2002), 39–68; Csapo (n. 40).
- <sup>51</sup> For the hypothesis of earlier simplicity, see GMW 1.59, n. 20, doubtless with [Plut.] De mus. in mind and the entire tradition he represents. Cf. De mus. 1141C for a later parallel development:  $\dot{a}\phi$  '  $\dot{a}\pi\lambda ov\sigma\tau\dot{\epsilon}\rho as$   $\dot{\epsilon}\dot{\epsilon}s$   $\pi o\iota\kappa\iota\lambda\omega\tau\dot{\epsilon}\rho av$   $\mu\epsilon\tau a\beta\dot{\epsilon}\beta\eta\kappa\epsilon$   $\mu ov\sigma\iota\kappa\dot{\eta}v$ ; ibid., 1135D and 1142C on 'the solemn, simple archaic style'; and 1133B on the 'simple' style of early citharody. But we need to be on our guard here, as this hypothesis is something of an ancient and, consequently, a modern construct (see ps.-Plutarch at n. 117, below).
  - <sup>52</sup> So, e.g. *GMW* 1.59, n. 20.
- <sup>53</sup> West, *Ancient Greek Music*, 344 ('before the time of Lasus'); contrast D'Angour, 'Dithyramb', 333: 'Pindar's  $\pi\rho i\nu$   $\mu \dot{\epsilon} \nu$  is too general to refer solely to the dithyrambs of the unnamed Lasos.' A further possible understanding of  $\pi\rho \dot{\nu} \nu$  is implicit in P. Wilson, rev. of Lavecchia (n. 11) in *BMCR* 04.24 (2002) (more developed than P. Wilson, *The Athenian Institution of the Khoregia: The Chorus, the City and the Stage* [Cambridge, 2000], 314, n. 32); see n. 117, below.
  - <sup>54</sup> Cf. also Pind. fr. 107a1-3 with *Pyth*. 1.4 (cit. Franklin [n. 43], at n. 57).

the view that Pindar is rejecting a prior musical austerity—just not one that was practised by Lasus. On the other hand, the hypothesis of an earlier austerity seems forced and unnecessary. Is it even true? Even if we do not understand  $\sigma\chi_{OUVOT\'eVela}$  to mean 'stretched out like a *pleated* rope', which would bring out one of its root senses, <sup>55</sup> we can nevertheless suppose Pindar means to say that in the past, intricately composed, possibly extended, 'creeping' dithyrambs—or songs that Pindar is calling dithyrambs—were discouraged, as was the sigma-sound. <sup>56</sup> That music before Pindar could be complex, even experimentally so, is an attested fact. Pseudo-Plutarch knows this. <sup>57</sup> And the details surrounding the otherwise shadowy figure of Sacadas of Argos, the early sixth-century pioneer of the *aulos*, confirm it. They also happen to make for a remarkably close fit to the present circumstances, a fact that has been noticed previously but never fully appreciated.

## III. SACADAS. LASUS AND THE NEW POETICS OF SOUND

Sacadas, who thrice took the prize for his performance on the pipes at the newly reorganized Pythian games between 586 and 578, is known for having established the Puthikos nomos, an instrumental piece that portrayed, and mimed, the religious myth of Apollo's slaying of the serpent at the Pythian sanctuary.<sup>58</sup> The composition was structured in five sections, each named according to the stage of action represented, and culminating in a joyous celebration of victory. It was clearly an intricate work, and it must have been an extended performance as well. It was also a showpiece for the virtuoso aulete, who used his instrument to create all manner of sound-effects. from a trumpet-call to a tooth-gnashing sound (achieved by pressing the tongue or reed against the teeth), both of these in the central combat segment, to a surigmos sound mimicking the hissing of the dying serpent.<sup>59</sup> Then along came Lasus, who embraced both the intricate dithyrambic style and, I want to suggest, the s-sound developed by Sacadas a generation or two earlier, whether by directly transposing Sacadas' innovations for the aulos to the Chorus or else by suggesting them. Pindar followed in his wake, singing a dithyramb that re-Joyces in both of these things. Whatever the case may be, their common approach to the possibilities of poetic sound may well be our best clue to understanding Lasus' reforms and Pindar's reflection of them in his second *Dithyramb*. But it is to Lasus that we must now turn.

Let us start with a brief characterization of Lasus' new poetics of sound as these can be grasped today. A fairly firm footing is given by the pseudo-Plutarchan treatise *On Music*:

Lasus of Hermione, by changing his rhythms to the dithyrambic style  $(\partial_{\gamma}\omega\gamma\dot{\gamma}\nu)$  and by pursuing the example of the multiplicity of notes  $(\pi o\lambda v\phi\omega\nu\dot{q})$  belonging to the *aulos* (and so making use

<sup>&</sup>lt;sup>55</sup> See LSJ s.v.  $\sigma \chi o \hat{\nu} o s$ , II: 'anything twisted or plaited of rushes, esp. rope, cord'.

 $<sup>^{56}</sup>$  This would be compatible with D'Angour's proposed choreographical and euphonic interpretation of  $\tilde{\epsilon}\rho\pi\epsilon$  σχοινοτένεια, 'proceeded in a straight line'. For the association of σχοινοτενής with a marked length of colons or periods and with consequent troubling affects for the breath, see the (admittedly late) testimony gathered in Lavecchia (n. 11), 126–7, nn. 72–3. (The scholia to the Aristotle passages, not cited by him, are more relevant still.) But the sense of extended length of poetic composition is also found, as at Philostr. Her. 55.4: καὶ ἄλλως σοφὸν ἐν τοῖς λυρικοῖς ἄσμασι τὸ μὴ ἀποτείνειν αὐτά, μηδὲ σχοινοτενῆ ἐργάζεσθαι.

<sup>&</sup>lt;sup>57</sup> [Plut.] *De mus.* 1138B, with the clarifying discussion in Franklin (n. 43).

<sup>58</sup> See West, *Ancient Greek Music*, 212–14 for a full account; briefly, D'Angour, 'Dithyramb', 338

<sup>&</sup>lt;sup>59</sup> Poll. 4.83–4; Strab. 9.3.10; Hesych. s.v. ὀδοντισμός.

of more notes, widely scattered about  $[\delta\iota\epsilon\rho\rho\iota\mu\mu\acute{\epsilon}vo\iota s]$ ), transformed the music that existed before him.<sup>60</sup>

Evidently, Lasus' revolution consisted in transposing the lively, melodic, and polyphonic qualities of the aulos, which was a double-reed instrument with multiple stops and capable of great range, microtones, microintervals, and extended techniques, onto vocal music. The impression is confirmed by a fragment to be quoted momentarily (PMG 702). The polyphony of the aulos had already been established by Sacadas of Argos, as we just saw. And although Sacadas (or Clonas) is credited with a trimelês nomos, or three-mode song for the Chorus, this appears to have been a composition that modulated in successive strophes between the traditional modes (Dorian, Phrygian, Lydian) and so not to have been an adaptation of Sacadas' revolutionary auletic technique to the voice. 61 Adaptations for the cithara may have occurred before Lasus, as they surely did after him (see below). But what evidence is there that Lasus either adapted Sacadas' technique to the voice or else was inspired by it? This is, to be sure, the most speculative element of my hypothesis. But the hypothesis also makes provision for our ignorance as part of the history it draws: that history was recorded by Pindar, albeit in a quasi-riddling form, and then subsequently lost. In other words, the best (and only) evidence that we have for the transfer of surigmos to the vocal realm is Pindar's dithyramb itself.<sup>62</sup> On this reconstruction, Lasus need not have been the first to have experimented with vocal sibilance in the wake of Sacadas' aulos techniques. Quite the contrary. Sibilance and sigmatism would merely have served Lasus as a banner with which to flag his own promotion of a greatly expanded range of possibilities for the voice, and above all in dithyrambic contexts.

The effects of Lasus' changes to vocal music must have been shocking. But the changes must also have entailed a wholesale transformation of existing music, as pseudo-Plutarch suggests—and all the more so if Lasus was simultaneously adopting a dithyrambic rhythmical style in the totality of his choral productions, effectively endowing choruses with the *characteristics* of the dithyramb, and was not making changes only within the dithyrambic genre, as the text likewise suggests. Vocal rhythms had to be altered, as did 'movement', whatever that is.  $\partial \gamma \omega \gamma \dot{\eta}$  normally means 'tempo', which is how the term is sometimes rendered here, but Privitera, who offers the most detailed analysis of this passage, is probably right to claim that its meaning here has a 'comprehensive value': 'it refers not only to rhythm and its stylistic realization, but also to the tempo of the diction, which in the case of choral songs was regulated by the music as well as by the rhythm.'64 Tessitura would have

<sup>60</sup> De mus. 1141C; trans. after GMW 1.235, adapted.

<sup>&</sup>lt;sup>61</sup> See West, *Ancient Greek Music*, 342–3 on Lasus; ibid., 214 on Sacadas and Clonas (the ancient source is [Plut.] *De mus.* 1134B).

<sup>62</sup> John Franklin has suggested to me that Lasus' own *On Music (Suda* s.v. 'Lasus') may have recorded this same history, and possibly supplied Heraclides of Pontus or another fourth-century musicologist with the information. Even so, there is no telling whether Lasus would have recorded his own position vis-à-vis Sacadas. The fate of Lasus' study, the very existence of which is controversial, is unknown. For a defence of the authenticity of the notice, see Privitera, *Laso di Ermione*. 36–42.

<sup>&</sup>lt;sup>63</sup> So, too, Privitera, *Laso di Ermione*, 75–6; cf. G. Comotti, *Music in Greek and Roman Culture*, trans. R. V. Munson (Baltimore, 1989), 26–7. Others (Lasserre, Barker, West) construe the changes as limited to the dithyramb.

<sup>&</sup>lt;sup>64</sup> Privitera, *Laso di Ermione*, 76, n. 15. Cf. R. P. Winnington-Ingram, *Mode in Ancient Greek Music* (Cambridge, 1936), 60.

also required alteration, as well as the total character of the songs. And, given that Lasus seems to have been a citharode and not an aulete, it stands to reason that he would have sought to transpose the new music onto his own instrument. To do so would have necessitated changes of another kind, which appear to be substantiated elsewhere, and to which we now turn.

The only preserved verses by Lasus are from the *Hymn to Demeter* mentioned by Heraclides of Pontus in the third book of his *On Music* and quoted by him in its *incipit*:

I sing ( $\mu\epsilon\lambda\pi\omega$ ) of Demeter and Kore, wife of Klymenos, raising a sweet-crying ( $\mu\epsilon\lambda\iota\beta\delta\alpha\nu$ ) hymn in the deep-resounding ( $\beta\alpha\rho\nu\beta\rho\rho\mu\nu\nu$ ) Aeolian attunement ( $\delta\rho\mu\nu\nu\nu\alpha\nu$ ).

It is easy to see why Heraclides took an interest in these verses: they too are programmatic, and they announce a proud new turn in the hymnic genre. That the Aeolian mode was uncommon at the time is confirmed by Pratinas of Phlius, a prominent and prolific poet active in the early fifth century, who urges its adoption, labelling it 'fallow' and thus still underexploited. 66 As Lasus' language implies, the Aeolian harmonia was a 'loud' and resonant one. 'And', Heraclides continues, 'in the sequel [Pratinas] says, more straightforwardly, "The Aeolian harmonia is the song that suits everyone who is boisterous  $(\lambda \alpha \beta \rho \acute{a} \kappa \tau \alpha \iota s)$ ".' This agrees with Heraclides' account of the tuning's êthos in the earlier part of the passage, which in fact offers a kind of racialized taxonomy of Greek modes (Dorian, Aeolian, Ionian): like the Aeolians (i.e. Thracians), it displays elements of ostentation, fullness, and weightiness  $(\tau \dot{o} \ \dot{o} \gamma \kappa \hat{\omega} \delta \epsilon_s)$ , 'even conceit'; it is 'lofty  $(\dot{\epsilon} \xi \eta \rho \mu \dot{\epsilon} \nu o \nu)$  and confident'; it has 'a pretence of nobleness'; and it has a reach that goes lower than the Dorian mode, with which it shares some superficial characteristics, whence its nickname, the 'Hypodorian' (which is best taken to mean 'not Dorian, yet nearly Dorian', Heraclides or his epitomator assures us, the way  $\upsilon\pi\delta\lambda\epsilon\nu\kappa\rho\nu$  means 'not quite white, but whitish').<sup>67</sup>

Three features stand out in these accounts of Lasus' adoption of the Aeolian mode. First, once again we find Lasus promoting a highly *audible* modality of singing, conformable to the example set by Pindar above (and Pindar is the only other early poet to mention adopting the Aeolian *harmonia*<sup>68</sup>). Second, we get a first glimmering of the sublime entering into the language of musical description:  $\mathring{o}\gamma\kappa os$ , loftiness, nobility, and so on. The pseudo-Aristotelian *Problems* adds to this impression: it calls the Hypodorian (viz., Aeolian) mode 'magnificent and stately'  $(\mu\epsilon\gamma\alpha\lambda\sigma\pi\rho\epsilon\pi\grave{e}s\kappa\alpha\grave{u}\sigma\tau\acute{a}\sigma\iota\mu\sigma\nu)$ ' and 'hence [the] most suited of the *harmoniai* to *kitharôdia* [solo song accompanied by the *cithara*]'. <sup>69</sup> And last but not least,  $\beta\rho\acute{o}\mu\sigmas\alpha\grave{u}\lambda\acute{o}\nu$  ('brawl of the pipes') is used in the Homeric *Hymn to Hermes* (v. 452), and so  $\beta\alpha\rho\acute{v}\beta\rho\sigma\mu\sigma\nu$  seems to underscore, like a kind of promotional book-jacket blurb, Lasus' transposition of *aulos*-sounds and melodic structures onto the voice. <sup>70</sup> Consequently,

 $<sup>^{65}</sup>$  PMG 702 = Ath. 14.624e-f; trans. after GMW 1.282, adapted.

<sup>66</sup> PMG 712 = Ath. 14.624f-625a = fr. 163 Wehrli; West, Ancient Greek Music, 342.

<sup>67</sup> Fr. 163 Wehrli = Ath. 14.624d-625a.

<sup>68</sup> Pyth. 2.69–71. But he is not the only other poet to celebrate the 'loud deep-pitched aulos (βαρὺν αὐλόν)' (Ion of Chios TrGF 42 = Ath. 4.185a; trans. Barker); cf. Simonides (?) PMG 947b: τερπνοτάτων μελέων ὁ καλλιβόας πολύχορδος αὐλός; Pind. Ol. 3.8: βοὰν αὐλῶν.

<sup>&</sup>lt;sup>69</sup> [Pr.] 19.48, 922b14; trans. after GMW 1.203.

<sup>&</sup>lt;sup>70</sup> I owe this observation to John Franklin.

pseudo-Plutarch's testimony that Lasus introduced auletic 'polyphony' into vocal techniques is nicely confirmed in the *Hymn to Demeter*. So too is the likelihood that Lasus was eager to experiment with all elements of the vocal register, from deep brawling to shrill hissing sounds. Incidentally, one of the further musical forms mentioned by Pollux in his discussion of the *Puthikos nomos* is 'the pipe-piece of the deep-toned kind  $(\tau \hat{\omega} \nu \ \delta \hat{\epsilon} \ \beta o \mu \beta \acute{\nu} \kappa \omega \nu)$ , the inspired and frenzied one, suitable for orgiastic rites'. Nomoi, dithyrambs, and other ecstatic musical offerings are an orgy of sound-effects that nearly exceed the boundaries of music altogether.

The *Hymn to Demeter* has one last feature that needs to be noted, and which we know attracted Heraclides' attention: it also happens to be the second of Lasus' two known asigmatic compositions.<sup>72</sup> If so, then the suppression of the sigma in a hymn otherwise conspicuous for its vocal reach cries out for a further explanation. That explanation already lies ready to hand. Recall the definition of lipogrammatic practice, the paradoxical aim of which is to enable and unleash sound through the suppression of sound. This seeming contradiction at the level of musical form tells us everything about Lasus' self-presentation as a musician. And this in turn will lead us to an eventual solution of his riddle of sound as we find it in Pindar and Clearchus.

### IV. THE SEARCH FOR NEW SOUNDS

Lasus undoubtedly accompanied his Hymn to Demeter on the cithara. But in order to do so in the new 'deep-resounding' Aeolian mode, it is likely that modifications in the tunings of his instrument would have been required, as they would have been for his new auletic style generally. Here, the sheer technical virtuosity of Lasus' theorizing of sound comes to the fore. The clues have been well assembled by Privitera, and although there is more to say about them, the details need not detain us here.<sup>73</sup> Suffice it to name just three elements to this side of Lasus' program. (1) His first step was to fractionalize the harmonic interval so as to obtain a greater number of notes ('and so making use of more notes, widely scattered about  $[\delta\iota\epsilon\rho\rho\iota\mu\mu\acute{\epsilon}\nu\iota\iota\varsigma]$ '), a true 'polyphony' closer to that of the aulos. Replicating the smaller intervals of the aulos entailed the production of semitones and quartertones previously unheard on the stringed instrument, most likely by modifying the cithara tuning.<sup>74</sup> (2) A further possibility, suggested by Privitera, is an intriguing consequence of 'the division of the interval': 'in the moment in which a plurality of sounds (semitones and quartertones) was produced, the same interval lengthened [and 'widened'], creating the impression that the notes did not follow their natural order, but strayed apart from one another as a result of the interposed semitones and quarter tones.'75 Whatever modifications

<sup>&</sup>lt;sup>71</sup> Poll. 4.82. Cf. *PMG* 708.12, where Pratinas complains about the 'deep-chattering mouth'  $(\lambda \alpha \lambda o \beta a \rho v \sigma a)$  of the *aulos*.

<sup>&</sup>lt;sup>72</sup> Ath. 10.455c; Eust. *Il*. 24.1.

<sup>&</sup>lt;sup>73</sup> See my discussion of Lasus' theory of the musical note (n.14).

<sup>&</sup>lt;sup>74</sup> So Privitera, *Laso di Ermione*, <sup>78–9</sup> (who, however, speaks of a diatonic interval); cf. Comotti (n. 63), 26–7 and West, *Ancient Greek Music*, 343 (who speak of divisions within an enharmonic interval). F. Lasserre (ed.), *Plutarque, De la musique. Texte, traduction, commentaire, précédes d'une étude sur l'éducation musicale* (Olten–Lausanne, 1954), 37, suggests that the effects were obtained by pressing the plectrum down between the saddle (or tailpiece) and the sound-board. Even if this technique could produce the desired effects (and Annie Bélis assures me that it could not), apart from Privitera's objections, a further worry would be that this is hardly a systematic, reproducible method, let alone readily transferable to the voice: Lasus had precise theoretical and empirical motives (see below).

<sup>&</sup>lt;sup>75</sup> Privitera, *Laso di Ermione*, 79. Similarly, C. del Grande, *Espressione musicale dei poeti greci* (Naples, 1932), 89 (cit. L. Gamberini [ed.], *Plutarco*, "*Della musica*" [Florence, 1979], 250).

Privitera's formulation might require, the possibility of a subjective impression that the intervals have been dilated just by being filled with so many notes remains valid, or at least worth considering. And (3) Lasus developed a theory of microintervals, and conducted empirical experiments using jars, and possibly strings and syrinxes, to test the effects of sound under different conditions. In the case of jars, these would be paired, one remaining empty as a control, the other variably filled with liquid, first half-way, then a quarter-way, then a third of the way, with their concords  $(\sigma \nu \mu \phi \omega \nu i a)$  tested at each point. Strings and syrinxes were tested similarly for their concordances.

Lasus' theories arguably paved the way for Aristoxenus' own theory of harmonics, however much the latter would resist this conclusion (Aristox. *Harm.* 1.3.5–25). But what is more, two facts emerge from this ensemble of theorizing, both directly relevant to the problem of Pindar's second *Dithyramb*. The first is Lasus' emphatic emphasis on the subjective impression of sound as something phenomenally perceived, which has clear implications for the arrangement of the circular chorus, if that was indeed meant to eliminate vocal dissonances. In this respect, Lasus would have anticipated Aristoxenus' phenomenalism by nearly two centuries. The second is Lasus' relentless drive to fractionalize the interval, creating new microintervals, ever smaller harmonic divisions, and finer grades of polyphony. Plainly, the inherited musical sound palette was not broad or colourful enough to satisfy his aesthetic needs.

As in his more practical pursuits, Lasus here gives the impression of a musician restlessly in search of new sources of musical sound and eager to expand the existing repertoire. In this, he is merely embodying the impetus of musical evolution in Greece from the sixth century into the fourth. Later sources remark this tendency, which is often treated as a passage from a simpler style characterized by a 'narrowness of range' (στενοχωρία) and a 'paucity of notes' (ὀλιγοχορδία) to a busier style characterized by 'complexity' (ποικιλία), 'many notes' (πολυχορδία), and being various or manifold  $(\pi o \lambda \dot{v} \tau \rho o \pi o s)$ , which is to say, modulating between different harmoniai.<sup>80</sup> Vases illustrate how musicians added strings to their lyres one by one from the traditional seven, presumably in order reach beyond existing tunings and to attain new melodic possibilities, sometimes polyphonic; Timotheus' eleven-stringed lyre in the late fifth century lay at the extremer edge of this evolution.<sup>81</sup> A related development is the forty-stringed zither, possibly designed by Lasus' peer and contemporary, Epigonus, to map out divisions of the scales and intervals rather than for immediate performance.<sup>82</sup> Interestingly, both Epigonus and Lasus were quick to seize on the possibilities of expanding the harmonic and tonal range of the cithara.83

<sup>&</sup>lt;sup>76</sup> The theory was that by striking the jars, 'the concord of the octave was given out' in corresponding ratios of 2:1, in the fifth as 3:2, in the fourth as 4:3. But the numbers, unfortunately, do not seem to add up (whereas in the case of the strings, they do). See Privitera, *Laso di Ermione*, 73; *GMW* 2.32, n. 11.

<sup>&</sup>lt;sup>77</sup> Theoph. Sm. 59.4–60.11 Hiller. Discussion in Privitera, *Laso di Ermione*, 64–73.

<sup>&</sup>lt;sup>78</sup> See D'Angour, 'Dithyramb', 335, 340 (on sound as *heard*); 336 (on 'poorly synchronized sibilants').

<sup>&</sup>lt;sup>79</sup> See A. Barker, 'Music and perception: a study in Aristoxenus', JHS 98 (1978), 9–16.

<sup>80 [</sup>Plut.] *De mus.* 1137A–B. Cf. n. 51, above.

<sup>&</sup>lt;sup>81</sup> West, *Ancient Greek Music*, 62–4; J. C. Franklin, 'Diatonic music in Greece: a reassessment of its antiquity', *Mnemosyne* 55.6 (2002), 669–702, at 696.

<sup>82</sup> See West, Ancient Greek Music, 78-9, 225.

<sup>&</sup>lt;sup>83</sup> Epigonus and his circle were the 'first' to adopt Lysander's auletic *cithara* techniques (Ath. 14.637d).

The Greek language corroborates this general historical trend.  $\pi \acute{a}\mu \phi \omega vos$  ('allsounding'),  $\pi o \lambda v \phi \omega v i \alpha$ , and  $\pi o \lambda v \chi o \rho \delta i \alpha$  ('using many strings' or 'notes') all capture this search for an expansion in sound, and ποικιλία is one of their congeners. 84 Pindar speaks of the ' $\pi \alpha \mu \phi \omega \nu \sigma \nu$  song of the *auloi*', and an unassigned early fragment contains the striking catachresis, 'many-stringed aulos'. 85 This last expression seems like a virtual gloss on Lasus' polyphonic reforms, which involved transposing auletic techniques onto the cithara and from there to the voice. ποικιλία ('variety, subtlety, intricacy, coloration, ornament') is likewise associated with Lasus, in a damaged column from Philodemus' second book of On Poems. That Lasus' name should surface in a discussion of euphony is not at all surprising; it is only a pity that the surrounds are so badly preserved. Euphonist critics, probably of the Hellenistic era, seem to have named Lasus to demonstrate how his very (or most) subtly wrought compositions (τὰ μάλιστα πεποικιλμένα [sc., ποιήματα]) produced pleasurable euphony, not a distressing harshness of sound.86 Because sibilants and rough consonants are treated three columns earlier  $(\xi, \zeta, \sigma, \rho)$ , Gomperz and others have suggested that Lasus' asigmatism was somehow involved in the discussion, though it is not at all clear how this should be so. (One awaits a fresh reading of these columns.) It is more likely that the whole of his euphonic practice and/or theory in its complexive totality was under scrutiny.<sup>87</sup>

To state this in terms familiar from later euphonist critics, Lasus was as much interested in the mechanisms by which euphony was produced (the  $\sigma \acute{v} \nu \theta \epsilon \sigma \iota s$ , or the arrangement of the sounds) as he was in the resulting sound itself as this presented itself phenomenally to the ear (the  $\epsilon i \acute{v} \phi \omega \nu i a$ , which was said to 'supervene' on the composition as its evanescent product). <sup>88</sup> And in general, it would be wrong to belittle Lasus' achievements by reducing them to the presence or absence of the sigma, even if he was at times remembered for his outlandish experiments in asigmatism. <sup>89</sup> His interests were far-ranging, and they obviously had an impact that reached well into the Hellenistic period and beyond. Once again, his primary aim was to explore and ultimately to *emancipate* the full complexity of musical sound, not to restrict its range. <sup>90</sup>

- $^{84}$  ποικιλία glosses πολυχορδία in [Plut.] De mus. 1137A. Cf. Pindar's use of ποικίλος in his epinicians beyond the dithyrambic genre (e.g. Ol. 3.7: φόρμιγγά τε ποικιλόγαρυν; Ol. 4.2: ποικιλοφόρμιγγος ἀοιδᾶς; Ol. 6.86–7: πλέκων ποικίλον ὕμνον; Nem. 4.14: ποικίλον κιθαρίζων).
- 85 Pind. *Pyth.* 12.19; *Adesp.* 29b (*PMG* 947b), cit. in n. 68, above. Further examples in Franklin (n. 81), 696, n. 70.
- 86 P. Herc. 994 col. 37.9–13 Sbordone: οὐδὲ τὰ Λάσου μάλιστα τοιαυτῆι πεποικιλμένα ποιεῖ (Janko: ποιεῖ[ν Gomperz) [τ]οιοῦτον οὔτε τὴν ἐσχ[ά]την τ[ρ]αχε[ί]αν ἀλγηδόνα φανεράν; '... nor do the compositions of Lasus which are wrought most subtly in this way [viz., euphonistically] produce [either] such [an effect(?), viz., aural pleasure; cf. lines 6–7, 19–20], nor do [they make] manifest the most extreme harsh pain [resulting from the alleged harsh sounds of his compositions].' Both the text (after C. Romeo's readings) and the translation remain uncertain. With R. Janko's conjecture, it makes sense now to assume that Philodemus, true to form, is flatly rejecting claims on all sides of the debate, but other ways of construing the speakers are admittedly possible.
- <sup>87</sup> So, too, Privitera, *Laso di Ermione*, 89, n. 5 (*pace* T. Gomperz, 'Philodem und die aesthetischen Schriften der Herculanischen Bibliothek', *Sitzungsberichte der Kaiserlichen Akademie der Wissenschaften in Wien. Philosophisch-Historische Classe* 123, no. 6 [1891], 1–88, at 48, n. 2).
- <sup>88</sup> On these critics, see J. I. Porter, 'οί κριτικοί: a reassessment', in J. G. J. Abbenes, S. R. Slings and I. Sluiter (edd.), *Greek Literary Theory after Aristotle: A Collection of Papers in Honour of D. M. Schenkeveld* (Amsterdam, 1995), 83–109.
  - 89 Thus, and rightly, Privitera, Laso di Ermione, 31, 89, 91.
  - <sup>90</sup> It is tempting to see in a preserved fragmentary poem ascribed to Pratinas of Phlius (PMG

It is this drive to *unleash* sound that paradoxically accounts for Lasus' *suppression* of the sigma, which is universally acknowledged to have been a miserable failure or at the very least an impracticable, but also only a momentary and experimental, measure. It lasted for no more than two pieces of music, even if it triggered a smallish vogue, or subgenre, of idiosyncratic composition under constraining conditions in antiquity. Still, the measure is an overly dramatic way of achieving its sought-for end, which surely could be achieved by other means (and ultimately was). As with Perec, lipogrammatism is meant to make a performative splash. So in order to understand better exactly why Lasus undertook asigmatism, we need to look at his performative practice.

As we saw, it cannot have been in order to underscore how the sigma vitiates the euphonies of musical sound. This explanation is surely wrong, and it is belied by Lasus' own rapid abandonment of the project. One possibility that to my knowledge has not been suggested in the past is that Lasus undertook the experiment not in order to banish the sigma from the aural spectrum, but as a reductio ad absurdum of any attempt to do so. In this case, the riddle of the sigma would have had a mocking, absurdist edge to it, by taking a preexisting tendency—the stigmatism of sigmatism to an absurd limit. On the plus side, in its performative play of voluble silence, in suppressing a sound that it teasingly all but names, Lasus' riddle, embodied in his songs like a tacit reproach—of predecessors, but worse: of sound itself—would have been a way of signalling how the momentary reduction of sound to an inaudible minimum becomes, in Perec's later words, 'the basis of which everything becomes possible', which in Lasus' case would have meant everything that promoted a rich and fully realized sound. This would have made for a genuinely ludic  $(\pi\alpha\iota\sigma\tau\iota\kappa\acute{o}\nu)$  riddle. 91 Likewise, when Pindar took up the banner of Lasian reform he could indulge in the same supercilious tone, hissing his disapproval of any puritanical predecessors who scourged the hateful letter s, vaunting his embrace of the complete register of sounds, by starting off gleefully with a word whose harsh sigmatism would have drawn hisses from the Hellenistic euphonists no less than from his predecessors: schoinoteneia. 92

708 = Ath. 14.617c-f) an averse reaction to the new Lasian poetics of sound ('What is this hubbub? [ $\tau$ ίς ὁ θόρυβος ὅδε;] What are these dances? What loud-clattering arrogance [ὕβρις  $\pi$ ολυπάταγα] has come upon the Dionysian altar?', etc. [trans. Barker]), and not only to Lasus' reform of the dithyramb, as has long been suspected (see A. W. Pickard-Cambridge, *Dithyramb, Tragedy and Comedy* [1st edn. 1927; rev. T. B. L. Webster, Oxford, 1962], 29–32). But there are problems with this temptation. First, Pratinas makes no mention of the place of the voice *per se* on the opponent's programme in this fragment. Consequently, he may be criticizing only the newly awarded prominence of the *aulos* itself due to the rearrangements instituted by Lasus in the dithyrambic chorus (D'Angour, 'Dithyramb', 342–3), and not Lasus' translation of the character of the *aulos* onto the voice. Second, elsewhere Pratinas seems to have embraced Lasus' promotion of the Aeolian tuning (*PMG* 712). We may not know enough about sixth-century musical polemics to be able to settle such complex matters. Or else the old suspicion that the author is a later, fifth-century Pratinas may be right (most recently, Csapo [n. 40], 214; Franklin [n. 43], at n. 14).

<sup>91</sup> Such a riddle would have been both lipogrammatic and cryptic at once. Lasus was, moreover, known in antiquity as a master of *decryption*, for as Herodotus relates (7.6.3), Lasus famously exposed a forgery by Onomacritus, catching him as it were *in flagrante*, by showing how the latter had surreptitiously slipped his own poetry  $(\partial \mu \pi o \iota \omega \nu)$ , in oracle form, into the words of Musaeus. Exile (by Hipparchus) followed as a punishment for this literary crime.

<sup>92</sup> Richard Janko reminds me that the word *schêma* elicits similar responses from the euphonist critic Pausimachus; see Phld. *Poem.* 1, cols. 90–1 Janko, with Janko's comments ad loc. (a passage that concerns Euripides' much-mocked habit of sigmatism, here in the *Ion*). The statistical results of D. L. Clayman, 'Sigmatism in Greek poetry', *TAPA* 117 (1987), 69–84, are somewhat contra-

Who might these musical puritans have been? Although there are huge gaps in the evidence and we cannot properly fill them in with confidence, one possibility suggests itself immediately: musicians who reacted aversely to the music of Sacadas, or rather to the sibilant sounds that became musically conceivable for the voice thanks to Sacadas' innovations on the aulos. We can deduce this possibility directly from Pindar's own ode-and, indeed, from nowhere else-starting with his only explicit clue: 'formerly... the "s" came out [sounding] base-born to men'. 93 Such a scenario is not implausible, and it has quite a lot to recommend it. Sacadas' Puthikos nomos became part of the traditional repertory at the Pythian games. He also spawned emulators. In 490 B.C.E., Midas of Acragas won the Pythian contest with another element of the repertory, an auletic Polukephalos nomos ('many-headed nome') that likewise involved the imitation of the hissing of a snake.<sup>94</sup> Midas won't have been the first exponent of the Sacadian technique—or the last. In 558 B.C.E. solo cithara contests were added to the Pythian competitions. Were these adapted to Sacadas' techniques and then extended still further to vocal songs?95 If so, a general diffusion of Sacadas' innovations is conceivable, but also a conservative reaction, as the techniques grew increasingly adventurous and developed into a 'free form' style of musicianship. How, after all, do you imitate s-sounds on strings? The aulete Lysander of Sicyon (early fifth century) tried just this, and not just any s-sounds, but precisely those effects innovated by Sacadas on the aulos, most likely in part by producing high-toned harmonics.<sup>96</sup> Imitation through vocal hissing, on the other hand, is a simple affair. What would have represented a distinct challenge would be to tame this sound-effect musically along with other forms of sibilance in choral settings.

Lasus would have faced this problem, but he would have squared up to it in a more scientific fashion than his predecessors were able to do, with his background in harmonics and in acoustic experiments. The conservative reaction would have called for a ban on the overuse of sibilants; Lasus would have found a third way. He would have also, presumably, wanted to expand his repertory beyond the nome and to experiment with new harmonic possibilities in all musical settings (for pipes, strings and voice). Perhaps he discovered how, given a wider palette of sounds, the circular chorus eliminated dissonances, as D'Angour has shown, and not just of the s-variety (and perhaps not only in the dithyramb). And so, if his asigmatic experiments were, as I suggested, merely a way of pointing up the absurdities of restricting the sound spectrum in music, we can now point to a culprit and a butt.

dictory with regard to Pindar, who comes out scoring a relatively low and high incidence of s-sounds (low: pp. 74, 78; Table 1; high: pp. 76, 77; Tables 2, 5). But the isolation of sigmatism is doubtless a misleading guide to euphonic practices.

 $<sup>^{93}</sup>$  A double entendre on κίβδηλον meaning 'straggling' (D'Angour) would still be possible on this interpretation.

<sup>&</sup>lt;sup>94</sup> Schol. Pind. *Pyth.* 12 prae. 8, 15b, 39a–b, 41; West, *Ancient Greek Music*, 214. The meaning of 'many-headed' is unknown, but it too is surely bivalent, referring to some musical character (such as polyphony or the like) through the imagery of a many-headed snake.

<sup>95</sup> West, Ancient Greek Music, 214, 337, suspects they were.

<sup>&</sup>lt;sup>96</sup> Philoch. FGrH 328 F 23 = Ath. 14.637f–38a; see A. Barker, 'The innovations of Lysander the kitharist', CQ 32 (1982), 266–9. The reconstructions of the two cases, Lasus and Lysander vis-à-vis Sacadas, inevitably share similarities.

### V. SOLVING THE RIDDLE

In this light, some of the odder details of Pindar's second Dithyramb finally begin to fall into place as well, starting with Pindar's ophidian imagery. While it is true that this imagery would be appropriate to a Dionysian dithyramb sung before a Theban audience in their capacity as custodians of a cult of Dionysius, 97 we can now see that the imagery has added point if it is alluding to the very kinds of sibilant sounds that became musically possible thanks to Sacadas' Pythian poem and its operatic contents. If so, then Pindar must be referring to the snake that Apollo slays in Sacadas' poem—not the literal snake, but its literary emblem—while he is also conjuring up its sounds, or rather the *clamour* of its sounds, hyperbolized as 'a thousand snakes'98—the sounds in their noisy aspect and diffused historically, or simply made baroque and hideous, a kind of taunt meant for those who despise the s, and something for Pindar to revel in. And if that is right, then Pindar is plainly directing the mind to a Sacadian-like effect, even as he is proclaiming his allegiance to Lasus. Second, there is the ever-elusive term  $\sigma \chi o \iota \nu o \tau \acute{e} \nu \epsilon \iota \alpha$  itself. Surely the most direct clue to its meaning is the one that has, as it were, been staring us in the face all along: the variety of the aulodic nome (a nome sung to the aulos) called the Schoiniôn, which was said to have been invented by Clonas (again), and whose name means something like '(twisted) like a rope' or 'drawn out like a rope'. 99 A connection between Pindar's word and the Schoiniôn nome (and name) has been mooted before, but only in passing. 100 The reason for this lack of interest is not far to seek: the Schoiniôn is barely mentioned by the ancients. But even more to the point, it is a nome, and Pindar refers to a dithyramb. Or does he?

'Formerly the singing of dithyrambs crept along, stretched out like a rope' could easily be a kind of compressed musicological history in verse, albeit somewhat cryptically phrased and equivalent to the statement, 'formerly the singing of dithyrambs had taken the shape of nomes'. So phrased, Pindar's statement could be intelligible, and true, in a few different ways. It might be possible that the Pythian nome had transformed itself into the dithyramb since Sacadas' day (some seventy-five years before Pindar), either in fact or in memory; 101 or that his nome had lent its features to the dithyramb, especially if we can count on the nome's wider diffusion, as

<sup>&</sup>lt;sup>97</sup> See D'Angour, 'Dithyramb', 338 ('no less appropriate to Dionysos than to Apollo'); and Lavecchia (n. 11), in his commentary on the poem, which is strongly coloured by his orgiastic (teletic) reading of this and other dithyrambs by Pindar.

 $<sup>^{98}</sup>$  μυρίων φθογγάζεται κλαγγαίς δρακόντων, v. 18; the same term ( $\delta$  δράκων) appears repeatedly in the key testimonies of Pollux and Strabo on Sacadas. Cf. Lavecchia (n. 11), 162 ad loc.: 'forse qui κλαγγά allude al suono dell' $\alpha$  $\dot{\nu}$ λός, di cui i serpenti produrrebbero un'immagine' (with excellent parallels, none of which is Dionysiac).

<sup>&</sup>lt;sup>99</sup> See *GMW* 1.252 ('rope-like'); West, *Ancient Greek Music*, 216 ('drawn out like a rope'); [Plut.] *De mus.* 1132D, 1133A with *GMW* 1.209 n. 21 (on Clonas and the *Schoiniôn*).

<sup>100</sup> U. von Wilamowitz-Moellendorff (ed.), *Timotheus, Die Perser* (Leipzig, 1903), 90, n. 1; M. L. West, 'Stesichorus', CQ n.s. 21 (1971), 302–14, at 310, n. 6; West, *Ancient Greek Music*, 216; GMW 1.252. The association is rejected by B. Zimmermann, *Dithyrambos: Geschichte einer Gattung* (Göttingen, 1992), 44, on weak grounds ('zumal das Adjektiv [σχοινοτένεια] sich ausdrücklich auf den Gesang bezieht'; similarly, D'Angour, 'Dithyramb', 333, n. 18): all that is required is a verbal reminiscence in Pindar for the allusion to take effect. This rejection on verbal grounds further overlooks West's argument about what a nomos meant in musicological terms in Pindar's day (see below).

<sup>&</sup>lt;sup>101</sup> Cf. O. Crusius, 'Über die Nomosfrage', Verhandlungen der 39. Versammlung der deutschen Philologen und Schulmänner in Zürich vom 28. September bis 1. Oktober 1887 (Leipzig, 1888), 258–75, at 274.

sketched out above. 102 Or it may simply be that the difference between the nome and the dithyramb was not generically precise or even available until a much later date, as M. L. West has argued. West finds their distinction 'inapplicable to the early nomes', because nomes were merely 'schemes used for the singing of all kinds of verse'. 103 Thus, in West's view Pindar is making a comment about 'the traditional dithyramb in the aulodic σχοινίων νόμος'. <sup>104</sup> I believe we can be more precise. But the conflation of nomos and Schoiniôn is attractive, in so far as it points us to the nomos genre, and from there to the most notorious innovator in nomos-sibilancy, Sacadas. The continuation in Pindar completes the evolutionary scheme: 'and the "s" came out [sounding] base-born to men'. This kind of picture fits well with what we know about Pindar, who evidently wrote a proemium about Sacadas, mentioning him by name, and who 'often reflected on various aspects of musical history, including that of both aulos and dithyramb'. 105 Speculatively, then, the picture looks like this: Sacadas originally made his musical innovations; these were propagated more widely and encouraged experimentation in other forms of vocal sibilance, which were then subjected to censure; Lasus intervened and rejected the purists' counterclaims; Pindar followed suit, both in his second Dithyramb, where his allusion to Lasus' emancipation of musical sound is couched in terms of an allusion to Sacadas' musically inspired practice, and in other places where he adopts sigmatism for the sheer sake of the sound. 106 (The presence or absence of the sigma is in fact only one small, principally symbolic, aspect of this new poetics and dynamics of sound, as we saw earlier.<sup>107</sup>) Later generations lost sight of the original allusions, and confusions set in over the nature of the polemics named only in Pindar's verses.

Two lingering clues to Sacadas' crucial role in this ancient squabble have to be the two pieces of evidence that are typically cited as evidence for Lasus' role in it, and which were mentioned earlier. Aristoxenus writes that earlier unnamed musicians rejected the sigma because it was 'harsh and ill-suited to the aulos', while Dionysius of Halicarnassus writes that the s-sound is aesthetically ugly: it produces a 'hiss', a surigmos, like that of 'an irrational beast'. Aristoxenus has been taken to mean that the s-sound 'presumably . . . did not in his opinion sound distinctively against the aulos accompaniment'. But if we take the reference as being aimed at Sacadas, and not Lasus, Aristoxenus means just what he says (whether he knows it or not): hissing is harsh-sounding (one argument), and it is ill-suited to the aulos (another argument). Dionysius' otherwise unintelligible outburst against hissing—why liken it to an irrational beast ( $\theta \eta \rho$ )?—instantly becomes intelligible in the same light:

<sup>&</sup>lt;sup>102</sup> For one borrowing from the nome by the dithyramb, viz., verbal concatenation, see Csapo (n. 40), 225.

<sup>&</sup>lt;sup>103</sup> West (n. 100), 310 (italics added). One might compare Telestes 806, 810 *PMG*, where 'hymnos and nomos are used interchangeably to mean harmonia' (T. J. Fleming, 'The musical nomos in Aeschylus' *Oresteia*', *CJ* 72, no. 3 [1977], 222–33, at 222).

<sup>&</sup>lt;sup>104</sup> West (n. 100), 310, n. 4 (italics added).

<sup>&</sup>lt;sup>105</sup> Pind. fr. 282 (= Paus. 9.30.2 + [Plut.] *De mus.* 1134A); Franklin (n. 43), at n. 48. The proemium must have included a physical description of Sacadas with his *aulos*, to judge from Pausanias' report.

<sup>&</sup>lt;sup>106</sup> See D'Angour, 'Dithyramb', 334, n. 22; 338 (on *Isthm.* 1.22–5).

<sup>&</sup>lt;sup>107</sup> Cf. also Dion. Hal. *Comp.* 22 and his virtual hymn to Pindaric phonic dissonance (αντιτυπία), exemplified with (and thus preserving) Pind. *Dith.* fr. 75.

<sup>&</sup>lt;sup>108</sup> Both cited at nn. 5 and 6, above.

<sup>109</sup> West, Ancient Greek Music, 40.

<sup>&</sup>lt;sup>110</sup> D'Angour, 'Dithyramb', 335, likewise calls Aristoxenus' conflation 'tendentious'.

Sacadas after all turned his *aulos* into an irrational beast. And *surigmos* is the precise term used in later accounts to capture the sound of the expiring serpent in Sacadas' mimetic nome. Neither Aristoxenus nor Dionysius mentions Sacadas in this connection, most likely because that connection was already lost to them.

The original polemic as this was encapsulated in Pindar's second *Dithyramb* would have been obscured, and probably early on, by a few different factors. First, the connection with Lasus was remembered, but because of the tacit nature of Lasus' riddle there would have been no way of piecing together the various elements of this historical puzzle without an independent account of some sort. Evidently that account never existed, or else it was lost (possibly being orally transmitted to begin with). 112 Second, and relatedly, a confusion of genres and their genealogies was inevitable: we have sigmatic nomes, their offspring, Lasus' dithyramb and his hymn (both asigmatic), and Pindar's sigmatic dithyramb. If the Sacadian nome lent its features to the dithyramb, it also could have lent them to other musical genres<sup>113</sup>—which is exactly what Lasus' global reforms required. 114 Yet in the oversimplifying light of the fifth century, Lasus could appear as the precursor of the New Musicians, whose revolutionary musical activities were principally associated with the dithyramb. 115 Third, thanks to the hostility with which the later dithyramb of the New Musicians was received, there was a tendency to rewrite the musical past in the light of the present. A musical 'golden age' in the past was created, the traces of which we have already seen hinted at above: it was conceived as a time onto which the—now identifiably Greek—characteristics of simplicity, austerity and purity, but also manliness and nobility, could be retrojected. The earlier period certainly showed a more relaxed attitude towards Asianism than later authors would suggest. 116 This fantasy of a simpler, quieter, more stately past took root in the conservative reaction to the new dithyramb: Aristophanes, Plato, Aristotle, Xenophon and Aristoxenus were its more prominent exponents; the later work of pseudo-Plutarch is a derivative crystallization of their and others' views.

Finally, because some of the features of the New Music resembled those of the earlier avant-garde, and in fact marked their prolongation and evolution, the idea that the past could have produced such 'revolutionary' musicians was gradually eclipsed by the far more compelling ideal of a purer-sounding era when sigmas never hissed and instruments sounded out in clear and distinct tones. The fact that it was a feature of this radical tradition to revolutionize itself periodically from within and to claim more originality for itself at each new turn than was strictly warranted, led to overstatements ('the rhetoric of innovation' mentioned earlier) that, taken literally, only added to the historical confusion. It is a confusion that continues to plague us today—which is why we are only slowly coming to appreciate the complexity of music

<sup>111</sup> Strab. 9.3.10; Poll. 4.83-4; Pind. Pyth. hypoth. 31.

Presumably, Pindar would have come across Lasus' innovations by way of word of mouth.

<sup>&</sup>lt;sup>113</sup> Sacadas himself composed lyrics and elegiacs, and had a circle of associates who composed in elegiacs as well ([Plut.] *De mus.* 1134A, 1134C). Note, too, Telestes' identification of the nome with the hymn (806, 810 *PMG*).

When pseudo-Plutarch says of Lasus that he 'chang[ed] his rhythms to the dithyrambic style  $(\dot{a}\gamma\omega\gamma\dot{\eta}\nu)$ ' he means just this—not that Lasus adopted the dithyramb, but that his style became somehow dithyrambic, or if one likes, nomic, or Sacadic (the distinction may not have meant very much to Lasus, musically speaking).

Privitera, Laso di Ermione, 82; D'Angour, 'Dithyramb', 339; Csapo (n. 40).

<sup>&</sup>lt;sup>116</sup> See Csapo (n. 40), 230–5, and *passim*.

in its earliest forms, even with the occasional, if contradictory, testimony of an ancient source like pseudo-Plutarch to assure us of the fact.<sup>117</sup>

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#### Abbreviations

- D'Angour, "Dithyramb" = A. D'Angour, 'How the dithyramb got its shape', CQ 47. 2 (1997), 331–51
- GMW 1 = A. Barker, Greek Musical Writings. Volume 1: The Musician and His Art (Cambridge, 1984)
- GMW 2 = A. Barker, Greek Musical Writings. Volume 2: Harmonic and Acoustic Theory (Cambridge, 1989)
- Privitera, Laso di Ermione = G. A. Privitera, Laso di Ermione nella cultura ateniese e nella tradizione storiografica (Rome, 1965)
- West, Ancient Greek Music = M. L. West, Ancient Greek Music (Oxford, 1992)

117 [Plut.] De mus. 1138B: 'The forms of rhythmic composition used by ancient composers were more complex, since they had a great respect for rhythmic complexity, and their patterns of instrumental idiom  $(\tau \dot{\alpha} \pi \epsilon \rho \dot{\iota} \tau \dot{\alpha} s \kappa \rho o v \sigma \mu \alpha \tau \iota \kappa \dot{\alpha} s \delta \iota \alpha \lambda \dot{\epsilon} \kappa \tau o v s)$  were also more complicated  $(\pi o \iota \kappa \iota \lambda \dot{\omega} \tau \epsilon \rho a)$ ' (trans. Barker; italics added).  $\kappa \rho o v \sigma \mu \alpha \tau \iota \kappa \dot{\alpha} \dot{\epsilon} \delta \iota \alpha \lambda \dot{\epsilon} \kappa \tau o \iota$  are rhythmic sounds lacking semantic content, one species of which is placed in the same ambit as Sacadas' innovations by later sources. See Lasserre (n. 74), 166 ('une sorte de vocalise sans signification réelle . . . rythmique plutôt que mélodique'), citing Phot. s.v.  $v \iota \gamma \lambda \alpha \rho \epsilon \dot{\nu} \omega \nu$  ('whistling', 'trilling'):  $\tau \epsilon \rho \epsilon \tau \dot{\iota} \zeta \omega \nu$ ; and cf. Poll. 4.83:  $\mu \dot{\epsilon} \rho \eta \delta$ '  $\alpha \dot{\nu} \lambda \eta \mu \dot{\alpha} \tau \omega \nu \kappa \rho o \dot{\nu} \mu \alpha \tau \alpha$ ,  $\tau \epsilon \rho \epsilon \tau \iota \sigma \mu o \iota$   $\tau \epsilon \rho \epsilon \tau \dot{\iota} \sigma \mu \alpha \tau \alpha$ ,  $\nu \dot{\iota} \gamma \lambda \alpha \rho o \iota$ . One possible trace of a polemic that has been lost could be a tussle in the regional politics of cult location between Athens, Thebes and Argos, embodied (if it is) in the tension between Pindar, Lasus and Sacadas. See Wilson (n. 53) for a suggestive argument about Athens and Thebes, along with R. W. Wallace, 'An early fifth-century Athenian revolution in aulos music', HSCP 101 (2003), 73–92, at 78–82.