## THE DIASTALTIC ETHOS

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RISTIDES Quintilianus, Manuel Bryennius, and Cleonides all discuss ethos in their musicological treatises,¹ and each of the three, along with Ptolemy,² mentions the "diastaltic" ethos.³ Aristides (30. 13) describes it as the musical ethos "through which we arouse the spirit" (τὴν δὲ διασταλτικήν, δι' ἦς τὸν θυμὸν ἐξεγείρομεν). Cleonides (206. 4–8) describes it as the musical ethos "through which magnificence, the manly elevation of the soul, heroic deeds, and similar feelings are displayed; it is used in tragedy and genres of this character" (ἔστι δὲ διασταλτικὸν μὲν ἦθος μελοποιίας, δι' οὖ σημαίνεται μεγαλοπρέπεια καὶ δίαρμα ψυχῆς ἀνδρῶδες καὶ πράξεις ἡρωϊκαὶ καὶ πάθη τούτοις οἰκεῖα). Bryennius (362. 19–24) merely repeats the definition of Cleonides.⁴ Ptolemy (106. 14–15) mentions the diastaltic ethos only in an astronomical-musicological context. Though the definitions that Greek musicologists (and Plato and Aristotle) give to the various ethe are

1. Modern editions of the Περὶ μουσικῆς by Aristides Quintilianus (ca. a.d. 200?) are those by A. Jahn, Aristides Quintilianus "De musica" libri III (Berlin, 1882), and R. P. Winnington-Ingram, Aristides Quintilianus "De musica" libri Ires (Leipzig, 1963). Only one German translation exists, that by R. Schäfke, Aristides Quintilianus: "Von der Musik" (Berlin, 1937). No English translation has been published, though T. J. Mathiesen is preparing one for future publication. For the Εἰσαγωγὴ ἀρμονική of Cleonides (date unknown, also referred to as Euclid, Pappus, and Zosimus), see the still indispensable K. von Jan, Musici scriptores gracci (Leipzig 1895), pp. 167–207, and H. Menge, Euclidis opera omnia, vol. 8: Euclidis "Phaenomena" et scripta musica (Leipzig, 1916), pp. xxxvii-liv, 186–223. An English translation can be found in O. Strunk, "Harmonic Introduction," Source Readings in Music History (New York, 1950), pp. 34–46. I have prepared a new text and translation which soon will be submitted for publication. Presently it rests as a dissertation (Chapel Hill, 1980). For the Byzantine Bryennius (fourteenth century), see I. Wallis, Operum mathematicorum, vol. 3: Μαρουή) Βρυενίου ἀρμονικά (Oxford, 1699), pp. 357–508, and G. H. Jonker, The "Harmonics" of Manuel Bryennius (Groningen, 1970); the latter includes an English translation. All references to Cleonides will specify the page and line numbers of Jan's edition, those of Aristides will refer to Winnington-Ingram's edition, and those of Bryennius to Jonker's edition

For a general discussion of musical ethos, the reader is referred to Pl. Resp. 397-400; S. Michaelides, The Music of Ancient Greece: An Encyclopaedia (London, 1978), pp. 110-13; E. A. Lippmann, "The Sources and Development of the Ethical View of Music in Ancient Greece," Musical Quarterly 49 (1963): 188-209; H. Abert, Die Lehre vom Ethos in der griechischen Musik (Leipzig, 1899); and W. D. Anderson, Ethos and Education in Greek Music (Cambridge, Mass., 1966).

- 2. For an edition of Ptolemy's 'Αρμονικά, see I. Düring, Die Harmonielehre des Klaudios Ptolemaios (Göteborg, 1930). A German translation can be found in Düring, Ptolemaios und Porphyrios über die Musik (Göteborg, 1934). There is no English translation, though I have begun preparing one. All references to Ptolemy refer to the page and line number in Düring's edition.
- 3. There are four kinds of musical ethos discussed by the Greeks: (1) the three types of melodic ethos discussed in this paper—the diastaltic, systaltic, and hesychastic (or medium); (2) the more commonly known forms of "harmonic" ethos which correspond to the seven harmoniai—Dorian, Lydian, Phrygian, Hypodorian, Hypophrygian, Hypolydian, and Mixolydian; (3) the three types of generic ethos which correspond to the three genera—diatonic, chromatic, and enharmonic; (4) rhythmic ethos. Aristides Quintilianus (10. 13–14) mentions ethos as the fifth type of difference between notes, but this ethos does not correspond to an emotional state.
- 4. Bryennius actually discusses ethos two times, at 362. 19-20 and at 122. 2-3. The passages are identical; both repeat the exact words of Cleonides.
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vague,<sup>5</sup> let us for the moment assume the definitions of Aristides and Cleonides (= Bryennius) to describe the same emotions (ethe). The most immediate problem then becomes the very term  $\delta\iota a\sigma\tau a\lambda\tau\iota\kappa \delta s$ .

The manuscript traditions are quite confused and confusing in reporting this term. In the Aristides Quintilianus tradition, at 30. 13 all the important manuscripts offer the reading  $\delta\iota a\sigma\tau a\tau\iota\kappa\dot{\eta}\nu$ , with the exception of those Cleonides manuscripts which include interpolations from Aristides. These Aristides interpolations read  $\delta\iota a\sigma\tau a\lambda\tau\iota\kappa\dot{\eta}\nu$  here at 30. 13, and Possevinus emended this  $\delta\iota a\sigma\tau a\lambda\tau\iota\kappa\dot{\eta}\nu$  to  $\delta\iota a\sigma\tau a\tau\iota\kappa\dot{\eta}\nu$ . Winnington-Ingram includes these readings in his apparatus, and he adds Bryennius'  $\delta\iota a\sigma\tau \eta\mu a\tau\iota\kappa\dot{\eta}\nu$ . Aristides again uses the term at 40. 15. There, however, all the manuscripts read  $\delta\iota a\sigma\tau a\lambda\tau\iota\kappa\dot{\eta}\nu$ . Winnington-Ingram nonetheless prints  $\delta\iota a\sigma\tau a\tau\iota\kappa\dot{\eta}\nu$  and suggests, in the apparatus criticus, that the reader compare 30. 13, the passage just discussed here.

The Cleonides manuscripts offer even less security. The word is mentioned at 206. 4 and 206. 6. At 206. 4 only one, relatively inferior, manuscript reads  $\delta\iota a\sigma\tau a\lambda\tau\iota\kappa o\hat{v}$ , while the others read  $\delta\iota a\sigma\tau a\tau\iota\kappa o\hat{v}$ ,  $\delta\iota a\sigma\tau \eta\tau\iota\kappa o\hat{v}$ , <sup>10</sup> and  $\delta\iota a\sigma\tau \eta\mu a\tau\iota\kappa o\hat{v}$ . At 206. 6 Jan prints  $\delta\iota a\sigma\tau a\lambda\tau\iota\kappa o\hat{v}$  but gives no source for his reading. All the manuscripts read  $\delta\iota a\sigma\tau \eta\mu a\tau\iota\kappa o\hat{v}$  or  $\delta\iota a\sigma\tau a\tau\iota\kappa o\hat{v}$ , <sup>13</sup> and it is Meibom who reads  $\delta\iota a\sigma\tau a\lambda\tau\iota\kappa o\hat{v}$ ; he cites Vulcanius, the scribe of another inferior manuscript. <sup>14</sup>

- 5. See Pl. Resp. 397-99; Arist. Pol. 1340-41; Lucian Harm. 1. 10-12; and pseudo-Plutarch De mus. passim. See also n. 35.
  - 6. These important manuscripts are Winnington-Ingram's V, N, R, F, and d.
- 7. Jan failed to recognize this group (qua-group) of Cleonides manuscripts, though he does recognize the interpolations in Vulcanius' manuscript—Lugdunensis Perizonianus F. 41 (olim Lugdunensis 135)—and in the manuscript—Vaticanus gr. 1341—which Antonius Possevinus used for his edition of the treatise ("Euclidis Musica," Bibliotheca de Ratione Studiorum II (Venice, 1603), pp. 260–72). This group, here designated as q-group, consists of six manuscripts, three of which are attributed to Cleonides, three to "Anonymous." They all include interpolations from Aristides Quintilianus at 185. 15 (= Aristides 8. 3–9. 12), 186. 21 (= Aristides 9. 15–10. 15), 190. 11 (= Aristides 12. 6–12. 8), and 207. 7 (= Aristides 28. 10–30. 17). These manuscripts also include several interpolations from Bryennius. The exact relation to and reflection of Aristides' original text is hard to determine from these interpolations.
- 8. But no matter which form Wallis printed in his late seventeenth-century edition of Bryennius, the Bryennius manuscripts actually vary greatly at Bryennius 362. 19-24; six have διαστατικήν, eight have διασταματικήν, and Jonker prints διαστα(λ)τικήν. The six reading διαστατικήν are (Jonker's abbreviations) R, Ma, Mb, Pc, La, and Lb. Those reading διαστηματικήν are Va, H, Pa. Oa. Om, Mc, N, and Am.

Comparing the two Aristides passages, one finds that even the Aristides manuscripts themselves cannot agree on the precise term, for in one passage (40. 15) they unanimously read διασταλτικόs and in the other (30. 13) they unanimously—with the exception of the Cleonides manuscripts—read διαστατικήν. Similarly, the Aristides tradition differs as to the term used to describe the "systaltic" ethos, VNM reading συσταλτικήν and FR reading συστατικήν; as all concur on διασταλτικόs at 40. 13, so do they concur with συσταλτικόs at 40. 15.

- 9. I follow Jan here, but he neglected to examine seven codices, including Vaticanus gr. 2338, which includes two superior versions of the treatise.
  - 10. L (Lipsiensis gr. 25).
  - 11. M (Venetus Marcianus VI/3, twelfth century), Jan's most valuable manuscript.
- 12. This reading is found in a number of manuscripts, including significantly those manuscripts which alone contain the Aristides interpolations.
- 13. MLW read διαστηματικόν, and NB read διαστατικόν. Jan uses "B" for a codex which contains two different versions of the treatise, with pp. 311–18 attributed to Cleonides, pp. 300–310 to Pappus.
- 14. Lugdunensis Perizonianus F. 41; cf. n. 7. Again there are textual difficulties with the "systaltic" ethos, BM<sup>3</sup>L reading συσταλτικόν and M<sup>3</sup>W reading συστατικόν.

The evidence of the Bryennius manuscripts does not provide us with an entirely independent view; Bryennius used Cleonides as his source here, and so one would doubt that Bryennius' manuscript tradition could offer an independent, let alone unanimous, report. The readings at both 362. 19–20 and 362. 19 vary from διαστατικήν to διαστηματικήν to διασταλτικήν. Wherever the term appears in Bryennius' text, Jonker prints a hesitant "διαστα[λ]τικ-." hesitant διαστα[λ]τικ-."

In Ptolemy only one manuscript, Vaticanus gr. 176 (Düring's A), preserves διασταλτικά; the rest and Düring read διαστατικά.

The manuscript traditions of Aristides, Cleonides, Ptolemy, and Bryennius have proved themselves hopelessly confused in their preservation of this term, and so paleographical research must now yield to musicological and semantic. While there is no evidence that a word διαστητικός (read by the valuable twelfth-century M in the Cleonides tradition) existed, the other three variants, διασταλτικός, διαστηματικός, αnd διαστατικός, are all attested in other authors. Διαστηματικός is found elsewhere in Aristides as well (101. 4, 5. 26), but there it has no connection with a type of ethos; it is only an adjective referring to "intervals," for διάστημα is an extremely common, rudimentary musicological term meaning "interval." The adjective διαστηματικός can also be found in the musicological treatises of Ptolemy (100. 29) and Aristoxenus (13. 21 da Rios). Archytas (1), Porphyry (Sent. 44), Apollonius Dyscolus (Pron. 57. 10), and Philo Mechanicus (Bel. 2. 184) also use the term in a nonmusicological sense.

Διασταλτικόs is found only in the passages cited here (perhaps), and in Apollonius Dyscolus (Adv. 185. 10 and Pron. 24. 12). Διαστατικόs is found in a musicological sense at Ptolemy 29. 2 and perhaps at 106. 14; Düring reports the reading at 29. 2 as secure, but that at 106. 14 has a *lectio varia*. The term also has this meaning in Nicomachus (282. 6 Jan) as well as in Timaeus Locrus (100E) and Plutarch (Mor. 952B and Pomp. 53).

The meaning of διαστηματικόs is evident from its derivation. In each nuance discussed in LSJ, it refers to an "interval," be it a musical interval, a distance of space, or a geometrical (radius) dimension. That a word with such musicological significance should find its way into the treatises of

<sup>15.</sup> To be sure, at 362. 19–20 one finds in Jonker's apparatus διαστατικήν and διαστηματικήν. The same manuscripts also consistently read the same variants at 362. 23 and 362. 24 with a few exceptions.

<sup>16.</sup> At 362. 19 he shows his frustration by announcing in his apparatus, "scripsi dubitans utrum codd. meliores (et A.Q. W.-I.) sequar an Wallisii atque Jani auctoritatem (cf. supra ad. p. 122.2sq)." At 122. 2 (and 122. 3) Bryennius again quotes Cleonides and all the Bryennius manuscripts have διαστηματικοῦ, but Jonker follows Wallis and Jan in writing διασταλτικοῦ (-κὸν); he questions Winnington-Ingram's (30. 13) διαστατικήν. "A.Q. W.-J. [sic] p. 30. 13 scr.—στατικήν (= disintegrating(?) cf. L.S.J. s.v.)."

<sup>17.</sup>  $\Delta\iota\dot{\alpha}\sigma\tau\eta\mu\alpha$  ("interval") is essentially the difference between two notes ( $\phi\theta\delta\gamma\gamma\sigma\iota$ ). The Aristoxenians recognized intervals smaller than the whole tone—diesis (quarter tone and third tone) and hemitone—and larger—trihemitone, ditone, dia tessaron (two and one-half tones), dia pente (three and one-half tones), tetratone, pentatone, and the dia pason (six tones), and so on. For major discussions of  $\delta\iota\dot{\alpha}\sigma\tau\eta\mu\alpha$ , see Aristides Quintilianus 10. 16–12. 14; Bryennius 98. 9–102. 22; Cleonides 187. 3–189. 8; Aristoxenus 21. 17–22. 3 da Rios; Theon of Smyrna 3; Martianus Capella 948–53; Anonymous Bellermann 22, 58; Nicomachus 12; and Gaudentius 3.

<sup>18.</sup> For Aristoxenus, see R. da Rios, Aristoxeni "Elementa harmonica" (Rome, 1954). No doubt Aristoxenus had discussed these ethical matters, whence their appearance in Cleonides and Aristides (and Ptolemy), but most of his musicological works are lost.

Aristides, Cleonides, and Bryennius is not at all surprising. It is certainly a lectio facilior; any scribe with a reasonable amount of musicological knowledge could have written it absentmindedly, while a scribe with no musicological background could have inserted it since it was a more familiar term, that is,  $\delta\iota\dot{\alpha}\sigma\tau\eta\mu\alpha$ , which he had seen earlier in his copying. In addition to this common method of paleographical reasoning, one can also point out that a musical ethos cannot be "intervallic." The names of the ethe refer to feelings, not musical constructions; in Cleonides, Bryennius, and Aristides,  $\sigma\nu\sigma\tau\alpha\lambda\tau\iota\kappa\delta\nu$  ("depressing") and  $\dot{\eta}\sigma\nu\chi\alpha\sigma\tau\iota\kappa\delta\nu$  ("soothing") are the types of names given to ethe. If nonemotional names are given, they are geographical—Dorian, Lydian, Phrygian, Aeolian, Ionian—or at least generic—diatonic, chromatic, enharmonic—but not constructional.

Jonker questioned the meaning of διαστατικόs, "disintegrating," given in LSJ, which states that the adjective derives from διάστασις and pertains only to "discord"; in Plutarch Pompey 53 its connection with  $\lambda \dot{\sigma} \gamma \sigma \sigma$  necessitates the meaning "causing discord," and the same meaning is found in Nicomachus 282. 6 Jan. The ethos which causes "magnificence and heroic deeds" can certainly not be the same one which "causes discord." In the 1968 Supplement to LSJ, however, there is a new offering, "exciting, exalting," found in Ptolemy 1. 12, 3. 11, and in Cleonides 13 (= 206. 4–5). This definition is incorrect. LSJ has supplied it only because Winnington-Ingram's 1963 edition of Aristides Quintilianus reads διαστατικόs at 40. 15 and 30. 13 (= 1. 19 and 1. 12); the translations, "excited, exalted," which will be discussed presently, were used in the earlier LSJ for διασταλτικόs. That is, the editors found διασταλτικόs to be nothing other than a lectio varia, and so they merely transferred the definition of διασταλτικόs from the earlier edition to the definition of διαστατικόs in the Supplement.

With διαστηματικόs belonging clearly to the realm of paleographical error and διαστατικόs having a meaning not at all appropriate to Cleonides' and Aristides' definitions of the word, there is only one alternative remaining, διασταλτικόs. Διασταλτικόs has the basic meaning of "serving to distin-

<sup>19.</sup> This type of error is common in technical treatises, e.g., at Cleonides 190. 2, M reads διάτονον (diatonic) for δίτονον (ditone).

<sup>20.</sup> The συστατικόs found in the manuscripts of Cleonides and Aristides in all likelihood results, because of their proximity in the texts, from the attraction to διαστατικός. Ἡσυχαστικός is absolutely secure.

Cleonides (206. 10–14) says the systaltic is the ethos "through which the soul is led toward humility and an unmanly condition" (συσταλτικόν δὲ, δι' οὖ συνάγεται ἡ ψυχὴ εἰς ταπεινότητα καὶ ἄνανδρον διάθεσν). It is harmonious with "amorous feelings, lamentations, wailings and the like" (ἀρμόσει δὲ τὸ τοιοῦτον κατάστημα τοῦς ἐρωτικοῖς πάθεσι καὶ θρήνοις καὶ οἴκτοις καὶ τοῦς παραπλησίοις). Aristides Quintilianus agrees; for him (30. 12–13) the systaltic ethos is that "through which we move distressing feelings" (δι' ἢς πάθη λυπηρὰ κινοῦμεν).

The hesychastic ethos of Cleonides (206. 14–15) is the ethos which accompanies "tranquillity of the soul and a free and peaceful condition" (ἡσυχαστικὸν δὲ ἦθός ἐστι μελοποιίας ῷ παρέπεται ἡρεμότης ψυχῆς καὶ κατάστημα ἐλευθέριον τε καὶ εἰρηνικὸν). Hymns, paeans, encomia and the like are used here. Aristides (30. 14–15) calls this third type of ethos the medium (μέσην), and it is through this ethos that "we lead the soul to quietude" (τὴν δὲ μέσην δι' ἦς εἰς ἡρεμίαν τὴν ψυχὴν περιάγομεν).

<sup>21.</sup> LSJ does not acknowledge variant readings here (διαστατικόs) as it does in its supplemental material to διασταλτικόs.

guish."<sup>22</sup> As many words in Greek (and English) which originally have the meaning "separate" tend also to have the meaning "superior,"<sup>23</sup>  $\delta\iota a\sigma\tau a\lambda\tau\iota\kappa\delta s$  can also take on this meaning. It does so, however, only in the area of musicology; LSJ then offers this second meaning and cites Aristides Quintilianus 1. 12 (= 30. 13) and Cleonides 13 (= 206. 4–5) for the meaning "exciting, exalting."<sup>24</sup> Unfortunately, there is no other citation for this technical meaning of  $\delta\iota a\sigma\tau a\lambda\tau\iota\kappa\delta s$  in either LSJ or Stephanus. Stephanus, in fact, merely quotes the passages in Cleonides (attributed at the time to Euclid) under scrutiny here and does not attempt to translate the poorly attested term. LSJ does make this rather bold attempt and hypothesizes "exalting, exciting" from the information given by Aristides and Cleonides, for these two authors say that the diastaltic ethos "arouses the soul" and/or "shows magnificence, manly elevation of the soul, heroic deeds and the like."

Reading Cleonides' definition, one would have to reject LSJ's "exciting" as a definition for  $\delta\iota a\sigma\tau a\lambda\tau\iota\kappa \acute{o}s$ , for noble and heroic qualities are moved by this ethos; Cleonides' diastaltic ethos does not "excite" the human spirit to perform heroic deeds. "Exalting" is more acceptable, for the exalted soul can indeed achieve a feeling of magnificence. But this definition of  $\delta\iota a\sigma\tau a\lambda\tau\iota\kappa \acute{o}s$  nonetheless still falls short of the ideal. The exalted soul does not necessarily perform heroic deeds or become "manly"  $(\dot{a}\nu\delta\rho \hat{\omega}\delta\epsilon_s)$  just because of its "elevation"  $(\delta\iota a\rho\mu a)$ . A technical term is best left untranslated when there is little evidence for its precise meaning, but I propose "distinguishing, uplifting" as an English translation which covers Aristides' "arousing," Cleonides' "showing magnificence, manly elevation and heroic deeds," and the etymological "separate, distinguished."

Further suggestions for understanding the full implications of the meaning of  $\delta\iota a\sigma\tau a\lambda\tau\iota\kappa \delta s$  arise from investigating the uses and legacy of the verb from which  $\delta\iota a\sigma\tau a\lambda\tau\iota\kappa \delta s$  is derived.  $\Delta\iota a\sigma\tau \epsilon \lambda\lambda \omega$ , of course, means "to put asunder, expand, separate" (LSJ, I. 1), and many verbs meaning "to separate" again mean "to be superior, excel."  $2\tau \Delta\iota a\sigma\tau \epsilon \lambda\lambda \omega$  has this meaning

<sup>22.</sup> This is the basic meaning of the adjective in Apollon. Dysc. Adv. 185. 10, Pron. 24. 12 and 49. 24, the scholiast to Eur. Med. 334(8), and Eust. 73. 31 and 1610. 3.

<sup>23.</sup> Derivatives of διίστημι, e.g., διαστατικός and διαστηματικός, can also (etymologically) refer to "distinguishing, separate"; cf. Diog. Laert. 4. 33. Greek, like English, is wont to stretch this "distinguishing" into "superior, elevated." The usages of διαφέρω (LSJ, III. 4) are a good example, as are διαιρέω (LSJ, III. 1) and διακρίνω (LSJ, I. 3 and II. 1). It is conceivable that "superior, elevated" could be used as the meaning for διαστηματικός; cf. δγκος καὶ διάστημα [Longin.] 40. 2 (= LSJ, II) with ὅγκος καὶ δίαρμα in Plut. Μοτ. 853C or [Arist.] Aud. 800a35 ἐκ πολλοῷ διαστήματος. But this is not an attested meaning for this word. See also W. Rhys Roberts (ed.), [Longinus]: "On the Sublime" (Cambridge, 1899), s.v. διαιρεῖν (pp. 196-97).

<sup>24.</sup> The LSJ 1968 Supplement incorrectly tries to eliminate the word—on account of Winnington-Ingram's 1963 edition of Aristides Quintilianus—as a varia lectio in both Cleonides and Aristides Quintilianus. Moreover, LSJ should have added Aristides 1. 19 in addition to, not instead of, 1. 12 and Cleonides 1. 13.

<sup>25.</sup> Cf. Plut. Mor. 853C; [Longin.] 12. 1; and Diog. Laert. 9. 7.

<sup>26.</sup> Of the translators of Cleonides, Strunk (1950) has "diastaltic," Paul (1872) "diastaltische," Menge (1916) "diastalticus," and Ruelle (1884) "diastaltique." Meibom (1652) and Gregorius (1703) have "distendens," while Pena (1557), Dasypodius (1571), Herigone (1634), and Possevinus (1603) have "Intervallaris," and Forcadel (1566) "intervalaire."

<sup>27.</sup> Cf. n. 23.

in Apollonius Dyscolus (Pron. 39. 1) where it is opposed to ἀπόλυτον είναι. but this is the only citation given in LSI for this meaning. 28 Another derivative of στέλλω, καταστέλλω, is known to have had "ethical" musicological applications, for example, Sextus Empiricus Adversus mathematicos 6, 19 τῶν μελῶν τὰ μὲν είναι διεγερτικὰ τῆς ψυχῆς τὰ δὲ κατασταλτικά and Iamblichus De vita Pythagorica 25. 113. In both examples κατασταλτικός refers to a relaxed and sedate (ethical) quality of music. Obviously the idea behind the use of the root -στέλλω gives the musical compound movement; the preposition gives this movement a direction. Kara-, as seen in the above two examples, is "down,"29 and dia- in composition has a variety of meanings, that used here necessarily meaning "thoroughly" (cf. LSJ, D. IV, V). Perhaps even more to the point is the ubiquitous use of compounds of  $\sigma \tau \dot{\epsilon} \lambda \lambda \omega$ in ancient Greek (and modern English) medical terminology. Διαστέλλω is used to mean the dilation of the lungs ([Arist.] Aud. 800a35), of the heart (Gal. 2. 597), and of the pulse (Gal. 8. 736). 30 It is not at all rare for writers in one technical discipline to adopt the vocabulary of another technical discipline for their own use; this is especially true in the peripatetic tradition. The term  $\sigma \dot{\nu} \sigma \tau \eta \mu a$ , for instance, is used by musicologists. metricians, and physicians; and  $\mu \epsilon \tau \alpha \beta o \lambda \dot{\eta}$  is a musicological, military, literary, and political term. Nor is musicological interest in medicine restricted to terminology alone. Aristides (89, 10 and 113, 27) describes the relationship of body and soul by referring to  $i\alpha\tau\rho\hat{\omega}\nu$  παίδες, 31 and his entire description of rhythm at 82. 25-26 is filled with medical terminology. 32 Ultimately, it seems that Aristides Quintilianus and Cleonides are describing these musical ethe not in musical terms as much as they are in musicalmedical terms, the result of which is not an intellectual musicological experience, but an emotional-physical (or "musical"-physical) experience. This is why neither Cleonides nor Aristides Quintilianus tries to equate these ethe with those "harmonic" ethe discussed by Plato and Aristotle; the former refer to physical effects, the latter to musicological constructs.<sup>33</sup>

Once this peripatetic musicological-medical connection is manifest, and with the actual meanings of διαστατικόs, διασταλτικόs, and διαστηματικόs

<sup>28.</sup> Its second-century A.D. date could postdate either Ptolemy or Cleonides, although the date of neither is secure.

<sup>29.</sup> The ἀνα- in ἀνάσταλσις does not signify "up," but "backwards," e.g., Gal. 12. 664.

<sup>30.</sup> Cf. συστέλλω in Hippoc. VM 22 and καταστέλλω in Diosc. Med. 2. 1. See also B. Meinecke, "Music and Medicine in Classical Antiquity," in Music and Medicine, ed. M. Schullian and M. Schoen (New York, 1948), pp. 76–77. For pointing out this vital connection between musical and medical terminology I am extremely grateful and entirely indebted to the anonymous referee for CP.

<sup>31.</sup> Aristides (83. 21) also relates different rhythms to κινήσεις τῶν ἀρτηριῶν.

<sup>32.</sup> Τοιγάρτοι κάν ταις των σφυγμών κινήσεσιν οι διά τοιούτων χρόνων τάς συστο//λάς ταις διαστολαις άνταποδιδόντες ύγιεινότατοι.

<sup>33.</sup> We can, despite the lack of detailed information, at least attempt to equate Cleonides' description of the diastaltic ethos with Heracleides Ponticus' (4ρ. Ath. 624D) description of the ethos effected by the Dorian harmonia ("scale"). Heracleides describes this ethos as ανδρώδεs and μεγαλοπρεπές, Cleonides as μεγαλοπρέπεια... δίαρμα ψυχῆς ἀνδρώδες. The resemblance is obvious. Heracleides then continues to describe the Dorian with other adjectives such as σκυθρωπόν και σφοδρόν ("sober and vehement"). For this meaning of σκυθρωπός, which normally means "sullen, gloomy," cf. Dem. 45. 68. Arist. Pol. 1340b4 describes the Dorian similarly, calling it "the most steadfast and manly" (περὶ τῆς δωριστὶ... στασιμωτάτης οὐσης καὶ μαλιστ' ῆθος έχούσης ἀνδρεῖον). [Plut.] De mus. 1136D-F labels the same harmonia as ἀξιωματικόν and σεμνόν.

fully understood, the problematic passages in Cleonides, Aristides, Bryennius, and Ptolemy at once become resolved. The ethos must be the diastaltic, and passages which once contained textual difficulties now must conform to the only conceivable musicological possibility. The major Aristides manuscripts at Aristides 30. 13 must yield their διαστατικὸς to the διασταλτικὸς of the Aristides-interpolated Cleonides manuscripts. Winnington-Ingram's emendation of διαστατικὸς for (all) the manuscripts' διασταλτικὸς should be rejected. Bryennius' text should read διασταλτικοῦ (-κὸν) at 122. 2(3) and 362. 23(24) instead of διαστα[λ]τικοῦ (-κὸν), and Jonker's lengthy apparatus notes can be ignored. Jan's text should remain unchanged even though the διασταλτικοῦ at 206. 4 is found in only one somewhat inferior manuscript and even though that at 206. 6 is found only in Vulcanius and thus Meibom (and Jan). Ptolemy's text at 106. 14 should read διασταλτικά as well, especially in conjunction with συσταλτικά at 106. 13.34

We must next briefly investigate the diastaltic ethos as defined by Cleonides and Aristides Quintilianus to see if they do indeed define the same ethos. This investigation is necessary on account of the general inconsistency in the Greek descriptions of ethe. 35 Aristides' definition seems to apply to the medical terminology more closely than does Cleonides' definition, but this does not rule out a close connection between the two authors. Moreover, one should compare the definitions of the systaltic and hesychastic ethe in Aristides and Cleonides.<sup>36</sup> As one might expect from the very name, the systaltic ethos is intended as the polar opposite of the diastaltic ethos in both authors.37 The hesychastic or medium ethos also seems to be paralleled in both authors despite the variation in terminology.<sup>38</sup> If Aristides' definitions of the systaltic and hesvchastic ("medium") so closely resemble those of Cleonides, then it would seem that Aristides intended his rather simple definition of the diastaltic ethos to mean the same as Cleonides' more elaborate definition. Nonetheless, one still must use caution here. Cleonides and Aristides apparently used the same source, but there is still some difficulty in explaining away the difference in phrasing and emphasis.

It still seems that the three *ethe* of Aristides and Cleonides (and Bryennius) are not in any way intended to correspond to any specific three of the seven basic *harmoniai*.<sup>39</sup> The imprecision of definition and the plurality of

<sup>34.</sup> Also, Ptolemy's third ethos, the middle (τὸν μεταξύ...) relates to Aristides' μέσην.

<sup>35.</sup> Heracleides (ap. Ath. 625B), for example, describes the Hypophrygian as "harsh and rough" (σκληρὸν καὶ αὐστηρὸν) while Lucian (Harm. 1. 10-11) labels it "subtle" or "elegant" (γλαφυρὸν). In a rather infamous discrepancy, Plato (Resp. 398E) labels the Lydian harmonia as "soft" and "convivial" (μαλακόν, συμποτικόν), while his Stagirite pupil (Pol. 1342b32) maintained that it was the ideal, orderly harmonia with which to educate a young lad (διὰ τὸ δύνασθαι κόσμον τ' ἐχειν καὶ παιδείαν). Apparently the "mood" of a harmonia was a matter for subjective interpretation.

<sup>36.</sup> Given supra, n. 20.

<sup>37.</sup> It corresponds to the ethos evoked either by Plato's Mixolydian harmonia (Resp. 398Ε θρηνώδης ["lamenting"]) or his Lydian (μαλακόν ["soft"]).

<sup>38.</sup> They correspond most closely to the "soft" Lydian of Plato.

<sup>39.</sup> Cleonides does not acknowledge the existence of the harmoniai; for him the Dorian, Lydian, and Phrygian are tones (τόνοι οτ τρόποι). Aristides is more interested in antiquarian matters.

opinions about the ethos of many harmoniai make such a correspondence impracticable. The ethe described in Plato's Republic, Aristotle's Politics. Heraclides, pseudo-Plutarch, and Lucian are categorically specific ethe (however vague their description) to be attached to specific harmoniai, that is, scales, melodic phrases, and cadences. They are technical musicological constructs which produce vague, emotive responses. The three ethe described by Cleonides, Aristides, and Bryennius are in contrast physicalmusical descriptions, general descriptions of physiological and therefore emotional states caused by vague types of melodies. In the harmonic ethe the reactions are vague, the music specific; in the melodic ethe, the music is vague and the reaction specific. 40 That Cleonides tells us that the diastaltic ethos was suitable for the lyrics of tragedy does not delineate more finely the musical range of this ethos, for pseudo-Plutarch (1136C-1137 A) reminds us that the Mixolvdian (lamenting) was suitable for tragedy as were the Dorian, Lydian, and Ionian. If pseudo-Plutarch is offering us reliable information here, then Cleonides was much too vague in assigning the diastaltic ethos to tragedy. Tragedy contains more than "magnificence"; it contains lamentations as well, and in this instance the systaltic ethos should have corresponded to tragedy as well according to Cleonides' (and Bryennius') definition. Cleonides did not make it correspond, however, and once again an ancient Greek musicologist has shown modern scholarship that his reliability so far as music of "classical" Greece is concerned is suspect.

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<sup>40.</sup> Even so, if the systaltic ethos is appropriate for love, lamentations, wailing, and the like, then only the Mixolydian harmonia described by Plutarch (De mus. 1136D), Aristotle (Pol. 1340b), and Plato (Resp. 398E) could evoke this melodic ethos. The plaintive and lamenting Mixolydian might also be used to evoke the hesychastic of middle ethos, though the soft Lydian of Plato seems more "middle" of the road and peaceful than the emotional Mixolydian. The diastaltic ethos, however, with its  $\mu\epsilon\gamma\alpha\lambda\delta\sigma\rho\acute{e}\pi\epsilon\iota\alpha$  could correspond to either the Dorian of Heracleides, pseudo-Plutarch, and Aristotle, or to the majestic Hypodorian of pseudo-Aristotle, or possibly, following Aristides' definition, to the rousing Phrygian of Aristotle, and perhaps even to the exciting, bacchic Hypolydian.