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Heather L. Reid and Georgios Mouratidis¹
The *Mousikē* in *Gymnastikē*:
How Athletic Exercise Promotes Ethical Harmony

...for the whole of man's life requires the graces of rhythm and harmony. Again, over and above all this, people send their sons to a trainer, so that having improved their bodies they may perform the orders of their minds.

...πᾶς γὰρ ὁ βίος τοῦ ἀνθρώπου εὐρυθμίας τε καὶ
εὐαρμοστίας δεῖται. ἔτι τοίνυν πρὸς τούτοις εἰς
παιδοτρίβου πέμπουσιν, ἵνα τὰ σώματα βελτίω
ἔχοντες ὑπηρετῶσι τῇ διανοίᾳ χρηστῇ οὔσῃ.

—Plato *Protagoras* 326b

Long before the gymnasium existed as a civic institution in ancient Greece, moral education through physical movement took the form of choral dance. Groups of age-mates gracefully moving their bodies together as they sing songs that celebrate the excellences of their ancestors is the primordial way to blend ethical ideals with voluntary action in a cooperative social practice. *Mousikē*, a concept that covers all the arts presided over by the Muses, functioned educationally by combining instrumental music, poetic verse, and ordered

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physical movement to inculcate a sense of shared history, moral ideals, and political principles.² Polybius (4.20) links the Arcadians' reputation for *aretē* (virtue, excellence) with the musical education of their youth, and choral dance was an important part of life all over ancient Greece.³ In Sparta, it was considered an important factor not only in the exercise and socialization of youth (especially children, the *paides*), but also in maintaining social order.⁴

It is not surprising, then, when asked about the origin of gymnastic education in Plato's *Laws* (673c),⁵ that the Athenian points back to his earlier (653e–654a) description of dance as a gift of Apollo and the Muses through which human movement (*kinēsis*) is ordered (*taxeōn*) by the pleasurable perception of rhythm and harmony:

Now, whereas all other creatures are devoid of any perception of the various kinds of order and disorder in movement (which we term rhythm and harmony), to men the very gods, who were given, as we said, to be our fellows in the dance, have granted the pleasurable perception of rhythm and harmony,

² See Penelope Murray and Peter Wilson, eds. *Music and the Muses: The Culture of 'Mousikē' in the Classical Athenian City* (Oxford: Oxford University Press, 2004), 1–2.

³ On the educational function of choral dance, see Claude Calame, *Choruses of Young Women in Ancient Greece*, trans. D. Collins and J. Orion (Lanham, MD: Rowman & Littlefield, 2001), and Barbara Kowalzig, "Changing Choral Worlds: Song-Dance and Society in Athens and Beyond" in *Music and the Muses: The Culture of Mousikē in the Classical Athenian City*, eds. P. Murray and P. Wilson (Oxford, Oxford University Press, 2004), 39–65.

⁴ Paul Christesen, "Athletics and Social Order in Sparta in the Classical Period," *Classical Antiquity* 31.2 (2012): 193–257, 198.

⁵ For a detailed account of choral dance in Plato's *Laws* focused on the role of rhythm, see Attila Simon's article in this volume.

whereby they cause us to move and lead our choirs, linking us one with another by means of songs and dances; and to the choir they have given its name from the ‘cheer’ implanted therein

τὰ μὲν οὖν ἄλλα ζῶα οὐκ ἔχειν αἰσθησιν τῶν ἐν ταῖς κινήσεσιν τάξεων οὐδὲ ἀταξιῶν, οἷς δὴ ῥυθμός ὄνομα καὶ ἁρμονία: ἡμῖν δὲ οὖς εἵπομεν τοὺς θεοὺς συγχορευτὰς δεδόσθαι, τούτους εἶναι καὶ τοὺς δεδωκότας τὴν ἔνρυσθμόν τε καὶ ἑναρμόνιον αἰσθησιν μεθ’ ἡδονῆς, ἣ δὴ κινεῖν τε ἡμᾶς καὶ χορηγεῖν ἡμῶν τούτους, ῥοδαῖς τε καὶ ὀρχήσεσιν ἀλλήλοις συνείροντας, χορούς τε ὠνομακέναι παρὰ τὸ τῆς χαρᾶς ἔμφυτον ὄνομα.⁶

Since human children, like wild animals, are motivated by pleasure but, unlike other animals, have the ability to take pleasure in music, dance makes the process of ordering their otherwise unruly actions possible. In the absence of rhythm and harmony, young people will be guided instead by animalistic pleasures, which are by nature disorderly (*ataktōn*).⁷ Since moral education begins with the correct alignment of pleasure and pain,⁸ choral dance may be said to function educationally by pleasantly imposing order on human activity.

Even if this understanding of dance is uncontroversial, however, it is surprising that Plato’s Athenian, having declared

⁶ All translations of Plato’s *Laws* are from R.G. Bury (Cambridge, MA: Harvard University Press, 1926), with occasional modifications.

⁷ *Laws* 659e–660a argues that music must charm the soul not yet ready for study, and that it must be strictly controlled “to portray by his rhythms the gestures, and by his harmonies the tunes, of men who are temperate, courageous, and good in all respects.” Unless thus controlled, there is the risk that music itself will be changed in accordance with “disorderly pleasures” (*ataktōn hēdonōn*).

⁸ See *Laws* 653b.

the foregoing discussion of *mousikē* to be sufficient, begins his explanation of *gymnastikē*, a term typically translated as “athletic training,” by continuing to talk about dance (673d):

The origin of the play we are speaking of is to be found in the habitual tendency of every living creature to leap; and the human creature, by acquiring, as we said, a sense of rhythm, generated and brought forth dancing; and since the rhythm is suggested and awakened by the tune, the union of these two brought forth choral dance and play.

Οὐκοῦν αὖ ταύτης ἀρχὴ μὲν τῆς παιδιᾶς τὸ κατὰ φύσιν πηδᾶν εἰθίσθαι πᾶν ζῶον, τὸ δ' ἀνθρώπινον, ὥς ἔφαμεν, αἰσθῆσιν λαβὼν τοῦ ῥυθμοῦ ἐγέννησέ τε ὄρχησιν καὶ ἔτεκε, τοῦ δὲ μέλους ὑπομιμνήσκοντος καὶ ἐγείροντος τὸν ῥυθμόν, κοινωθέντ' ἀλλήλοις χορείαν καὶ παιδιὰν ἔτεκέτην.

This is actually the fourth time in *Laws* that rhythm is described as imposing order on the disorderly movements of youth. Earlier, it was defined as “order of motion” (*kinēseōs taxis*),⁹ and music and gymnastics were said to put order (*taxis*) into the disorderly (*ataktōs*) sounds and movement of youth (672c):

...but this much I know,—that no creature is ever born in possession of that reason, or that amount of reason, which properly belongs to it when fully developed; consequently, every creature, during the period when it is still lacking in its proper intelligence, continues all in a frenzy, crying out wildly, and, as soon as it can get on its feet, leaping wildly. Let us

⁹ Plato, *Laws* 664e: “...the order of motion (*kinēseōs taxis*) is called ‘rhythm,’ while the order of voice [...] is termed ‘harmony,’ and to the combination of these two the name ‘choristry’ is given.”

remember how we said that in this we have the origin of music and gymnastic.

τὸ δὲ τοσόνδε οἶδα, ὅτι πᾶν ζῶον, ὅσον αὐτῷ προσήκει νοῦν ἔχειν τελεωθέντι, τοῦτον καὶ τοσοῦτον οὐδὲν ἔχον ποτὲ φύεται. ἐν τούτῳ δὴ τῷ χρόνῳ ἐν ᾧ μήπω κέκτῃται τὴν οἰκείαν φρόνησιν, πᾶν μαίνεται τε καὶ βοᾷ ἀτάκτως, καὶ ὅταν ἀκταινώσῃ ἑαυτὸ τάχιστα, ἀτάκτως αὖ πηδᾷ. ἀναμνησθῶμεν δὲ ὅτι μουσικῆς τε καὶ γυμναστικῆς ἔφαμεν ἀρχὰς ταύτας εἶναι.

The name “gymnastic,” furthermore, had been assigned to “playful dance” (*paizontōn orchēsin*) on the condition that its movement leads to “bodily excellence” (*sōmatos aretēs*, 673a). But we also know that by Plato’s time, musical and gymnastic education was treated separately and taught by separate instructors.¹⁰ Even if dance counts as *gymnastikē* (which it does in Plato’s *Laws*),¹¹ how do wrestling, ball games, footraces, and other traditionally “gymnastic” exercises impose order on movement when there is no music involved? Where, in other words, is the *mousikē* in *gymnastikē*?

Literature and iconography depict flute players accompanying long-jumpers and boxers,¹² rowing was paced

¹⁰ Physical exercises were mainly taught by a *paidotribēs*, see Werner Petermandl, “Growing up with Greek Sport: Education and Athletics” in *A Companion to Sport and Spectacle in Greek and Roman Antiquity*, eds. P. Christesen and D.G. Kyle (Chichester, Wiley Blackwell, 2014), 236–45, 238–40. Cf. Plato, *Laws* 764c.

¹¹ C.A. Forbes, *Greek Physical Education* (New York: Century, 1929), 62, says dancing was usually excluded from physical education.

¹² Pausanias, *Description of Greece* 5.17.10 says a flute is played during the long jump, but Jean-Paul Thuillier, *Les jeux athlétiques dans la civilisation étrusque* (Rome: Ecole française de Rome, 1985), 231–254, questions examples of music in boxing.

by the beat of a drum, and it is not difficult to imagine music motivating exercise in ancient *gymnasia* just as it does in their modern counterparts. But these are not examples of music *in* gymnastic exercise. To understand how *gymnastikē* orders human action like music does, we need to think about “music” in a Pythagorean way as a rational or even mathematical order found in the *kosmos*, which can be applied to bodies, souls, and even communities to achieve a kind of harmony.

It makes sense that Pythagorean ideas about order would be foundational in gymnastic philosophy since the master himself was associated with athletic training and understood philosophy as a way of life that involved rhythmic cycles and strict discipline.¹³ Pythagoreanism, furthermore, had a profound influence on ancient Greek ideas about lifestyle, health, and philosophy. Plato’s contact with Pythagoreans during his travels in Sicily and Southern Italy is widely thought to have shaped his metaphysics, ethics, and politics—why not his understanding of gymnastics as well? To understand the parallel between *mousikē* and *gymnastikē* in civic education, we need to focus on ordering ideas such as *eukosmia* and *eutaxia*—both praiseworthy values for *gymnasion* trainees, especially *ephebes*, as the epigraphic record suggests.¹⁴

Kosmos and taxis

Although classical philosophers emphasize the blending and balance of *gymnastikē* and *mousikē* in Greek education, the subjects were taught separately and typically taken to educate the body and mind, respectively. Plato’s Socrates directly challenges that division in a *Republic* passage that we will examine below, but his Athenian confirms it in *Laws* at 795d:

¹³ For a review of the evidence, see Nigel Spivey, “Pythagoras and the Origins of Olympic Ideology,” in *Thinking the Olympics*, eds. B. Goff and M. Simpson (London: Bloomsbury, 2011), 21–39.

¹⁴ E.g., *Inscriptiones Graecae* (hereafter, *IG*) II³ 1 1362 (185 BC).

The lessons may, for practical convenience, be divided under two heads—the gymnastic, which concern the body, and the musical, which aim at goodness of soul.

τὰ δὲ μαθήματά που διττά, ὥς γ' εἰπεῖν, χρῆσασθαι
συμβαίνοι ἄν, τὰ μὲν ὅσα περὶ τὸ σῶμα
γυμναστικῆς, τὰ δ' εὐψυχίας χάριν μουσικῆς.

This division is shared by many others including Isocrates, Protagoras, Xenophon, and even Aristotle, who offers a detailed account of musical education in *Politics* 8 (1337a ff.). There, he says “we pursue gymnastics for the sake of health and strength (for we do not see either of these things produced as a result of music).”¹⁵ But Aristotle thinks that music affects “the moral character of the soul” (*psychēs ēthos*), and is “well adapted to the youthful nature”:

for the young owing to their youth cannot endure anything not sweetened by pleasure, and music is by nature a thing that has a pleasant sweetness.

οἱ μὲν γὰρ νέοι διὰ τὴν ἡλικίαν ἀνῆδυντον οὐδὲν
ὑπομένουσιν ἐκόντες, ἡ δὲ μουσικὴ φύσει τῶν
ἡδυσμένων ἐστίν.¹⁶

¹⁵ Aristotle, *Politics*, 1338a: “...οὐδ' αὖ καθάπερ ἡ γυμναστικὴ πρὸς ὑγίειαν καὶ ἀλκὴν (οὐδέτερον γὰρ τούτων ὀρώμεν γιγνόμενον ἐκ τῆς μουσικῆς).” All translations of Aristotle's *Politics* are by H. Rackham (Cambridge, MA: Harvard University Press, 1932), with occasional modifications.

¹⁶ Aristotle, *Politics* 1340b. Compare 1339a: “...or whether we ought rather to think that music tends in some degree to virtue (music being capable of producing a certain quality of character just as gymnastics are capable of producing a certain quality of body),” ἢ μᾶλλον οἰητέον πρὸς ἀρετὴν τι τείνειν τὴν μουσικὴν, ὥς

We should keep in mind that musical education in ancient Greece included the study of literature, especially epic poetry. It would be a mistake, however, to interpret *mousikē*'s focus on the soul and *gymnastikē*'s focus on the body as mutually exclusive. Aristotle says that *gymnastikē* cultivates courage (*andreia*, 1337b), which he takes to be a property of the soul; meanwhile musical education featured vocal and instrumental performance, including competitions, in parallel with its gymnastic counterpart. Both *mousikē* and *gymnastikē* involve both the body and the soul.

Classical philosophers generally agree that musical and gymnastic education complement one another,¹⁷ but there is debate about which is primary. At *Politics* 1338a–b, Aristotle says that habit (*ethos*) comes before reason (*logos*), so children must first be instructed by the trainer (*paidotribēs*) for the sake of their physical condition (*hexis*), and the gymnastics teacher (*paidas gymnastikē*) for the sake of their actions (*erga*). Plato counters that music should come first, pointing to its use of *logos* and *mythos* (*Republic* 376e–377a), but both philosophers emphasize ordering characteristics like balance and harmony in their recommendations. Aristotle cautions that gymnastic training must be balanced with other forms of education lest the youth develop courage at the expense of the other virtues, making them “available for statesmanship to use for one task only, and even for this task training them worse than others do” (*Politics* 1338b). Plato, meanwhile, presents *mousikē* and *gymnastikē* as harmonies that can be applied to human beings (*Symposium* 187a). Civic education may thus be understood

δυναμένην, καθάπερ ἡ γυμναστική τὸ σῶμα ποίον τι παρασκευάζει, καὶ τὴν μουσικὴν τὸ ἦθος ποίον τι ποιεῖν.

¹⁷ In fact, Plato characterizes this as common belief at *Crito* 50de, *Timaeus* 18a, and *Republic* 546d, where the “sick city” is described as one that neglects music and prefers only gymnastics.

philosophically as music and gymnastics working together to create a kind of harmony between body and soul—but this conception did not originate with Plato and Aristotle.

It was the Pythagorean tradition, influential in philosophy and athletic training alike, that first linked musical harmony with rational order and ethical value. Pythagorean communities practiced strict dietary and behavioral discipline, following set daily routines that combined music, physical exercise, and philosophical conversation.¹⁸ Music in its vocal and instrumental forms was not the object of their interest—it simply manifested in the sensible world the inaudible harmony of the divine *kosmos*, which they understood to be an abstract and rational order more perfectly expressed in numbers.¹⁹ The Greek term *kosmos* simply means order; it was the Pythagoreans who applied it to the universe.

Generally speaking, Pythagorean *kosmos* involves the imposition of limit on the unlimited, order on disorder. And just as the imposition of definite ratios on the indefinite range of musical pitch produces harmony when tuning a lyre, the imposition of order on human activity produces harmony within and among human beings, bringing us closer to divine

¹⁸ See Christoph Riedweg, *Pythagoras: His Life, Teaching, and Influence*, trans. Steven Rendall (Ithaca, NY: Cornell University Press, 2005), 31, who quotes Iamblichus, *Vita Pythagorica* 96s: “After such study, they turned to the care of their bodies. Most used oil-rubs and took part in footraces; a lesser number wrestled in gardens and groves; some engaged in long-jumping or in shadow-boxing, taking care to choose exercises well-adapted to bodily strength.”

¹⁹ See Arnold Hermann, *To Think Like God* (Las Vegas: Parmenides, 2004), 94: “...Pythagoras rejected the judging of music by the sense of hearing, asserting that its excellence must be apprehended by the mind. This is why he did not judge it by the ear, but by the scale based on the proportions, and considered it sufficient to pursue the study no further than the octave.”

perfection.²⁰ The Pythagorean principle of good order applies not only to the body, whose health and beauty was understood in terms of balance and symmetry,²¹ but also to the soul, whose rational and irrational parts need to be harmonized, and even to the community, whose members need to be in harmony with one another.²² In fact, later Pythagoreans called this process of psychological and political ordering *diakosmēsis*.²³ Coming to understand and eventually embody cosmic harmony begins, for the Pythagoreans, with ordering personal actions in a rhythmic and disciplined way of life.

The Pythagorean value placed on order and harmony was picked up by Plato, probably on his voyages to Sicily and Southern Italy, where such beliefs were widespread. He befriended important Pythagoreans such as Archytas of Taranto, and perhaps encountered their *gymnasia*. He mentions Iccus of Taranto—an athlete and coach renowned for his self-discipline—twice in the dialogues.²⁴ Plato's *Gorgias* links principles of *kosmos* and *taxis* with goods like health and excellence in a way that explicitly recalls Pythagorean texts, including one by Archytas.²⁵ At *Gorgias* 503e–504a, Socrates

²⁰ See W.K.C. Guthrie, "Pythagoras," in *The Encyclopedia of Philosophy*, vol. 7, ed. Paul Edwards (New York: MacMillan, 1967), 37–39.

²¹ This view is associated with Alcmaeon of Croton, a Pythagorean physician who was active in the 5th century BCE. See J.A. Philip, *Pythagoras and Early Pythagoreanism* (Toronto: University of Toronto Press, 1966), 46.

²² See, Hermann, *To Think Like God*, 101.

²³ See Matteo Varoli, "La 'Repubblica' dei Pitagorici," *Lexis* 37 (2019): 111–130, at 126 n. 52.

²⁴ *Protagoras* 316e; *Laws* 7.840a.

²⁵ According to Carl Huffman, "Pythagoreanism," *The Stanford Encyclopedia of Philosophy* (online), 21–22: *Gorgias* 507e6–508a8 "mirrors the emphasis on organization and calculation in

uses the principles of *taxis*, *kosmos*, and *harmonia* to compare the “good man” with the gymnastics trainer as one who:

...arranges everything according to a certain order (*taxis*), and forces one part to suit and fit with another, until he has combined the whole into a regular and well-ordered (*harmozō*) production; and so of course with all the other craftsmen, and the people we mentioned just now, who have to do with the body — trainers and doctors; they too, I suppose, put order (*kosmos*) and system into the body.

...ὥς εἰς τάξιν τινὰ ἕκαστος ἕκαστον τίθησιν ὁ ἄν τιθῇ, καὶ προσαναγκάζει τὸ ἕτερον τῷ ἑτέρῳ πρέπον τε εἶναι καὶ ἀρμόττειν, ἕως ἄν τὸ ἅπαν συστήσῃται τεταγμένον τε καὶ κεκοσμημένον πρᾶγμα· καὶ οἱ τε δὴ ἄλλοι δημιουργοὶ καὶ οὓς νῦν δὴ ἐλέγομεν, οἱ περὶ τὸ σῶμα, παιδοτρῖβαι τε καὶ ἰατροί, κοσμοῦσι πού τὸ σῶμα καὶ συντάττουσιν.

Socrates proceeds to argue that body and soul alike benefit from *eutaxia* and *eukosmia*, explaining at *Gorgias* 504c–d that “regularity and order” (*taxis kai kosmos*) effect “health and strength” in the body, as well as *aretē*. *Taxis* and *kosmos* in the soul, meanwhile, are

[are] called lawfulness and law, whereby men are similarly made law-abiding and orderly (*kosmioi*); and these states are justice (*dikaia sunē*) and temperance (*sōphrosunē*).

Ταῖς δὲ τῆς ψυχῆς τάξεσι καὶ κοσμήσεσι νόμιμόν τε καὶ νόμος, ὅθεν καὶ νόμιμοι γίνονται καὶ κόσμιοι· ταῦτα δ' ἔστι δικαιοσύνη τε καὶ σωφροσύνη

contemporary Pythagorean texts such as Archytas Fr. 3 and Aristoxenus' *Pythagorean Precepts* Fr. 35."

The topic being debated in *Gorgias* is civic education and the dialogue was written right around the time that Plato founded his school in the Academy gymnasium. It makes sense in this context that order, in the form of *eutaxia/eukosmia*, *sōphrosunē*, and *dikaiosune*, is central to the philosophy of the *gymnasion*.

Behavioral *eutaxia*

Many inscriptions suggest that discipline was an issue in the gymnasium. The Gymnasiarchic Law, for example, states:

all those who use the gymnasium shall obey anyone whom the gymnasiarch appoints to be superintendent, as is also prescribed for the gymnasiarch. If someone does not obey, the gymnasiarch shall whip a person subject to the whip and fine others.²⁶

The same document also says that “none of the young men shall enter among the boys nor talk to the boys. Otherwise, the gymnasiarch shall fine and prevent anyone who does any of these things;” further down it lists penalties for insulting or striking the gymnasiarch.²⁷ Conversely, in numerous decrees from the Hellenistic Period ephebes are praised for their *eutaxia* and compliance with the city’s laws and customs.²⁸

A section on *eukosmia* in the ephebarchic law of Amphipolis says that ephebes were expected to leave their houses before dawn and walk to the gymnasium alone, silently, and orderly (*eutaktōs*);²⁹ another text suggests that they

²⁶ L. Gounaropoulou and B.H. Miltiades, *Epigraphes Katō Makedonias: Teuchos A'. Epigraphes Veroias* (Athens: National Hellenic Research Foundation, 1998) 1.Bll.8–10 (hereafter, *EKM* 1).

²⁷ *EKM* 1.1, Bll.39–42.

²⁸ See, for example, *IG* II² 478 (305/4 BCE); *IG* II² 1006 (122/1 BCE); *IG* II² 1008 (118/7 BCE).

²⁹ Calliopi D. Lazaridou, “Εφηβαρχικός Νόμος από την Αμφίπολη,” *Archaiologike Ephemeris* 154 (2015), 1–48, ll.38–40.

would be fined by the gymnasiarch for being late.³⁰ This scene reflects the Pythagorean emphasis on keeping a daily routine and keeping silent (for five years) in order to impose order in one's life.³¹ The conception of education as the imposition of order on body and soul sheds light on the facts that the *gymnasion* director was often called the *kosmētēs* and individual instructors were called *sōphronistes*.³² It also offers clues as to the criteria for the *gymnasion's* intramural contests in *eutaxia* and *eukosmia*, near synonyms that have the general meaning of orderly behavior and discipline. Xenophon associated *eutaxia* with obedience to authority and recognized that offering prizes (*athla*) would inspire its competitive cultivation.³³ But how did *gymnastikē* itself develop such qualities?

The Platonic *Definitions*, a handbook used in the Academy gymnasium, offers some tantalizing clues.³⁴ It defines *kosmiotēs* as follows:

³⁰ Plautus, *The Two Bacchises*, trans. W. de Melo (Cambridge, MA: Harvard University Press, 2011), 424–25: “If you didn’t come to the sports ground before sunrise, you’d pay a heavy price to the head of the gymnasium.” (*ante solem exorientem nisi in palaestram ueneras, gymnasi praefecto hau mediocris poenas penderes*).

³¹ Apprentices were required to keep silent for five years and listen to the Pythagorean moral precepts, accordingly called “*akousmata*.” See Diogenes Laertius, *Lives* 8.10; Iamblichus, *Pythagorean Life*, 72; and Huffman, “Pythagoras”

³² Bram Fauconnier, “Some Notes on the Athenian Gymnasiarch” *Klio* 104.1 (2022): 135–58.

³³ Xenophon discusses the importance of *eutaxia* and *eukosmia* at *Cyropaedia*. 8.1.33, and *Constitution of the Lacedaimonians* 8.1. Offering prizes for *eutaxia* is recommended at *Hiero* 9.6.

³⁴ Though not Plato’s own work, the *Definitions* appears to have been used pedagogically by his successors at the Academy. See Edoardo Benati, [Platone] *Horai: Saggio introduttivo, edizione critica, traduzione, e commento* (Baden-Baden: Academia Verlag, 2023).

...decorum: voluntary submission to what seems best;
being disciplined (*eutaxia*) in moving the body.

...ὑπειξίς ἐκουσία πρὸς τὸ φανέν βέλτιστον·
εὐταξία περὶ κίνησιν σώματος.³⁵

Did philosophers of the gymnasium believe that *eutaxia* in moving the body created *eutaxia* in the soul? We know from *Republic*'s Myth of Er that Plato takes the *taxis* in the soul of an individual to be a product of the lifestyle they have chosen.³⁶ The *gymnasium*, fundamentally, habituates future citizens to a lifestyle characterized by rhythm and harmony that will produce *eutaxia* (and therefore excellence) in their bodies, souls, and communities. And it does this first of all through basic discipline.

Eukosmia may be defined in *Definitions* as "voluntary submission to what seems best," but as Plato and Aristotle both point out, what seems best to children is guided not by reason but by feelings of pleasure and pain. This means that, at least in the early years,³⁷ the imposition of order on movement in the gymnasium requires an external authority with the power to

³⁵ [Plato] *Definitions* 412b, trans. D.S. Hutchison, in *Plato: Complete Works*, ed. John M. Cooper (Indianapolis: Hackett, 1997).

³⁶ At *Republic* 618b, in the myth of Er, those choosing future lives are not able to choose the "*taxis*" of their souls in that life separately because the choice of life will affect the order of the soul automatically: "But there was no determination of the quality of soul, because the choice of a different life inevitably determined a different character." ψυχῆς δὲ τάξιν οὐκ ἐνεῖναι διὰ τὸ ἀναγκαίως ἔχειν ἄλλον ἐλομένην βίον ἁλλοίαν γίνεσθαι. Unless otherwise stated, this and all quotations of *Republic* are based on the translation Paul Shorey (Cambridge, MA: Harvard University Press; 1969) with occasional modifications.

³⁷ According to Aristotle, *Politics* 1336b, boys started attending the gymnasium around seven years of age.

punish. Discipline enforced by pain, threatened or actual, was a visible part of gymnasium culture.

In fact a rod or switch, called by Plato a *rhabdos kosmousēs* (*Laws* 700c), was a common iconographic symbol of athletic judges, gymnastic trainers, and discipline in general.³⁸ In the gymnasium, its power was primarily symbolic. Since flogging was a humiliating punishment usually reserved for slaves; the willingness of free people to risk such punishment shows remarkable submission to disciplinary authority.³⁹ There is evidence that floggings did sometimes occur,⁴⁰ but in practice the *rhabdos* was probably a sign of authority and an instrument of persuasion rather than punishment.⁴¹ Most importantly, the *rhabdos* symbolized the general aura of discipline that characterized gymnastic education. This discipline began with showing up at the gymnasium regularly and on time, but

³⁸ For example, Pausanias, *Description of Greece* 5.18.2 describes the image of a female incarnation of Justice striking Injustice with a *rhabdos* in his description of the Chest of Kypselos.

³⁹ According to Stephen G. Miller, *Ancient Greek Athletics* (New Haven: Yale University Press, 2004), 18, “The willingness of a free man to subject himself to the punishment of a public flogging should be understood not only as a basic part of ancient Greek athletics but also as a fundamental characteristic of ancient Greek society. The notion of equality before the law inherent in this custom may be the most significant contribution of athletics to the ancient world.”

⁴⁰ Forbes, *Physical Education*, 65 says images of *paidotribai* with *rhabdoi* prove that “rigorous discipline was enforced” in the *gymnasion*, citing Basil the Great, *de Leg Graecis* vi, and Dio Chrysostom (15.19), who says the thrashing proves that “gymnastic trainers are slave-masters” (παιδοτρίβας δεσπότης εἶναι).

⁴¹ A representation of a gymnasium leader with a “*rhabdos*” is, according to Gauthier (*Beroia* 66 n. 4), possibly in the honorific statue of Sosilos, son of Dorieus, on Delos: D. Knoepfler, in: BCH Suppl. I (1973), 233–237.

gymnastic exercises themselves demand obedience and submission—first of the body to the mind, and second to external authority—both that of the trainer and of the rules.

In most *gymnasia*, exercise for the *paides* (children) seems to have been confined to the *palaistra*, a peristyle building with an open courtyard. A *palaistra* was typically part of a larger gymnasium complex, although some, like the one Socrates enters in Plato's dialogue *Lysis*, were private urban spaces. Some *gymnasia* even had a dedicated "children's *palaistra*."⁴² Training in the *palaistra* would exclude "outdoor" activities such as javelin, archery, and long-distance running, but it could certainly accommodate wrestling (as its name implies),⁴³ friendly games, rhythmic exercises similar to modern calisthenics,⁴⁴ or even dance. Plato's *Laws* counts dance and wrestling as *gymnastikē*,⁴⁵ with specific restrictions that the rhythms and poses (*schemata*) imposed be dignified and useful.⁴⁶ He also endorses *cheironomia*, a mixture of pantomime and shadow-boxing with links to the Pythagoreans that

⁴² E.g., *Die Inschriften von Miletos* I 3, 145; *Jahreshefte des Österreichischen Archäologischen Instituts in Wien* 11, 1908, 56–61, no. 2–3.

⁴³ *Palaistra* is named after *palē*, which means wrestling.

⁴⁴ Galen, *Hygeine* 2.8, identifies the Pythagorean wrestler Milo with specific training techniques and lists various exercises (*gymnasia*) including rhythmic arm-swinging (*pitulizein*), running in an ever-narrowing spiral (*ekplethrizēin*), shadow-fighting (*skiomachein*), arm-wrestling (*akrocheirein*), jumping, throwing the discus and javelin, and working out with heavy bags, balls, and weights.

⁴⁵ Plato, *Laws* 795d–796a.

⁴⁶ Plato, *Laws* 672e: "And the part concerned with bodily motion possesses, in common with vocal motion, rhythm; besides which it possesses gesture as its own peculiar attribute, just as tune is the peculiar attribute of vocal motion." Τὸ δέ γε κατὰ τὴν τοῦ σώματος κίνησιν ῥυθμὸν μὲν κοινὸν τῇ τῆς φωνῆς εἶχε κινήσει, σχῆμα δὲ ἴδιον. ἐκεῖ δὲ μέρος ἡ τῆς φωνῆς κίνησις.

imitated (*mimesthai*) specific movements—perhaps those of heroes and esteemed athletes.⁴⁷ All of the exercises practiced in the children's *palaistra* would have to be fun and friendly enough to be motivated by pleasure—this is probably why Plato describes them as play (*paidia*) in the passage at *Laws* 673d, quoted above. Just as the rhythm in music engages the soul and regulates movement in a dance, the pleasure inherent in playful wrestling or courtyard games motivates participants to accept the limitations on their movement provided by the rules of the game or the example to be followed.

Plato's Socrates says in *Republic* that children's games prepare them to accept the rule of law later on,⁴⁸ and modern philosophy of sport confirms that players accept being

⁴⁷ For a discussion, see Matthew W. Dickie, "Παλαιστρέτης/ 'Palaestrita': Callisthenics in the Greek and Roman Gymnasium," *Nikephoros* 6 (1993): 105–151, 118. Plutarch, *Table Talk*, 747b, suggests that *cheironomia* was a gymnasium contest: "My brother Lamprias was appointed, along with Meniscus the trainer, to be judge, as he gave a convincing performance of the pyrrhic dance and had been thought better at shadow-fighting (*cheironomia*) than any of the boys in the wrestling-schools. Trans. E.L. Minar, F.H. Sandbach, W.C. Helmbold (Cambridge, MA: Harvard University Press, 1961). See also Dio Chrysostom 32.20. In *Symposium* 2, Xenophon's Charmides says he practiced it because he didn't know how to dance. Iamblichus, *De Vita Pythagorica* 97, mentions *chieronomia* among other exercises practiced by Pythagoreans.

⁴⁸ Plato, *Republic* 424e–425a: "So, as we were saying from the start, right from the beginning our youngsters must partake of a more lawful kind of play on the grounds that, if it becomes lawless and the children likewise, then it will be impossible for their children to grow into law-abiding and worthy men?" Οὐκοῦν, ὃ ἐξ ἀρχῆς ἐλέγομεν, τοῖς ἡμετέροις παισὶν ἐννομωτέρου εὐθὺς παιδιᾶς μεθεκτέον, ὥς παρανόμου γιγνομένης αὐτῆς καὶ παίδων τοιούτων ἐννόμους τε καὶ σπουδαίους ἐξ αὐτῶν ἄνδρας αὐξάνεσθαι ἀδύνατον ὄν;

governed by rules because it makes the pleasure of the game possible.⁴⁹ Children will play an energetic game like tag or kickball as long as they are having fun. Ballgames accordingly were common in ancient *gymnasia*, some even had a dedicated room for them called the *sphairistērion*.⁵⁰ The Imperial-era doctor Galen deems exercise with a small ball best because it not only exerts the body but also “delights the soul.”⁵¹

Since the pleasure of even a simple game like “keep-away” depends on obeying the rules, games can perform the same educational function as dance: guiding bodily movement by means of pleasure and discipline. Children’s wrestling, for the same reason, was probably a slightly more regulated form of natural horseplay. The impulse to learn through imitation (*mimēsis*), furthermore, could be indulged by exercises like *cheironomia* or *pyrrhikē*—a dance made up of fighting moves similar to the “forms” practiced in martial arts such as karate. In *Laws*, pyrrhic dancing is said to imitate (*mimeomai*) the bodies and souls of good people.⁵² Education in the *gymnasion*,

⁴⁹ See Bernard Suits, *The Grasshopper: Games, Life, and Utopia* 2nd ed. (Peterborough, ON: Broadview, [1978] 2005), 39, and discussion in Heather L. Reid, *Introduction to the Philosophy of Sport* 2nd ed. (Lanham, MD: Rowman & Littlefield, 2023), 53–55.

⁵⁰ Theophrastus, *Characters* 5.9 mentions a *sphairistērion*, and Pollux, *Onomasticon* 9.103–107 describes a variety of ancient ball games. For discussion, see Miller, *Ancient Greek Athletics*, 171–78.

⁵¹ Galen, *On Exercise with a Small Ball*, trans. Ian Johnston (Cambridge, MA: Harvard University Press, 2018), 900K: “I say the best of all exercises are not only those which are able to exercise the body vigorously, but those which are also able to delight the soul. φημὶ γὰρ ἄριστα μὲν ἀπάντων γυμνασίων εἶναι τὰ μὴ μόνον τὸ σῶμα διαπνεεῖν, ἀλλὰ καὶ τὴν ψυχὴν τέρεπιν δυνάμενα.

⁵² Plato, *Laws* 815ab: “pyrrhic dancing [...] represents modes of eluding all kinds of blows and shots by swervings and duckings

even for the very young,⁵³ expresses the principle of ordering wild movement through behavioral discipline motivated not just by the threat of pain from the *rhabdos*, but also the pleasure of music and playful fun and games.

Ethical *eutaxia* (*sōphrosunē*)

As future citizens develop morally, the source of their motivation and discipline needs to become internal. Obedience is transformed into self-control (*sōphrosunē*), a virtue long associated with athletics but adapted in *gymnasion* education to the goal of civic *aretē*. Youths in Plato's ideal city are said to have no need for law because of their *sōphrosunē*.⁵⁴ The Platonic

and side-leaps upward or crouching; and also the opposite kinds of motion, which lead to active postures of offence, when it strives to represent the movements involved in shooting with bows or darts, and blows of every description. In all these cases the action and the tension of the sinews are correct when there is a representation of fair bodies and souls...." πυρρίχην [...] τάς τε εὐλαβείας πασῶν πληγῶν καὶ βολῶν ἐκνεύσεσι καὶ ὑπεῖξει πάσῃ καὶ ἐκπηδήσεσιν ἐν ὕψει καὶ ξὺν ταπεινώσει μιμουμένην, καὶ τὰς ταύταις ἐναντίας, τὰς ἐπὶ τὰ δραστικά φερομένας αὐτῶν σχήματα ἐν τε ταῖς τῶν τόξων βολαῖς καὶ ἀκοντίων καὶ πασῶν πληγῶν μιμήματα ἐπιχειροῦσαν μιμεῖσθαι. τό τε ὀρθὸν ἐν τούτοις καὶ τὸ εὐτονον, τῶν ἀγαθῶν σωμάτων καὶ ψυχῶν ὁπόταν γίγνηται μίμημα.

⁵³ Plato, *Laws* 791c: "Let us say, then, that this factor—namely, the exercise of quite young children by the various motions—contributes greatly towards developing one part of the soul's virtue." ἐν δὴ καὶ τοῦτο εἰς ψυχῆς μόριον ἀρετῆς, τὴν τῶν παντελῶς παίδων γυμναστικὴν ἐν ταῖς κινήσεσιν, μέγα ἡμῖν φῶμεν συμβάλλεσθαι.

⁵⁴ Plato, *Republic* 410a: "Indeed it's clear," I said, "that your young people will take care not to resort to the need for the law, since they use that simple form of education in *mousikē* which we said gives rise to *sophōsunē*." Οἱ δὲ δὴ νέοι, ἦν δ' ἐγώ, δηλον ὅτι

Definitions, defines *sōphrosunē* as *eutaxia* and harmony in the soul with respect to pains and pleasures, ruling and being ruled (411e–412a):

Sōphrosunē [is] moderation of the soul concerning the desires and pleasures that normally occur in it; harmony and *eutaxia* in the soul in respect of normal pleasures and pains; concord of the soul in respect of ruling and being ruled; normal personal independence; *eutaxia* in the soul; rational agreement within the soul about what is admirable and contemptible; the state by which its possessor chooses and is cautious about what he should.

Σωφροσύνη μετριότης τῆς ψυχῆς περὶ τὰς ἐν αὐτῇ κατὰ φύσιν γιγνομένας ἐπιθυμίας τε καὶ ἡδονάς· εὐαρμοσσία καὶ εὐταξία ψυχῆς πρὸς τὰς κατὰ φύσιν ἡδονάς καὶ λύπας· συμφωνία ψυχῆς πρὸς τὸ ἄρχειν καὶ ἄρχεσθαι· αὐτοπραγία κατὰ φύσιν· εὐταξία ψυχῆς· λογιστικὴ ὁμιλία ψυχῆς περὶ καλῶν καὶ αἰσχυρῶν· ἕξις καθ' ἣν ὁ ἔχων αἰρετικός ἐστι καὶ ὑλαβητικός ὧν χρῆ

The Aristotleian *Virtues and Vices*, which, like the Platonic *Definitions*, seems to be a textbook for use in the gymnasium, describes *sōphrosunē* in terms of *eutaxia* and *kosmiotēs*:⁵⁵

To *sōphrosunē* it belongs not to value highly bodily pleasures and enjoyments, not to be covetous of every enjoyable pleasure, to fear disorder, and to live an orderly life (*tetasthai*) in small things and great alike.

εὐλαβήσονται σοι δικαστικῆς εἰς χρεῖαν ἵεναι, τῇ ἀπλῇ ἐκείνῃ μουσικῇ χρῶμενοι ἦν δὴ ἔφαμεν σωφροσύνην ἐντίκτειν.

⁵⁵ [Aristotle] *Virtues and Vices*, trans. H. Rackham (Cambridge, MA: Harvard University Press, 1935), 1250b8–13.

Sōphrosunē is accompanied by *eutaxia*, *kosmiotēs*, modesty, caution.

Σωφροσύνης δέ ἐστι τὸ μὴ θαυμάζειν τὰς ἀπολαύσεις τῶν σωματικῶν ἡδονῶν, καὶ τὸ εἶναι πάσης ἀπολαυστικῆς ἡδονῆς ἀνόρεκτον, καὶ τὸ φοβεῖσθαι τὴν ἀταξίαν, καὶ τὸ τετάσθαι περὶ τὸν βίον ὁμοίως ἔν τε μικροῖς καὶ μεγάλοις. παρέπεται δὲ τῇ σωφροσύνῃ εὐταξία, κοσμιότης, αἰδώς, εὐλάβεια.

The use of the verb *teinō*⁵⁶ in this passage recalls Socrates's description of music and gymnastics at *Republic* 411e–412a as arts that “harmoniously adjust” the soul by tightening and relaxing its spirited and wisdom-loving parts:

...it seems there are two arts which I would say some god gave to mankind, music and gymnastics for the service of the high-spirited principle and the love of knowledge in them—not for the soul and the body except incidentally, but for the harmonious adjustment (*epiteinō*) of these two principles by the proper degree of tension and relaxation of each.

...ἐπὶ δὴ δύ' ὄντε τούτω, ὡς ἔοικε, δύο τέχνα θεὸν ἔγωγ' ἄν τινα φαίην δεδωκέναι τοῖς ἀνθρώποις, μουσικὴν τε καὶ γυμναστικὴν ἐπὶ τὸ θυμοειδὲς καὶ τὸ φιλόσοφον, οὐκ ἐπὶ ψυχὴν καὶ σῶμα, εἰ μὴ εἰ πάρεργον, ἀλλ' ἐπ' ἐκείνω, ὅπως ἂν ἀλλήλοιν συναρμολογήτον ἐπιτεινομένω καὶ ἀνιεμένω μέχρι τοῦ προσηκόντος.

⁵⁶ The form *testashai* is translated here as “to live an orderly life,” but *teinō* has the primary meaning “to stretch,” especially in the context of turning stringed instruments. Hence, it is linked with concepts of order and harmony.

The image is one of tuning a lyre: the Pythagorean application of order to produce harmony. The passage that began at 410b with the question of how gymnastic education contributes to *aretē* in the soul ends with Socrates concluding at 412a:

Then he who best blends gymnastics with music and applies them most suitably to the soul is the man whom we should most rightly pronounce to be the most perfect and harmonious musician, far rather than the one who brings the strings into unison with one another.

τὸν κάλλιστ' ἄρα μουσικῇ γυμναστικὴν κεραννύντα
καὶ μετρίωτατα τῇ ψυχῇ προσφέροντα, τοῦτον
ὀρθότατ' ἂν φαῖμεν εἶναι τελέως μουσικώτατον καὶ
εὐαρμοστότατον, πολὺ μᾶλλον ἢ τὸν τὰς χορδὰς
ἀλλήλαις συνιστάντα.

The tuning metaphor is important because it shows how the adjustment of a physical instrument according to a rational sense of order can create something good and beautiful; the same principle applies to the human being. Gymnastic training not only harmonizes the body with the soul's rational sense of order, producing a visibly ordered physique, the ordered movement of the body also engenders such order in the soul.

Just as body builders balance upper and lower body exercise, physical and intellectual activity must be balanced to prevent over-development of one part of the soul at the expense of the others.⁵⁷ Plato's Socrates states in *Republic* that gymnastic exercise should be practiced not for the sake of bodily strength, as athletes do, but rather to arouse the spirited

⁵⁷ A man who concentrates on *gymnastikē* and neglects *mousikē* renders the philosophical part of his soul "feeble, deaf, and blind" according to Plato, *Republic* 411cd.

part of the soul (*thumoidēs*).⁵⁸ *Mousikē*, meanwhile, develops the philosophical part of the soul, but it needs to be harmonized with spirit through *gymnastikē* to keep it “gentle and orderly” (*kosmion*).⁵⁹ Music and gymnastics together put the parts of the soul in their proper order (*Republic* 441e–442a):

‘Then is it not, as we said, the blending of music and gymnastics that will render [reason and spirit] concordant, intensifying and fostering the one with fair words and teachings and relaxing and soothing and making gentle the other by harmony and rhythm?’ [...] ‘And these two thus reared and having learned and been educated to do their own work in the true sense of the phrase, will preside over the appetitive part...’

ἄρ’ οὖν οὐχ, ὥσπερ ἐλέγομεν, μουσικῆς καὶ γυμναστικῆς κρᾶσις σύμφωνα αὐτὰ ποιήσῃ, τὸ μὲν ἐπιτείνουσα καὶ τρέφουσα λόγοις τε καλοῖς καὶ μαθήμασιν, τὸ δὲ ἀνιῆῖσα παραμυθουμένη, ἡμεροῦσα ἀρμονίᾳ τε καὶ ῥυθμῷ; [...] καὶ τούτῳ δὴ οὕτῳ τραφέντε καὶ ὥς ἀληθῶς τὰ αὐτῶν μαθόντε καὶ παιδευθέντε προστήσεσθον τοῦ ἐπιθυμητικοῦ

How exactly music and gymnastics would achieve this harmony is not explained, except to say they should be practiced in a simple and moderate way (*Republic* 404e). Plato

⁵⁸ Plato, *Republic* 410b: “What is more, he will toil at the gymnastics and physical exercise with a view to arousing the passionate side of his nature rather than cultivating mere strength, unlike other athletes who plan their diet and exercise with a view to developing muscle.” Αὐτά μὴν τὰ γυμνάσια καὶ τοὺς πόνους πρὸς τὸ θυμοειδὲς τῆς φύσεως βλέπων κάκεῖνο ἐγείρων πονήσῃ μᾶλλον ἢ πρὸς ἰσχύν, οὐχ ὥσπερ οἱ ἄλλοι ἀθληταὶ ῥώμης ἕνεκα σιτία καὶ πόνους μεταχειρίζονται.

⁵⁹ Plato, *Republic* 410e.

and Aristotle agree that heavy training for athletic competition is not appropriate before puberty, but they both allow for a short period of life afterward to be completely dedicated to it.⁶⁰ As Aristotle says in *Politics* 1338b–1339a:

It is thus agreed that we should employ gymnastic training, and how we should employ it. For until puberty we should apply lighter exercises, forbidding hard diet and severe exertions, in order that nothing may hinder the growth; [...] But when they have spent three years after puberty upon their other studies, then it is suitable to occupy the next period of life with laborious exercises and a strict training diet; for it is wrong to work hard with the mind and the body at the same time, for it is the nature of the two different sorts of exertion to produce opposite effects, bodily toil impeding the development of the mind and mental toil that of the body.

ὅτι μὲν οὖν χρηστέον τῇ γυμναστικῇ, καὶ πῶς χρηστέον, ὁμολογούμενόν ἐστιν· μέχρι μὲν γὰρ ἡβῆς κουφότερα γυμνάσια προσοιστέον, τὴν βίαιον τροφήν καὶ τοὺς πρὸς ἀνάγκην πόνους ἀπειργοντάς, ἵνα μὴ θέν ἐμπόδιον ᾖ πρὸς τὴν αὐξήσιν [...]. ὅταν δ' ἀφ' ἡβῆς ἔτη τρία πρὸς τοῖς ἄλλοις μαθήμασι γένωνται, τότε ἀρμόττει καὶ τοῖς πόνοις καὶ ταῖς ἀναγκοφαγίαις καταλαμβάνειν τὴν ἐχομένην ἡλικίαν· ἅμα γὰρ τῇ τε διανοίᾳ καὶ τῷ σώματι διαπονεῖν οὐ δεῖ, τούναντίον γὰρ ἐκάτερος ἀπεργάζεσθαι πέφυκε τῶν πόνων, ἐμποδίζων ὁ μὲν τοῦ σώματος πόνος τὴν διάνοιαν ὁ δὲ ταύτης τὸ σῶμα.

⁶⁰ For Plato, see *Republic* 498bc, and 537b.

In any case, the psychological aspects of athletic competition and training—practiced in a moderate way—seem to contribute to the virtuous soul they are aiming for. In fact, ancient *gymnasia* staged intramural competitions, typically called *Hermaia*, that commonly awarded prizes not only for footraces and other athletic contests but also for “gymnastic virtues” such as *philoponia*, *euexia*, *eutaxia*, and *eukosmia*.⁶¹ We do not know the exact nature of the contests, but awarding a prize for something attaches the pleasure of victory to it, thereby motivating a desire for honor (*philotimia*)—the characteristic emotion of the spirited part of the soul. *Philotimia*, in turn, motivates the appetitively unpleasant exertion (*ponos*) and training (*askēsis*) required to achieve such honors—as Xenophon recognized in his praise of King Cyrus:

And as, in addition to this, he had further observed that people are much more willing to practice (*askein*) those things in which they have rivalry (*philonikia*) among themselves, he appointed contests for them in everything that he knew it was important for soldiers to practice (*askeō*).

ἔτι δὲ πρὸς τούτοις ἐννοήσας ὅτι περὶ ὁπόσων ἂν ἐγγένωνται ἀνθρώποις φιλονικίαι, πολὺ μᾶλλον ἐθέλουσι ταῦτ' ἀσκεῖν, ἀγῶνάς τε αὐτοῖς προεῖπεν

⁶¹ For example, three inscriptions from Samos contemporary to the Gymnasiarchic law preserve lists of victors from gymnasia competitions show that the youth competed in foot race, *euexia*, *eutaxia*, *philoponia*, stone throwing, catapult, javelin throw, archery, fighting with weapons, fighting with shields, *stadion*, *diaulon*, and *dolichos*. E.g., IG XII 6 1 183 (before the middle of the second century BCE); IG XII 6 1 181 (200 BC) and IG XII 6 1 182 (200–150 BC). In another victory list from Samos, we read alongside winners of *philoponia* and torch-racing, winners in *diaulon*, wrestling, *pankration*, and boxing: IG XII 6 1 180.

ἀπάντων ὅποσα ἐγίγνωσκεν ἀσκεῖσθαι ἀγαθὸν
εἶναι ὑπὸ στρατιωτῶν καὶ προεῖπε.⁶²

Very likely the “gymnastic virtue” prizes were cumulative awards based on habitual attitudes and behaviors exhibited over the course of a year. Explained philosophically, such prizes helped to move motivation and discipline inward by incentivizing the spirited part of the soul to follow the sense of rational order characteristic of the philosophical part. The appetitive impulse to sleep in, shout out, or otherwise act up was eventually overpowered internally by the spirit’s desire to win the award by following the counsel of reason.

Besides running, contests in wrestling, boxing, *pankration*, javelin, archery, and other skilled athletic events are attested in the *Hermaia*—especially for the ephebes. Success in these would of course require organized and habitual training over a period of time—training that would incorporate musical principles such as rhythm and measure, even if it was not accompanied by music itself. Advanced training methods employing mathematical principles such as progressive resistance are attested in the ancient world, and associated with the Pythagorean wrestler Milo, who was famous for exercising with a calf draped over his shoulders every day until it turned into a bull.⁶³ There is also evidence of periodization in a training technique called the *tetrad*, which varied exercise intensities over a four-day cycle. Philostratus thought the *tetrad* to be dangerous for youths and even blamed

⁶² Xenophon, *Cyropaedia* 2.1.22, trans. Walter Miller (Cambridge, MA: Harvard University Press, 1914).

⁶³ The common legend which even generated a proverb is referenced in Quintilian, *The Orator’s Education*, 1.9.5. For discussion, see Jean-Manuel Roubineau, *Milon de Crotone: Ou L’invention du Sport* (Paris: Presses Universitaires de France, 2016), and Heather Reid’s review in *The Classical Review* 67.2 (October 2017): 457–59.

a young athlete's death on it.⁶⁴ It is unlikely that training for *gymnasion* contests was so extreme. As explained above, both Plato and Aristotle thought moderation was the key since heavy training was inimical to engagement with the Muses. But low-key athletic contests and prizes for gymnastic virtues could arouse *philotimia* and incentivize the internal discipline of *sōphrosunē* associated explicitly with gymnastic education.

Social *eutaxia* (*dikaiosunē*)

The goal of *gymnasion* education is to create citizens, but philosophically there is an interdependence between *eutaxia* in individual souls and in their communities. It is telling that the Academy handbook defines justice (*dikaiosunē*) in terms that can be understood individually or politically as:

the unanimity of the soul with itself, and the *eutaxia* of the parts of the soul with respect to each other and concerning each other; the state that distributes to each person according to what is deserved; the state on account of which its possessor chooses what appears to him to be just; the state underlying a law-abiding way of life; social equality; the state of obedience to the laws.

Δικαιοσύνη ὁμόνοια τῆς ψυχῆς πρὸς αὐτήν, καὶ εὐταξία τῶν τῆς ψυχῆς μερῶν πρὸς ἄλληλά τε καὶ περὶ ἄλληλα· ἕξις διανεμητικὴ τοῦ κατ' ἀξίαν ἐκάστω· ἕξις καθ' ἣν ὁ ἔχων προαιρετικὸς ἐστὶν τῶν φαινομένων αὐτῷ δικαίων· ἕξις ἐν βίῳ νόμου ὑπήκοος· ἰσότης κοινωνικὴ ἕξις ὑπηρετικὴ νόμων.⁶⁵

The translator pushes things a bit by rendering *hexis* (condition) as “state,” but in Plato's *Republic*, justice in the individual is a kind of musical micronarrative for justice in the

⁶⁴ See Philostratus, *Gymnasticus* §§47–54.

⁶⁵ [Plato], *Definitions* 411d–e.

community; indeed justice is the power (*dunamis*) that produces *eutaxia* in souls and states (*poleis*) alike.⁶⁶ Socrates defines the just man, furthermore, not in terms of his external affairs, but as having attained,

self-mastery and beautiful order within himself, and having harmonized these three principles [of the soul], the notes or intervals of three terms quite literally the lowest, the highest, and the mean, and all others there may be between them, and having linked and bound all three together and made of himself a unit, temperate and harmonious.

ἄρξαντα αὐτὸν αὐτοῦ καὶ κοσμήσαντα καὶ φίλον
γενόμενον ἑαυτῷ καὶ συναρμόσαντα τρία ὄντα,
ὥσπερ ὄρους τρεῖς ἀρμονίας ἀτεχνῶς, νεάτης τε
καὶ ὑπάτης καὶ μέσης, καὶ εἰ ἄλλα ἄττα μεταξὺ
τυγχάνει ὄντα, πάντα ταῦτα συνδήσαντα καὶ
παντάπασιν ἕνα γενόμενον ἐκ πολλῶν, σώφρονα
καὶ ἡρμοσμένον. (*Republic* 443d–e)

Leaders need to be in harmony with themselves internally in order to create harmony in their communities (something Siracusa's Dionysius notoriously failed to achieve).⁶⁷ In Plato's

⁶⁶ As Socrates convinces Glaucon at 443b: "Are you still looking for justice to be something other than this power which produces men and states such as this one?" | 'No, by Zeus!', he said." Ἐτι τι οὖν ἕτερον ζητεῖς δικαιοσύνην εἶναι ἢ ταύτην τὴν δύναμιν ἢ τοὺς τοιούτους ἄνδρας τε παρέχεται καὶ πόλεις; | Μὰ Δία, ἢ δ' ὅς, οὐκ ἔγωγε.

⁶⁷ See Plato, *Seventh Letter*, 332d: "Such, then, was the counsel which Dion and I always gave to Dionysius. [...] in the first place, make it his aim to acquire other friends for himself from among his kindred and contemporaries who were in harmony about virtue; and to acquire, above all else, this harmony within himself, since

ideal *polis*, the three social classes with particular functions (producers, guardians, and rulers) correspond to the three elements of the soul.

It is not enough for the *gymnasion* to foster *eutaxia* in individuals, it also needs to teach them their place in the community. As Aristotle points out, “law is a form of order (*taxis*), and good law must necessarily mean good order (*eutaxia*); but an excessively large number cannot participate in order (*taxeōs*).”⁶⁸ Citizenship was not a privilege afforded automatically to everyone; it meant taking special responsibility for the *polis* and, in the case of the epehebes, learning to defend it militarily. Originally attested as a liturgy in 4th-century Athens,⁶⁹ *eutaxia* is frequently used in a military context and could apply to military activities in the *gymnasion* such as marching, group fighting exercises, and training with weapons and shields.⁷⁰

in this he was surprisingly deficient.” Ἀ δὴ καὶ Διονυσίῳ
ξυνεβουλεύομεν ἐγὼ καὶ Δίων [...] πρῶτον ἐπὶ ταῦτα
ὀρμήσαντα φίλους ἄλλους αὐτῷ τῶν οικείων ἅμα καὶ
ἡλικιωτῶν καὶ συμφώνους πρὸς ἀρετὴν κτήσασθαι, μάλιστα δ’
αὐτὸν αὐτῷ, τούτου γὰρ αὐτὸν θαυμαστῶς ἐνδεᾶ γεγενέσθαι.
Tr. R.G. Bury (Cambridge, MA, Harvard University Press, 1966).

⁶⁸ Aristotle, *Politics* 1326a: νόμος τάξις τίς ἐστι, καὶ τὴν εὐνομίαν
ἀναγκαῖον εὐταξίαν εἶναι, ὃ δὲ λίαν ὑπερβάλλων ἀριθμὸς οὐ
δύναται μετέχειν τάξεως.

⁶⁹ On *eutaxia* as a liturgy, see IG II² 417 (c.330 BC). Stephen Lampert,
“Ten Notes on Attic Inscriptions,” *Zeitschrift für Papyrologie und
Epigraphik* 135 (2001): 51–62, 56, argues that it was certainly an
agonistic liturgy. This is suggested by a relief with an inscription
dated in the last quarter of the 4th c. BCE, depicting a honorand
with a shield (a common prize in civic contests), being crowned
by the *demos* with a personification of *Eutaxia* standing by.

⁷⁰ See, for example Thucydides, *History of the Peloponnesian War* 6.72;
Plato, *Laches* 191c; Xenophon, *Memorabilia*, 3.3, and *On Hunting*

But philosophically speaking, both individual and political *eutaxia* is based on an understanding of community structure and an acceptance of one's role in it. Just as the irrational parts of the soul must accept being ruled by the rational part, all citizens including the military must be willing to perform their specific function in society. Social responsibility is not reducible to military activity, and even the highest social position is still beneath the gods. It is not by chance that visits to the *gymnasion* typically began with religious sacrifice, or that ephebes were often responsible for performing sacrifices at public festivals. Order between gods and humans, as well as among social groups such as *paides* and *neoi* (youths) was rigorously controlled in the *gymnasion*.⁷¹

There were also exercises in social cooperation. The fact that Panhellenic athletic festivals such as the Olympic Games generally excluded team sports makes the *gymnasion's* inclusion of them all the more remarkable. It has even been argued that the *eutaxia* was a team competition based on military skills.⁷² The premier team sport for *gymnasia*, however, was the *lampadēdromia* or *lampas* (torch-race) in which groups of youths representing different districts had to carry a sacred

12.5. Luca Sansone Di Campobianco, "The Frame of Mind of Εὐταξία" in *Mass and Elite in the Greek and Roman Worlds: From Sparta to Late Antiquity*, ed. Richard Evans (London: Routledge, 2017), 28, argues mainly from epigraphic evidence that *eutaxia* can be understood as the *technē* that oversees the artful deployment of the phalanx and the preservation of its cohesion in battle.

⁷¹ See EKM 1 Beroia. 1 ll.B.13–15, quoted at the start of this section.

⁷² Nigel B. Crowther, "Team Sports in Ancient Greece: Some Observations," *The International Journal of Sport History* 12.1 (1995): 127–36, reprinted in *Athletika: Studies on the Olympic Games and Greek Athletics* (Hildesheim: Weidmann, 2004), 357 describes *eutaxia* as a military contest for teams on horseback. He also takes the *euandria* to be a team competition in beauty.

flame from one altar to another without letting it go out. The torch-race for the Panathenaia began at the altar of Eros in the Academy gymnasium and finished on top of the Acropolis⁷³—it doesn't take much to imagine the sense of social and religious responsibility such an event inspired. Plato's *Republic* mentions a torch-race on horseback (at a festival outside Athens) in its prologue, and *Laws* uses the torch-race as a metaphor for passing life from one generation to the next.⁷⁴ As anyone who has participated in a relay-race knows, it inspires a keen awareness of one's own performance as something that others are depending on, and creates a special need for timing and cooperation. Such feelings could only be intensified by running naked through city streets while trying to keep a sacred flame alight. The torch relay replicates the psychology of citizenship better than military service ever could.

Conclusion

In a way, the image of the *lampadēdromia* brings us full-circle to the publicly performed choral dance with which we began: groups of age-mates, moving their bodies in a coordinated way as they commemorate the excellences of their ancestors. But the philosophy of the *gymnasion* re-interpreted civic education as a process that harmonizes human action with philosophical ideals by moving one's sense of discipline from obedience, to honor, and finally to justice. It does this in the beginning by establishing healthy routines and pleasant games enforced by external authority, then it moves to structured training and intramural competition which

⁷³ On the civic value of team events in the Panathenaia see Julia L. Shear, *Serving Athena: The Festival of the Panathenaia and the Construction of Athenian Identities* (Cambridge: Cambridge University Press, 2021), 196–201.

⁷⁴ Plato, *Republic* 238a; *Laws* 776b. See Xenophon, *Ways and Means* 4.52 on torch-race teams receiving a stipend from the *gymnasion*.

cultivate self-discipline (*sōphrosunē*), and it reaches a peak with cooperative activities and team sports that motivate and enforce a sense of social responsibility (*dikaiosunē*). In tandem with *mousikē*, which cultivates an intellectual appreciation of *kosmos* and *taxis*, *gymnastikē* applies those principles to movement activities thereby harmonizing body and soul not just individually but also collectively. This is why in Plato's *Republic*, care for the state begins with preserving the *taxis* in musical and gymnastic education;⁷⁵ *eutaxia* turns out to be the *mousikē* in *gymnastikē*.

⁷⁵ Plato, *Republic* 424b: "...the overseers of our state must [...] be watchful against innovations in gymnastics and music counter to the established order." τοῖς ἐπιμεληταῖς τῆς πόλεως, παρὰ πάντα αὐτὸ φυλάττωσι, τὸ μὴ νεωτερίζειν περὶ γυμναστικὴν τε καὶ μουσικὴν παρὰ τὴν τάξιν.