MUSIC AND THE EDUCATION OF THE SOUL IN PLATO AND ARISTOTLE: HOMOEOPATHY AND THE FORMATION OF CHARACTER¹

Studies of how the Greeks understood the role of music in the education of the soul have tended to focus on two points above all.² First, scholars treat the idea that music influences the soul as a self-evident notion that started with the Pythagoreans, and they attribute the same view of the subject to both Plato and Aristotle. As an example of the latter tendency consider the following statement: 'Aristotle's conviction that character must be formed by habituation before the intellect is instructed – a conception he shares with Plato – will be important to bear in mind when considering ethical training though music.'3 In fact, Plato's position on music and the education of the soul evolves from the Republic to the Laws; in particular he considers the role of pleasure in the musical education of young children in the Laws but not in the Republic. The second general tendency in the scholarship on this subject makes $\hat{\eta}\theta o_S$ a central idea in musical education, as indicated by the titles of the books by Abert and Anderson and by the widespread use of the term ethos in discussing this subject. In fact, it is only Aristotle, in the *Politics*, who speaks of $\hat{\eta}\theta_{OS}$ in his treatment of musical education. It is worth setting out the differences, occasionally subtle ones, between the treatments of this question in Plato, in both the Republic and the Laws, and Aristotle in the Politics. It is also worth specifying how the concept of $\hat{\eta}\theta_{OS}$ arises in connection with musical education, which will entail avoiding its use in regard to Plato.

Music is a fundamental part of Greek *paideia* in the classical period.⁴ As the sophists rose to prominence in the fifth century, the role of music in education became a topic of great interest. Plato provides a crucial set of sources for understanding this development: the organisation of the ideal cities described in the *Republic* and the *Laws* requires an account of the education which the citizens of those cities will have to receive, whether or not those citizens will form part of the governing class. In this paper I shall say little about how Plato may have borrowed from the sophists in regard to musical education, but will focus first on the characteristic features of his theory of music's role in education in the *Republic* and *Laws*. Then I shall consider Aristotle's approach in the final three chapters of Book 8 of the *Politics*, where he considers the role of music in educating the soul.

¹ I thank Harvey Yunis who translated this article into English.

² Cf. H. Abert, Die Lehre vom Ethos in der griechischen Musik. Ein Beitrag zur Musikästhetik des klassischen Altertums (Leipzig, 1899); W.D. Anderson, Ethos and Education in Greek Music: The Evidence of Poetry and Philosophy (Cambridge, MA, 1966); A. Barker, Greek Musical Writings. Vol. 1, The Musician and His Art (Cambridge, 1984); R.W. Wallace, 'Damon of Oa: a music theorist ostracized?', in P. Murray and P. Wilson (edd.), Music and the Muses: The Culture of Mousikê in the Classical Athenian City (Oxford, 2004), 249–67; and A. Ford, 'Katharsis: the power of music in Aristotle's Politics', in Murray and Wilson, Music and the Muses, 309–36.

³ A. Ford (n. 2), 314 (emphasis added).

⁴ Cf. H.-I. Marrou, *Histoire de l'Éducation dans l'Antiquité. Vol. 1: Le Monde Grec* (Paris, 1948).

If one excludes the brief remarks of Protagoras in the dialogue named after him,⁵ and those of Socrates in the *Crito* and *Alcibiades*,⁶ it is in the *Republic* and the *Laws* that Plato describes, through the dialogues' characters, the task that falls to music in the education of the soul. Before setting out the differences in the treatment of music in the two dialogues and accounting for the ways in which Plato's view evolved from the *Republic* to the *Laws*, it is necessary to consider three basic questions that concern Plato's overall view of music and education: why is it that music should have any role at all in the education of the soul? What type of music does one use and why? Whom does one educate and by what means?

Once the necessity of conferring power on the guardians has been established, the interlocutors of the *Republic* attempt to define and describe the training which the guardians will receive. In classical fashion Socrates assigns the art of gymnastic to the formation of the body and the art of music to that of the soul. Beyond this basic training, the future guardians will receive higher instruction for the formation of their minds, as described in Books 6 and 7. Yet even before the introduction of gymnastic, the very first educational influence which the guardians will receive concerns the formation of their character through music. The word 'music' translates the term $\mu ov \sigma u \kappa \eta$, which covers a large field – 'the art of the Muses' in its entirety – including not only the art of rhythms and harmonies, but also that of $\lambda \delta \gamma o u$ ('discourses'). Here we will only be considering music in the narrow sense, that is, the art of rhythms and harmonies. Questions regarding poetry, in particular the type of objects that poets are obliged to represent in their compositions and the way in which they are obliged to represent them, will be left aside. Aristotle takes up these questions in a distinct treatise – the *Poetics* – and not in the chapters of the *Politics* that will concern us here.

⁵ Protagoras 326a4-b6: οἴ τ' αὖ κιθαρισταί, ἔτερα τοιαῦτα, σωφροσύνης τε ἐπιμελοῦνται καὶ ὅπως ἄν οἱ νέοι μηδὲν κακουργώσιν· πρὸς δὲ τούτοις, ἐπειδὰν κιθαρίζειν μάθωσιν, ἄλλων αὖ ποιητῶν ἀγαθῶν ποιήματα διδάσκουσιν μελοποιῶν, εἰς τὰ κιθαρίσματα ἐντείνοντες, καὶ τοὺς βυθμούς τε καὶ τὰς ἀρμονίας ἀναγκάζουσιν οἰκειοῦσθαι ταῖς ψυχαῖς τῶν παίδων, ἴνα ἡμερώτεροί τε ὧσιν, καὶ εὐρυθμότεροι καὶ εὐαρμοστότεροι γιγνόμενοι χρήσιμοι ὧσιν εἰς τὸ λέγειν τε καὶ πράττειν· πῶς γὰρ ὁ βίος τοῦ ἀνθρώπου εὐρυθμίας τε καὶ εὐαμμοστίας δείται. 'The music masters by analogous methods instill self-control and deter the young men from evil-doing. And when they have learned to play the lyre, they teach them the works of good poets of another sort, namely the lyrical, which they accompany on the lyre, familiarising the minds of the children with the rhythms and melodies. By this means they become more civilised, more balanced, and better adjusted in themselves and so more capable in whatever they say or do, for rhythm and harmonious adjustment are essential to the whole of human life'. (trans. Guthrie)

⁶ Crito 50d5–el: (The laws of Athens are speaking) Άλλὰ τοῖς περὶ τὴν τοῦ γενομένου τροφήν τε καὶ παιδείαν ἐν ἢ καὶ σὺ ἐπαιδεύθης; ἢ οὐ καλῶς προσέταττον ἡμῶν οἱ ἐπὶ τούτω τεταγμένοι νόμοι, παραγγέλλοντες τῷ πατρὶ τῷ σῷ σε ἐν μουσικἢ καὶ γυμναστικἢ παιδεύειν; 'Have you any [complaint] against the laws which deal with children's upbringing and education, such as you had yourself? Are you not grateful to those of us laws which were instituted for this end, for requiring your father to give you a musical and physical education?' (trans. adapted from Tredennick). Alcibiades 106e4–6: (Socrates addressing Alcibiades) Άλλὰ μὴν ἄ γε μεμάθηκας σχεδόν τι καὶ ἐγὰ οἶδα· εἰ δέ τι ἐμὲ λέληθεν, εἰπέ. 'Έμαθες γὰρ δὴ σύ γε κατὰ μνήμην τὴν ἐμὴν γράμματα καὶ κιθαρίζειν καὶ παλαίειν· οὐ γὰρ δὴ αὐλεῖν γε ἤθελες μαθεῖν. 'I know more or less the subjects that you learned. If I missed anything, let me know. As far as I recall, you learned to read and write, to play the cithara, and to wrestle; you refused to learn to play the flute'.

⁷ Rep. 2.376c7–8.

⁸ Rep. 2.376e2-4.

⁹ Rep. 2.376e9-3.398b8.

The first point to be considered in regard to the musical education of the soul is the mimetic quality of music. Like all other arts, such as drawing, weaving, embroidery, and architecture, but also like nature itself, music is capable of imitating moral qualities and human attitudes; music does so by means of rhythms and harmonies. 10 Because music has this property. Socrates and his interlocutors seek to purify music by following the same rules as those which were adopted when they defined the principles of imitation for narrative discourse and poetry. This process takes place in two steps: purification of harmonies, then purification of rhythms. One group of harmonies is rejected straightaway: mixolydian and syntonolydian. 11 These are the harmonies used in threnodies, and the type of poetic composition that expresses funereal grief and lamentation was previously excluded because it inspires neither courage nor restraint in those who listen to it.¹² The Ionian and Lydian harmonies suffer the same fate: these harmonies which are $\mu \alpha \lambda \alpha \kappa \alpha i \tau \epsilon \kappa \alpha i \sigma \nu \mu \pi \sigma \tau \iota \kappa \alpha i$ ('soft and tending to promote drinking')¹³ and also $\gamma \alpha \lambda \alpha \rho \alpha i$ ('loose'), ¹⁴ are not suited for the warriors who are the guardians of the city. Only the Phrygian and Dorian are maintained because they imitate the sounds and accents of a man who is both courageous and temperate, courage and temperance being the two virtues of the man who is philosophical by nature (*Rep.* 3.399a5–c4):

Οὐκ οἶδα, ἔφην ἐγώ, τὰς άρμονίας, ἀλλὰ κατάλειπε ἐκείνην τὴν ἁρμονίαν, ἢ ἔν τε πολεμικὴ πράξει ὄντος ἀνδρείου καὶ ἐν πάση βιαίῳ ἐργασία πρεπόντως ἂν μιμήσαιτο φθόγγους τε καὶ προσφδίας, καὶ ἀποτυχόντος ἢ εἰς τραύματα ἢ εἰς θανάτους ἰόντος ἢ εἰς τινα ἄλλην συμφορὰν πεσόντος, ἐν πᾶσι τούτοις παρατεταγμένως καὶ καρτερούντως ἀμυνομένου τὴν τύχην· καὶ ἄλλην αὖ ἐν εἰρηνικἢ τε καὶ μὴ βιαίῳ ἀλλ' ἐν ἐκουσία πράξει ὅντος, ἢ τινά τι πείθοντός τε καὶ δεομένου, ἢ εὐχἢ θεόν ἢ διδαχῆ καὶ νουθετήσει ἄνθρωπον, ἢ τοὐναντίον ἄλλῳ δεομένῳ ἢ διδάσκοντι ἢ μεταπείθοντι ἐαυτὸν ἐπέχοντα, καὶ ἐκ τούτων πράξαντα κατὰ νοῦν, καὶ μὴ ὑπερηφάνως ἔχοντα, ἀλλὰ σωφρόνως τε καὶ μετρίως ἐν πᾶσι τούτοις πράττοντά τε καὶ τὰ ἀποβαίνοντα ἀγαπῶντα. Ταύτας δύο ἀρμονίας, βίαιον, ἐκούσιον, δυστυχούντων, εὐτυχούντων, σωφρόνων, ἀνδρείων αἴτινες φθόγγους μιμήσονται κάλλιστα, ταύτας λεῖπε.

I don't know the harmonies, I said, but leave us that harmony that would fittingly imitate the utterances and accents of a brave man who is engaged in warfare or in any enforced business, and who, when he has failed, either meeting wounds or death or having fallen into some other mishap, in all these conditions confronts fortune with steadfast endurance and repels her strokes. And another for such a man engaged in works of peace, not enforced but voluntary, either trying

¹⁰ Rep. 3.401a1-8.

The usual translation 'mode' $-\phi \rho \nu \gamma \iota \sigma \tau i$, for example, being rendered as the 'phrygian mode' - does not correspond to any Greek word in the text. This translation, which in fact is a gloss, is incoherent in the eyes of the musicologists if one accepts the comment of O. Gombosi, 'The Greeks knew no modes', (uttered at the Congress of Musicologists, Basel, 1949 and cited by J. Chailley, La Musique Grecque Antique [Paris, 1979], 105), and the paper on the 'mythe des modes grees' presented by J. Chailley to the French Society of Musicology in 1955. The method of translating the Greek terms adopted in this paper follows Chailley, who writes 'la terminologie doit être auscultée avec soin. Le mot "mode" n'a aucun équivalent en gree, ce qui est déjà révélateur. Le plus souvent, on trouve des adverbes ou adjectifs substantivés, tels que $\dot{\eta}$ δωριστί ου δ μειξολύδιος; c'est en voulant préciser indûment que des traducteurs trop zélés interpolent "le mode dorien ou mixolydien", ou encore traduisent par "mode" des termes dont le sens est tout autre.... On supplie les traducteurs à venir d'être particulièrement méticuleux quant à la précision des termes; bien des mécomptes eussent été évités si $\tau \acute{o}vos$ était toujours traduit par ton, $\delta \rho \mu o \nu \acute{a}$ par harmonie, $\delta \delta \acute{o}\rho \iota o s$ par "le dorien" (sans interpolation), etc, et ceci ne vaut pas seulement pour le français' (La Musique Grecque Antique, 106).

¹² Rep. 3.387d1-388e4.

¹³ Rep. 3.398e9.

¹⁴ Rep. 3.398e10.

to persuade somebody of something and imploring him – whether it be a god, through prayer, or a man, by teaching and admonition – or contrariwise yielding himself to another who is petitioning or teaching him or trying to change his opinions, and in consequence faring according to his wish, and not bearing himself arrogantly, but in all this acting modestly and moderately and acquiescing in the outcome. Leave us these two harmonies – the enforced and the voluntary – that will best imitate the utterances of men failing or succeeding, the temperate, the brave – leave us these. (trans. adapted from Shorey)

The musical rhythms $(\delta \nu \theta \mu o i)$ that along with harmonies $(\delta \rho \mu o \nu i \alpha \iota)$ and words $(\delta \delta \gamma o \iota)$ form melody $(\mu \epsilon \delta o s)^{15}$ are in turn subject to the same distinction (*Rep.* 3.399e8–11):

Έπόμενον γὰρ δὴ ταῖς άρμονίαις ἂν ἡμῖν εἴη τὸ περὶ ῥυθμούς, μὴ ποικίλους αὐτοὺς διώκειν μηδὲ παντοδαπὰς βάσεις, ἀλλὰ βίου ῥυθμοὺς ἰδεῖν κοσμίου τε καὶ ἀνδρείου τίνες εἰσίν.

For upon harmonies would follow the consideration of rhythms; we must not pursue complexity nor great variety in the basic movements, but must observe what are the rhythms of a life that is orderly and brave. (trans. Shorey)

As in the case of the harmonies, there exists here too a similarity between the human attitudes of courage and moderation and certain types of rhythms, though Glaucon admits to Socrates that he does not understand this correspondence in detail and Socrates recommends consulting Damon, ¹⁶ whose *Areopagiticus* may have contained 'a study of rhythms, complete with a metrical analysis of which only a few scraps survive.' ¹⁷ In any case Plato does not concern himself in the *Republic* with the

- 15 Rep. 3.398d1-2.
- ¹⁶ Cf. Glaucon and Socrates on the question of which rhythms produce an orderly life (Rep. 3.400a4-b4): Ἀλλὰ μὰ Δί΄, ἔφη, οὖκ ἔχω λέγειν. Ὁτι μὲν γὰρ τρί΄ ἄττα ἐστὶν εἴδη ἐξ ὧν αἱ βάσεις πλέκονται, ὥσπερ ἐν τοῖς ψθόγγοις τέτταρα, ὅθεν αἱ πᾶσαι ἁρμονίαι, τεθεαμένος ἂν εἴποιμι· ποῖα δὲ ὁποίου βίου μιμήματα, λέγειν οὖκ ἔχω. Ἀλλὰ ταῦτα μέν, ἢν δ΄ ἐγώ, καὶ μετὰ Δάμωνος βουλευσόμεθα, τίνες τε ἀνελευθερίας καὶ ὕβρεως ἢ μανίας καὶ ἄλλης κακίας πρέπουσαι βάσεις, καὶ τίνας τοῖς ἐναντίοις λειπτέον ῥυθμούς. 'Nay, in faith, I cannot tell. For that there are some three forms from which the steps are combined, just as there are four in the notes of the voice whence come all harmonies, is a thing that I have observed and could tell. But which are imitations of which sort of life, I am unable to say. Well, said I, on this point we will take counsel with Damon, too, as to which are the steps appropriate to illiberality, and insolence or madness or other evils, and what rhythms we must leave for their opposites'. (trans. adapted from Shorey)
- ¹⁷ D. Delattre, article on Damon, in R. Goulet (ed.), Dictionnaire des Philosophes Antiques (1989), 606. According to F. Lasserre, Plutarque, De la Musique: Texte, Traduction et Commentaire précédés d'une Étude sur l'Éducation Musicale dans la Grèce Antique (Lausanne, 1954), 67–8, Damon posited three basic rhythms that form the 'steps' $(\beta \dot{\alpha} \sigma \epsilon \iota s)$, among which some are complex, such as the enoplion, and others are simple, such as the epic, the iambic, and the trochaic. Scholars have tried to reconstruct Damon's doctrine of rhythms: D. Holwerda, 'De Artis Metricae Vocabulis quae sunt $\Delta AKTY\Lambda O\Sigma$ et $ENO\Pi\Lambda IO\Sigma$ ', in KΩMΩIΔOTPAΓHMATA, Studia Aristophanea W.J.W. Koster in Honorem, R.E.H. Westendorp (ed.) (Amsterdam, 1967), 51-8; C. Del Grande, 'L'Insegnamento di Damone', in Enciclopedia Classica, Sezione II: Lingua e Letteratura, volume V: La Lingua Greca nei mezzi della sua espressione, Tomo II: La Metrica Greca (Turin, 1960), 216-29. According to E. Moutsopoulos, the entity known as basis 'pourrait remonter à Platon, mais son importance pour Platon est purement mathématique, puisque, selon diverses combinaisons, elle engendre les divers rythmes' (E. Moutsopoulos, La Musique dans l'Œuvre de Platon [Paris, 1959], 78). On the idea of 'steps' ($\beta \acute{a} \sigma \epsilon \iota s$), cf. V. Palmieri, 'Il Significato Metrico di $B \acute{A} \Sigma I \Sigma$ ', Vichiana, n.s. 15 (1986), 3-24, and J.L. Moreno, Arsis, Thesis, Ictus, Las Marcas del Ritmo en la Música y en la Métrica Antiguas (Granada, 1994).

objects of imitation of these rhythms and his account remains imprecise on this subject.¹⁸

There is another way to understand the mechanism that allows music to play a role in the education of the soul, viz. the principle of 'homoeopathy'. Compared to the deficiencies of natural beings and the deficiencies of objects made by craftsmen, which also have the ability to imitate human attitudes, music possesses a supreme usefulness which justifies its place in the education of the soul. Music is capable of exercising a particular kind of beneficial influence, namely, grace $(\epsilon \vec{v} \sigma \chi \eta \mu \sigma \sigma \acute{v} v \eta)$ (*Rep.* 3.401d5–e1):

*Αρ' οὖν, ἦν δ'ἐγώ, ὧ Γλαύκων, τούτων ἔνεκα κυριωτάτη ἐν μουσικῆ τροφή, ὅτι μάλιστα καταδύεται εἰς τὸ ἐντὸς τῆς ψυχῆς ὅ τε ῥυθμὸς καὶ ἀρμονία, καὶ ἐρρωμενέστατα ἄπτεται αὐτῆς φέροντα τὴν εὐσχημοσύνην, καὶ ποιεῖ εὐσχήμονα, ἐάν τις ὀρθῶς τραφῆ, εἰ δὲ μή, τοὐναντίον;

And is it not for this reason, Glaucon, said I, that education in music is most sovereign, because more than anything else rhythm and harmony find their way to the inmost soul and take strongest hold upon it, bringing with them and imparting grace, if one is rightly trained, and otherwise the contrary? (trans. Shorey)

The mechanism through which music influences the soul is not made explicit by Plato. To clarify and complete the philosopher's account and to examine this process more closely, it is worth considering a fragment of Damon that is preserved in the *De Musica* of Aristides Quintilianus. After having defined music and put forward the principles of his musical theory, Damon considers in his second book the effects on the soul that are produced by different types of music, and he views music as the fundamental discipline for the education of the irrational part of the soul (Damon, DK B7 = Aristides Quintilianus, *De Musica*, 2.14):

Ότι γὰρ δι' ὁμοιότητος οἱ φθόγγοι συνεχοῦς μελωιδίας πλάττουσί τε οὐκ ὂν ἦθος ἔν τε παισὶ καὶ τοῖς ἤδη προβεβηκόσι καὶ ἐνδομυχοῦν ἐξάγουσιν, ἐδήλουν καὶ οἱ περὶ Δάμωνα· ἐν γοῦν ταῖς ὑπ' αὐτοῦ παραδεδομέναις ἁρμονίαις, τῶν φερομένων φθόγγων ὁτὲ μὲν τοὺς θήλεις ὁτὲ δὲ τοὺς ἄρρενας ἔστιν εὐρεῖν ἤτοι πλεονάζοντας ἢ ἐπ' ἔλαττον ἢ οὐδ' ὅλως παρειλημμένους, δῆλον ὡς κατὰ τὸ ἦθος ψυχῆς ἑκάστης καὶ ἀρμονίας χρησιμευούσης.

Damon's school showed that among children and those who are advanced in age the sounds of a continuous melody fashion through resemblance a character which they don't have, or bring out a character which is latent. With regard to the harmonies that he transmitted, it is possible to discover among the sounds that are carried both masculine and feminine ones that dominate, that are in the minority, and that are lacking altogether. So it is clear that for the character of each soul there is also a useful harmony.¹⁹

¹⁸ Lasserre explains the obscurity thus: 'l'imprécision voulue de cet exposé donne l'impression que le texte de Damon était obscur, ou si différent des notions de Platon et de ses contemporains en matière de rythmique et de métrique qu'on n'en pouvait plus accepter la partie technique autrement que comme une curiosité' (n. 17, 67).

¹⁹ From the purely hypothetical reconstructions which commentators have proposed for the content of Damon's doctrine as represented in Plato, Aristotle, and Aristides Quintilianus, D. Delattre retains the following: 'd'abord la nécessité d'une éducation de l'âme par la musique, impliquant un choix attentif des tonalités musicales à adopter (...) et à bannir, pour mener à la vertu et détourner des vices, et une sévère sélection des instruments de musique qui les mettent en œuvre, ainsi que l'adoption d'un système de quatre types de gamme (ou *harmoniai*): lydien, iastien, phrygien et dorien, privilégiant les deux derniers modes aux dépens des premiers. Devait y être développée aussi l'idée fondamentale que, en imitant les sons propres à chacune des activités humaines et aux sentiments qui les accompagnent, chaque harmonie provoque dans l'âme un mouvement correspondant. D'où il découle que le modèle donné par l'imitation musicale

By virtue of resemblance $(\delta\mu\omega\iota\delta\tau\eta_S)$ music imitates certain qualities, and thus succeeds in imparting those same qualities to the soul, or rather, to judge from this fragment, it imparts them to the person's character $(\hat{\eta}\theta\sigma_S)$. This principle, which we call 'homoeopathy' in reference to C.W. Müller's study of the $\delta\mu\omega\iota\upsilon-\delta\mu\omega\iota\omega$ principle in pre-Platonic philosophy, ²⁰ derives in all probability from the idea of Pythagorean origin²¹ that there exists a mysterious connection between the world of sounds and that of the human soul. ²² The homoeopathic mechanism can be summed up as follows: a person's sounds $(\phi\theta\delta\gamma\gamma\omega\iota)$ and vocal modulations $(\pi\rho\sigma\omega\delta\iota\alpha\iota)$ in respect to a certain practical activity become the object of a musical $\mu\iota\mu\eta\sigma\iota s$ (representation), which consists of harmony, rhythm, and speech. The musically mimetic elements of harmony, rhythm, and speech are absorbed by the $\psi\upsilon\chi\dot{\eta}$ (soul), and more particularly the $\hat{\eta}\theta\sigma s$ (character), and when they are heard, they stimulate the virtues that are conveyed by the imitative harmony, rhythm, and speech in question.

The *Laws* extends and at the same time revises the position sketched in the *Republic*; the *Laws* also seeks to be, if not the practical realisation of a model polis, at least the first step in the direction of such a realisation.²³ With regard to the question of the education of the soul through music, the *Laws* nevertheless diverges from the *Republic* in certain respects.

détourne l'âme des mauvais exemples et parvient à les corriger en l'entraînant en sens inverse (...). Damon développait probablement aussi dans son discours une étude des rythmes, complétée par une métrique dont il reste quelques bribes (...). Enfin, une théorie éthique, d'inspiration pythagoricienne, devait accompagner cette théorie musicale et métrique, à laquelle elle donnait tout son sens' (Delattre [n. 17], 605-6).

- 20 C.W. Müller, Gleiches zu Gleichem. Ein Prinzip frühgriechischen Denkens (Wiesbaden, 1965), xii, defines the principle thus: 'bei dieser Bedeutung von "Ähnlichkeit" und "Verwandtschaft" für das vorphilosophische Denken der Griechen liegt es nahe, auch den naturphilosophischen Grundsatz Gleiches zu Gleichem in diesen Zusammenhang einzordnen. Hier wie dort wird der Gleichheit eine besondere Kraft beigemessen, die das Gleiche und Artverwandte über eine raum-zeitliche Trennung hinweg verbindet und in dieser als Identität empfundenen Verbindung eine Kausalitätsbeziehung sympathetischer Art entstehen läßt. Beide, Ähnlichkeitszauber und vorsokratisches $\mathring{o}\mu o \iota o \nu \mathring{o}\mu \iota \omega$ -Prinzip, haben ihren gemeinsamen Ursprung in dem, was Cassirer das "mythische Bewußtsein" nennt, in der Gedankenverbindung Gleichheit-Verwandschaft-Zugehörigkeit-Identität'.
- ²ⁱ Although it used to be customary to regard Damon as a Pythagorean, it is worth emphasising that no ancient source expressly connects him with that school. The connection has been doubted; cf. T. Cardini (1969), A. Barker (1989), and B. Gentili (1988) as cited by Delattre (n. 17), 602: 'Si Damon a bien en commun avec les pythagoriciens de considérer que les innovations musicales entraînent inévitablement des changements politiques, il s'en distingue radicalement en ce qu'il établit le lien de la musique et des affections de l'âme non sur une base abstraite, mais sur un base empirique, celle de la perception (aisthésis) et de l'expérimentation (peira) des différentes musiques, de sorte que sa classification des genres musicaux, harmoniai, rythmes, etc, reposait non sur des a priori mathématiques, mais sur l'expérience vécue. Quoi qu'il en soit, l'aspect fondamentalement pythagoricien de son éthique musicale continue à paraître une évidence à tous les commentateurs modernes'.
- ²² Cf. Abert (n. 1), 11: 'die Voraussetzung der ganzen Lehre ist dieselbe wie bei den Pythagoreern, nämlich die Annahme jenes geheimnisvollen Bandes, das zwischen der Welt der Töne und dem menschlichen Seelenleben besteht und jene wunderbaren Wirkungen erzeugt, welche in ihrer Gesamtheit die Musik als den bedeutendsten Faktor in der sittlichen Erziehung des Menschen erscheinen lassen. Jedes Melos, jeder Rhythmus übt einen bestimmten Einfluß auf unsern Charakter aus; umgekehrt wohnt dem sittlich-guten Menschen ohne weiteres der Sinn für die richtige Art der Musik inne'.
- ²³ Cf. Å. Laks, 'Prodige et médiation: esquisse d'une lecture des *Lois*', in *D'une cité possible, sur les Lois de Platon*, sous la direction de J.-F. Balaudé, Le Temps Philosophique (Nanterre, 1995), 11–28.

First of all, the *Laws* presents the rhythms and harmonies of musical education with much less precision than the *Republic*. In Book 2 of the *Laws* the Athenian Stranger limits himself to the following comments (*Laws* 2.669c3–d2):

Οὐ γὰρ ἄν ἐκεῖναί γε ἐξαμάρτοιέν ποτε τοσοῦτον ὥστε ῥήματα ἀνδρῶν ποιήσασαι τὸ χρῶμα γυναικῶν καὶ μέλος ἀποδοῦναι, καὶ μέλος ἐλευθέρων αὖ καὶ σχήματα συνθεῖσαι ρυθμοὺς δούλων καὶ ἀνελευθέρων προσαρμόττειν, οὐδ' αὖ ρυθμοὺς καὶ σχήμα ἐλευθέριον ὑποθεῖσαι μέλος ἢ λόγον ἐναντίον ἀποδοῦναι τοῖς ρυθμοῖς, ἔτι δὲ θηρίων φωνὰς καὶ ἀνθρώπων καὶ ὀργάνων καὶ πάντας ψόφους εἰς ταὐτὸν οὐκ ἄν ποτε συνθεῖεν, ὡς ἕν τι μιμούμεναι.

For the Muses would never blunder so far as to assign a feminine gesture and melody to verses composed for men, or to fit the rhythms of captives and slaves to gestures framed for free men, or conversely, after constructing the rhythms and gestures of free men, to assign to the rhythms a melody or speech of an opposite style. Nor would the Muses ever combine in a single piece the cries of beasts and men, the clash of instruments, and noises of all kinds, by way of representing a single object. (trans. adapted from Bury)

In sum, melodies, rhythms, and speech must correspond to and be correctly adapted to each other. This discussion will be resumed in Book 7, where the Athenian assigns to the elders the task of selecting the type of songs and dances that will be used in educating the children, whether that means eliminating them or correcting defective compositions as necessary. At this point, the Athenian distinguishes between songs that suit women and those that suit men according to their particular harmonies and rhythms.²⁴

But the way in which the Laws conceives of musical education presents a more fundamental difference in relation to the Republic. This difference can only be understood if one also considers the manner in which Plato introduces the notion of $\dot{\eta}\delta o\nu\dot{\eta}$ (pleasure) as part of the anthropological aspect of the Laws. Elaborating the institutions of this second-best city, which is defined by its closer alignment to the realities of the human condition than is the Republic, the Laws deals more practically than does the Republic with the ramifications of conceiving of human beings as complex unities in which reason coexists with the irrational part of the soul. The irrational part of the soul is itself a composite entity, the manifestations of which, however diverse they may be, are nevertheless reducible in the last instance to the pursuit of pleasure and the flight from pain, while reason manifests itself not in regard to pleasure, but in regard to the good. Thus in Book 1 of the Laws (644c1-645c8) a human being is compared to a $\theta \alpha \hat{v} \mu a$ (puppet) which is subject to both the pull of the golden thread of reason, precious but without strength, and the iron sinews of irrational impulses. Just because a human being is the locus of these contradictory forces of reason and non-reason, human beings can be prodigious and astonishing (the primary sense of $\theta \alpha \hat{v} \mu \alpha$) in so far as they attain harmony: gold and iron can in effect, in certain circumstances, pull in the same direction. This convergence between the two tendencies occurs, for example, in the pleasure which young children experience in dance and which the mature citizen feels in his joy, if his education has been successful, when he participates in the cycle of choruses in the

 $^{^{24}}$ Laws 7. 802e8-11: τὸ δὴ μεγαλοπρεπὲς οὖν καὶ τὸ πρὸς τὴν ἀνδρείαν ῥέπον ἀρρενωπὸν φατέον εἶναι, τὸ δὲ πρὸς τὸ κόσμιον καὶ σῶφρον μᾶλλον ἀποκλίνον θηλυγενέστερον ὡς ὂν παραδοτέον ἔν τε τῷ νόμῳ καὶ λόγῳ. 'Now we may affirm that what is noble and of a manly tendency is masculine, while that which inclines rather to decorum and moderation is to be regarded rather as feminine both in law and in discourse'. (trans. adapted from Bury)

calendar of religious festivals.²⁵ The conflict of being pulled in opposite directions is surmounted when the pleasure that one experiences is a rational pleasure.²⁶

If the *Republic* assigns a primary role to the rational component in so far as the true philosophers, as the guardians of the ideal city, possess all power, the *Laws* largely reestablishes an equilibrium in so far as it accords a degree of legitimacy to pleasure and pain, since they necessarily comprise part of the humanity of human beings (*Laws* 5.732e4–7):

Έστιν δὴ φύσει ἀνθρώπειον μάλιστα ἡδοναὶ καὶ λῦπαι καὶ ἐπιθυμίαι, ἐξ ὧν ἀνάγκη τὸ θνητὸν πᾶν ζῷον ἀτεχνῶς οἶον ἐξηρτῆσθαί τε καὶ ἐκκρεμάμενον εἶναι σπουδαῖς ταῖς μεγίσταις·

Pleasures, pains, and desires are by nature especially human; and from these, of necessity, every mortal creature is, so to say, suspended and dependent by the strongest cords of influence. (trans. Bury)

The constitutive bipolarity of human beings, where pleasure henceforth plays an essential role, entails important consequences for the manner in which the Laws conducts education through music. First of all, this education is no longer addressed only to children. The Republic, in effect, viewed music, along with gymnastic, as propaedeutic, since the essential parts of education take place after childhood and adolescence as scientific education progresses towards dialectic. In the Laws music plays an educational role throughout the citizen's life. Through dance, music continually reestablishes and reorients the balance of pleasure and pain which the citizen received during his childhood and which tends to grow lax.²⁷ On the other hand, musical education pays considerable attention to the notion of pleasure. In so far as childhood, during which there is neither reflective thought nor true opinion, knows only the sensations of pleasure and pain, and because it is in the domain of pleasure and pain that souls primarily come to have their sense of virtue and vice, education will consist of a regulated discipline of the irrational tendencies, that is, of pleasures and pains. By using praise and blame to habituate young souls to love what they should love and to hate what they should hate, education will make possible the emergence of an irrational kind of virtue, one that is independent of reflective thought.²⁸

The manner in which education is envisaged in the *Laws* enables us to understand better how music is to be used in shaping the souls of children. Musical rhythms and harmonies have the same mimetic status in the *Laws* which they had in the

²⁵ If the conflict between the rational and irrational tendencies cannot be assuaged spontaneously, the law intervenes by imposing, through reason, a violence that constrains irrational desires

²⁶ Laws 2.664e-665a.

²⁷ If childhood has an essential place in education as envisaged in the *Laws*, that is because it is 'à l'origine d'une vertu des affects qui se prolonge dans l'âge adulte, tout en s'estompant et se corrompant d'ailleurs de multiples façons au cours de la vie. L'enfance a également son importance comme période de la vie, mais ce qui lui confère son originalité et sa portée philosophique réside dans ce dont elle est le lieu, à savoir le surgissement d'une certaine vertu' (A. Castel-Bouchouchi, 'Comment peut-on être philosophe? La notion platonicienne de *paideia* et son évolution de la *République* aux *Lois*', in Balaudé (ed, n. 23), 65).

²⁸ When this irrational virtue is supplemented in adults by an accord $(\sigma \nu \mu \phi o \nu i \alpha)$ with reason, it becomes complete virtue $(\sigma \dot{\nu} \mu \pi \alpha \sigma \alpha \ \dot{\alpha} \rho \epsilon \tau \dot{\eta})$. Complete virtue is distinct from the irrational virtue of childhood, from which it derives, to the extent that a reflective person will be able to account for the correctness of his feelings.

Republic: ²⁹ they are representations ($\mu\mu\mu\dot{\eta}\mu\alpha\tau\alpha$) that follow the moral norm which the elders of the third chorus see fit to assign to them. ³⁰ A proper regulation of praise and blame allows them to habituate young souls to experience pleasure when they encounter the pleasing representations conveyed by the music, as the Athenian Stranger explains to Clinias in book 7 (798d6–e7):

- Τί οὖν; Τοις ἔμπροσθεν λόγοις πιστεύομεν, οις ἐλέγομεν ὡς τὰ περὶ τοὺς ῥυθμοὺς καὶ πᾶσαν μουσικήν ἐστιν τρόπων μιμήματα βελτιόνων καὶ χειρόνων ἀνθρώπων; "Ηπῶς;
- Οὐδαμῶς ἄλλως πως τό γε παρ' ἡμῖν δόγμα ἔχον ἂν εἴη.
- Οὐκοῦν, φαμέν, ἄπασαν μηχανητέον μηχανὴν ὅπως ἂν ἡμῖν οἱ παῖδες μήτε ἐπιθυμῶσιν ἄλλων μιμημάτων ἄπτεσθαι κατὰ ὀρχήσεις ἢ κατὰ μελῳδίας, μήτε τις αὐτοὺς πείση προσάγων παντοίας ἡδονάς;
- Well, then, do we still put our trust in those former statements of ours, in which we said that matters of rhythm and music generally are imitations of the manners of good or bad men? Or how do we stand?
- Our view at least remains unaltered.
- We assert, then, that every means must be employed, not only to prevent our children from desiring to copy different models in dancing or singing, but also to prevent anyone from tempting them by the inducement of pleasures of all sorts. (trans. Bury)

The conception of musical education has undergone a major change from the *Republic* to the *Laws* in so far as the later dialogue employs pleasure as part of a view of human nature that departs from the *Republic*. But the imitative role of music as well as the homoeopathic mechanism described above remains in force in the *Laws*. In order to assess the manner in which Aristotle follows Plato and conceives of musical education in *Politics* 8.5–7, it is necessary to consider the vocabulary used in the *Republic* and the *Laws* to designate the different aspects of the entire scheme that has

 29 For example, Laws 2.654e9–655b2: τί δὲ δὴ τὸ καλὸν χρὴ φάναι σχῆμα ἢ μέλος εἶναί ποτε; Φέρε, ἀνδρικής ψυχής ἐν πόνοις ἐχομένης καὶ δειλής ἐν τοῖς αὐτοῖς τε καὶ ἴσοις ἀρ΄ ομοια τά τε σχήματα καὶ τὰ φθέγματα συμβαίνει γίγνεσθαι; - Καὶ πῶς, ὅτε γε μηδὲ τὰ χρώματα; - Καλώς γε, ὧ έταιρε. Άλλ' ἐν γὰρ μουσικῆ καὶ σχήματα μὲν καὶ μέλη ἔνεστιν, περὶ ρυθμον καὶ άρμονίαν οὔσής τής μουσικής, ὤστε εὖρυθμον μὲν καὶ εὐάρμοστον, εὔχρων δὲ μέλος ἢ σχῆμα οὐκ ἔστιν ἀπεικάσαντα, ὥσπερ οἱ χοροδιδάσκαλοι ἀπεικάζουσιν, ὀρθῶς φθέγγεσθαι· τὸ δὲ τοῦ δειλοῦ τε καὶ ἀνδρείου σχῆμα ἢ μέλος ἔστιν τε, καὶ ὀρθῶς προσαγορεύειν ἔχει τὰ μὲν τῶν ἀνδρείων καλά, τὰ τῶν δειλῶν δὲ αἰσχρά. 'Well then, however shall we define goodness of posture or of melody? Come, consider: when a manly soul is beset by troubles, and a cowardly soul by troubles identical and equal, are the postures and utterances that result in the two cases similar? - How could they be, when even their complexions differ in colour? - Well said, my friend. But in, fact, while postures and melodies do exist in music, which deals with rhythm and harmony, so that one can rightly speak of a melody or posture being rhythmical or harmonious, one cannot rightly apply the choir masters' metaphor well-colored to melody and posture; but one can use this language about the posture and melody of the brave man and the coward, and one is right in calling those of the brave man good, and those of the coward bad'. Also Laws 2.655d5: μιμήματα τρόπων ἐστὶ τὰ περὶ τὰς χορείας 'choric performances are representations of character'. (trans. adapted from Bury)

 30 The elders will be able to adjust the melodies and make the appropriate musical choices for moral education because they possess wisdom ($\phi\rho\delta\nu\eta\sigma\iota s$) and courage ($\dot{\alpha}\nu\delta\rho\epsilon\dot{\iota}\alpha$, cf. Laws 2.659a4–5), and have acquired through their own education an especially fine sensibility in regard to matters of rhythms and harmonies (Laws 2.669b–670e, 7.802a–e). As the Athenian Stranger explains in Book 3 (699d–701b), it is the moral criterion, not the pleasure that is experienced, that guides the choice of music.

been under discussion. A consideration of all the passages in both dialogues that treat musical education leads to the following summary:³¹

- The objects represented by music are designated by terms that, in spite of their diversity, nevertheless always make reference, directly or indirectly, to an aspect of human morality. All of these terms $\phi\theta\delta\gamma\gamma\omega$ καὶ προσωδίαι (sounds and vocal modulations),³² βίος (type of life),³³ $\mathring{\eta}\theta$ ος (character),³⁴ $\tau\rho\delta\pi\omega$ (dispositions),³⁵ $\psi\nu\chi\dot{\eta}$ (soul),³⁶- suppose the presence of a morally competent human being.³⁷ Further, most of these terms are accompanied by adjectives that refer to ethical qualities: $\mathring{a}v\delta\rho\epsilon\hat{\iota}os$ (courageous),³⁸ $\sigma\omega\phi\rho\omega\nu$ (temperate),³⁹ $\kappa\delta\sigma\mu\iota os$ (orderly),⁴⁰ $\mathring{a}\gamma\alpha\theta\delta\varsigma$ (virtuous).⁴¹
- In both the *Republic* and the *Laws* music imitates these moral qualities by means of $\mu \dot{\epsilon} \lambda os$ (melody),⁴² which is composed of $\dot{\alpha} \rho \mu ov \dot{\alpha}$ (harmony)⁴³ and $\dot{\rho} v \theta \mu \dot{o} s$ (rhythm).⁴⁴ The *Republic* also introduces the notions of $\beta \dot{\alpha} \sigma \epsilon \iota s$ (steps)⁴⁵ and $\pi o\dot{\nu} s$ (foot)⁴⁶ which are connected to rhythm, while to designate the words in a piece of music the *Laws* seems to prefer the word $\dot{\rho} \dot{\eta} \mu a$ to the word $\lambda \dot{o} \gamma os$.⁴⁷
- Finally, the third term of this mechanism is the subject that undergoes the influence of music. This subject is the $\psi v \chi \dot{\eta}$ (soul) in both the *Republic* and the *Laws*, ⁴⁸ though in one passage in the *Republic* the word $\dot{\eta}\theta_{OS}$ (character)⁴⁹ is used to designate the recipient of music's influence.

How, in chapters 5–7 of Book 8 of the *Politics*, does Aristotle react to Plato's ideas about music and its role in education? The answer to this question raises three further questions: What reasons justify the use of music in the education of the soul? Who receives this education, and by what means? What kind of music does one use and why?

In his first move to justify the role of music in education, Aristotle demonstrates that music affects the soul, and more precisely that it affects the $\hat{\eta}\theta os$ (character) of the soul because, he says, through music we acquire certain qualities of character (*Pol.* 8.5, 1340a8–12).

Άλλὰ μὴν ὅτι γιγνόμεθα ποιοί τινες, φανερὸν διὰ πολλῶν μὲν καὶ ἐτέρων, οὐχ ἥκιστα δὲ καὶ διὰ τῶν ᾿Ολύμπου μελῶν ταῦτα γὰρ ὁμολογουμένως ποιεῖ τὰς ψυχὰς ἐνθουσιαστικάς, ὁ δ᾽ ἐνθουσιασμὸς τοῦ περὶ τὴν ψυχὴν ἤθους πάθος ἐστίν.

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31 Rep. 3.398c1-403c8; 4.424c-425a; 7.522a2-b1; Laws 2.654a9-671a1; 3.700a7-701b3;
6.764e3-765a1; 7.798d7-804c1, 812b2-813a7.
  <sup>32</sup> E.g. Rep. 3.399a7–8; 399c2–3 (in the latter passage \phi\theta \acute{\phi}\gamma\gamma o\iota alone).
  <sup>33</sup> E.g. Rep. 3.399e10–11; 400a7.
  34 E.g. Rep. 3.400b2; 401a8.
                                               35 E.g. Laws 2.655d5; 7.798d9.
  <sup>36</sup> E.g. Laws 7.812c3, where \psi v \chi \dot{\eta} is implied by the context.
  ^{37} Cf. the adjectival substantives \delta δειλός τε καὶ ἀνδρείος at Laws 2.655a9.
  <sup>38</sup> E.g. Rep. 3.399a7–8; 3.399c2–3; 3.399e10–11; Laws 2.655a9
  <sup>39</sup> E.g. Rep. 3.399c2-3; 3.401a8.
  <sup>40</sup> E.g. Rep. 3.399e10–11.
                                             <sup>41</sup> E.g. Rep. 3.400b2.
  42 E.g. Rep. 3.398d1-2; 3.400a1, 2; Laws 2.654e4; 2.656c4; 2.660a7; 2.669b2.
  <sup>43</sup> E.g. Rep. 3.398d8; 3.398e1; 3.398e9; 3.399a5, 6; Laws 2.655a5; 2, 660a7; 7.802e1.
  <sup>44</sup> E.g. Rep. 3.398d8; 3.399e9, 10; 3.400b4; 3.400c3; Laws 2.655a5; 2.656c4; 2.669b2; 2.669c6,
7, 8; 2.669d6; 7.798d8; 7.802e2.
  45 Rep. 3.399e10; 3.400a5; 3.400b3.
                                                        <sup>46</sup> Rep. 3.400a2; 3.400c2.
  <sup>47</sup> E.g. Laws 2.656c5; 2.669b2; 2.669c4.
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⁴⁸ E.g. Rep. 3.401d7; Laws 2.659d4; 2.659e6; 2.664b5; 7.812c3; 7.812c6.

49 Rep. 4.424d8.

That we are so affected [i.e. that our characters, $\tau \hat{\alpha}$ $\ddot{\eta}\theta\eta$, are affected, cf. 1340a7] is proved in many ways, and not least by the power which the melodies of Olympus exercise; for beyond question they inspire enthusiasm, and enthusiasm is an emotion of the character of the soul. 50 (trans. adapted from Jowett)

This passage suggests the first difference between Aristotle and Plato: that which music influences is no longer the $\psi v \chi \dot{\eta}$ as a whole, but just one part of it. In the *Ethics* $\hat{\eta} \theta o s$ designates that part of the desiring soul which, being irrational by nature, nevertheless has a share in reason to the extent that it takes reason into account.⁵¹

Secondly, Aristotle establishes that music allows the $\hat{\eta}\theta os$ to acquire the virtue that is proper to it $(\hat{a}\rho\epsilon\tau\dot{\eta})$ $\hat{\eta}\theta\iota\kappa\dot{\eta}$, ethical virtue), and that the music which is employed in education consists, as Plato already claimed in the *Laws*, in a discipline that is intended to habituate young people to experience pleasure and pain in the correct manner (*Pol.* 8.5, 1340a14–18):

Έπει δε συμβεβηκεν είναι την μουσικήν των ήδεων, την δ' ἀρετην περι το χαίρειν ορθώς και φιλείν και μισείν, δεί δηλονότι μανθάνειν και συνεθίζεσθαι μηθεν ούτως ώς το κρίνειν όρθως και το χαίρειν τοις ἐπιεικέσιν ήθεσιν και ταις καλαίς πράξεσιν.

Since then music is a pleasure, and excellence consists in rejoicing and loving and hating rightly, there is clearly nothing which we are so much concerned to acquire and to cultivate as the power of forming right judgments, and of taking delight in good dispositions and noble actions. (trans. Jowett)

The similarity on this point with the *Laws* should not obscure a deeper coherence between the *Politics* and the *Ethics*. First of all, the notion of $\tilde{\epsilon}\theta$ os (habit) was identified in the *Nicomachean Ethics* as the condition through which one acquires ethical virtue. As opposed to dianoetic virtue, which is acquired as the result of instruction, $\partial \rho \epsilon \tau \dot{\eta} \dot{\eta} \theta \iota \kappa \dot{\eta}$ (ethical virtue) is considered in effect the result of practice and habituation (*Eth. Nic.* 2.1, 1103a17–18):

'Η δ' ήθικὴ έξ ἔθους περιγίνεται, ὅθεν καὶ τοὔνομα ἔσχηκε μικρὸν παρεκκλίνον ἀπὸ τοῦ ἤθους.

Moral excellence comes about as a result of habit, whence also its name is one that is formed by a slight variation from the word for 'habit'.⁵² (trans. Ross-Urmson)

The *Ethics* also attests to the presence of pleasures and pains in the definition of ethical virtue. If the latter is in effect a disposition acquired through the repetition of specific actions, it really becomes virtue only from the moment when it is practised in the same manner as an inborn disposition, that is, without any pain and with the pleasure that is proper to it. The best sign of a person's virtuous or vicious dispositions, says Aristotle, is the pleasure and pain which he experiences when he undertakes virtuous or vicious actions (*Eth.Nic.* 2.2, 1104b3–8):

⁵⁰ Cf. also Pol. 8.5, 1340b10–13: ἐκ μὲν οὖν τούτων φανερὸν ὅτι δύναται ποιόν τι τὸ τῆς ψυχῆς ἦθος ἡ μουσικὴ παρασκευάζειν, εἰ δὲ τοῦτο δύναται ποιεῖν, δῆλον ὅτι προσακτέον καὶ παιδευτέον ἐν αὐτῷ τοὺς νέους. 'Enough has been said to show that music has a power of forming the character, and should therefore be introduced into the education of the young'. (trans. Jowett)

⁵¹ Cf. Eth. Eud. 2.2, 1220b5–7: διὸ ἔστω <τὸ> ἦθος †τοῦτο†, ψυχῆς κατὰ ἐπιτακτικὸν λόγον <τοῦ ἀλόγου μέν,> δυναμένου δ' ἀκολουθεῖν τῷ λόγω ποιότης. 'Consider then character to be a quality in accordance with governing reason belonging to the irrational part of the soul which is yet able to obey the reason'. (trans. adapted from Solomon)

⁵² Cf. the parallel passage at *Eth. Eud.* 2.2, 1220a39–b5.

Σημείον δὲ δεῖ ποιεῖσθαι τῶν ἔξεων τὴν ἐπιγινομένην ἡδονὴν ἢ λύπην τοῖς ἔργοις· ὁ μὲν γὰρ ἀπεχόμενος τῶν σωματικῶν ἡδονῶν καὶ αὐτῷ τούτῳ χαίρων σώφρων, ὁ δ' ἀχθόμενος ἀκόλαστος, καὶ ὁ μὲν ὑπομένων τὰ δεινὰ καὶ χαίρων ἢ μὴ λυπούμενός γε ἀνδρεῖος, ὁ δὲ λυπούμενος δειλός.

We must take as a sign of states the pleasure or pain that supervenes on acts; for the man who abstains from bodily pleasures and delights in this very fact is temperate, while the man who is annoyed at it is self-indulgent, and he who stands his ground against things that are terrible and delights in this or at least is not pained is brave, while the man who is pained is a coward. (trans. Ross-Urmson)

This detour into the *Ethics* allows us to understand the mechanism that is the basis for Aristotle's view of musical education: it consists of habituating young persons to experience pleasure for the things that they are not yet capable of judging rationally and whose value, for good or ill, they cannot yet understand on their own.⁵³ This habituation comes about as a result of the mimetic feature of music. Aristotle affirms that music possesses rhythms and melodies that constitute in fact $\delta\mu\sigma\iota\dot{\omega}\mu\alpha\tau\alpha$ $\tau\dot{\omega}\nu$ $\dot{\eta}\theta\dot{\omega}\nu$ (resemblances to characters) (*Pol.* 8.5, 1340a18–21):

Έστι δὲ δμοιώματα μάλιστα παρὰ τὰς ἀληθινὰς φύσεις ἐν τοῖς ῥυθμοῖς καὶ τοῖς μέλεσιν ὀργῆς καὶ πραότητος, ἔτι δ' ἀνδρείας καὶ σωφροσύνης καὶ πάντων τῶν ἐναντίων τούτοις καὶ τῶν ἄλλων ἦθῶν.

Rhythms and melodies supply resemblances, which are very close to the actual affections, of anger and gentleness, and also of courage and temperance, and of all the qualities contrary to these and of the other qualities of character. (trans. adapted from Jowett)

Thus, rhythms and melodies possess the property of imitating $\mathring{\eta}\theta\eta$ (characters), that is, to infer from Aristotle's own examples, the character traits that are in fact the ethical dispositions, whether virtuous or vicious. ⁵⁴ Aristotle seems to revert to the mimetic value of music that was broached in the *Republic* and the *Laws*. But Aristotle goes farther in so far as he affirms that music is a $\mu'\mu\eta\sigma\iota s$ (representation) that is radically distinct from the $\mu'\mu\eta\sigma\iota s$ of the other arts because musical mimesis alone can imitate characters *directly*. ⁵⁵ Painting and sculpture represent the signs of

- 53 But the rational capacities develop with age and they allow the individual to control the passions (pleasure and pain) on his own. As opposed to the *Laws*, in Aristotle human beings do not stay children throughout their lives and musical education only concerns childhood. The rational norm, which in effect guides this education and whose function consists in orienting the pleasures and pains felt by children, remains exterior to the person only for a time; during that time it is located in the choice of musical rhythms and harmonies. But once the person has become an adult, the ethical virtue that has developed during the person's childhood does not remain irrational; it would be too fragile. Rather, ethical virtue will be sustained by right reason, $d\rho\epsilon\tau\eta$ διανοητική (dianoetic virtue), which will offer the person the rules and norms to observe in regard to the passions.
- 54 πραότης (gentleness) is discussed in *Eth. Nic.* 4.5, 1125b26–1126b10; *Eth. Eud.* 3.3, 1231b5–26; *MM* 1.22, 1192b23–38. ἀνδρεία (courage) is analysed in *Eth. Nic.* 3.6, 1115a4–10, 1117b21; *Eth. Eud.* 3.1, 1228a26–1230a36; *MM* 1.20, 1190b9–1191a35. σωφροσύνη (moderation) is studied in *Eth. Nic.* 3.10, 1117b23–12, 1119b18; *Eth. Eud.* 3.2, 1230a36–1231b4; *MM* 1.21, 1191a36–b21.
- 55 The nature of this musical μίμησις, expressed in Greek by the word δμοίωμα, is discussed by J. Pépin ($^{\circ}ΣΥΜΒΟΛΑ$, ΣΗΜΕΙΑ, $^{\circ}OΜΟΙΩΜΑΤΑ$. À propos de *De Interpretatione* 1, 16 a 3–8 et *Politique* 8, 5, 1340 a 6–39', in *Aristoteles Werk und Wirkung. I. Band, Aristoteles und seine Schule*, J. Wiesner (ed.), Berlin, New York, 1985, 22–44), who translates δμοίωμα as 'correspondance', and explains that 'les formes produites par les plasticiens ne sont pas des δμοιώματα, elles n'ont rien qui corresponde vraiment aux dispositions morales; mais celles-ci sont signalées à l'extérieur par les formes et couleurs qui se produisent naturellement sur le corps.

character by the intermediary device of figures and colours. The specific quality of musical mimesis is expressed in the Greek text by the use of the term $\delta\mu\sigma\ell\omega\mu\alpha$ (resemblance). Aristotle explains that the visible objects which painting or sculpture produce by way of imitation are not $\delta\mu\sigma\iota\omega\mu\alpha\tau\alpha$ (Pol. 8.5, 1340a32–4):

'Έτι δὲ οὐκ ἔστι ταῦτα δμοιώματα τῶν ἠθῶν, ἀλλὰ σημεῖα μᾶλλον τὰ γιγνόμενα σχήματα καὶ χρώματα τῶν ἠθῶν.

Figures and colours are not resemblances, but signs, of characters. (trans. adapted from Jowett)

To the extent that music produces not mediated representations, but $\delta\mu\omega\omega\mu\alpha\tau\alpha$, the pleasure or pain that one will experience in listening to the music's imitative rhythms and melodies will be the same as the pleasure and pain felt in a real situation. Musical education of the $\eta\theta$ os consists in habituating the soul to experiencing the pleasure that is produced when certain types of rhythms and melodies are heard, and these rhythms and melodies are those which correspond to the virtuous types of characters. In other words, musical education makes virtue attractive. By means of imitation it produces in the souls of auditors dispositions that are identical to those which are imitated by the music's rhythms and melodies. For this reason it is necessary to choose carefully the types of melodies and rhythms that will be made available to young people. 57

Since music makes use of character likenesses, auditors will be affected according to the type of music which they are made to listen to. To educate young people, it is necessary to accept some kinds of music and reject others. For this purpose Aristotle implements a primary distinction among harmonies, one that relies on the type of affection that they create in the souls of auditors (*Pol.* 8.5, 1340a40–1340b5):

Εὐθὺς γὰρ ἡ τῶν άρμονιῶν διέστηκε φύσις, ὥστε ἀκούοντας ἄλλως διατίθεσθαι καὶ μὴ τὸν αὐτὸν ἔχειν τρόπον πρὸς ἑκάστην αὐτῶν, ἀλλὰ πρὸς μὲν ἐνίας ὁδυρτικωτέρως καὶ συνεστηκότως μᾶλλον, οἶον πρὸς τὴν μιξολυδιστὶ καλουμένην, πρὸς δὲ τὰς μαλακωτέρως τὴν διάνοιαν, οἶον πρὸς τὰς ἀνειμένας, μέσως δὲ καὶ καθεστηκότως μάλιστα πρὸς ἑτέραν, οἶον δοκεῖ ποιεῖν ἡ δωριστὶ μόνη τῶν άρμονιῶν, ἐνθουσιαστίκους δ' ἡ φρυγιστί.

The nature of harmonies differs, and those who hear them are differently affected by each. Some of them make [men] sad and grave, like the so-called mixolydian, others enfeeble the mind, like the relaxed ones, another, again, produces a moderate and settled temper, which appears to be the peculiar effect of the Dorian; the Phrygian inspires enthusiasm. (trans. adapted from Jowett)

- (...) Ainsi, par le truchement des signes naturels, sculpteurs et peintres finiront par imiter indirectement les sentiments, sans toutefois parvenir à en réaliser des $\delta\mu\omega\omega\mu\alpha\tau a$. Il en va tout autrement de la musique, dont on a vu qu'elle imite directement les dispositions morales et que (de ce fait, peut-on penser) elle en offre, elle, des $\delta\mu\omega\omega\mu\alpha\tau a$. C'est à établir cette différence qu'Aristote voulait en venir dans cette apparente digression sur les arts visuels, ainsi d'ailleurs que l'ont généralement compris les interprètes modernes. On y trouvera confirmation de ce que la notion d' $\delta\mu\omega\omega\mu\alpha$ n'est pas partout réductible à celle d'image; car, bien que relayée, l'imitation des sentiments par le peintre ou le sculpteur n'est nullement dénuée de valeur d'illustration; ce n'est d'ailleurs pas ce qu'Aristote lui reproche, mais bien de ne pouvoir agir sur les dispositions morales, alors que le musicien le peut, précisément en raison de cette correspondance privilégiée, qu'il exploite plus qu'il ne la produit, et qui s'exprime par le nom d' $\delta\mu\omega\omega\mu\alpha$ ' (p. 28).
- ⁵⁶ As Aristotle notes at the end of the chapter, the soul is related to the harmonies and rhythms.
- ⁵⁷ For the same reason young people must be encouraged to observe the works of Polygnotus rather than those of Pauson. The former is an ethical painter, that is, he represents the best $\eta\theta\eta$, endowed with ethical virtue. Aristotle also mentions the opposition of Polygnotus and Pauson at *Poetics* 2, 1448a1–9.

In chapter 7 of Book 8 of the *Politics*, Aristotle divides melodies into three kinds,⁵⁸ $\mathring{\eta}\theta\iota\kappa\acute{\alpha}$ (ethical), $\pi\rho\alpha\kappa\tau\iota\kappa\acute{\alpha}$ (practical) and $\grave{\epsilon}\nu\theta\sigma\upsilon\iota\alpha\sigma\tau\iota\kappa\acute{\alpha}$ (enthusiastic), each of which corresponds to a particular harmony. With regard to education, only the ethical harmonies play a role, and among the ethical harmonies the Dorian is foremost (*Pol.* 8.7, 1342b12–17):

Περὶ δὲ τῆς δωριστὶ πάντες ὁμολογοῦσιν ὡς στασιμωτάτης οὔσης καὶ μάλιστα ἦθος ἐχούσης ἀνδρεῖον. Ἐτι δὲ ἐπεὶ τὸ μέσον μὲν τῶν ὑπερβολῶν ἐπαινοῦμεν καὶ χρῆναι διώκειν φαμέν, ἡ δὲ δωριστὶ ταύτην ἔχει τὴν φύσιν πρὸς τὰς ἄλλας ἁρμονίας, φανερὸν ὅτι τὰ Δώρια μέλη πρέπει παιδεύεσθαι μᾶλλον τοῖς νεωτέροις.

All agree that the Dorian is the gravest and manliest. And whereas we say that the extremes should be avoided and the mean followed, and whereas the Dorian is a mean between the other harmonies, it is evident that our youth should be taught the Dorian melodies. (trans. adapted from Jowett)

For his ideal city in the *Republic* Plato rejected all harmonies apart from the Dorian and the Phrygian, but Aristotle here seems to be even more severe than his teacher: he allows only the Dorian harmony, because it imitates courage, while the Phrygian harmony is rejected because it is connected with frenzy and enthusiasm.⁵⁹ Aristotle uses the same distinction in regard to rhythms (*Pol.* 8.5, 1340b8–10):

Οί μὲν γὰρ ἦθος ἔχουσι στασιμώτερον οί δὲ κινητικόν, καὶ τούτων οί μὲν φορτικωτέρας ἔχουσι τὰς κινήσεις οί δὲ ἐλευθεριωτέρας.

Certain rhythms have a character of regularity, others of motion, and of these latter again, some have a more vulgar, others a nobler movement. (trans. adapted from Jowett)

Although Aristotle does not say so explicitly, in view of his preceding statement on harmonies and melodies it seems that the rhythm which is most useful for the education of young people is the one whose character is regular.

The passages of the *Politics* that have been cited allow us to affirm that at every key point in Aristotle's account of the educational influence of music the word $\hat{\eta}\theta_{OS}$ plays a major role. It refers to:

- the quality of the desiring part of the soul as it was defined in the *Ethics* and which is influenced by music;
- the different character traits which music can represent by means of the rhythms and harmonies which constitute the music;
- the different characters which harmonies and rhythms have;
- the character which education is supposed to bring about in young listeners by means of music.

To sum up Aristotle's account of the mechanism of musical education: a person's $\mathring{\eta}\theta\eta$ (characters) have $\delta\mu\omega\omega\omega\mu\alpha\tau\alpha$ (resemblances) in music by means of the rhythms and harmonies. Each of these rhythms and harmonies has its particular $\mathring{\eta}\theta\sigma$ which imbues the soul with that $\mathring{\eta}\theta\sigma$ when the rhythms and harmonies are heard.

Three points in conclusion. First, in Plato's *Republic* and *Laws* as in Book 8 of Aristotle's *Politics* the education of the soul by music comes about by virtue of a 'homoeopathic' mechanism which presupposes a kind of music whose rhythms and

⁵⁸ Pol. 8.7, 1341b32–34.

⁵⁹ Pol. 8.7, 1342a32-b12.

harmonies possess a mimetic property. Second, beyond the continuity of this model in two authors whose purposes and aims are very different, the manner in which musical education is envisaged by both depends on an anthropological point: Plato's view of the role of pleasure in the human soul had important consequences for the manner in which the citizens of the *Laws* will be educated during the entire course of their lives. Third, the last chapters of the *Politics* make clear the great care with which Aristotle appropriated Plato's scheme for musical education in the *Republic* and *Laws*. In reorganising that scheme around the central concept of $\hat{\eta}\theta_{OS}$, which he defined in the *Ethics*, Aristotle succeeded in giving a coherent interpretation of traditional elements which he integrated into his own systematic set of views. This same process of reappropriation and resystemisation of the Platonic inheritance by means of the concept of $\hat{\eta}\theta_{OS}$ is also at work if one considers the political value of the term.

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