

ARISTOTLE'S DEFINITION OF DANCE

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DID Aristotle ever dance? Did the Macedonian monarchy, in the environment of which Aristotle grew up, promote dances for the young as consistently as democratic Athens or oligarchic Sparta did? Would he, the son of a physician with close ties to the Macedonian court, actively participate in choral dances performed by his age-mates?¹ The notoriously inadequate account of both the chorus and the dance in the *Poetics* might not inspire much pondering over dancing's appeal to Aristotle.² Even more, the eighth book of his *Politics*, with its ostensible approval of cultural models ascribing different status to performers and spectators, implicitly favoring the latter, may well prompt doubts about whether Aristotle ever endorsed dance as a noble activity, let alone about whether he himself ever practiced dance.³

Whether or not the philosopher's brief definition of dance in the first chapter of the *Poetics* entails a personal exposure to the temptations of rhythmic movement, this essay wishes to make a case for both the accuracy and the elegance of one section of it: the often disregarded portion where Aristotle refers to the medium of dance mimesis, namely rhythm.⁴ Moreover, I hope to show that, unlike other relevant ancient sources, this section of Aristotle's definition captures in a remarkably acute way rhythm's role in the overall sensorium of dance.

RHYTHM ALONE, WITHOUT MELODY

Aristotle's definition of dance, along with its immediately preceding analysis in the first chapter of the *Poetics*, goes this way (1447a 18-28):

¹ On Aristotle's Macedonian origins and on his father in the court of the Macedonian king see Diog. Laert. 5, 1.

² On the chorus in the *Poetics* see Halliwell 1986, 238-52; more recently Peponi 2013a, 23-5.

³ Arist. *Pol.* 1339b - 1341b. On Aristotle's ideas regarding performance see Peponi 2013b, 223-32, esp. 227-9.

⁴ Arist. *Poet.* 1447a 26-8.

ὥσπερ γὰρ καὶ χρώμασι καὶ σχήμασι πολλὰ μιμοῦνται τινες ἀπεικάζοντες (οἱ μὲν διὰ τέχνης οἱ δὲ διὰ συνηθείας), ἕτεροι δὲ διὰ τῆς φωνῆς, οὕτω κἀν ταῖς εἰρημέναις τέχναις ἅπασαι μὲν ποιοῦνται τὴν μίμησιν ἐν ῥυθμῷ καὶ λόγῳ καὶ ἄρμονίᾳ, τούτοις δ' ἢ χωρὶς ἢ μεμιγμένοις· οἷον ἄρμονία μὲν καὶ ῥυθμῷ χρώμεναι μόνον ἢ τε αὐλητικῇ καὶ ἢ κιθαριστικῇ κἀν εἴ τινες ἕτεροι τυγχάνωσιν οὔσαι τοιαῦται τὴν δύναμιν, οἷον ἢ τῶν συρίγγων, αὐτῷ δὲ τῷ ῥυθμῷ χωρὶς ἄρμονίας ἢ τῶν ὀρχηστῶν (καὶ γὰρ οὗτοι διὰ τῶν σχηματιζομένων ῥυθμῶν μιμοῦνται καὶ ἦθη καὶ πάθη καὶ πράξεις).¹

Just as people (some by formal skill, others by a knack) use colours and shapes to render mimetic images of many things, while others again use the voice, so too all the musical arts mentioned produce mimesis in rhythm, language, and melody, whether separately or in combinations.² That is melody and rhythm alone are used by music for aulos and lyre, and by any other types with this capacity, for example music for panpipes; rhythm on its own, without melody, is used by the art of dancers (since they too, through rhythms translated into movements, create mimesis of character, emotions, and actions) (transl. Halliwell 1999, 29-31).

The portion of this definition that has attracted most attention is the one stating the mimetic foundation of dance, namely the dancers' capacity to represent (or enact) characters, emotions and actions.³ Dance as mimesis, much celebrated by influential dance figures of the earlier modern era such as Jean-Georges Noverre or renounced later by others, is without question key in Aristotle's understanding of the performing arts in general.⁴ Contentious as this sweeping and quite influential claim

¹ Text of the *Poetics* as in Halliwell 1999, which slightly deviates from Kassel 1965 (corr. repr. 1966).

² I substitute "musical arts" for Halliwell's "poetic arts" in order to stay as close as possible to the Greek understanding of poetry as part of *mousike* (the inclusive term for verbal, kinetic, and instrumental activity or of any combination of them).

³ *Emotions* tends to be the preferred English equivalent for *pathe* that, in its original contexts, encompasses a wide variety of physical and psychological experiences to which an individual may be subjected.

⁴ Noverre 1930 (1760¹), esp. 9-31 about his endorsement of the mimetic function of dance, which blends Aristotelian views with the later establishment of pantomime dancing. For negative approaches to the mimetic aspects of dance see Scott 2005.

may be, I do not intend to discuss it here. Instead I would like to explore the other part of this concise definition, the phrase διὰ τῶν σχηματιζομένων ῥυθμῶν, both by itself and in relation to the statement that it is *through rhythm on its own, without melody* that the art of dancers takes place. My special interest in this portion of Aristotle's definition of dance is elicited first and foremost by the remarkable conceptual density of the phrase *schematizomenos rhythmos* and second by its quite noticeable resistance to a straightforward translation into modern languages along with some misunderstandings it has occasionally caused.¹

Αὐτῷ τῷ ῥυθμῷ χωρὶς ἀρμονίας, that is *rhythm alone, without melody* has often been understood (although not without some puzzlement), as dance with no musical accompaniment at all.² For instance, Gerald Else had suggested that "Aristotle implies dancing alone, without any music," but he continues, "normally, at any rate, music and dancing went together".³ Similarly, Lucas mentions that "Aristotle must refer to unaccompanied solo dancing which can hardly have been common".⁴

It goes without saying that in this opening chapter of the *Poetics* poetry and the domain of *mousike* in general are treated as a whole and on the basis of their most established practices. It is highly unlikely, therefore, that in such a context Aristotle's definition of dance-mimesis would refer to an exception rather than to the Greek cultural norm. Likewise it is unlikely that Aristotle would be thinking of dance as an exclusively visual art without audible components. Dance practices of different cultures show that the auditory presence of rhythm, in some form or another, is indeed the norm for both dance training and dance performance.⁵ Greek dance practices consistently corroborate this principle both in texts and in visual depictions of dance. In this regard the importance of the *aulos* (double pipe)

¹ On translations into modern languages see p. 233 n. 1.

² Several commentaries, as for instance Dupont-Roc -Lallot 1980, 147-8 and Janko 1987, 68 f. do not comment on this particular issue.

³ Else 1957, 33-5, esp. 34.

⁴ Lucas 1972, 58.

⁵ See for instance Goodridge 1999; Royce 2002, 192-211, esp. 198 f. See also Naerebout 1997, esp. 160-6.

is indisputable and its key role specifically in providing rhythm is explicitly mentioned in Greek poetry and prose throughout antiquity. A long list of cases where the *aulos* is mentioned as setting the rhythm for the dance would be superfluous in this context, yet a representative example from Xenophon's *Symposium* is particularly illuminating (Xen. *Symp.* 2, 21 f.):

Ἄγε δὴ, ἔφη ὁ Φίλιππος, καὶ ἐμοὶ αὐλησάτω, ἵνα καὶ ἐγὼ ὀρχήσωμαι. ἐπειδὴ δ' ἀνέστη, διῆλθε μιμούμενος τὴν τε τοῦ παιδὸς καὶ τὴν τῆς παιδὸς ὀρχησιν. καὶ πρῶτον μὲν ὅτι ἐπήνεσαν ὡς ὁ παῖς σὺν τοῖς σχήμασιν ἔτι καλλίων ἐφαίνετο, ἀνταπέδειξεν ὅτι κινοίη τοῦ σώματος ἅπαν τῆς φύσεως γελοιότερον· ὅτι δ' ἡ παῖς εἰς τοῦπισθεν καμπτομένη τροχούς ἐμιμῆτο, ἐκεῖνος ταῦτά εἰς τὸ ἔμπροσθεν ἐπικύπτων μιμῆσθαι τροχούς ἐπειρᾶτο. τέλος δ' ὅτι τὸν παῖδ' ἐπήνουν ὡς ἐν τῇ ὀρχήσει ἅπαν τὸ σῶμα γυμνάζοι, κελεύσας τὴν αὐλητρίδα θάττονα ῥυθμὸν ἐπάγειν ἵει ἅμα πάντα καὶ σκέλη καὶ χεῖρας καὶ κεφαλὴν.

“Come” said Philip, “let me have some flute music, so that I may dance too”. So he got up and mimicked in detail the dancing of both the boy and the girl. To begin with, since the company had applauded the way the boy’s natural beauty was increased by the grace of the dancing postures, Philip made a burlesque out of the performance by rendering every part of his body that was in motion more grotesque than it naturally was; and whereas the girl had bent backward until she resembled a hoop, he tried to do the same by bending forward. Finally, since they had given the boy applause for putting every part of his body into play in the dance, he told the flute girl to hit up the rhythm faster, and danced away, flinging out legs, hands, and head all at the same time (transl. Todd 1923, 553, slightly adapted).

In order to be able to perform his dance Philip first asks for the *aulos* to play and soon thereafter requests a faster rhythm to which he may let his body respond accordingly. This is a most telling passage, clearly showing how kinetic activity is linked to acoustic stimuli and consequently how the aural structure provided by the *aulos*, namely rhythm, regulates the visual structure of dancing movement. It is an emblematic instance demonstrating the correlation between the aural and the visual aspects of *rhythmos* and especially the way they are expe-

rienced as a unity in cultural practice, even in an impromptu performance taking place in the casual and intimate setting of a symposium.

Apart from the *aulos*, percussion instruments, especially the various types designated as *krotala* or *krembala*, usually made of wood and held in the hands of the dancers, are repeatedly depicted in vase paintings representing choral or solo dancers, both mortals and gods.¹ According to Athenaeus, who refers to earlier sources, bronze could also be used for (or attached to) such percussion instruments, along with rocks, shells, or bits of pots.² The lines of the *Homeric Hymn to Apollo* praising the choral performance of the Delian maidens are among the most interesting early sources that reflect current aesthetic views on song-and-dance excellence while also referring to the practice of playing *krembala*.³ The often ignored or rejected variant κρεμβλιαστύς, which fits well the meaning of these lines, literally means rhythmic patterning created by *krembala* and entails unity of sound and movement, thus designating the kinetic activity in which the Delian chorus is said to excel along with their vocal activity.⁴ Finally, in texts where musical instruments are not mentioned, an ordered system of sound is often indicated, for instance clapping of the hands or, more often, beating of the feet. In the eighth book of the *Odyssey*, for example, the youths enjoying the virtuoso dance of Halios and Laodamas are said to beat the time for them.⁵ Stamping is consistently mentioned in poetry describing dance, as for instance in Aristophanes' *Lysistrata* where choral dances and rhythmic patterning are depicted as closely interconnected, while *krotos*, in this case the sound resulting from beating of the feet, is explicitly called χορωφελήτας, namely "helping the choral dance".⁶

These are a few indicative examples of the quite extensive evidence according to which acoustic patterns of rhythm were

¹ Peponi 2009, esp. figg. 1-6 (including the Muses dancing to the *krotala*).

² Ath. 14, 636c-e.

³ *Hymn. Hom. Ap.* 156-64, esp. 162 f.

⁴ For an extensive analysis of this issue, detailed argumentation including relevant iconography, and bibliography see Peponi 2009.

⁵ *Od.* 8, 379.

⁶ *Ar. Lys.* 1301-9.

either accompanying dance movement or were created by it, a cultural norm that Aristotle was undoubtedly well aware of. Thus, contrary to questions raised in some secondary literature regarding either the transparency of the phrase *with rhythm alone without melody* or the regularity of the dance practices it may have alluded to, Aristotle's contemporaries would most probably have an immediate grasp of its meaning and of the deeply rooted practices it assumed. The phrase *dia ton schematizomenon rhythmon*, however, to which I will now turn, may have been a less familiar conceptual and verbal formation even in Aristotle's times.

Schema vs. schematizomenos rhythmos

Although, as we shall see, juxtapositions and combinations of the terms *schema* and *rhythmos* with the verbs $\rho\upsilon\theta\mu\iota\zeta\epsilon\sigma\theta\alpha\iota$ (to be rhythmized) and $\sigma\chi\eta\mu\alpha\tau\iota\zeta\epsilon\sigma\theta\alpha\iota$ (to be shaped) are encountered in Greek texts, the specific phrase *schematizomenos rhythmos*, namely the combination of the verb *schematizesthai* with *rhythmos* as its subject, appears to be a *hapax*. As will become clear in the course of this exploration, Aristotle's opting for this phrase in his brief definition of dance is significant. Its employment emerges as a marked and deliberate deviation from the simpler and established term *schema* (shape, figure), which is the one usually present in ancient attempts to define *orchesis* or to determine its main constituents. *Schema* was also the term that dance vocabulary consistently shared with the vocabulary of painting and it is noteworthy that Aristotle did employ this term, along with the term *chroma* (color), in a section preceding his definition of dance, where he refers to painting as one of the mimetic arts.¹

Among other attempts to determine the main constituents of the art of dance in antiquity, Libanius' off-hand definition in his *On Behalf of the Dancers*, provides a typical and interesting instance of the way traditional terminology would come to be used in similar contexts (64, 28):

¹ For the entire passage of the *Poetics*, including both the section on painting and the section on dance, see p. 216.

φέρει γάρ, οὐ κίνησιν τῶν μελῶν σύντονον μετὰ τινων σχημάτων καὶ ῥυθμῶν τὴν ὄρχησιν εἶναι λέγεις;

Come then, do you not define the dance as the vigorous motion of the limbs along with certain figures and rhythms? (transl. Molloy 1996, 149).

Contrary to the complete absence of the body's physical existence in Aristotle's brief definition of dance, Libanius' impromptu and equally brief definition in the fourth century A.D. reclaims both the physicality and the intensity of a dancer's moving limbs as defining aspects of dance. At the same time, it resorts to the term habitually used in such contexts, namely the term *schemata*, here put side by side with the term *rhythmoi*. Though one can legitimately speculate that the terms *schema* and *rhythmos* are purposely juxtaposed by Libanius and presumably meant to be associated, they are nevertheless far from conceptually intertwined in the way they are in Aristotle's phrase *schematizomenos rhythmos*. Rather, a certain vagueness tints Libanius' overall formulation.¹

Despite dim similarities between the two otherwise very distinct definitions of dance, Libanius' much later version should not necessarily be considered a half-digested reproduction or a distant echo of Aristotle's. Even in a cavalier definition like his, we should probably expect to encounter those conceptual ingredients that seem to have been indispensable in all discourses engaging with dance throughout antiquity: *rhythmos* and *schema*. Yet, as already mentioned, Aristotle's *schematizomenos rhythmos* emerges as an unusual synthesis of these invariable ingredients, a verbal fine-tuning most likely meant to capture a key feature of dance. In an effort to shed more light on this feature, it will be helpful to explore instances of similar diction in the broader chronological frame of Aristotle's times, namely the fourth century B.C.

¹ Libanius' vagueness is apparent in his μετὰ τινων σχημάτων καὶ ῥυθμῶν (i.e. *with some or certain* figures and rhythms), which deprives his definition of any conceptual specificity regarding the exact role of *rhythm* and *schema* in dance and especially the relationship between the two.

The participle *schematizomenos* is rarely encountered in discourses of the Classical period engaging with the broader field of *mousike*. Interestingly, though, Aristoxenus, Aristotle's pupil, used the term in the surviving Second Book of his *Elementa Rhythmica* in an illuminating context (2, 3 f.):

Νοητέον δὲ δύο τινὰς φύσεις ταύτας, τὴν τε τοῦ ῥυθμοῦ καὶ τὴν τοῦ ῥυθμιζομένου, παραπλησίως ἐχούσας πρὸς ἀλλήλας ὥσπερ ἔχει τὸ σχῆμα καὶ τὸ σχηματιζόμενον πρὸς αὐτά. Ὡσπερ γὰρ τὸ σῶμα πλείους ἰδέας λαμβάνει σχημάτων, ἐὰν αὐτοῦ τὰ μέρη τεθῆ διαφερόντως, ἦτοι πάντα ἢ τινὰ αὐτῶν, οὕτω καὶ τῶν ῥυθμιζομένων ἕκαστον πλείους λαμβάνει μορφάς, οὐ κατὰ τὴν αὐτοῦ φύσιν, ἀλλὰ κατὰ τὴν τοῦ ῥυθμοῦ. ἢ γὰρ αὐτὴ λέξις εἰς χρόνους τεθεῖσα διαφέροντας ἀλλήλων λαμβάνει τινὰς διαφοράς τοιαύτας, αἶ εἰσιν ἴσαι αὐταῖς τῆς τοῦ ῥυθμοῦ φύσεως διαφοραῖς. Ὁ αὐτὸς δὲ λόγος καὶ καὶ ἐπὶ τοῦ μέλους καὶ εἴ τι ἄλλο πέφυκε ῥυθμιζέσθαι τῷ τοιούτῳ ῥυθμῷ ὅς ἐστιν ἐκ χρόνων συνεστηκώς.

One must understand that there are these two natures, that of *rhythmos* and that of the *rhythmizomenon* [lit. “that which is made rhythmic”], these being related to one another in the same way as are shape (*to schema*) and what is shaped (*to schematizomenon*). For just as a body takes on many kinds of shapes (πλείους ἰδέας λαμβάνει σχημάτων), if all or some of its parts are disposed in different ways, so each of the *rhythmizomena* takes on many forms (πλείους λαμβάνει μορφάς), in accordance not with its own nature, but with that of rhythm. For the same utterance [*lexis*], when disposed into durations that differ from one another, takes on differences of a sort that are equal to the differences in the nature of the rhythm themselves. The same can be said about melody too, and about anything else whose nature it is to be made rhythmic [*rhythmizesthai*] by the sort of rhythm that is constituted out of durations (transl. Barker 1990, 185).¹

The above passage is part of the introductory sections of Book 2, where Aristoxenus explores the conceptual affinities between the two realms of *schema* and *schematizomenon* (shape and shapeable medium) on the one hand, and *rhythmos* and *rhythmizomenon* (rhythm and rhythmizable medium) on the other. Given the focus of his treatise on rhythm as an aural property, the

¹ Brackets are the translator's, parentheses are mine. On a section of this passage see also Rocconi in this volume, p. 189.

examination of rhythm together with shape in the introductory sections of Book 2 reflects a sustained theoretical interest in the cultural and notional associations between the two domains.

Certainly, *rhythmos* was considered a property of visual artifacts as well as of aural ones, its visual facet clearly attested in evidence as early as the late archaic period and continuing well into Aristotle's times and beyond.¹ Aristotle's own understanding of the domain of *rhythmos* not only as an aural property but also as a visual one is particularly illuminating as it brings up some interesting aspects of the compatibility and complementarity of the domains of *schema* and *rhythmos*. In a passage of his *Physics*, for instance, where he discusses theories about the substantive existence of primary materials such as wood or bronze, he uses the term ἀρρυθμιστα (literally: un-rhythmized) in order to make clear the conceptual differentiation between the unformed materials themselves as opposed to the formed products that are made of them, such as a bed that is made of wood or a statue that is made of bronze.² Similarly, in another passage of the same work he contends that when a material is completely shaped (*schematizomenon*) and arranged (*rhythmiζomenon*) we no longer name it by the name of the material but by the name of its derivative, as for instance in the case of the bed, which we no longer call "wood" but "wooden" (*Ph.* 245b 9-12):

τὸ μὲν γὰρ σχηματιζόμενον καὶ ῥυθμιζόμενον ὅταν ἐπιτελεσθῆ, οὐ λέγομεν ἐκεῖνο ἐξ οὗ ἔστιν, οἷον τὸν ἀνδριάντα χαλκὸν ἢ τὴν πυραμίδα κηρὸν ἢ τὴν κλίνην ξύλον, ἀλλὰ παρωνυμιάζοντες τὸ μὲν χαλκοῦν, τὸ δὲ κήρινον, τὸ δὲ ξύλινον.

For when any material has been completely shaped or arranged into a structure, we no longer call it by its own name but by a derivative: the statue is not brass but brazen, the candle is not wax but waxen, the bench not wood but wooden (transl. Cornford-Wicksteed 1957, 229).

¹ For an overview of the conceptual breadth of the term *rhythmos* in Greek texts see the seminal article by Benveniste 1971. See also the extensive and meticulous work by Ross 1971.

² Arist. *Ph.* 193a.

The juxtaposition of *schematizomenon* and *rhythmizomenon* here, both applying to the formation of primary materials in visually recognizable structures, is not repetitive.¹ It implies affinity but also subtle differentiation between the two domains of *schema* and *rhythmos*, the latter most probably meant to be understood primarily as the specific ratios governing the structure of the former.² Thus, although in the verbal fabric of Aristotle's text the two domains are merely juxtaposed, they can best be understood as conceptually intersecting and mutually complementary.

With Aristoxenus' *Elementa Rhythmica*, however, things are different. Although he explores the fields of *schema* and *schematizomenon* as presenting affinities with the realm of *rhythmos* and *rhythmizomenon*, his general tendency is to discuss the two domains in parallel, not as intersecting. In the course of this discussion, each time he mentions shape (*schema*) or substances that can acquire shape (*schematizomena*), he clearly refers to formations of material entities for which he consistently employs the term *soma*, to be literally translated as *body*. In his analysis of *rhythmos* and *rhythmizomenon*, on the other hand, Aristoxenus consistently refers to divisions of time, *chronos*. In other words, his tendency is to treat *rhythmos* as pertaining to arrangement of time units and *schema* to arrangement of material parts. The two domains – *schema* and *schematizomenon*, *rhythmos* and *rhythmizomenon* – though carefully juxtaposed and compared, do not cross over or intermingle. Consequently, a conceptual and verbal synthesis similar to Aristotle's combinatory *schematizomenos rhythmos* is not to be found in Aristoxenus' analysis.

Only in one case does Aristoxenus' coextensive exploration of the domains of *schema* and *rhythmos* lead to a conceptual intercrossing, and this takes place in a passage where he explains how time (*chronos*) is divided by the rhythmizable enti-

¹ Printed here as in W. David Ross' Oxford Classical Text. The words *καὶ ῥυθμιζόμενον* are present in all manuscripts except for the family Σ.

² The visual aspect of *rhythmos* is usually identified as proportion: *LSJ* s.v. See also Benveniste 1971, 283 and 287.

ties (*rhythmizomena*), the latter listed as speech, melody, and bodily movement (*kinesis somatike*):¹

ὥστε διαιρήσει τὸν χρόνον ἢ μὲν λέξεις τοῖς αὐτῆς μέρεσιν, οἷον γράμμασι καὶ συλλαβαῖς καὶ ῥήμασι καὶ πᾶσι τοῖς τοιούτοις· τὸ δὲ μέλος τοῖς ἑαυτοῦ φθόγγοις τε καὶ διαστήμασι καὶ συστήμασιν· ἢ δὲ κινήσεις σημεῖοις τε καὶ σχήμασι καὶ εἴ τι τοιοῦτόν ἐστι κινήσεως μέρος.

Consequently speech will divide the time by its own parts, namely letters, syllables, and words, and so on. Melody will divide it by its own parts, notes, and silent intervals, and groups of notes; bodily movement will divide it by signals (*semeiois*) and positions (*schemata*) and whatever other parts of movement there may be (transl. Pearson 1990, 7).

Indeed *schema* and *rhythmizomenon* seem to intersect here – the former is defined specifically as one of the elements by which one of the three *rhythmizomena*, namely bodily movement, is divided. In this case, however, Aristoxenus does not refer to *schema* in connection with the comprehensive domain of matter and its formation, as he does in the previous sections. *Schemata* here are set side by side with what Aristoxenus calls *semeia*, on the one hand, and the area vaguely designated as *whatever other parts of movement there may be*, on the other. All three categories, the two clearly specified and the third that is left vague, come across as equally effective means by which bodily movement may be segmented.

Orchesis is not explicitly mentioned in this passage, yet there is no question that dance is precisely what Aristoxenus refers to in this section and what his readers would understand. His vocabulary is indicative. The term *semeia*, to be alternatively translated as gestures, signs, or points, refers to signification through bodily language and may include what several centuries later Plutarch named *deixis*, namely *pointing*, and defined as the process by which the dancers “indicate (δηλοῦσι) their very objects of reference such as the earth, the sky, them-

¹ Aristox. *Rhythm.* 2, 9. On this passage see also Rocconi in this volume, p. 190.

selves, or the bystanders”.¹ *Schemata*, mentioned next, is used by Aristoxenus in an equally technical meaning as one of the elements that contribute to the division of bodily movement. The idea that *schemata*, namely dance figures, serve more or less as stationary elements in the flow of bodily movement is also articulated in Psellus’ *Introduction to the Study of Rhythm*, the eleventh-century Byzantine scholar’s rendering of Aristoxenus’ work:²

Τῶν δὲ ῥυθμιζομένων ἕκαστον οὔτε κινεῖται συνεχῶς οὔτε ἡρεμεῖ, ἀλλ’ ἐναλλάξ. καὶ τὴν μὲν ἡρεμίαν σημαίνει τό τε σχῆμα καὶ ὁ φθόγγος καὶ ἡ συλλαβή, οὐδενὸς γὰρ τούτων ἐστὶν αἰσθῆσθαι ἄνευ τοῦ ἡρεμῆσαι· τὴν δὲ κίνησιν ἢ μετάβασιν ἢ ἀπὸ σχήματος ἐπὶ σχῆμα καὶ ἢ ἀπὸ φθόγγου ἐπὶ φθόγγον καὶ ἢ ἀπὸ συλλαβῆς ἐπὶ συλλαβὴν.

No *rhythmizomenon* is continuously in movement or at rest, but there is alternation. Rest is indicated by the position or the note or the syllable. None of these can be perceived by the senses unless there is rest. And movement is indicated by the shift from position to position from note to note, from syllable to syllable (transl. Pearson 1990, 23).

In such cases, therefore, *schema* (translated here as “position”) is associated specifically with the stationary intervals of dance movement that allow for *eremia*, namely repose or tranquility. This is the way Plutarch also explained *schema* in dance, in the relevant discussion encountered in *Table-Talk* and mentioned previously. Though extant ancient discourses on dance theory are limited, the use of similar interpretive terminology in Plutarch’s work seems to reflect a quite solid tradition that, despite changing cultural attitudes and trends in performance over the centuries, conceptualized dance *schema* in the same vein (*Table-Talk* 747c):

φορὰς μὲν οὖν τὰς κινήσεις ὀνομάζουσι, σχήματα δὲ <τὰς> σχέσεις καὶ διαθέσεις, εἰς ἃς φερόμεναι τελευτῶσιν αἱ κινήσεις, ὅταν Ἀπόλλωνος

¹ Barker 1990, 186 translates *semeia* as “points”. For a similar usage of the term *semeion* in rhapsodic performances as well as in solo singing see Arist. *Poet.* 1462a 4-8. For the explanation of *deixis* in dance see Plut. *Quaest. conviv.* 747 e and Lawler 1954.s

² Psel. 6 (= 22, 6-11 Pearson).

ἢ Πανὸς ἢ τινος Βάκχης σχῆμα διαθέντες ἐπὶ τοῦ σώματος γραφικῶς τοῖς εἶδεσιν ἐπιμένωσι.

They call the moving parts *motions* or *trajectories* (*phoras*); and (they call) poses (*schemata*) the stationary states (*scheseis*) and arrangements (*diatheseis*), to which the movements lead and conclude, as when the dancers, having arranged their bodies in the pose of Apollo or Pan or a Bacchant, retain these figures as in a painting.¹

Clearly, Plutarch uses *schema* to refer to a stationary arrangement of the body, its stillness further emphasized by his explicitly articulated analogy to painting. In other words, there is a notable convergence here between *schema* in the realm of dance and *schema* in the realm of painting. In painting, the *schema* of a body depicts a frozen instant of its visually implied but non-representable movement; in dance, *schema* is identified as the moving body's pose in the moment of arrest. Whether or not Plutarch's overall terminology in this passage, along with its explication, represent generally accepted perceptions and norms, his understanding of *schema*, in particular, does indeed reflect tendencies encountered throughout antiquity.² Remarkably, such an understanding of *schema*, allowing for the closest possible approach between dance and painting, coincides with the broadest and most inclusive definition of the concept of *schema* in its most general meaning, as this is articulated in Aristoxenus' work (*Rhythm*. 2, 5):

Τῶν τε γὰρ πεφυκότων σχηματίζεσθαι σωμάτων οὐδενὶ οὐδέν ἐστι τῶν σχημάτων τὸ αὐτό, ἀλλὰ διάθεσις τίς ἐστι τῶν τοῦ σώματος μερῶν τὸ σχῆμα, γινόμενον ἐκ τοῦ σχεῖν πως ἕκαστον αὐτῶν, ὅθεν δὴ καὶ σχῆμα ἐκλήθη.

No object capable of assuming different shapes is to be identified with any of the shapes. The shape (*schema*) is a particular arrangement of the parts of the object. It results from the way each part "has itself" (*schein*). That is why it is called *schema* (transl. Pearson 1990, 5).

¹ Translation is mine. On this passage and the static nature of *schema* in Greek dance see also Rocconi in this volume, p. 195.

² For a general commentary on the passage see Teodorsson 1996, 378 f. See also Lawler 1954; Schlapbach 2011.

The translation of the Greek word *soma* not as *body*, as one would tend to translate it, but as *object*, is due to the persuasive argument that in this passage, which represents another section of Aristoxenus' introductory remarks in the Second Book of his *Elementa Rhythmica*, the text does not refer to the human body specifically (and consequently to dance) but to matter and its formation in general.¹ Yet the interesting overlapping not just of the terminology used in both the area of physical substances and of dance but, even more so, of the common conceptual footing that lies beneath overlapping terminology, suggest that fourth-century B.C. philosophical discourses about matter and form had much to share with critical discourses about the arts, both aural and visual. Be that as it may, the passage clearly corroborates the perception that *schema*, even in its most general applications, signifies an attained and settled condition of form.²

It is precisely this connotation of the term *schema*, I submit, its semantic underscoring of form as a set configuration, that Aristotle probably intended to circumvent in his definition of dance by employing the phrase *schematizomenos rhythmos*. In other words, unlike his reference to painting in the immediately preceding sentence, where he did employ the term *schema*, his brief definition of dance clearly strove to capture the distinctive attribute of dance, namely movement, for which the term *schema* would fall short in both clarity and exactitude. Before I return to more specific aspects of Aristotle's compound phrase, however, it is worth looking at an interesting passage in Plato's *Laws* that brings up several of the issues discussed so far (672e-673a):

ΑΘ. Καὶ τὰ μὲν δὴ τῆς χορείας ἡμίσεα διαπεπεράνθω· τὰ δ' ἡμίσεα, ὅπως ἂν ἔτι δοκῆ, περανοῦμεν ἢ καὶ ἐάσομεν.

¹ On the meaning of the term *soma* as any material object in this passage see Pearson 1990, 49.

² On the fixedness of *schema* (esp. as opposed to *rhythmos*) see also the brief reference by Benveniste 1971, 285. For an outline of *schemata* in dance (including a passing reference to Aristotle's *Poetics*) see Catoni 2005, 133-234.

ΚΛ. Ποῖα δὴ λέγεις, καὶ πῶς ἐκάτερα διαιρῶν;

ΑΘ. Ὅλη μὲν που χορεία ὄλη παιδείσιν ἦν ἡμῖν, τούτου δ' αὖ τὸ μὲν ῥυθμοὶ τε καὶ ἀρμονίαι, τὸ κατὰ τὴν φωνήν.

ΚΛ. Ναί.

ΑΘ. Τὸ δέ γε κατὰ τὴν τοῦ σώματος κίνησιν ῥυθμὸν μὲν κοινὸν τῇ τῆς φωνῆς εἶχε κινήσει, σχῆμα δὲ ἴδιον. ἐκεῖ δὲ μέλος ἢ τῆς φωνῆς κίνησις.

Ath. And half of the discussion about choral art has been completed. Shall we complete the other half in whatever way may seem well, or shall we skip it?

Kl. What are you talking about and how are you making this division?

Ath. Presumably the choral art as a whole is for us the same as education as a whole, and the vocal aspect of this is rhythms and harmoniae.

Kl. Yes.

Ath. Now the aspect that pertains to the bodily movement has rhythm, which is shared by the movement of the voice, and posture (*schema*), which is peculiar to it alone; while peculiar to the movement of the voice is melody (transl. Pangle 1988, 55).

Plato's co-examination of the vocal and the kinetic components of performance in this passage is due to his preoccupation with *choreia* (song-and-dance) in the *Laws*. That both bodily and vocal movement share rhythm in common may be detected as an underlying fact in Aristotle's *Poetics* as well. In the passage preceding his definition of dance, *rhythmos*, *logos* and *melody* are mentioned as the media that, in different combinations, inform different genres of *mousike*.¹ Yet the way Plato delineates the function of *rhythmos* by explicitly juxtaposing song and dance in the above passage not only highlights the singularity of *schema* as bodily movement's distinctive trait but it also indicates that *schema* is better understood here not just as a settled or fixed form but as the embodiment of the mobility of rhythm, rhythm having been defined as ordered movement earlier in the same work.² In other words, unlike the understanding of *schemata*

¹ Arist. *Poet.* 1447a 20-23 and *supra* p. 215.

² Pl. *Leg.* 665 a: τῇ δὴ τῆς κινήσεως τάξει ῥυθμὸς ὄνομα εἶη, τῇ δὲ αὖ τῆς φωνῆς, τοῦ τε ὀξέος ἅμα καὶ βαρέος συγκεραυνυμένων, ἀρμονία ὄνομα προσαγορεύοιτο, χορεία δὲ τὸ συναμφοτέρον κληθείη.

we see in Aristoxenus and in a long tradition afterwards that stresses their stationary quality, in Plato's earlier examination one senses a tendency to use the term less strictly, in order to encompass the bodily formations that emerge integrally out of the overall flow of motion. To put it differently, in this passage the use of *schema* comes across as an attempt to capture dance movement *in toto*, as the sum of motions *and* rests, the latter likely regarded as the necessary organizational implement for the rhythmic development of the former.

RHYTHM AS A SYNESTHETIC UNITY

Still, despite the fact that both terms *schema* and *rhythmos* are present in this Platonic passage and even though their interrelation is implied, the particular way in which shape and rhythm actually intersect in dance is far from spelled out as concretely as in the verbal and conceptual knot we encounter in Aristotle's *schematizomenos rhythmos*. To my knowledge *rhythmos*, either as a strict grammatical subject of the verb *schematizesthai* in any of its forms, or more generally as an entity subjected to the act of shaping, is not to be encountered anywhere else in Greek texts. No doubt, then, Aristotle's unusual choice carries its own significance. It is worth noting, however, that formulations involving the same two terms mutually transposed and conceptually inverted, namely with the broader domain of *schema* presented as the one acted or impacted upon by that of *rhythmos*, are in fact encountered in the Greek corpus. Two such instances from the fourth century B.C. are illuminating, the first coming from Aristotle himself. In *De caelo* (306 b 9-15) Aristotle writes:

Ἐπειτα φαίνεται πάντα μὲν τὰ ἀπλᾶ σώματα σχηματιζόμενα τῷ περιέχοντι τόπῳ, μάλιστα δὲ τὸ ὕδωρ καὶ ὁ ἀήρ. Διαμένειν μὲν οὖν τὸ τοῦ στοιχείου σχῆμα ἀδύνατον· οὐ γὰρ ἂν ἤπτετο πανταχῆ τοῦ περιέχοντος τὸ ὅλον. Ἀλλὰ μὴν εἰ μεταρρυθμισθήσεται, οὐκέτι ἔσται ὕδωρ, εἴπερ τῷ σχῆματι διέφερον. Ὡστε φανερόν ὅτι οὐκ ἔστιν ὠρισμένα τὰ σχήματα αὐτῶν.

Secondly, all simple bodies (*hapla somata*) are observed to be shaped (*schematizomena*) by the place in which they are contained, particu-

larly in the case of water and air. The shape (*schema*) of the element therefore cannot survive, or it would not be everywhere in contact with that which contains the whole mass. But if its shape is modified (*metarrhythmisthesetai*), it will no longer be water, since its shape was the determining factor. Clearly then the shapes (*schemata*) of the elements are not defined (transl. Guthrie 1939, 319, slightly adapted).

For the specific purposes of our exploration the passage offers an interesting example where shape is conceptualized as subject to the formative impact of rhythm, rhythm understood here as a property of the material and thus visually perceived world. In other words, *schema* is here conceived as capable of being rhythmized. To put it differently, in lieu of the formulation *schematizomenos rhythmos* employed in the *Poetics*, a phrase such as *rhythmizomenon schema* could adequately capture the content of this passage in *De caelo*. One encounters a similar idea with a slightly readjusted meaning in the quite different context of pseudo-Demosthenes' *Eroticus*, an underexplored text most probably written in the fourth century B.C. (*Erot.* 11 f.):¹

ἀλλὰ μὴν οὐδὲ ταῦτ' ἔστιν αἰτιάσασθαι πρὸς τὴν σὴν ὄψιν, ἃ πολλοῖς ἄλλοις ἤδη συνέπεσεν τῶν κάλλους μετασχόντων. ἢ γὰρ δι' ἀρρυθμίαν τοῦ σχήματος ἀπασαν συνετάραξαν τὴν ὑπάρχουσαν εὐπρέπειαν, ἢ δι' ἀτύχημά τι καὶ τὰ καλῶς πεφυκότα συνδιέβαλον αὐτῶ. ὧν οὐδενὶ τὴν σὴν ὄψιν εὐροιμεν ἂν ἔνοχον γεγενημένην.

Furthermore, it is impossible to impute to your looks even those blemishes which in the past have marred many another who has shared in beauty. For either through lack of rhythm in their bearing (*di'arrhythmian tou schematos*) they have ruined all their natural comeliness or through some misfortune have involved their natural attractions in the same disfavour. By none of these could we find your looks afflicted (transl. DeWitt-DeWitt 1949, 51, adapted).

This is part of an extensive pederastic discourse, an *encomion* to the young beloved, here focusing on the boy's appealing looks (*opsis*). The expression δι' ἀρρυθμίαν τοῦ σχήματος (translated here as *through lack of rhythm in their bearing*) applies to others whose appearance is by comparison less outstanding than the

¹ For the *Eroticus* as a spurious but fourth-century B.C. text see more recently Worthington 2006, 40.

beloved's and should be understood primarily in its purely visual demeanor (as lack of ideal proportion) and secondarily as a defect related to matters of comportment and style. As in Aristotle's *De caelo*, then, in this otherwise very different case too *rhythm* is conceived of as operating within the broader realm of *shape* and as having a visually observable impact on it.

To sum up, the idea that shape (*schema*) is rhythmizable appears to be familiar in fourth-century B.C. discourses engaging with issues of perception and the sensory from different angles; it surfaces in verbal combinations that connect the two components, *schema* and *rhythmos*, in various ways. In such cases *rhythmos* is understood as a visual property. Contrary to the idea that shape is rhythmizable, the idea expressed in the *Poetics* through the phrase *dia ton schematizomenon rhythmon* is that rhythm is shapeable. The two ideas, that shape is rhythmizable and that rhythm is shapeable, are certainly based on the much broader perception that the two domains of shape and rhythm are mutually compatible, yet they convey different conceptual priorities and thus encapsulate differing notions. That shape is rhythmizable, the idea that turns out to be more familiar in extant texts, seems to capture the perception that a visual entity, shape, can be altered partially or wholly in its visually perceivable ratios. That rhythm is shapeable, on the other hand, presupposes the idea that an existing set of ratios may acquire material, and consequently visual, structure. In the unique case where the latter idea is encountered in antiquity, Aristotle's *Poetics*, these ratios are undoubtedly conceived of as aural entities, their shapeable quality designating their immediate transformability from aurally perceivable stimuli into visual ones.

This intuitive mutation in the modality of the senses is key to Aristotle's conception of dance. Had he used the established term *schema*, which as we saw was habitually employed in antiquity not only in less ambitious definitions (such as the one encountered in Libanius) but also in earlier and quite ambitious ones, like Plato's in the *Laws*, this fundamental aspect of dance in relation to rhythm's synesthetic mechanics would have been left unarticulated and obscure or absent, as it appears to be in all other cases. In addition, avoiding the term

schema, which as we saw tended to carry the semantic nuance of an attained and settled form, enabled Aristotle to spell out with an absolute exactitude, which is missing from Plato's formulation, not shape as an accomplished form but the very *process* of shaping. What Aristotle strove to convey is an aural property in the course of being turned into a visual one. In order to express this notion succinctly he used the participle of the verb *schematizesthai* not as a substantival neuter participle (*schematizomenon*), as Aristoxenus did in *Elementa Rhythmica*, but as an adjectival participle with progressive force, thus indicating the phenomenon of being shaped as a process. A translation closer to what a contemporary of Aristotle would probably understand when reading the *Poetics* would be something like "through the rhythms as they are being turned into visual structures they (the dancers) enact characters, emotions, actions". Despite its unattractive and unavoidable verbosity such a rendering into English offers a clear way to convey the intention of Aristotle's formulation.¹

¹ As mentioned earlier, the phrase *dia ton schematizomenon rhythmmon* resists a straightforward translation into modern languages. A few representative samples are indicative:

- Bywater 1980 (1909¹): "Rhythm alone, without harmony, is the means in the dancer's imitations; for even he, by the rhythm of his attitudes, may represent men's characters, as well as what they do or suffer".

- Else 1957: "[A]nd that of the dancers [imitates] (using) its rhythms alone, without melody; for they too, through their rhythms incorporated in dance-figures, imitate both characters and experiences and actions".

- Gallavotti 1997 (1974¹): "Ma producono imitazione con il ritmo per sé solo, senza musica, gli attori dei balletti; questi riescono, con le danze figurate, a riprodurre caratteri ed emozioni e fatti".

- Dupont-Roc, Lallot 1980: "C'est au moyen du rythme seul, sans la mélodie, que l'art des danseurs représente (en effet, c'est en donnant figure a des rythmes qu'ils représentent caractères, émotions, actions)".

- Fuhrmann 1982: „[...] die Tanzkunst allein den Rhythmus ohne Melodie; denn auch die Tänzer ahmen mit Hilfe der Rhythmen, die die Tanzfiguren durchdringen, Charaktere, Leiden und Handlungen nach“.

- Lanza 1987: "Di solo ritmo è l'arte dei danzatori, anche costoro infatti per mezzo di ritmi figurati imitano caratteri, emozioni e azioni".

- Janko 1987: "[F]or they too can represent characters, sufferings, and actions, by means of rhythms given form".

- Heath 1996: "[W]hile dance uses rhythm by itself and without melody (since dancers too imitate character, emotion and action by means of rhythm expressed in movement)".

It is conceivable that the phrase *schematizomenos rhythmos* was coined by Aristotle himself and that, as the extant Greek corpus at least indicates, it was not used by later authors. Whether or not its absence from later sources should be attributed to its peculiar semantic density or simply to the limited readership of the *Poetics* for several centuries after Aristotle's death is an open question.¹ Be that as it may, it is worth pointing out that, as we saw earlier, the philosopher's own student, Aristoxenus, though presumably familiar with his teacher's conceptual apparatus, seems to have taken a noticeably differing stance when referring or alluding to dance in the surviving Second Book of *Elementa Rhythmica*, despite similarities in his use of diction.

THE TOUCH OF RHYTHM

By capturing the synergy – indeed the inextricability – of the aural and the visual aspects of *rhythmos* in its unfolding Aristotle encapsulated the quintessence of dance as a fundamentally synesthetic act. These sensory underpinnings of rhythm, and by extension of dance, remained mostly latent in ancient discourses. Interestingly, however, in Aristides Quintilianus' *De musica* rhythm and the senses are openly and cogently addressed in ways pertinent to our discussion (*De mus.* 1, 13):

Ῥυθμὸς τοίνυν ἐστὶ σύστημα ἐκ χρόνων κατὰ τινὰ τάξιν συγκειμένων· καὶ τὰ τούτων πάθη καλοῦμεν ἄρσιν καὶ θέσιν, ψόφον καὶ ἡρεμίαν. καθόλου γὰρ τῶν φθόγγων διὰ τὴν ὁμοιότητα τῆς κινήσεως ἀνέμφατον τὴν μέλους ποιουμένων πλοκὴν καὶ ἐς πλάνην ἀγόντων τὴν διάνοιαν

Despite the effort of all translators to capture the original text, their divergence from the concept conveyed in the original phrase *dia ton schematizomenon rhythmion*, as analyzed here, is evident in all cases with the exception of Janko's and Lanza's (the latter provided by the anonymous reader, whom I thank) which are the closest to the original. The problems emerge either in the translation of the term *rhythmos* or (mainly) in the translation of the participle *schematizomenon*, or finally in the difficulty of modern languages in isolating the participle syntactically.

¹ For the history of the text of the *Poetics* in antiquity see recently Tarán-Gutas 2012, 11-35. For a quite different understanding of Aristotle's phrase as "crystalized, frozen postures" see Rocconi in this volume, p. 183.

τὰ τοῦ ῥυθμοῦ μέρη τὴν δύναμιν τῆς μελωδίας ἐναργῆ καθίστησι, παρὰ μέρος μὲν, τεταγμένως δὲ κινουῦντα τὴν διάνοιαν. ἄρσις μὲν οὖν ἐστὶ φορὰ μέρους σώματος ἐπὶ τὸ ἄνω, θέσις δὲ ἐπὶ τὸ κάτω ταῦτοῦ μέρους. ῥυθμικὴ δὲ ἐστὶν ἐπιστήμη τῆς τῶν προειρημένων χρήσεως. Πᾶς μὲν οὖν ῥυθμὸς τρισὶ τούτοις αἰσθητηρίοις νοεῖται· ὄψει, ὡς ἐν ὀρχήσει· ἀκοῇ, ὡς ἐν μέλει· ἀφῆ, ὡς οἱ τῶν ἀρτηριῶν σφυγμοί· ὁ δὲ κατὰ μουσικὴν ὑπὸ δυεῖν, ὄψεώς τε καὶ ἀκοῆς. ῥυθμίζεται δὲ ἐν μουσικῇ κινήσεις σώματος, μελωδία, λέξις.

Rhythm, then, is a systēma of durations put together in some kind of order. The modifications of these durations we call arsis and thesis, and sound and silence. Notes as such, because of the lack of differentiation in their movement, leave the interweaving of the melody obscure and confuse the mind : it is the elements of rhythm that make clear the character of the melody, moving the mind part by part, but in an ordered way. Arsis is the upwards movement of a part of the body, thesis the downwards movement of the same part. Rhythmics is the science of the employment of the things we have mentioned. Rhythm in general is perceived by three senses, which are these: sight, as in dancing; hearing, as in melody; and touch, by which we perceive, for instance, the pulsations of the arteries. Musical rhythm, however, is perceived by two of them, sight and hearing. Rhythm is imposed in music upon the movement of the body, upon melody, and upon diction (transl. Barker 1990).¹

Apart from several uncertainties regarding Aristides Quintilianus, as for instance the century he lived in, there are questions about the sources he might have used in his work on music.² For his discussion of rhythm, in particular, Aristoxenus' work has been suggested as an obvious source, probably known to Aristides through various compilations.³ Yet in the extant part of Aristoxenus' *Elementa Rhythmica* there are no references to the sensorium of rhythm similar or roughly close to the ones encountered in Aristides Quintilianus' passage. Even though it is hard to locate the latter's specific source, the

¹ See commentary in Barker 1990, 433-5. On a section of this passage in relation to the visual aspect of dance see Rocconi in this volume, p. 195.

² He lived between the first century B.C. and the fourth century A.D. See Mathiesen 1983, 10; Barker 1990, 392. On his sources see Mathiesen 1983, 14-57; Barker 1990, 392-9.

³ Barker 1990, 433 f.

apparent ease with which he registers a more or less taxonomical approach to the complex issue of rhythm and perception leaves little doubt that his text reflects ideas that enjoyed some authority in his era.

Aristides' focus on perception and the senses is evident first of all in the way he engages with rhythm's effects on the mind (*dianoia*). One is in a state of mental disarray when perceiving melody that lacks rhythm, Aristides says, as opposed to the state of mental lucidity brought by the introduction of rhythmic structure. As we saw earlier, one can easily trace back to Plato a definition of rhythm as *the order of movement* but what is different here is the rephrasing of such a definition in order to address concerns regarding perception: it is one's mind (*dianoia*) that rhythm moves in an orderly manner, according to Aristides' formulation.

In the same context, what is quite intriguing is Aristides' account of the senses that are activated in the perception of rhythm. Here he creates two categories, *rhythm in general*, on the one hand, and *musical rhythm*, on the other. The first category, *rhythm in general*, includes sight, exemplified by dance; hearing, exemplified by melody; and touch, exemplified by arterial pulse. The second category, Aristides says, namely *musical rhythm*, is perceived by two senses, sight and hearing, his specific references here being bodily movement, melody, diction. Clearly, then, there is an interesting slippage in Aristides' thought, for his two bigger categories, the *general* and the *musical*, turn out to almost overlap. Two of his three examples in the first (supposedly general) category happen to be specific examples from the field of *mousike*: dance, that Aristides associates with sight, and melody, that he associates with hearing.

Two points are particularly relevant to our discussion. First, although Aristides Quintilianus' overall focus on issues of rhythm and perception brings him quite close to addressing the multiple senses involved in dance, he never actually does so. In both of his categories, general and musical, dance is treated by him as a purely visual event, melody as an aural one. Later in the same passage he mentions that each of the three fields regulated by musical rhythm (i.e. bodily move-

ment, melody, and diction) may be attended either by itself or in conjunction with either or both of the other two other fields. "Rhythm is perceived ($\nu\omicron\epsilon\tilde{\iota}\tau\alpha\iota$) in and of itself" Aristides says, "in the case of unaccompanied dance; with *melos* in the case of cola; and with diction alone in dramatized recitations of poems".¹ These affirmations may not be particularly lucid yet two things seem quite clear. First, Aristides almost equates pure rhythm, bodily movement, and unaccompanied dance. And second, he presents them as conducive to being combined with either melody or diction. This is an interesting point implicitly touching on the issue of sense perception, since the potential coexistence of bodily movement with either melody or diction would require activation of the sense of hearing in addition to sight. Still, this occasional co-existence or even co-ordination of bodily movement, as a visual stimulus, with aural stimuli is very different from what Aristotle captured in his definition of dance. What Aristotle encapsulated with his *dia ton schematizomenon rhythmmon* is rhythm's *own* dual sensory infrastructure, the idea that rhythm *itself* has the potential to be simultaneously acoustic and visual and that dance activates this duality. Such a conception is not addressed or even alluded to by Aristides Quintilianus.

Second, one wonders what prompted Aristides' reference to rhythm as a phenomenon perceivable through the sense of touch, with the arterial pulse being his example. That touch is the sense used to feel one's pulse is frequently stated in ancient medical discourses, for instance in Galen's works, yet the context of Aristides' reference is wholly different.² Indeed Aristides brings up the example of arterial pulse in his first, *general*, category of rhythm but, as mentioned earlier, in this same category his two other sensory references are drawn from the broader field of *mousike*. In brief, Aristides' reference to touch and pulsation stands out as the only one in this passage that comes from an entirely different area of experience.

¹ This is a paraphrase of *De mus.* 1, 13, 28 ff. W.-I.

² See for instance Gal. *De placitis Hipp. et Plat.* 6, 8, 46; *De puls.* 8, 457, 5-10; 8, 453, 1-5; 8, 461, 10 f.; *De diff. puls.* 8, 537, 9-14.

Or, should we suppose that his reference to touch and pulsation may in fact be a distant echo, indeed a remnant, of discourses lost to us that were originally attached to theories and practices of *mousike*? Over the last several decades in our era, dance research has focused more intensely on issues of kinesthetic communication in dance, emphasizing the essentially haptic modality of feeling movement within one's body. By *haptic modality* I refer to what has been formulated in current literature as "the changing relation between rhythm and muscular tension" or "the changing contours of touch within our bodies".¹ Could we imagine that similar ideas were advanced in musical circles and among dance practitioners in antiquity? In this case, what may now strike us as a misplaced or out of context clue about rhythm and pulsation in Aristides' text, could have originally been part of ideas about the experience of music and dance in relation to the body's own creation of, and responsiveness to, rhythm and movement. Relevant references in the Galenic corpus and another passage in Aristides' treatise *On Music*, which discusses different types of rhythms along with their implicit and explicit association with dance and pulsation, provide significant indications that the issue may have been part of established cultural and scientific discourses.²

Aside from Aristides' text, however, had we direct testimonies of ancient dancers about their sensory perception of rhythm, we would probably hear not only about their experience of the inseparability of the visual and the aural, but also (and perhaps even more) about the awakening of tactile sensations in their bodies. "When I dance, I love to turn the music up really loud. I want to *feel the sonic waves in the floor, feel them over my skin* as I dance through space".³ This is the voice of a professional, contemporary, dancer, a testimony among many others one may encounter in current media or in earlier,

¹ Sklar 2008, esp. 87 f.

² See especially Gal. *Syn. puls.* 9, 459; Aristid. *Quint. De mus.* 2, 15, 16-25 W.-I. On attempts to develop a theory of the pulse after the 3rd century B.C. in relation to musical theory see Lloyd 1973, 79 f.

³ Cendese 2011, underlining mine.

twentieth-century, writings. Here is, for instance, what Isadora Duncan wrote about her experience in a Students' Cabaret in Buenos Aires with young men and women dancing the tango:

I had never danced the tango but the young Argentine who was our cicerone persuaded me to try. From my first timid steps I felt my pulses respond to the enticing languorous rhythm of this voluptuous dance, sweet as a long caress, intoxicating as love under southern skies, cruel and dangerous as the allurements of a tropical forest.¹

Lack of similar surviving references to a dancer's own somatic feeling of rhythm in antiquity does not mean that kinesthetic awareness was absent from the experience of dance.² In all likelihood, ancient dancers would also feel their "pulses respond to the enticing rhythm" and would have a wide range of physical responses to reverberations reaching both the outer and the inner body from outside or springing from the inner body out. Though not explicit, this is what a great number of extant sources seem to allude to. The din arising from the song and the stamping of the dancing performers is repeatedly documented, in both ancient poetry and prose.³ The archetypal chorus of the Muses in Hesiod's *Theogony*, for instance, is said to create powerful vibrations with both their song and their processional walking and dancing: "and around them the black earth resounded as they sang, and from under their feet a lovely din rose up as they headed towards their father".⁴ It is unfortunate that we do not have more evidence about the way such vibrations created tactile sensations in the body of both the dancers and their audiences, yet surely they further stimulated kinetic impulses. Nonetheless, what we do know with absolute certainty is that the thrust of rhythm was consistently conceptualized in antiquity as having an irresistible and immediate impact on bodily locomotion. The idea that rhythm dominates the body is evident in the remarkable variety of ex-

¹ Duncan 1955, 325.

² On this issue see Olsen, forthcoming.

³ See for instance Eur. *Tro.* 542-6; *IA.* 436-8; Timoth. *Pers.* 196-201; Pratin. fr. 3 Sn. (*TrGF* I). The tradition continues with pantomime dancing for which see Lucian *Salt.* 2; *Lib. Or.* 64, 96 f.

⁴ Hes. *Theog.* 69-71 (transl. Most 2006, 9, adapted).

pressions repeatedly encountered in ancient texts and denoting that dancers get *into*, *by*, *with* or even *under* the rhythm.¹

Can we detect any such preoccupations with the purely organic impact of rhythm in Aristotle's brief definition of dance? One might be initially inclined to give a negative answer. Yet, despite the absence of the physical and the somatic on the surface of Aristotle's definition, one may trace a subtler implication of its existence. Though far from openly addressing rhythm's peculiar tactility, Aristotle does allow for rhythm to be thought of as an almost material property. As we saw earlier, in fourth-century thought *schematizomenon*, the quality of being shapeable, is predominantly understood as applicable to material entities. This was clear in the examples we examined in the works of both Aristotle and of his pupil, Aristoxenus. They both employ the term *soma* (with its meaning ranging from material objects in general to the human body in particular) whenever they use any form of the verb *schematizesthai*. The connection between the domain of the shapeable and the human body, in particular, is confirmed both in ancient medical discourses and in surviving discourses about dance. It is the body as a whole (*soma*), or parts of it, such as for instance, the hands, elbows etc. that are subjected to the force of shaping in the Hippocratic corpus.² Likewise it is the dancer as a physical, somatic entity that is said to be shaped (*schematizesthai*) or to shape himself (*beautous schematizontes*) in Lucian's treatise *On the Dance*.³ Contrary to such sources and to the time-honored perceptions they represent, in his definition of dance Aristotle opted for an unusual conceptual and verbal formation, making rhythm itself the very subject of the verb *schematizesthai*, the very entity that is being shaped. In short, by employing the phrase *dia ton schematizomenon rhythmmon* Aristotle envisioned and captured the rhythms as having the agency of a living being, the vitality of a physical body, and the plasticity of matter. Rhythm is, or at least is like, a *soma*.

¹ See for instance Ar. *Thesm.* 954-6; Xen. *An.* 6, 1; Pl. *Leg.* 670b; Men. *Dys.* 950-2; Plut. *Lyc.* 22, 3; Ath. 14, 622c-d; Lucian, *Salt.* 10.

² Hippoc. *Fract.* 2, 16-20; 15, 10-7; *Art.* 10, 7-14.

³ Lucian, *Salt.* 17 and 19.

One might think that this remarkably dense phrase, which encapsulated in two words the synesthetic infrastructure of rhythm and hinted at its kinesthetic impact, is the product of an exceptionally sharp mind. Yet this intriguing phrase should also embolden us to reckon that, after all, Aristotle may have indeed experienced the thrust of rhythm overtaking his body and shaping it from within.

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