

“From the Visible to the Invisible” – Musical Metaphysics from the 6th and 5th Centuries B.C.

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ZUSAMMENFASSUNG

Der vorliegende Aufsatz setzt sich die Darlegung der genaueren Rolle, Rezeption und darstellerischen Wiedergabe der musikalischen Metaphysik und der darauf bezogenen philosophisch-religiösen Ideen des Pythagoras und der früheren Pythagoreer bei der Formulierung der Jenseitsvorstellungen der alten Griechen um die Wende von der archaischen zur klassischen Zeit (6.–5. Jh. v. Chr.) zum Ziel. Diesen philosophisch beeinflussten Ideen zufolge existierte ein unsichtbarer, transzender Bereich jenseits der sichtbaren, diesseitigen Welt, in den die Seelen der Verstorbenen eingingen. Zu der Zeit fanden die auf die musikalische Metaphysik bezogenen Gedanken einen allegorischen Ausdruck in wohl bekannten, jedoch mythologisch verhüllten Personen, wie z. B. in der Gestalt des Eros. Nach den frühpythagoreischen Auffassungen waren die menschlichen Seelen unsterblich, da sie einen himmlischen und göttlichen Ursprung besaßen. Ihnen zufolge waren die Seelen ein Eidolon, d. h. eine genaue Widerspiegelung der physischen Gestalt. Sie bewegten sich beflügelt in der Luft, wobei ihre Wanderung mit der Harmonie und der psychagogische Funktion der Musik eng verknüpft war. In dieser Studie wird versucht, den philosophischen Aspekt hinter einigen jener geflügelten Gestalten aus der griechischen Vasenmalerei zu ergründen, die man gewöhnlich als „Eroten“ bezeichnet.

One of the ways to learn more about ancient music is to try to understand the meaning of the “open images”¹ of ancient art, and to try to get beneath the surface² of them.

The Panathenaic amphora³ (Naples RC. 163 from Mon. Linc. 22, pl. 82) in the late sixth or early fifth century is decorated with meander-type ornaments. Two isolated male figures stand on both sides of the vase, and one figure of an animal

(Fig. 1a,b)⁴. On the front of the Naples vase (Fig. 1a), above the meander, is the figure of the naked “Eros”⁵ and the figure of hare. In his right hand, “Eros” holds an aulos-skin bag (*sybene*), with two compartments and a strap with which to hang it up. One can also see a small box (*glotto-komeion*) for reeds and *holmoi*. In his left hand he holds a tortoiseshell lyre. He wears a cloth band on his wrist. A plectrum is fastened to the lyre by a cord.

On the other side of the Naples vase (Fig. 1b), is the figure of a youth dressed in *himation*⁶ holding a stick in his left hand.

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¹ I have chosen the definition “open image” in instances when the composition does not have a narrative. Although “open images” may have identical figures or mythological explanation in ancient iconography, this is still not enough to reveal the author’s conception or to find his hidden ideas.

² See Eichmann 2000, 35–46: “There are many and perhaps more appropriate examples to demonstrate how an isolated interpretation of a single picture can easily lead to misconceptions. To increase our knowledge about musical instruments, an interdisciplinary approach and a critical investigation of sources should be undertaken.”

³ I wish to express my gratitude to Prof. Dr. Andrew Barker for the information about this picture.

⁴ Beazley 1930, pl. 10; 12, 4; Beazley 1922, 77; Barker 1984, fig. 7.

⁵ “Eros”: Homer calls Eros “the soul Aphrodite” (Aristid. Quint. De mus. 17. 88 – 10). Eros is a constant companion of Aphrodite. He is the violent physical desire that drives Paris to Helen, Zeus to Hera, and shakes the limbs of the suitors of Penelope (Hom. Il. 3. 442, 14. 294; Od. 18. 212). The power of Eros brings peril, he is cunning, unmanageable, and cruel (Alcman 36; Ibycus 6; Sappho 136). Eros comes suddenly like a wind and shakes his victims. Hesiod makes him, together with Earth and Tartarus, the oldest of all gods, pre-eminently powerful over gods and men (see Arafat/Peterson 1996, 556–557; “Eros” LIMC 3/1. 850–942; 4/1. 1–12).

⁶ See Beazley 1922, 77–78.

As one can see, the theme of this picture is unusual because it consists of two “open images,” both with hidden meanings. One of the most important characteristics of ancient thinking is the use of symbols, and the practice of hiding knowledge behind metaphors. This is why the attempt of some painters from sixth and fifth century to create pictorial allegories should not be overlooked⁷.

The two figures (1a and 1b) of the Naples vase are related in subject⁸. Here we have a presentation of images of the same person whose two manifestations – the visible and the invisible (his soul) – are symbolically represented by the images of a human (Fig. 1b) and that of “Eros” (Fig. 1a), respectively. For me, this is a good example of the allegorical representation of the abstract personification of the human’s soul (*psyche*) as “Eros.”⁹

If we open Homer’s *Iliad* (23. 65–107), we may see that the *psyche* of Patroklos has the same height, the same eyes and voice, even the same clothes as Patroklos. The visible side of the human body is opposed to the invisible *autos* (Alter Ego) – they are twins¹⁰. There is only one difference – the soul (*psyche*) always has wings¹¹.

To reveal the painter’s conception, we need to prove and explain the connection between the image of “Eros” (as pure soul), which is related to music, and the image of the youth, which is related to wisdom and knowledge. The ancient “wisdom” of the Greeks was given over especially to music (Ath. 14. 632 c). Taking all this into account, we should analyse the key details of the pictures, and try to connect them into one narrative: *mousike* and philosophy, aulos and lyre, “Eros”¹² and *psyche*¹³.

I. MOUSIKE AND PHILOSOPHY

It is not easy to interpret a figural composition related to music, especially when the theme of the scene has a symbolic and allegoric meaning.¹⁴ This is primarily because it is difficult to come to a common definition of ancient Hellenic music. As Aristotle writes: “For it is not easy to identify precisely the power that music has, nor the reasons why one ought to engage in it.” (Arist. Pol. 8.1339 a)¹⁵.

The modern view, that considers music as a living motion of tones with a limited range that manifests itself both horizontally (forming harmony) and melodically (in counterpoint progression), can explain the structure of Hellenic music, but not its ontological origin. It is like trying to know the roots of a tree by its fruit¹⁶.

Apart from tones, music existed also as text that was recorded at the time by various musical

documents, philosophical treatises, historical evidences, archaeological finds, etc. The examples of these six musical strata (musical myths, historical evidence, evidence of poetry, philosophical treatises, musical documents, and archaeological finds¹⁷) represent the visible side of music. With their help, music expands beyond the stiffening definition as the “art of tones” and turns into “text” that can be deciphered, analyzed, and interpreted, and could, in turn, lead to a more esoteric aspect of music.

This visible side of music is actually nothing but a modern way of expressing the ancient idea of *mousike* – the concept that the eight Muses and their mother, Mnemosyne are in fact one inseparable entity of memory and knowledge¹⁸.

What did the Hellenes perceive in the notion of *mousike*, “the art of the Muses”?

⁷ For another opinion, see Shapiro 1993, 16–18.

⁸ In these large vases the figures are usually related in subject, but there are many exceptions to this rule (see Beazley 1922, 72).

⁹ Let’s take for example the story of Ixion. In Greek mythology, Ixion is a sinner who suffers eternal punishment in Hades. He has been tied to the wheel. This scene we may see on the interior at an Attic red-figure cup (Geneva, Musée d’Art et d’Histoire, ca. 500–490). Approximately fifty years later, the well-known story has another continuation. Let’s see the images from attic red-figure kantharos, attributed to the Amphitrite Painter (London, British Museum E 155, ca. 460–450), where the scene from side A and the scene from side B are related in subject. The main figure is Ixion. Here he is not attached to the wheel. In the pictorial narrative on side B, Ixion is represented with the wings – this is not the image of Eros, Thanatos or Hypnos, but the image of the Ixion’s soul (*psyche*) (fig. 5a.b). (For an alternative interpretation see Shapiro 1994, 85–87.) There are a lot of images from ancient Greek art, which are outside of the world of mythology. One of these images is the personification (from the 6th and 5th centuries B.C.) of the human’s pure soul (*psyche*).

¹⁰ Roscher 1902–1909, 3202. About “aionos eidolon” see Pindar frg. 131.

¹¹ *Psyche* (soul) is “the motion which moves itself” arises... (see Taylor 1928/62, 396, 57d7–58c3).

¹² Eros, God of Love, in Archaic art is hard to differentiate from other winged males. An Attic plaque shows him wingless. On vases, he appears alone, carrying a lyre or hare, or, especially in myth, accompanying Aphrodite, winged, boyish, sometimes with a bow and arrows. During the Classical Period, he increasingly associates with women in domestic scenes or weddings. He appears in military and athletic scenes. In the Hellenistic Period, he is a putto, common in terracottas with *Psyche* (see Arafat/Petterson 1996, 556–557; “Eros” LIMC 3/1.850–942; 4/1. 1–12); see Greifenhagen 1957.

¹³ See Huffman 1993, 313, 323–328, 330–332, 334; Boshnakova 2003, 268–315.

¹⁴ The analyses of the “open images,” as in fig. 1a and fig. 1b, requires a systematic and complex approach, based on both analysis and interpretation of the source material.

¹⁵ Barker 1984, 172–173.

¹⁶ Koller 1963, 6.

¹⁷ For evidence about ancient music see Barker 1984, 1–4; West 1992, 4–8.

¹⁸ Koller 93; Boshnakova 2003, 27–30.

For myself, the possible answer may be found in an attempt to follow the History of Ideas, related to the ancient Hellenic notions of *mousike*. By going back to the roots of music, to the time when philosophy was the highest *mousike*.

"So it is as the best partner and servant of this – of philosophy, I mean – that we should practise music and teach it in its entirety, and by comparing as it were the lesser and the greater mysteries we should assign to each its proper value and honor, and join them together in the most proper and legitimate union.

Philosophy brings all knowledge to perfection, while music gives preliminary instruction: philosophy is the true and perfect ritual which restores to souls, through recollection, what they lost because of the catastrophe of their birth, while music is an initiation, a gentle introduction to the ritual, which offers in advance a little taste of what is brought to complete perfection in philosophy. Music provides the foundation of every field of learning, philosophy the pinnacles." (Aristid. Quint. De Musica, III, 27.133–20)¹⁹

The transformation of *mousike* into *techne* was a long process because music was not an idea set in stone, but a dynamic phenomenon, which underwent numerous transformations²⁰. Therefore, *mousike* should not be considered outside of the context of a certain culture-historical moment. This process started at the end of the 8th century B.C. with Homer and Hesiod, when the purpose of *mousike* was to integrate the entire sphere of knowledge. During the 6th century B.C., *mousike* was regarded theoretically as harmonia through Pythagorean Doctrine, and it was also charged with hidden theological meaning along with its purely musical characteristics²¹. During the 5th century B.C., it turned into the dual *mousike-technē* through theory, experience, and practice (*empeiria*)²². Since the 4th century B.C., it has been perceived as *technē*, and has included purely instrumental music as well. At this time, music began to turn into art²³.

If we separate the masterly interweaving of the allegoric and literal contents of music in Plato's Dialogues, it will be possible to understand the words of Socrates: "Philosophy is the highest music (*Mousike*)" (Plat. Phdo. 60e). Specifically, this separation is the reason for the basic distinction in ancient Hellenic notions of *mousike*: music as philosophy and music as art. The words of Socrates in Plato's dialog "Phaedrus" (268 e) present one of the most brilliant proofs for the existence of such an interweaving.

Muse denoted knowledge (gnosis). This resulted from Zeal, which was seeking and studying, and Reason (*aitia*), for all of *paideia* was hidden in it (Suid. s. v. Mousa). The individual parts of *mousike*

contained the truth about being, but they neither disclosed it nor explained it. Only philosophy, as highest music, could provide the freedom to express oneself without being constrained by old ideas, scenarios and repetitions. In fact, words-rhythm-harmony was, for Socrates, the allegory of the ideal music, which revealed the image of the true, virtuous man. Words expressed human thoughts and spirit; rhythm corresponded to deeds, while harmony was to join them in an inseparable trinity. Thus, words-rhythm-harmony turned into an allegory of those moral characteristics that should make the true, virtuous man. The allegoric strata of music reveals its meaning in the words of Socrates, who said that only the one who knew the wisdom of forms could be considered a good musician, and that only the one who was experienced in music could distinguish the virtuous man (Plat. Rep. 400 c–d). Consequently, the saying only the good musician can distinguish the false tones became valid. Only the awareness and perception of music in its integrity could lead to the understanding and disclosure of its true aspect, as well as to reach the simplicity that created wisdom in the soul (Plat. Rep. 404 e).

The most important quality of Socrates was his power to challenge the common perceptions and provoke people to think for themselves. His dialogues favored analyses²⁴ over repetition and thus strayed from the generally accepted model of the "*nomos*." However, anyone charged with infringing upon the Hellenic *nomos* in any way, i.e. to have broken the established standards of behaviour, was accused of sacrilege and was punished by the Law²⁵.

For example Aesop (Hdt. 2. 134; Aristot. frg. 573; Aristoph. Vesp. 1446; Plut. Sol. 6), Timotheus (Paus. 5. 12. 10; Ath. 14. 636 e), and Socrates (Plat. Apolog. 17 b; 24 b; 23 c–d; Phaid. 60 b–e) were accused of sacrilege and were sentenced, because they infringed upon the rules of the Hellenic *nomos*. Their sacrilegious behaviour transgressed the generally accepted scheme of behaviour in the polis: disregard for the words-rhythm-harmony trinity meant disrespect to the Muses. This disrespect led, in turn, to the disrespect of their patron – Apollo (Plat. Leg. 700 b–e – 701 a–e). Timotheus, who infringed upon the Hellenic *nomos* by putting the melody in the foreground for the first time,

¹⁹ Barker 1989, 534–535.

²⁰ Barker 1989, 1–27; Boshnakova 2003, 33–51.

²¹ The images (fig. 1a, fig. 1b) from the Naples vase (late 6th or early 5th century B.C.) represent the musical and philosophical ideas of their time.

²² Barker 1989, 7–8.

²³ Frank 1923, 3.

²⁴ Boshnakova 2003, 69.

²⁵ Koller 1963, 70–80.

turned music into an alternative realm, a place where everyone could feel free in the frames of the *nomos*. In this alternative realm, the primary element in the above-mentioned trinity was harmony. Rhythm was secondary, and words were completely excluded. It wasn't possible for anyone to follow the galloping tones that took the liberated human soul and carried it beyond everyday life. According to the *nomos*, words were decisive in the classification of certain music as being moral or not. Who could understand the character of this virtuoso music now? Its accomplishment even required a material change; Timotheus changed the perfect Hellenic instrument – kithara – by turning it into instrument with eleven strings, something characteristic of the so-called unworthy, barbarian poly-stringed instruments. Aesop violated the trinity by giving advantage to short, but categorical and convincing words. He revealed the imperfection of each man and allowed himself to present morals through allegories in the fables he wrote and narrated. Socrates also broke up the trinity, giving an advantage to words. However, he was a dangerous speaker who told the truth (Plat. Apolog. 17 b). Nothing could make him renounce “his music”: to stop him studying and learning those who know, and those who think that they do and they do not (Plat. Apolog. 41 b).

Only a true man of wisdom could make, in the last hours of his life, this fine and almost indiscernible transition between the reality of life and the purity of ideas, turning his self-irony into an allegory of the simple lack of understanding. Thus, Socrates was sentenced to death as a result of spending his life in studying the highest music (*mousike*) – philosophy²⁶.

II. AULOS AND LYRE

The relationship between the image of Eros (with lyre) and the poetry²⁷, (especially erotic one) is clear.²⁸ According to Athenaeus, Archytas – known for his works on music theory – had claimed that Alcman led the way as a composer of erotic song, being prone, in his habits, to the pursuit of women and to poetry of that kind. Hence he says, in one of his songs: Once again sweet Eros, to grace Cypris, overflows and melts my heart. (Ath. 13. 600 f)

It is rare to see Eros with aulos and lyre in both of his hands (Fig. 1a). Aulos²⁹ and lyre³⁰ were musical instruments, but they were also metaphors that turned, over the centuries, into concepts, which preserved for eternity the philosophical ideas of their time. This dispute and terminological particularism are reproduced with an exceptional imagery in Frg. 1 of a short treatise titled “Dialex-

eis,” which was composed in Dorian dialect in 400 B.C. – during the so-called Second Sophistic period. The music of stringed and wind instruments was reproduced there in poetical metaphors as *nomoi* that imitated “the character of the laurel

²⁶ Boshnakova 2003, 60–72.

²⁷ We have to distinguish poetic inspiration from wisdom or knowledge. (See Plato's *Ion*); see Delattre 2000, 287–293.

²⁸ Greifenhagen 1957.

²⁹ The aulos was a wind instrument, similar in organology to the modern oboe (see Huchzermeyer 1931, 6–63; Barker 1984, 14–18; West 1992, 81–107; Byrne 2000, 279–285). The so-called diaulos was in most general use. The one who played the aulos supported it for better comfort often with the help of a special band across his lips and cheeks, the so-called phorbeia. Many pictures on vases, plastics and some fragments of auloi that were found in archaeological excavations give evidence of how it looked. The myths, although scattered in different variants due to their being passed orally for decades and centuries, give unambiguous proof of the age-old tradition of the aulos and aulodia among the Hellenes. Some of them take us to the very beginning of the formation of the Hellenic pantheon, cosmos, and theogony, as well to the theology that followed in the 2nd millennium B.C. According to a Peloponnesian legend, the inventor of aulos was the son of Hephaestus, Ardalus from Troizen. The Muses adopted the byname Ardalidae after him (Paus. 2. 30. 3.). However, according to (Ps.-)Plutarchus, there were two Ardaluses. The second one introduced the aulodic music even earlier than Clonas (Mus. 6). Yet, the Aegean Clonas (Mus. 5) had been recognized as the first auletes in Hellenic musical history. He developed the aulodia into a virtuoso art shortly after the introduction of the Phrygian auletics. Sacadas, an auletes from Argos, won the Pythian Games in 586 B.C. with the *Pythikos nomos*. Almost a century later, Pindar dedicated his Pythian ode 12 to Midas, an auletes from Acragas, who won in 490 B.C. by playing aulos, upon which he most probably played the same melody that Pindar called the *Polykephalos nomos*. Pindar had interwoven in his immortal verses ancient myths, according to which the goddess Pallas Athena invented the art of playing the aulos after hearing the sorrowful song of the three lethally injured Gorgons (Pind. Pyth. 12). The aulos music that was introduced from Phrygia had been purely instrumental, called by the Hellenes: *psile aulexis* (Ath. 14. 618 b–c). The Hellenes learned also from the Phrygians two new *harmoniai* – the Phrygian and the Lydian – which were the basic modes of the aulos music. In fact, here the dispute between aulos and lyre is perceived again behind the notion of “harmonia.” Aulos let through the foreign *harmoniai*, together with the foreign music – sounds of the latter could hardly find their place in the Hellenic *nomoi*. Therefore, it had to be studied to reveal its weaknesses, to be limited through the musical *nomos*, and to be subjugated. The Hellenes could not fight against this inevitable novelty, and could not stand against the coming of the enharmonic concord, which was invented according to the evidence of Plutarchus (Mus. 11, 22) by the Phrygian auletes Olympus himself. Up to that time Hellenic music had known diatonic and chromatic only. Thus, even kithara music was influenced by the newly adopted auletics. The so-called *psile kitharisis* (the purely instrumental performance) was developed in response to the flourishing auletics, and it aimed at the same influence that the auletics had (Plat. Leg. 2. 700). The Phrygian auletics gave rise to such major changes, and created so many innovations, that in fact it changed the Hellenic music as a whole.

³⁰ The Hellenes denoted most of their instruments as foreign and barbarian. Aristoxenus in Athenaeus (Ath. 4.182 f)

and the character of the ivy,” respectively. Since the conflict between the lyre and aulos, or, in other words, between “the music of the laurel, which was represented by Apollo” and “the music of the ivy, which was represented by Dionysus” has existed even in Antiquity³¹, it is not surprising that Nietzsche would later seek to establish a dichotomy between “Apollonian and Dionysian music.” In fact, aulos and lyre, in their continuous dispute, became two rivals with equal power. Each had its own place, and neither could replace the other (Ath. 14. 617 d). They were two opposites: as instruments, as sounds, as ideas and realities. The “agon” between the aulos and the lyre could also be perceived as an aspiration to penetrate beyond the tonal side of music. Music had to be subjected to a theoretical study, and its psychagogic side had to be learned. The philosopher Pythagoras and his adherents first discovered the impact of music on education, as well as its quality to acquire balance of the soul, to inflame enthusiasm, and to take away harmful thoughts (Ath. 14. 632 c–d). However, Pythagoras fully rejected aulos. He even stigmatized playing the aulos. He considered the aulos’ sound haughty, impudent, panegyric, and humble (Iambl. Vita pyth. 111). However, not all of the pupils of Pythagoras followed his instructions to despise aulos. Many Pythagoreans – Euphranor, Archytas, and Philolaus for example – were concerned with auletics (Ath. 4. 184 e). The first two even wrote treatises on aulos. Phrynichus, Philoxenus, and Timotheus introduced novelties in kitharodics but composed aulos music at the same time (Plut. Mus. 31).

The innovators in music attempted to transfer on the kithara all the perfections and achievements attributed to the aulos: the elaborate ornaments, the modulations and the technically challenging musical phrases³². They aimed at giving the kithara a broader tonal range than the one it had. The aulos was significantly superior to the stringed instruments in view of technique.

In the spirit of the ancient polemic between lyre and aulos, the latter also underwent innovations itself – something quite seldom to happen on Hellenic land. Telephanes of Megara lived during the period of virtuosos. It seems that he had been against innovations in aulos construction, and he rejected the additional opening, the so-called syrinx. This kept him from participating in, and winning, the Pythian *agon* (Plut. Mus. 21).

The dispute between the aulos and the lyre also burst forth in aesthetic and moral realms at the end of the 5th century B.C. Pythagoras was the first to draw attention to the idea that music had an educational impact, and that instruments had ethos, but philosophers continued to develop his ideas after him. The attitude of Socrates towards the

aulos and the lyre is to be found in the dialogues of Plato. No doubt, lyre was the perfect musical instrument for philosophers. Aristotle mentioned the Sophist Lycophron, who wrote an *encomion* for the lyre. Philosophers thought that the lyre had an ethical impact and improved human character. Thus, it was useful in the education of men.

Plato criticized all poly-stringed musical instruments – including the aulos – as well as those who played aulos. He set aside only kithara, the lyre and syrinx as instruments of the shepherds. He thought it better to use the instruments of Apollo rather than those of Marsyas (Plat. Rep. 3. 399 d–e). Plato did not recognize the purely instrumental music of stringed or wind instruments (Plat. Leg. 2. 669 e–f – 670 a; 7. 810 e – 810 a–c).

Aristotle added aulos to the so-called “*technika organa*” that were excluded from education (Arist. Pol. 8. 6). However, he thought that the lyre was also to be expelled from youths’ education, especially its varieties: *pactis*, *barbitos*, *trigona*, *sambyce* and *heptagon*. He stated that the music that came out of these instruments invoked “desires of the flesh” in the audience. Aristotle thought that only instruments that stimulated musical education or aesthetic perception in the people who listened to them should be used in education.

Plato and his followers left detailed definitions about the ethos of each particular *harmoniai*. The Dorian *harmonia* was called “the singular Hellenic” in the dialogue Laches (188 d). The Ideal State accepted that *harmonia* and the Phrygian one (Plat. Rep. 3. 399 a) because they were representative of the words and the character of man, who acted bravely in all wars and dangerous situations, as well as hardy on injuries, miseries, and death. Aristotle also wrote in his Politics that the Dorian *harmonia* was moderate and manly in character. He pronounced it to be of particular value in the education of youths. Heraclides of Pontus, a pupil of Plato and Aristotle, glorified the majesty, richness, naturalness, and manliness in the Dorian *harmonia* (Ath. 14. 624). “These *harmonias* (Dorian, Aeolian, Ionian), then, are three, as we said of them at the beginning³³, being as many as there are

called foreign the following instruments: *phoinix*, *pactis*, *magadis*, *sambyce*, *trigona*, *klepsiambos*, *skindapsos* and *eneachordon*. Strabo defined Hellenic music as a whole as Thracian and Asian in view of both melodies and instruments. He described kithara generally as Asian. According to him, the names of *nablas*, *sambyce*, *barbitos*, and *magadis* were also barbarian (Strabo 10. 3. 17). However, the ambivalent meaning of some ancient musical instruments makes the interpretation of historical evidence difficult. In this respect the evidence of poetry enlightening.

³¹ Nestle 1978, 91, 235–236.

³² See Athenaeus 14. 624 c.

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tribes of Greeks (Dorians, Aeolians, Ionians). The Phrygian and the Lydian, originating with the barbarians, came to be known to the Greeks from the Phrygians and Lydians who emigrated to Peloponnesus with Pelops" (Ath. 14. 625 e).

Plato included the Phrygian *harmonia* in the Ideal State because it had a peaceful ethos (Plat. Rep. 3. 399 a–b). It seems, though, that the characteristics of that *harmonia* are in contradiction with everything that is known from the ancient sources about its nature. Aristotle, who classified *harmoniai* into ethical, practical and, enthusiastic, defined Phrygian as enthusiastic. He blamed Plato for accepting the Phrygian alongside the Dorian. According to him, Plato was inconsistent when he rejected the aulos but accepted its basic *harmonia* – the Phrygian (Arist. Pol. 8. 7).

Indeed, the question evokes bewilderment when put in this light. Socrates spoke about music skillfully interlacing allegoric and literary contents in the dialogs of Plato. Thus, the conceptual distinction in *mousike* should always be sought. This calls for the interpretation of music both in view of the context and in accordance with the tangible contents of music, i. e. it is important to distinguish whether music was thought of as the art of tones or as philosophy. One of the examples of the interlacing of allegoric and literary contents in music is illustrated by the words of Socrates, who gave an answer to the question of why they accepted only the Dorian and Phrygian *harmoniai* in the Ideal State: these are the forced and the optional harmony that best imitate the voices of the unhappy and the happy, of the judicious and the brave (Plat. Rep. 399 b–d).

Aulos and lyre are the allegorical meaning of all knowledge of music: *harmonia*, which blends opposites, connects the many and unites those who think differently (Theon Smyrn. Frg. 106. 10). The last revelation of being, of the perfect truth that gave birth to everything – the source and root of the eternal birth – appeared in the abstract, invisible realm of *harmonia*³⁴.

III. "EROS" OR THE SOUL OF THE PHILOSOPHER³⁵

In the 6th and 5th centuries B.C., ideas related to musical metaphysics started to seek out allegorical images within the framework of well-known mythological characters – "Eros," for example. To reveal the philosophical conception of "Eros" from Figure 1a, we have to take notice of historical evidence, evidence of poetry and philosophical treatises. Then we may see Eros, "nursling of wisdom, is more than aught else the inspiration of virtue, and this divinity is the sweetest of all for

mortals to consort with" (Ath. 13. 561), also we may see Eros as "the power which leads contrasts together". Parmenides of Elea³⁶ says "that she [the goddess] is also the cause of the gods, when he asserts: She devised Love first of all the gods...³⁷. And he (Parmenides) says that at one time she sends souls from the visible to the invisible world, and at another time back again." Simplicius, Commentary on Physics (Comm. Arist. Gr. IX, 39)³⁸.

The theologian Pherecydes of Syros, the teacher of Pythagoras, was the first to claim that people's souls are immortal (Cicero, Pherekydes, frg. 7A 5). Aristotle, Aristoxenus, and Dicaearchus argued this as well. Pythagoras expressed the Axiom of the Immortality of the Soul – and its everlasting rebirth – by creating his philosophy on a perfectly designed system, whose linking elements heralded the Doctrine of the Transmigration of the Soul were composed on the basis of the uniquely interlacing doctrine of harmony, arithmetic, geometry, and cosmology³⁹. Some of "the people in Italy who called Pythagoreans (Arist. De Caelo, 293a18ff) ... say that the soul is *harmonia*, others that it contains a *harmonia* (Arist. Politics, 1340b18). For *harmonia*, they say, is a blending and putting together of opposites, and the body is constituted out of opposites (Arist. De Anima, 407b27) ... There is an analogy between the matter and nature of instruments, and the former constitution of the soul, the constitution by means of which is made contact with its present body. For while the soul lives in the purer region of the universe and is unmixed with bodies, it is unblemished and undefiled, and goes round in company with the lord of this universe" (Aristid. Quint. De Musica, III, 17.86–20)⁴⁰.

Musical metaphysics was a fundamental component of the secret doctrine of Pythagoras. Since harmony was fundamental for Pythagorean philosophy, which is unambiguously proven by all sources, it would be logical to conclude that tones, not numbers, had first provoked the reasoning and

³⁴ The elucidation of the exoteric knowledge of music is not enough, nor is the complete understanding of Hellenic music. Therefore, the complete definition of Hellenic music requires the clarification of that hidden, shrouded-in-mystery aspect of *harmonia*, the nature of which was hidden in realms beyond the musical, in the abstract realm of harmony, accessible for the wisest among the Hellenes only.

³⁵ See Plato's discussions of Eros in Symposium and Phaedrus.

³⁶ Of Parmenides' life virtually nothing is known. Several sources connect him more reliably with the Pythagorean School. (See Gallop 1984, 3–28).

³⁷ See Plato's discussions of Eros in Symposium 178 b and Phaedrus.

³⁸ Gallop 1984, 102, Frg.13.

³⁹ Boshnakova 2003, 381–390.

⁴⁰ Barker 1989, 517.

the trials of the first Pythagoreans⁴¹. There has been a basic knowledge of the relation between consonant tones and numbers as early as the late 6th or early 5th century B.C. It was already clear that a string that was divided in a 2 : 1 ratio would give an octave; the 3 : 2 ratio – a fifth; the ratio 4 : 3 – a fourth. The three intervals – fourth, fifth, and octave – formed the basic scale of the Hellenic Doctrine of Harmony. Music was the basis of scientific research for Pythagoreans *mathematici*. They turned The Doctrine of Harmony into the first theory of music⁴². Their books are a peculiar mixture of precise and explicitly wise sentences whose meaning is not always clear to the reader⁴³. In this sense, the knowledge of the *mathematici* acquired an “open,” exoteric character, while the knowledge of harmony, connected to the meaning of the *akusma*, remained unclear to the non-initiated, and was preserved in the memory of the *acusmatici*. *Harmonia* had a mainly theological purpose to the *acusmatici*, where it was loaded with allegoric meaning. Above all, it was considered a divine phenomenon.

Akusma was divided into three groups. The first one answered the question “What is...?”; the second answered the question “What is the most...?”; and the third group gave answer to the question “What should be done and what should be left unchanged?” The doctrine of Pythagoras became clear to the *acusmatici*, because Pythagoras clarified each *akusma* to his students. The meaning of the doctrine was a mystery to those who did not know the interpretation because it was hidden in unintelligible comparisons and vague symbols. One example was the abstract image of the number. The number was the wisest thing in the metaphysical system of harmony as, according to Socrates, “it was the science that led the soul from creation to life ... the element of knowing life!” (Plat. Rep. 522).

According to the ancient sources, early Pythagoreans closely related two things: heavenly bodies and perfect intervals. (Ptol. Harm. III. 10–16) Stobaeus, referring to Aristoxenus, claimed that the Pythagoreans came to the notion of numbers by observing the circle of the heavenly bodies, i. e. heavenly luminaries.

For Pythagoras, heavenly phenomena were loaded with divine meaning, and thus mystical. This meaning was also disclosed in music and manifested in *harmonia* that could be both expressed and represented. Pythagoras himself spoke about symbols, and for him the planets were the dogs of Persephone (Porphyr. Vita Pyth. 41). In that sense, from Pythagoras’ point of view, the planets could never be compared to the strings of a lyre⁴⁴, nor could they respond to certain tones. How could music be divine if Pythagoras com-

pared the planets to “dogs” that moved around Persephone? It would be a mistake to search for physical and rational explanations of phenomena and ideas in the sources that record the metaphysics of early Pythagoreans, as they were loaded with allegories and obfuscating metaphors⁴⁵. For example, there is the allegory that proposed the idea that heavenly harmony was related to the progress of each planet, which gave out sound – one tone only – in its circular movement. These tones formed one harmony, i. e. one well ordered and harmonious set of sounds (Plat. Rep. 614–621)⁴⁶. However, Pythagoras could not relate the number of tones, which he claimed to determine with his senses, with any number of planets because even the ancient eastern civilizations of the Chaldeans, Babylonians, and Egyptians could not determine unequivocally the number of these heavenly spheres. The number of the planets was still an open multitude, and its determination depended on the sensitivity and the limits of the unequipped human eye. Here the difference between the scale and the number of the tones is evident. Therefore, the connection between tones and the number of the planets during the Hellenistic Age should have been an expression of the will to explain ancient esoteric knowledge with the aid of newer achievements of mathematics and astronomy.

According to Philolaus: “Concerning nature and *harmonia*, it is like this. The being of things, which is eternal, and nature itself, admit of divine and not human knowledge, except that it is not possible for any of the things that exist and are known by us to have come into being, if it were not for the existence of being of the things from which the universe is composed, both the limited and the unlimited. And since there existed these principles, being neither alike nor of the same race,

⁴¹ Boshnakova 2003, 193–204.

⁴² See Clements 1922, 133–166; Düring 1934, 4–12; Barker 1989, 28–52; Huffman 1993, 145–171; Solomon 2000, XXI–XXXVII.

⁴³ See Huffman 1993, 6–12.

⁴⁴ The Neo-Pythagoreans sought, almost seven centuries after Pythagoras, indirect ways to fix many of the unclear, esoteric sides of the Doctrine of the philosopher from Samos. Pythagoras and Plato, whose teachings overlapped in their core, had been the greatest prophets for Nicomachus. Therefore he accepted in his philosophical views the ideas of Pythagoras and Plato and kept to them. In the third chapter of his *Encheiridion of Music* Nicomachus makes a parallel between the seven planets and the seven strings of the lyre and, as Barker writes, describes a bizarre “ancient heptachord” (Barker 1989, 252).

⁴⁵ See Nicomachus (Ench. 3) and Ptolemy (Harm. III. 13) who makes an analogy between the tetrachords in the complete system and the configurations and relation to the sun (see Barker 1989, 387).

⁴⁶ See Adam 1929, 433–463, the critical notes.

Philolaus, Frg. 6: → *harmonia* = forth (*syllaba*)
 meson

hypaton

harmonia = fifth (*di'oxeia*)

↓

the *dia pasōn* is duple.

The names *hypate*, *mese*, *neate*, *trite*, which found application in the nomenclature of the Hellenic tonal system, should have been rather ancient, since Philolaus talked about them as if they were already well known. Hence, a conclusion may be drawn that they were cosmological names given by Pythagoras himself and were related to the metaphysical harmonic heavenly system⁵⁰. It is obvious that the very names of the tetrachords in the Perfect system were charged most of all with metaphysical meanings. Therefore, in the metaphysical harmonic *Sýstema Téleion*, the names of the tetrachord could be interpreted as follows: *hyperbolaion* – ascending, rising; *diezeugmenon* – partitioning, dividing; *meson* – passing the middle; *hypaton* – descending,

The Pythagorean oath, with its explicit negations which remind us to a greater extent of the second part of the probably most important *akusma*, is the answer to the major question for them: Is the soul mortal or immortal? Then, a possible reconstruction of the text in the style of the Pythagorean *akusma*-oath, might sound like this: "Is the soul mortal? No, I swear in the name of the one who bestows the sacred *tetraktys* of our soul, spring and root of the eternal birth" (Iambl. Vita pythag. 29. 162)⁵¹.

Pythagoreans considered the soul as being connected in some peculiar way to the sum of the four whole numbers that created the harmony of the *tetraktys* 1+2+3+4. According to the philosophy of Pythagoras, the consonance of the *tetraktys*, or of harmony, had a shape that could be seen, heard, and experienced. *Harmonia* brings together the four tetrachords, which are metaphors of the whole cosmos⁵² – *diezeugmenon* and *meson*,

hyperbolaion and *hypaton*⁵³ – according to metaphysical musical *Système Téléion*. The *tetraktys*, in which Pythagoras believed, comprised in itself

53 Reconstruction of the “harmonia” at Philolaus frg. 6: He mentioned *syllaba* and *di’oxeian* twice and said that “the dia pason is duple.” As Barker writes: “It seems unlikely that Philolaus wrote this paragraph as the immediate successor of the printed one before it, though that is how Stobaeus quotes them. But their uses of the notion harmonia must be related. In the musical case, notes and the intervals are coordinated by taking their place within the embracing framework of the octave, becoming articulations of its parts. Something similar holds for the components of the universe and its all-inclusive harmonia. Then concordant and melodic musical relations are not so in their own right, but only as entering into the octave structure.” (Barker 1989, 37, note 32).

Then, in frg. 6 we could find the description of complete the *systema* (Ptol. Harm. II. 4; II. 6; III. 5. 98), which, as a modulating systema, includes both the tetrachords, *synemmenon*, and *diezeugmenon*. Therefore we have five tetrachords: *hypaton*, *meson*, *synemmenon*, *diezeugmenon* and *hyperbolaion* (Aristid. Quint. I. 8); see Barker 1989, 415–416, notes 90–96.

harmonia, man's soul, and the whole Cosmos⁵⁴. The names of the tetrachords themselves had probably been chosen in order to give a direction:

<i>hyperbolaion</i>	+	<i>diezeugmenon</i>	+
ascending	+	separation	+

The *tetraktys* were more than likely hidden in the abstract image of the harmony of the four tetrachords – ascending + separation + passing the middle + descending – the road to the Otherworld which the soul must pass after leaving the body in order to come again to earth, to the world of the mortals. In the Pythagorean notion of the immortal soul, the so-called sacred *tetraktys* (1 + 2 + 3 + 4) guide the soul to its springs and roots.

"Is the soul mortal?

No, I swear in the name of the one (Pythagoras) who gave the sacred *tetraktys* (ascending "1" + separation "2" + passing the middle "3" + descending "4") of our soul, spring and root of the eternal birth ("10")."

This secret formula contained the instructions about the way of the immortal soul, hidden in the abstract essence of harmony and of the number. After leaving the body, the soul first (1) ascended (see the allegory at Plat. Phdr. 246 c–e; 249). These numbers were symbolically expressed through the *hyperbolaion* (towards the high) tetrachord. The higher it ascended, the further it went. That was its separation (2) from earth. However, the soul had first to go through *hyperbolaion*, and then to go to the *diezeugmenon* (the separating one) (see the allegory at Plato. Phdr. 246 c–e; 249). This movement was also symbolically expressed through two tetrachords – *hyperbolaion* and *diezeugmenon*. This was half of the way which the soul had to pass (see the allegory at Plat. Phdr. 246 c–e; 249). Then the soul continued through middle (3), which is the *meson* tetrachord. However, the soul had to pass *hyperbolaion* and *diezeugmenon* to get to it (1 the first tetrachord *hyperbolaion* + 2 the second tetrachord *diezeugmenon* + 3 the third tetrachord *meson*). The soul descended to the earth by (4) the fourth tetrachord *hypaton* (towards the low) after the passing of *meson* (see the allegory at Plat. Rep. 614–621). Thus, the "1", the first tetrachord *hyperbolaion*, + "2", the second tetrachord *diezeugmenon*, + "3", the third tetrachord *meson*, + "4", the fourth tetrachord *hypaton*, outline the abstract realm of harmony, while numbers, together with harmony, show the path of the immortal soul. Consequently, the *tetraktys* are inseparable because each tetrachord that follows the first contains the previous, not in musical but in the metaphysical sense. As it is, it is a fragment. This, despite being a hypothetical reconstruction, could still clarify in its own way the words of Socrates,

according to whom the science that led the soul from the creation through life was hidden behind the number (Plat. Rep. 522). Aristotle's assertion –

<i>meson</i>	+	<i>hypaton</i>
passing the middle	+	descending.

that Pythagoreans taught that the entire heaven is harmony and number – becomes clearer.

The *synemmenon* tetrachord divides, in the metaphysical sense of the harmonic *Sýstema Téleion*, the entire heaven into left and right space, as well as into up (heavenly spheres) and down (sub-heavenly space) (Arist. De caelo, B 2. 285 A 10)⁵⁵ and in doing so connects tetrachords into a frame of cosmic harmony. According to sources about Pythagoras, the heavenly spheres were related to the consonant system, and the consonant system to the heavenly, so that they elucidated and explained each other. The frame of musical harmony formed by the correlation between basic tones – fourth, fifth, and octave. The Earth, Moon, Sun, and the Star sphere (the Stars) had to be in the same correlation (Fig. 2).

Several interesting versions concerning the transmigration of the immortal soul are preserved in Plato (Plat. Phdr. 246 c–e; 249; Plat. Rep. 614–621). There is no doubt that the ideas about the spindle of Ananke, as well as about the heavenly harmony of the Sirens in the Er's story, were Pythagorean. It was quite difficult to decipher these ideas, as they were placed in an allegoric frame and loaded with a heavy metaphoric stratum that obscured the meaning implied in the text. If the text was read and analysed more carefully, one would find the reconstruction of the ideas, which were embedded in the old Pythagorean *akusma* – What is the Delphic oracle⁵⁶? – The *tetraktys*. That is the harmony of the Siren's singing, isn't it? (Iambl. Vita pyth. 82). It seems that Nicomachus also adopted, and further developed, Plato's idea about the movement of heavenly spheres and the Sirens. However, he used it literary, and did not seek allegory, as in the Er's story in Plato's dialogue The Republic (Plat. Rep. 616–617). This text does not have astronomic content, but has metaphysical meaning. Its aim was not to define the number of the planets and their movement, but to describe the space to where the soul travelled after leaving the body. The allegory in the story is

⁵⁴ If the immortality of the soul was basic for Pythagorean philosophy, then, all the knowledge and all the research in the fields of harmony, arithmetic, geometry, and cosmology should be explained only as related to the Beginning and to the explanation of what happens to the soul after death only.

⁵⁵ See Boshnakova 2003, 381–390.

⁵⁶ See the evidence at Strabo 9. 3. 5–6 and Paus. 10. 16. 3.

enhanced both by its mythical creatures – the Sirens – and by the harmony of their singing (Fig. 3). The image of the Sirens has always been connected with their bewildering, fascinating, and luring song, as well as with death. There, where the Sirens sang, was the place where souls went when they left earth. The multi-colored threads on the “spindle of Ananke” bewildered the soul that was captured by the Sirens’ harmony. Whoever heard their singing even once risked never going back again. Therefore, the three daughters of Ananke – Lachesis, Clotho, and Atropos – who sang with the harmony of the Sirens, made sure that the souls would return to the earth after they crossed over to the Afterworld, guided by Harmony. A soul had to know *tetraktys*, *harmonia*, to touch the source and the root of the eternal birth. The soul had to see it, to hear it and to experience it. All this happened during the transmigration of the soul through the heavenly spheres.

According to the Pythagorean Doctrine of the Transmigration of the Soul, those who led a pure life went to the heavenly spheres (Plat. Phdr. 246 c–e; 249). The sacred triangle in which the Sirens sang was heaven, where the pure souls went. Pythagoreans strived towards that place in the Universe, the sacred triangle⁵⁷. That is why Pythagoras insisted so much on the study of music. He composed for his followers “with the skill of a demon” various melodies by which he prepared their souls for the forthcoming travel. The ones who were zealous in their occupation on earth, those who knew the Perfect System of Harmony that was an imitation (*mimesis*) of the Perfect Heavenly Metaphysical *Sýstema*, only their souls would not be lost in that long travel because they were ready for it⁵⁸.

The metaphysical harmonic *Sýstema Téleion*, the tetrachords, which drew the road towards those eternally perfect mysteries, was the basis of the Pythagorean Doctrine of the Transmigration of the Soul. Pythagoras prepared his pupils on Earth for these eternally perfect mysteries in which their souls would take part. The Moon and the Sun were the Isles of the Blissful Souls during that long journey in the circle of the everlasting return. Most probably, this should be the interpre-

tation of the *akusma*: What is the Isle of the Blissful? – The Sun and the Moon.

Two dimensions of music were born by the Pythagorean Doctrine of Harmony – heavenly and earthly music. They were connected through numbers but on different levels – physical and metaphysical.

Earthly harmony was an imitation of the heavenly, and was therefore an art – *techne* – that created a realm that was parallel to the real world, a realm where everything was a copy of the divine world, the world of pure ideas. Heavenly harmony was a philosophy, as well as a spiritual path. Everybody could master *mousike techne*, but only few could see beyond the visible side of music and “hear, see, and experience the heavenly harmony.” Thus, a true musician knew the essence of harmony, not only the knowledge of harmony (Plat. Phdr. 268 e).

In Figure 1a and b are the brilliant illustrations of the metaphysical and mystical ideas from Pythagorean philosophical doctrine of the sixth and fifth centuries B.C., when music was the subject of philosophic reflection. Philosophers were the first to discover that music was the one thing able to knit together the network of visible and invisible... (Fig. 4) “Just as in music, the whole harmonia can be changed as the result of a small beginning in a single note, so too in actions a modest initial effort can reshape a whole way of life... Those who devise ways of avoiding troubles for the sake of comfort do not entirely escape the confusions of the world of becoming. It is only the divine conversion that comes through philosophy that leads unswervingly and securely to change. It releases the soul from its fellow-feeling the body, and makes the man who has knowledge of higher things worthy, through his participation in virtue, of the providence of that which is divine, and resembles himself. Philosophy provides a real escape from the process of becoming” (Aristid. Quint. De Musica, III, 27. 133 – 10)⁵⁹.

⁵⁷ See Lucian, *Vitarum auctio* 4.

⁵⁸ Alcmaeon says that men die for this reason, that they cannot join the beginning to the end (Kirk/Raven 1957, 235).

⁵⁹ Barker, 1989, 534.

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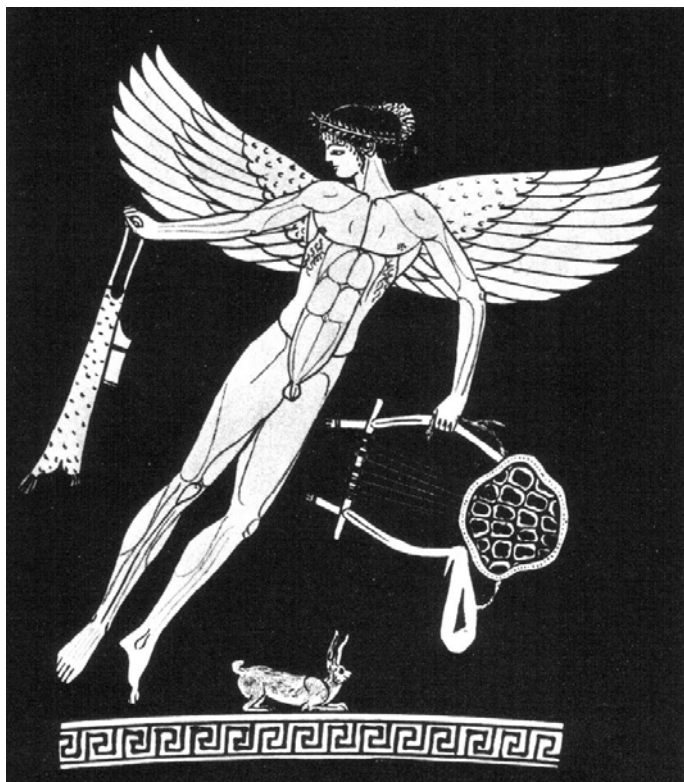


Fig. 1a Attic, late sixth or early fifth century BC (See in: Naples R.C. 163. Gabrici, Monumenti antichi publicati per cura della R. Accademia dei Lincei, xxii, Pl. 82; J. D. Beazley, Der Berliner Maler, 1930 (Berlin), N 16, Taf. 16; J. D. Beazley, Citharoedus, JHS, 1922, London, fig. 4).



Fig. 1b Attic, late sixth or early fifth century BC (See in: Naples R.C. 163. Gabrici, Monumenti antichi publicati per cura della R. Accademia dei Lincei, xxii, Pl. 82; J. D. Beazley, Der Berliner Maler, 1930, Berlin, N 16, Taf. 16; J. D. Beazley, Citharoedus, JHS, 1922, London, fig. 4).

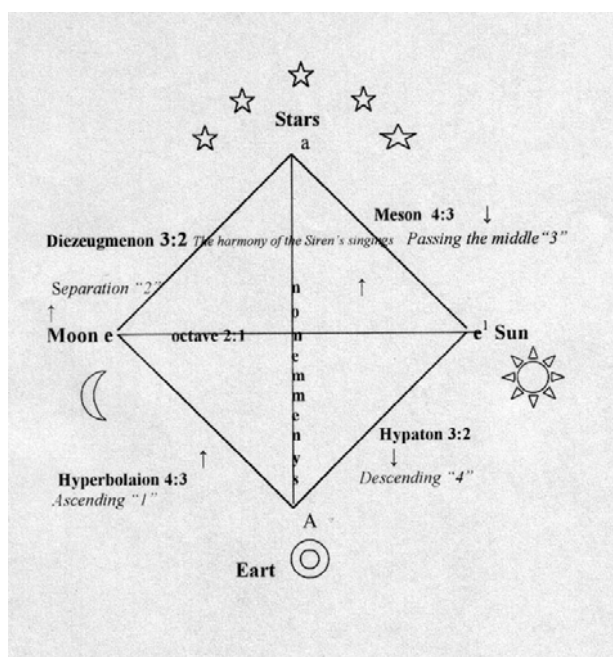


Fig. 2 Metaphysical harmonic *Systēma Tēleion* (reconstruction) (See in: A. Boshnakova, *Aulos and Lyre – the Philosophy of Music in ancient Hellas*, 2003, Sofia, Appendix N 5).



Fig. 3 The Sirens, c. 500–470 B.C. (See in: A. Waiblinger, *Corpus Vasorum Antiquorum*, Fascicule 26, Musée du Louvre, Fascicule 17, France, 1974, pl. 32.1).



Fig. 4 Apollo flying over the sea on his winged tripod. Below him, dolphins, fish, and octopus in the water. Attic Red-figure hydria by the Berlin Painter, 480–470 B.C. (See in: J. D. Beazley, *Der Berliner Maler*, 1930, Berlin, N 126, Taf. 25).

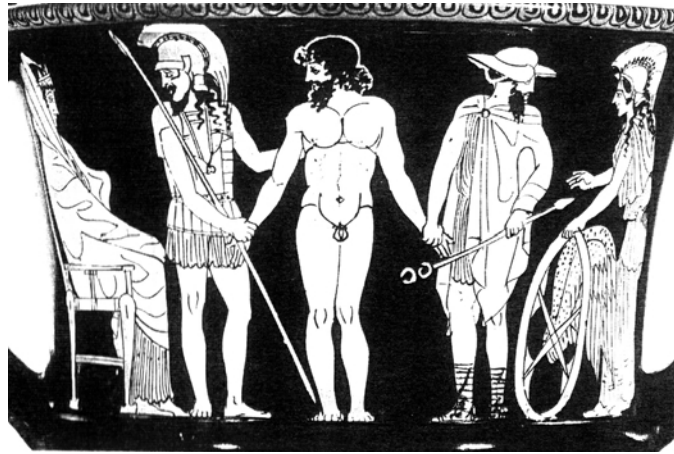


Fig. 5a Ixion with Hera and Athena, Ares and Hermes. Attic red-figure kantharos. London, British Museum E155. Ca. 460–450 B.C. (See in: H. A. Shapiro, *Myth into Art: poet and painter in classical Greece*, 1994, Routledge, 86, fig. 58).



Fig. 5b The psyche of Ixion has the same height, the same face and the same body as Ixion (see Fig. 5a). The visible side of the human body is opposed to the invisible *autos* (Alter Ego) – they are twins. There is only one difference – the pure soul (*psyche*) always has wings. Attic red-figure kantharos. London, British Museum E155. Ca. 460–450 B.C. (See in: H. A. Shapiro, *Myth into Art: poet and painter in classical Greece*, 1994, Routledge, 87, fig. 59).