

Franz Richter Herf

The Presence of Ancient Greek Music in the Today's Musical Work¹

When talking about the ancient Greek music, it is meant to be a specific historically delimited period. It starts with the era of Homer (about 800 B.C., thus after the Dorian migration) and terminates in the time between about 350 and about 300 B.C., when entering the Hellenism.

The continuation which the notion of the music of the Greek people has undergone in the intellectual and musical history of the Occident, is in his importance in no way inferior to the influence that the Greek architecture, the sculptoring, the philosophy, and the poetry have been exerted on. Since the few fragments which have been preserved from the music of the Greek, first of all, do not originate at all from the classical period, furthermore, since they do in no way convey a notion of the nature and the artistic impact of the music, the emanating forces have not to be looked for in the music as a sounding phenomenon.

The post-Christian centuries until today have been actuated to artistic inspiration, to the emulation of the ancient example, and to research, above all, by four imagining and mental spheres in conjunction with the Greek music:

- by the music as an idea,
- by the Greek tragedy,
- by the doctrine of ethos and the katharsis and thereby the role of music in the education,
- by the musicology, in particular, by the tradition of the Greek music theory.

The music as an idea, "Musiké", originally means the sounding of bound speech, of verses; a verse cannot be rendered other than by singing, it originally comprises in itself a musical element. "Musiké" is not what we understand by music, instead it is the work of the poet when it sounds, music and poetry simultaneously. This unity which is no longer conceivable for us today

¹ The text was first published in *Uni-aktuell*. Zeitschrift der Österreichischen Hochschülerschaft der Universität Salzburg, 3, 1982/83, 13 ff. A shorter version was published also in: MAEDEL, Rolf, and Franz Richter HERF. 1983. *Ekmelische Musik*. Innsbruck/Neu-Rum: Edition Helbling, 13 ff.

starts to decompose at the end of the 5th century – after the classical period. Music and poetry separate from each other.

Until the 5th century, the “Musiké” is intimately associated not only with the poetry but also with dancing.

The rhythm of the Homeric hexameter seems to have been that of a round dance. The choral lyrics of the 7th and 6th century and the choirs of the classical tragedy in the 5th century also have to be understood from the perspective of dancing. Chorus means “roundel”; the word has attained its today’s meaning not until the Christian era.

The Greek rhythm is not an independent musical, but likewise a verbal rhythm: the verse rhythm in the unity of the “Musiké.” It is not based on the accentuation of the individual words but on the length and shortness, respectively, of the individual syllables, on the quantity. We can state a lot about the Greek rhythm, yet not only on the basis of the descriptions of theorists, but above all on the basis of similar rhythmic attitudes which are today still vivid in the folk music of Greece and of the Balkans. So, for instance, the rhythm of the round dance Syrtós Kalamatianós, which is typical for the modern Greek folk music, can be traced back until the era of Homer.

Until the classical period however, the singing definitely takes precedence. The actually tonal aspect of the music is called “Melos”, composed of:

- Logos (Word),
- Harmonia (Modulation, i.e. the stress ratio between the consecutive tones), Rhythmos (Order of movements).
- Harmonia and Rhythmos have to accept a subordinate role to the Logos.

The “Musiké” of the classical period is never an art by itself in our meaning and for that reason alone, it is not comparable with our music. The major importance of the Greek music that has never been attained again in this sense by an occidental people is due to the connection of direct relatedness to life and immediate relationship to the deity. Music was not an accompaniment, it was an integral part of a cult, state ceremonies, celebrations, or of sociability.

The Periclean era (5th century) (Pericles 478–429) with the high classicism in the field of graphic art also leads up to a new period in music history which is likely at its zenith in the dramatic arts. The tragedy arises out of the Dithyrambs at the Dionysos festivals. Classical authors of the Greek drama: Aeschylus (525–456), Sophocles (496–406), Euripides (484–406).

The participation of the music in the drama is not entirely clarified. The most important musical forms are: the marching in, standing, and recessional song of the choir, choral chants with pantomimic dance, lyrical dialogs of mostly lamenting character. The choir is constituted by 12 and later 15 singers. Whereas in Sophocles, the music bears only a contentual and factual relation to the dramatic plot, in Euripides, it is by its atmospheric character involved in the entirety of his tragedies. Euripides has introduced in the artistic composition of the drama as a musical innovation a form which can be paraphrased with the term of the solo aria.

We know that the development of the opera (about 1600, in the Baroque period) originates from the longing for reawakening of the Greek tragedy. But even all reformative movements in the history of the opera try to emulate ancient examples. Gluck seeks a congenial declamatory unity of text and music; Wagner transfers the ancient choir into the orchestra. All these endeavours had been inspired by the Greek tragedy which, however, could not rise again in its original form.

Although the few preserved musical memorials of the Greeks are readable, they do not allow to make the music sound again. The Greek music is a music which consists in sounding, i.e. it is not based on notation like the western music. The Greek notation emerges not until after the classical period; when the unity of speech and music decomposes. It shall prevent the decomposition, and preserve the tradition of the musical practice. It serves for the fixation of sounding music and puts down in writing only what is no longer arising solely from the self-evident practice. In order to create sounding music from the Greek notation, one actually would have to know the Greek music: that what you want to reconstruct turns out to be the prerequisite for the reconstruction.

I would like to touch just shortly upon the ethos doctrine which takes up much space with the Greeks also in the music. It has a dominant position as moral keystone in the political and educational system, since in the Greek intuition music, according to its character, positively or negatively affects the human will.

The music serves the religion and the state. In Sparta, Thebes, and Athens, it is compulsory in the education to learn playing the Aulos and to participate in the choir. The practice of the melodies takes place in historical order, first the ancient hymnody of the sagas of gods and heroes, not till then the contemporary music. In Arcadia, it is public liability to attend music lessons up to the age of 30.

The ethics of Plato allows for the musical education of the youth only the Dorian key which is masculine, severe, and stabilizing the character, as well as the Phrygian key which is passionate and sparking off to belligerent deeds. The Lydian is refused because of its soft character. However, not only the keys but also the modes are of ethic importance. The diatonicism corresponds with the Dorian, the enharmonicism is used particularly in the music of the classical tragedy, the chromaticism is excluded from the tragedy.

By specifying the terms key and mode, we are already in the thick of the Greek music theory which is quite completely handed down to us.

The Greek music is originally based on the pentatonic scale. With the intrusion of elements of the linear musical culture of Asia Minor the five-step scale becomes a seven-step scale, by inserting two “irrational” tones (trail tones, without a precisely definable pitch) between the five tones.

Here we find the first evidences for the Occident of smaller tone steps than that of the semitone. They are called “Diesis” by the later Greek theorist. Though, in the Pythagorean era, “Diesis” denoted the diatonic semitone step (256:243) which later received the name “Leimma”. Then just those tone steps which were smaller than the semitone have been counted among the Dieses.

The Greek tone system has been described not until the age of Hellenism (beginning about 350 B.C.) and is based on a decidedly linear-melodic music. This is a product of race-foreign influences and mixtures; chromaticism and enharmonicism with their Dieses have thoroughly intermingled and modified the original music of the Greeks.

The tone system is based on the interval of the fourth, on the downward four-tone series, the tetrachord. Attaching on top of a tetrachord an equally constructed one results in the complete scale (the octave species of the respective key). The position of the semitone step within the tetrachord distinguishes the principal keys (Harmoniai):

- Lydian (medieval Ionian)
- Phrygian (medieval Dorian)
- Dorian (medieval Phrygian)

From each of these scales, two secondary scales can be formed by attaching a tetrachord corresponding to the basic scales above or below and by completion to the full octave:

below hypo- above hyper-

Fifth down Fifth up

Completing the octave above and below each by a tetrachord and adding a tone at the lower octave results in the complete system (system *téleion*). The two tetrachords in the middle are called “separated” (*diezeugménon*), the outer ones “connected” (*syneménon*).

The scales are transposed in order to be able to apply them in accordance with the normal ambitus of the Lyra and the Kithara, respectively, which features initially only four up to five, later seven up to seventeen strings.

On the other hand, the modes are determined by the different structure of the tetrachords. The frame, the fourth, always remains the same. The two tones in the middle are replaced by inserting irrational tones, in fact: for the chromatic mode by an irrational tone at the second position from the top, for the enharmonic mode by a tone at the third position. The diatonic mode which represents the oldest one, does not contain these irrational tones; they have to be traced back to the oriental influence.²

Sample 1

Tetrachords:

1a – enharmonic after Eratosthenes 1b – chromatic after Archytas

1c – diatonic soft, tempered after Aristoxenus 1d – diatonic soft after Ptolemy

We can exclude these irrational tones both from the tuning of the Lyra and also from the scales of the Aulos.

Sample 2

2a – Lyra tuning, Dorian soft

2b – Aulos scale, from Dieses

2 Audio samples are available on pCloud: <https://my.pcloud.com/publink/show?code=0ZFJ9HZUMkzfRF5gUfwr4E6JgpBffATa0zX>

In order to be able to systemize and represent all irrational tones which arise from the transpositions of the keys and modes, Aristoxenus of Tarent (300 B.C.) suggested to divide the tetrachord in 30 pieces. This micro-structure yields 72 degrees in the octave. We will encounter again this number in the contemporary fine-step (ekmelic) music.

When considering the Greek music theory, one has above all Pythagoras in mind. In the doctrines of the Pythagoreans the ancient cosmology with music and number continues to sound, but here it has the character of an esoteric doctrine whose knowledge remains restricted to secret societies, to small enclosed circles. The magnificent results of this science had more likely an impact on acoustics and the theoretical basics of music than on its development as an art genre.

Although the musical practice of the ancient Greece cannot be investigated scientifically it is at least within the bounds of possibility that rudiments of the Greek Melos have been preserved in individual regions down to the present day. So the Istrian cantos, but in particular, the wind instruments commonly use there – called Sopile which are always employed in pairs like the Aulos – points out to a possible vestige of the Greek Auletic. Also characteristic is the heterophony frequently found between the singing voices and the instruments. – Heterophony means a melodic variation as a decoration and paraphrase of the principal voice by a second, mostly instrumental voice. No polyphony or contrapuntism in our sense.

Sample 3

Istrian: *Vrbniće nad morem* 3a – 2 Sopiles

3b – Singing

3c – Two male voices and 1 Sopile

The Istrian Sopiles are also used in the livelier instrumental music for the folk-dances. In this capacity, I have employed them in my opera *Odysseus*, namely at the beginning of the first scene; Menelaos celebrates with many friends the wedding of his son. This festivity is interrupted temporarily by the arrival of Telemachos who wants to obtain information about the fate of his father Odysseus. The two Sopiles are accompanied by side drums, a trumpet theme gives this dance music a festive character.

Sample 4

Franz Richter Herf: *Odysseus*, Op. 12 (1979), 1st scene, beginning

The music at court of Menelaos has probably sounded not quite like this, but here a reconstruction is not the issue, which would not be possible at all, instead it is an inspiration from the Greek archaicum.

A further example for the Greek influence indirectly via the Istrian music is the musical version of the poem “Welle der Nacht” by Gottfried Benn. The singing is framed by an atmospheric picture of the Istrian coastal landscape. The dance tune sounding from afar, with the Sopiles being imitated by two oboes, applies the Istrian scale.

Sample 5

Franz Richter Herf: *Welle der Nacht*, Op. 2 (1973)

But not only in Istria, also in Macedonia, we still find today music that has not fulfilled a further development to the polyphony and possibly still comprises elements of the ancient Greek music. In the sample of a Macedonian shepherds’ song, a melody sounds over a stationary chord made of a fifth and a fourth with a great many irrational tones appearing in it. However, the clarinet-like instrument originates more recently.

Sample 6

Macedonian shepherds’ song

The fine-tone system of the ancient Greek monody and heterophony has been lost for the moment by the emergence of the occidental polyphony (earliest beginnings in the 10th century A.D.). It has come to a simplification and coarsening of the tone system. The irrational (ekmelic) tones were not applicable for the formation of chords. At the beginning, it even was a problem to place a harmonious third into the tone system. But in the course of time, more and more tones could be included also into the polyphonic music; first in a rather spare chromaticism, but finally by the introduction of the “equal temperament” (end of 17th, beginning of 18th century) a complex chromaticism and enharmonicism was feasible. Attempts of further differentiation of the tone system (Gesualdo 1560–1613) had no long-term success for the time being. The expansion of the chromaticism and enharmonicism was far from being finished. Not until the beginning of the 20th century, there is a growing number of tendencies to

introduce microtones. Under the representatives of this tendency, we find names like Busoni, Stein, Avraamov, Ives and Wyschnegradsky. The most important, doubtless, is Alois Hába who uses in his works already quarter and sixth tones and takes twelfth tones into consideration at least theoretically.

Sample 7

**Alois Hába: String quartet No. 11, Op. 87, 2nd movement
*Andante misterioso***

By the emergence of composing with 12 tempered tones, after the principle of Schoenberg and Hauer, this development has temporarily been stopped for 50 years.

Favoured by the introduction of electronics in the music, today more and more composers deal with the microtones and apply them in their works, even though mostly not systematized. On that point, two short clipping by Lutosławski and Ligeti.

Sample 8

8a – Witold Lutosławski: *Livre pour orchestre* (1968)

8b – György Ligeti: *Chamber concert for 13 solo instrumental performers* (1970)

The endeavour to integrate the microtones in our western tone system induced Rolf Maedel and me in 1970 to start a common research work. In doing so, the division of the octave in 72 degrees as already suggested by Aristoxenus turned out to be the most favourable solution for a microtonal system also for the polyphony. With this fine-step temperament, all audible tone values are perceptible with sufficient accuracy. Since this is also the case with all overtones – the Greeks did not yet know that the whole-numbered proportions are at the same time overtones – the microtones in the chords lead to completely new sound combinations.

Sample 9

9a – Ekmelic chords, produced with the fine-step organ

9b – Three times ground tone progressions (temp./prop.)

Like in those days, the influence of the Orient has enriched the archaic music of the Greeks by irrational tones and refined the tone system, also today it comes again to a further refinement of the existing tone system by non-European influences, for instance, of the Indian or Persian-Arabian music, and to the integration of all musical cultures of this earth into the occidental polyphony.

Sample 10

**10a / b / c – Franz Richter Herf: *Odysseus*, Op. 12 (1979),
Introductory chorus / 5th scene / Final chorus**