

ARCHAEO EPITAPH

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Abstract – ArchaeoEpithaph is a musical composition for soloists and choir commissioned by PoliEtnico which is based on the "Epitaph of Seikilos", a Greek inscription founded in Aydin (Anatolia) and dated between the second and first century B.C. It is the oldest complete document in which poetic text, musical melodic notation and rhythmic notation expressed in lines and points may be experienced.

The polyphonic elaboration maintains the melodic and rhythmic characteristics of the theme, using counterpoint and compositional procedures that aim to reuse the original material in order to reach a new expressive and artistic result. ArchaeoEpitaph will be performed during the Welcome Party from PoliEtnico Choir, and scientific lecture will present aspects of analyses and measurements of both the original theme and the polyphonic elaboration proposed by Giorgio Guiot.

I. THE SEIKILOS INSCRIPTION

Ancient Greek music always attracted great interest and has been studied in depth because of its strict links with Greek philosophy and mathematics: the works of many philosophers and musicological theorists were studied, like Archytas, Plato, Ptolemy, Aristides Quintilianus, Arystoxenus, Aristotle, and many others. But scientists and scholars had to face a very intriguing gap: despite the great amount of theoretical documents related to music, for a long time no one really knew how their music sounded like: a music that seemed so powerful to influence the moral quality of men, to create good and evil, peace and restlessness, to move trees and stones.

Such gap was filled at the end of the 19th century: in 1893 excavations at the Sanctuary of Apollo in Delphi found the Athenian Treasury; many of the blocks were inscribed with the 'Hymns to Apollo' and annotated with musical signs that could be interpreted.

This discovery immediately had a great resonance and soon became a popular phenomenon. Gabriel Fauré was commissioned to compose a modern instrumentation of the ancient melody to be performed in 1896 at the opening of the first modern Olympics. According with Baron Pierre di Coubertin, this archaic music created a 'eurhythmic' emphasizing the artistic and moral significance of the games, in the spirit of the Olympic movement.

The oldest complete document found so far including text, melodic and rhythmic notation seems to be the the Seikilos epitaph, found in 1883 during excavations in Turkey. This document allowed scholars to advance definitive hypotheses on writing and the meaning of ancient Greek music.



Abb. 15/16. Copenhagen Inv. Nr. 14897 (= Nr. 18)

Fig 1 The stele

The Seikilos inscriptions have been dated from around 200-100 BC.; the stele was discovered by Sir W. M. Ramsay in Tralleis, an archaeological site near the Turkish town of Aydin, during the building of the railway. According to one source, it first remained in the possession of the construction company's director E. Purser; since it was broken at the bottom, it was flattened at the base so that it could serve as a pedestal for Mrs Purser's flowerpots; this caused the loss of the last lines of the inscription. The stele remained in the Parser's family until the Greek-Turkish war of 1919-1922, when the Dutch Consul took it to keep it safe. The Consul's son-in-law later brought it to The Hague; it stayed there until 1966, when it was acquired by the Department of Antiquities of the Nationalmuseet in Copenhagen. This is where the stele is now located.

Another source says that it was kept in the Izmir Museum until 1922, lost for 35 years, rediscovered in 1957 broken in the base, and finally acquired by the Danish museum.

The Seikilos epithph is also known as the 'Skolion of Seikilos'; the word skolion (skólion mélos) means a banquet song, a 'chanson à boire', i.e. a song to be sung

at the end of a symposium, usually accompanied by a lyre, passed from singer to singer often improvising according to occasion.

The stone is filled with the text, in capital, as usual; here is the original text:

ΕΙΚΩΝ Η ΛΙΘΟΣ / ΕΙΜΙ · ΤΙΘΗΣΙ ΜΕ / ΣΕΙΚΙΛΟΣ
 ΕΝΘΑ / ΜΝΗΜΗΣ ΑΘΑΝΑΤΟΥ / ΣΗΜΑ
 ΠΟΛΥΧΡΟΝΙΟΝ // ΟΣΟΝ ΖΗΣ ΦΑΙΝΟΥ / ΜΗΔΕΝ
 ΟΛΩΣ ΣΥ / ΛΥΠΟΥ ΠΡΟΣ ΟΛΙ / ΓΟΝ ΕΣΤΙ ΤΟ ΖΗΝ /
 ΤΟ ΤΕΛΟΣ Ο ΧΡΟ / ΝΟΣ ΑΠΑΙΤΕΙ // ΣΕΙΚΙΛΟΣ
 ΕΥΤΕΡ

Above each line of the lyrics there is a line with letters for the tunes and some signs for the rhythm (_ to double the time unit, / to triple):

C Z Z̄ K I Z Ī K̄ I Z̄ Ī K̄ O C̄ Ō Φ̄
 Ὅ σον ζῆς φαί νου μη δέν ὀ λως σύ λυ ποῦ
 C K Z Ī K̄ Ī K̄ C̄ Ō Φ̄ C K O Ī Z̄ K̄ C̄ C̄ X̄ Ī
 πρὸς ὀ λί γον ἐσ τί τὸ ζῆν τὸ τέ λος ὀ χρό νος ἀπ αι τεῖ.

Fig 2 The inscription

The Greek letters used for the tunes and their modern ABC equivalents are:

Greek: Z Γ I K O C Φ X
 ABC: e E d c# B A G F#

Here we see a somewhat free English translation :

*As long as you live, shine
 Let nothing grieve you beyond measure
 For life is short
 And time will claim its toll.*

The first two lines of the tombstone say:

Εἰκὼν ἢ λίθος εἰμί. Τίθησί με Σεῖκιλος ἐνθα μνήμης ἀθανάτου σῆμα πολυχρόνιον

the translation of which sounds like:

I am a tombstone, an image. Séikilos placed me here as a long-lasting sign of deathless remembrance.

The last two surviving words on the tombstone (but the last letters have been chopped off) are :

Σεῖκιλος Εὐτέρ[πη] (*Seikilos Eutér[pēi]*) or Σεῖκιλος Εὐτέρ[που] (*Seikilos Eutér[pou]*)

meaning ‘Seikilos to Euterpe’ or ‘Seikilos of Euterpos’, i.e. ‘Seikilos, son of Euterpos’. It was possibly dedicated by Seikilos to Euterpe, the name of a woman related to him or to the Muse of Music and Lyric Poetry.

II. THE ORIGINAL MELODY

According with studies of music archaeology and ethnomusicology, experts have almost unanimously agreed to a musical transcription in modern notation, articulated in eight measures of binary metric, with ternary articulation of the subdivision (6/8):



Fig 3 Musical transcription

The melody is transcribed in a 6/8 meter and is eight measures long, while having 28 syllables and 48 notes. We can therefore say it is quite a lively melody with very frequent pitch variations and very few long and sustained sounds.

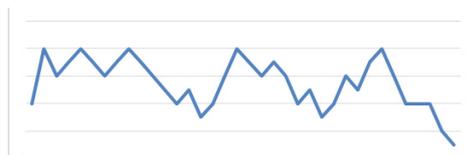


Fig 4 Melodic contour

Through a series of observations and analysis the Seikilos inscription will be considered in terms of melodic contour and interval structure, to determine whether this type of melody is consistent with the western musical tradition and with other musical traditions from other cultures.

The 37 melodic intervals are divided in ascending intervals (16), descending intervals (18) and repeated sounds (3). It's interesting to consider that most intervals are seconds (nearly as many ascending as descending), thirds (more descending than ascending), while wider intervals, such as fourths and fifths, are only ascending.



Fig 5 Melodic intervals distribution

This interval distribution, with a high frequency of small intervals and ascending melodic “jumps” followed by a slow recover in descending intervals, isn't determined by a specific musical or cultural tradition but can be observed in different cultures and historical periods, as shown in the following examples taken from Huron, but coming from different researches.

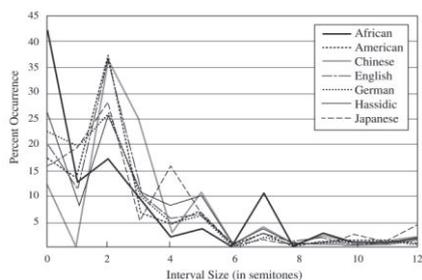


Fig.6 Frequency of occurrence of melodic intervals in annotated sources [3]

The melody is strongly connected to tradition also because of the re-occurrence of specific sounds in the scale. The ones that occur more often are the ones most important in today's "major mode": the first, third and fifth notes (the notes of the major chord, here called C, E, and G) and the fourth note. This sound distribution corresponds to what is statistically found in western music melody, with a peculiar modal element represented by the Bb as the seventh note of the scale.

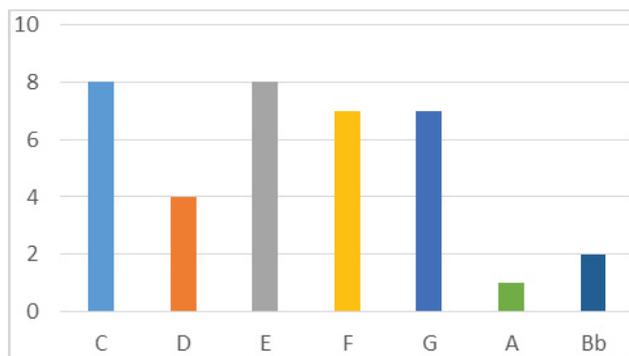


Fig 7 Distribution of scale tones

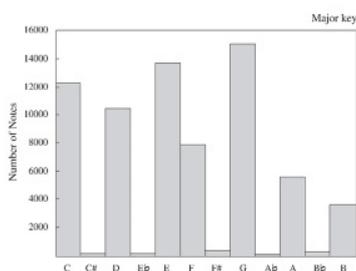


Figure 9.1 Distribution of scale tones for a large sample of melodies in major keys (>65,000 notes). All works were transposed so the tonic pitch is C; all pitches are enharmonic. Modulating passages were excluded. From Aarden 2003.

D. Huron, "Sweet anticipation: music and the psychology of expectation" MIT press, 2006.

Fig 8 Distribution of scale tones for a large samples of melodies [3]

III. THE POLYPHONIC ELABORATION

The polyphonic elaboration of the Seikilos inscription has attempted an operation of recovery of the original song and the melodic, rhythmical and timbral variation following different techniques usually used in composition. As for the melodic aspect, which is of particular interest (because of the available instrument, the choir!), work focused on various aspects pertaining to the melody and the interval analysis, the mode and harmony:

- use mostly the given material
- use "archaic" procedures in composition (motions for parallel fourth and fifth, imitative episodes etc.)
- use of bands made up of individual sounds, or cluster
- presence of monophonic episodes, at a distance of one octave or more (like an organ composition).

In particular, we can observe the presence on a large number of precise imitations of the theme or of parts of the theme: the melodic material is derived for almost 60% from imitations in the original tone or in other tones, while about 25% comes from prolonged sounds and pedal sounds.

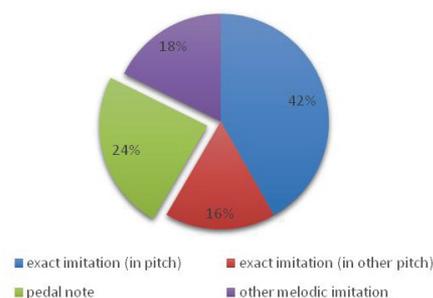


Fig. 9 exact references, imitations, echoes

Identical imitations of the melody come from parts of the theme, more specifically from measures that make it up (measures 4 and 6 were considered to be equivalent).

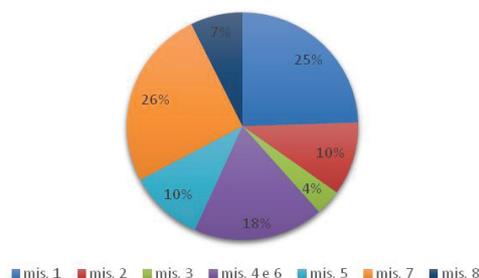


Fig. 10 References of the melodic theme

This arrangement is meant to put a focus on the development section, the big element marking the transition from early music to modern music. Unlike old music, where the main idea could only be imitated or at most "varied" in some way, the central part of a modern composition reveals itself as a sort of creative crucible, where original elements are pushed and combined together, giving rise to new combinations and unseen reactions. In our case, too, the meeting of new musical ideas results in changes in texture, climate, speed, overlaps of different parts and little surprises. This is the section where the musical piece develops from a simple quotation or imitation of itself to a more malleable element, where the original themes find new life and meaning.

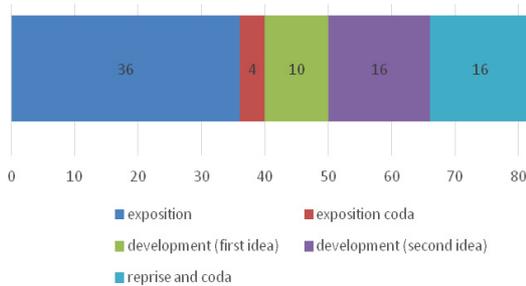


Fig. 11 Composition structure

Here we see an episode of the composition, where imitative episodes of the theme coexist with original elaborations and melodic and rhythmic transformations:



Fig. 12 A section of development

The structural elements of composition can also be observed looking at the number of voices used: the parts with the highest number of voices show the climax of the exposition, the development and the recapitulation. The first sixteen measures (what we earlier called “prologue”) are clearly an introduction.



Fig. 13 Number of voices

Finally, we can see how the structure of the composition, the number of incoming voices and the density of imitative music involve the creation of a composition in which all elements converge towards an expressive style combining the various elements.

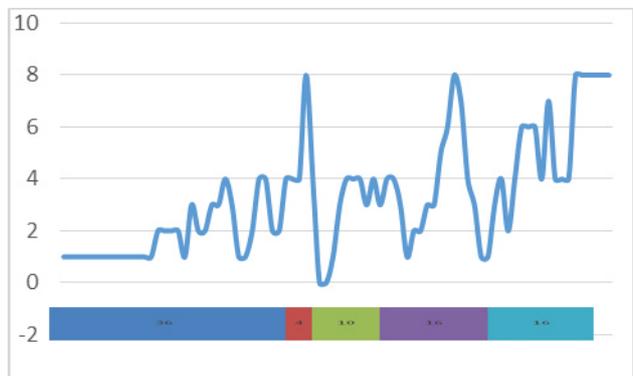


Fig. 14 Simultaneous presence of imitations and theme fragments

Through analysis and statistics of some of the compositional aspects we are able to understand the "restoration techniques" and the “recovery” of some melodies and compositions, which is the most important thing in the history of musical culture. These techniques aim to use and reuse the primary material in a continuous interpretation of melodic cells, rhythms and text.

IV. REFERENCES

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