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## XENAKIS IR HEIDEGGERIS: Bendros pasaulėžiūros paradigmos

Xenakis – Heidegger: Common Paradigms of Worldview

#### SUMMARY

The article presents a study of piano work by lannis Xenakis in connection with the peculiarities of the composer's personality. A comparison is made between Martin Heidegger's philosophy and the writings of lannis Xenakis. Biographical paradigms of I. Xenakis's compositions with the focus on his opuses for piano accompanied by a symphony orchestra, are studied. The primary themes of the composer's work including antiquity, alienation, loss of mother, experience of a trauma are established. The philosophical aspects of the compositions *Eonta, Synaphaï, Erikhthon*, and *Kegrops* are compared with the concepts of Heidegger's *Being and Time*. The issue of "being thrown into being" mentioned by M. Heidegger is investigated in I. Xenakis' Concert *Erikhthon*. It is concluded that I. Xenakis and M. Heidegger share common views on the unity of the ancient Greek philosophical foundation and its relation to the modern world.

#### **SANTRAUKA**

Straipsnyje pateikiama lannio Xenakio fortepijoninės kūrybos analizė, susijusi su kompozitoriaus asmenybės ypatumais. Šio autoriaus kūryba lyginama su Martino Heideggerio filosofija. Nagrinėjamos I. Xenakio kūrybos biografinės paradigmos, daugiausia dėmesio skiriant jo opusams fortepijonui su simfoniniu orkestru. Nustatytos pagrindinės kompozitoriaus kūrybos temos: senovė, susvetimėjimas, motinos netektis, traumos patirtis. Filosofiniai kompozicijų *Eonta, Synaphaï, Erikhthon* ir *Kegrops* aspektai lyginami su Heideggerio *Būties ir laiko* koncepcijomis. M. Heideggerio minimas "įmestumo į būtį" klausimas nagrinėjamas, remiantis I. Xenakio koncertu *Erikhthon*. Daroma išvada, kad I. Xenakį ir M. Heideggerį sieja bendras požiūris į senovės graikų filosofinės esmės vienovę bei sąsajas su šiuolaikiniu pasauliu.

RAKTAŽODŽIAI: Iannis Xenakis, Martinas Heideggeris, pasaulėžiūra, fortepijoninė kūryba, filosofija. KEY WORDS: Iannis Xenakis, Martin Heidegger, worldview, piano work, philosophy.

### **INTRODUCTION**

The outrageous and mysterious music of Iannis Xenakis (1922–2001) remains a cryptographic task for most researchers to decipher (Khai-Wei et al., 1996). The composer's personality could become the subject of phenomenological research, rising numerous questions about his sharp worldview, original thinking, and amazing aesthetics of his work. The biggest mystery is the reasons that prompted Iannis Xenakis to go against the flow in search of his own unique destiny (Capobianco, 2017). Among them, the obvious events were severe trauma, which the composer was reminded of throughout his life when looking at himself in a mirror, the death sentence he was sentenced to for 16 years, as well as the fate of a stranger from birth and subsequent forced immigration. However, to understand how the composer's personality was formed, it is necessary to "go" throughout his life together with him (Backman, 2018).

In this study, we delve into the creative essence of Iannis Xenakis, examining not

only his distinct compositional style but also the rich tapestry of personal experiences that shaped his musical expressions. Exploring the interplay between Xenakis's compositions and the existential tenets of Martin Heidegger's philosophy, this research illuminates the profound semantic connections that interlink their respective views on the world. This exploration is underpinned by a pioneering analytical method that draws upon biographical paradigms, offering, for the first time, a philosophical interpretation of Xenakis's music that aligns with Heideggerian thought. The pertinence of this research is underscored by the sustained and burgeoning intrigue in Xenakis's contributions as an emblematic figure of twentieth-century music, a fascination reflected in the global musicological discourse. The investigative framework employed here is multi-dimensional, embracing phenomenological scrutiny alongside musical, linguistic, psychological, comparative, and historical analyses to unravel the intricacies of Xenakis's oeuvre.

# FORMATION AND DEVELOPMENT OF IANNIS XENAKIS AS A COMPOSER

Iannis Xenakis was born in the city that has not preserved any memories of him; even the address where the composer's family lived is unknown; there is no memorial plaque or monument. However, despite this fact, Iannis Xenakis is the most famous and prominent person in the world, born in Braila, a city in the Romanian region known in the past as *Wallachia* (nowadays – *Muntenia* and *Ol*-

tenia). The only "shadow" that connects the little-known city with the name of the world-famous composer is the presence of the Greek population, which, in fact, is indigenous to the ancient times of its founding. Then, in the 5th century BC, the city received the ancient Greek name – Prochilia ( $\Pi po\chi \epsilon \iota \lambda i \alpha$ ), which is translated as "tensed lips," so the ancient Greeks called the Black Sea – Danube

transshipment point for merchant ships. The composer's surname –  $\Xi \varepsilon \nu \acute{\alpha} \kappa \eta \varsigma$  – has an imprint of life far from home –  $\xi \acute{\varepsilon} \nu o \varsigma$  + –  $\acute{\alpha} \kappa \eta \varsigma$  – one that comes from another place (Ioτoo( $\acute{\alpha}$  των..., 2018). And he had to be a foreigner for most of his life – a Greek born in the Kingdom of Romania, sentenced to death by Greece, the country with which he "had no relationship", a fugitive who became a French composer (Philippot, 1980).

Thus, the origin of I. Xenakis establishes important starting points for the development of his personality, the most significant of which - foreignness and Greek antiquity. Born in Braila, Romania, he was both a foreigner among the local population and a descendant of the ancient Greeks, those Greeks who did not vet know Christian doctrines but discovered the laws of the universe. The origin of the family from the Greek islands father Kleorchos Xenakis (Κλεάρχος Ξενάκης) – from Euboea, and mother Fotini Pavlou (Φωτεινή Παύλου) – from Lemnos - at the period of formation of the composer's worldview was not as strong as the ancient history of the city where he was born. It should be noted that antiquity is the second field after music, which Xenakis studied from an early age: "I wanted to play music from the time when I was a child. I started with anxiety and sensitivity, which I felt most deeply to the sounds. However, I also studied antiquity and philosophy, then I also studied politics and science" (James, 1995).

If the mentality of the "mainland" Greeks coexists with ancient  $E\lambda\lambda\dot{\alpha}\delta\alpha$ , the Roman Empire (which they call the Roman state), Byzantium and Ottoman enslavement, such ethnic syncretism is not

inherent in the mentality of I. Xenakis. The whole great Christian period was perceived by him as hostile, and the composer tells directly about it in his interview in 1978: "Perhaps the only period that has any analogy with today is the period of Alexander the Great, with this combination of religions, ideas and ideologies, with this universality of the time, which was based on the spread of Greek culture among such different peoples and with so many different ideas. Unfortunately, Christianity came and ruined everything" (James, 1995).

During the same interview, I. Xenakis demonstrates the manifestations of ancient Greek thinking in the Pythagorean ideas about the unity of music with science and life: "So, music has a direct connection not only with mathematics, but also with much deeper problems, aspirations, and human desires, such as the desire to create. That is why music is so inextricably linked to all the fundamental problems in general, from mathematics to the general vision that humanity has or does not have. Many ideas are missing. They have been lost with the loss of religions, and humanity is trying to replace them with others" (James, 1995).

Inquiring about the loss of scientific and aesthetic achievements of antiquity, Xenakis presents himself as a deliberate restorer of the ancient tradition, and this position is the basis of his reformist approaches to the methods of composition: "After all, mathematics cannot exist without music, without philosophy. Those cannot exist without visual art, without art at all. Perhaps this is my most important contribution, or at least the place where I have worked for so many years" (James, 1995).

He "transfers" his foreignness to composition, rejecting the "elite" serial

technique, and not continuing the methods of any of his teachers.

The demise of the composer's mother, pianist Fotini Pavlou, when he was only five years old, played a significant role in his early years. Compensation for the tragic, painful loss of his mother was I. Xenakis's love for the piano. Perhaps it was she who gave this instrument immeasurable, unlimited possibilities in the solo piano works of I. Xenakis and in his concertos for piano and orchestra. The fact that the composer attached special importance to the piano in his work is evidenced by the creation of a basic opus of stochastic technique – *Herma* (1960-61) (Xenakis, 1976).

Since 1952, Xenakis has presented Greek names to most of his compositions, presenting them in Latin. Exceptions are the titles of exotic themes, such as *Bohor* (magnetic film modifications with Laotian organ recordings, oriental bracelets, Byzantine psalms and piano, 1962), *Concret PH*, ("specific music" for the Phillips Pavilion – also magnetic tape of 1958), *Tuorakemsu* for 90 Musicians (1990), dedicated to the 60th anniversary of the birth of Japanese composer and writer Toru Takemitsu (武満 徹, 1930–1996), and others.

Some of the Greek titles of I. Xenakis's music compositions, such as " $M \acute{o} \rho \sigma \iota \mu \alpha - A \mu \acute{o} \rho \sigma \iota \mu \alpha$ " (literally: "those who are accepted and not accepted by fate") for piano, violin, cello, and double bass

(1962) are neologisms, others originate from ancient Greek.

One of the musical and philosophical works of I. Xenakis is the composition Eonta ( $\dot{\epsilon}\dot{o}v\tau\alpha$  ancient Greek – being) for piano and five brass instruments (consisting of two trumpets and three trombones), created in Berlin during 1963-1964 and published in 1967 by Boosey & Hawkes Publishing House (Xenakis, 1967). One unique aspect of this composition is that Pierre Boulez conducted its premiere in the "Paris Concert Series" in December 1964. The eminent composer and conductor invited ten performers of wind instruments instead of five to premiere performance, noting that "Eonta is a composition that is absolutely impossible to perform properly that only true instrumentalists can master it" (Matossian, 1986). The fact that the composition, according to the composer, is performed under the direction of the conductor, gives reason to see it as a category of piano concerto. Despite the small number of accompaniment instruments, their timbre and dynamometer also have no chamber features. Eonta attracts the attention of researchers primarily with its unique instrumental arrangement and innovations in the field of timbre. This is what Portuguese musicologist Helena Maria da Silva Santana (1998) says in her study "The Orchestration of Iannis Xenakis: Space and the Rhythmic Function of the Timbre".

# GENERAL VIEWS IN THE WORLDVIEW OF XENAKIS AND HEIDEGGER

In *Eonta*, I. Xenakis tackles the legacy of the ancient Greek poet and philoso-

pher Parmenides, a member of the Elea school (VI–V centuries BC), also paying homage to his early interests in antiquity. It should be noted that the life of Parmenides coincides with the founding of the composer's hometown - the ancient Greek Prochilia. It is possible that there is a connection between this date and the number of instruments selected in the composition. There is a similar numerical connection in the already mentioned composition Tuorakemsu. We do not rule out that the date of Prochilia's founding can explain the presence of the number "5" in Xenakis's Piano concerto Erikhthon - the beginning of the work from the fifth (!) measure and the composer's note on this occasion - All start on the bar 5 (Tous commencent sur le barre 5) (Xenakis, 1974).

Eonta by I. Xenakis, as stated in the score, is based on the translation of the treatise Being into the Cypriot dialect. In the above-mentioned treatise Parmenides outlines his conception of the most significant philosophical category, which will be the basis of world philosophy of modern civilization – the category of Being. For the ancient Greek scholar-pre-Socratic, Being is what the mind can comprehend: "τό γάρ αύτό νοειν έστιν τε καί είναι" ("as thought and being are the same") (Henn, 2003).

The teachings of Parmenides were developed in the deterministic philosophical traditions of Socrates, Plato, Spinoza, F. Nietzsche. From the second quarter of the 20th century, M. Heidegger was actively studying the philosophy of the ancient Greek scientist, especially in his first fundamental work *Being and Time*, as well as in a separate work devoted to Parmenides that was

based on his own lectures from 1942–1943 (Heidegger, 2018).

M. Heidegger studies in detail the philosophical position of Parmenides in the interpretation of being. He emphasizes the primacy of the ancient Greek scholar in introducing Being as a philosophical category at the beginning of Paragraph No. 44 of the above-mentioned work Being and Time, entitled World of Being, Openness and Truth of Existence (Dasein, Erschlossenheit und Wahrheit, S. 212) (Heidegger, 1967), as well as in the previous and subsequent exposition: "The world of presence is a common world. Being in the world is coexistence with others" (Paragraph No. 26 "Das Mitdasein der Anderen und das alltägliche Mitsein" -"The copresence of others and everyday event") (Heidegger, 1967).

In Being and Time, Heidegger's interpretation of the category of being includes, as a component, Parmenides' idea: "The world is the discovery of being in general /.../ Being of such a kind, which is the essential construction of being in the world, has an understanding of being as an integral element" (Paragraph No. 31 "Das Da-sein als Verstehen" – "Presence as understanding"). Another component of the category of Being for M. Heidegger is time, inextricably linked and not opposed to him: "The meaning of this understanding of being can be achieved only on the basis of temporal interpretation of being" (Heidegger, 1967).

The following queries come up: how the content of I. Xenakis's *Eonta* justifies the dedication to Parmenides and whether it is relevant to his philosophy? Some researchers have a very skeptical response to this query. For example, a scientist from Stanford University, Greek-born musicologist Ilias Chrysochoidis (2005) is one of those who look for "mistakes" made by I. Xenakis in the implementation of the computer program IBM 7090 in the composition *Eonta*. At the same time, the scientist does not find any parallels between the composition of I. Xenakis and the philosophy of Parmenides, "except for its "nonbeing" in it".

I. Xenakis's position on the need to conform the content of the composition and the means of composition to the laws of objective reality, which underlies his critique of the principles of serial technology, largely corresponds to the philosophical teachings of Parmenides. However, the main message of *Eonta* is, in fact, the question of being and awareness of it. By itself, the theme of *Being* allows the composer to use their creativity and imagination, necessitating the inclusion of relevant special symbols in the musical composition.

The composer raises the philosophical problem, giving it theatrical symbolism: *Eonta* is a projection of an ancient Greek theatrical performance. Beyond the bounds of a traditional musical composition, the composer uses elements of stage action: according to the remarks of the score, the performers of the copper group move in the stage space. Only the piano remains motionless, and the stage movement of wind instruments takes place around it. The piano part is the dramatic center of the composition and, at the same time, the object of the action of the brass section, in the

sound of which, various sound manifestations of being are mounted. The performers' roles are thus split: the ensemble of copper represents Being, while the piano portion is the subject of "reflection," which implies a particular mental analogue. The final phase of the composition after the end of the piano part is important (from bar No. 463 to the end bar No. 481). Symbolically reflecting Parmenides' philosophical postulate of "Non-being", the quintet of the brass instruments "freezes" in place, both in the stage and musical senses, and also "ceases its active existence": Being is possible only when it is comprehensible to the mind. Thus, "non-being" in the concept of the composition is reflected through "silence", which is an element of language, and corresponds to the provisions of Being and Time, set out in Paragraph 34, entitled "Da-sein und Rede. Die Sprache" ("Presence and speech. Language"): "Speech includes the ability to listen and remain silent". At the same time, it is now for the composer a kind of "sketch of his life, directed to death" (Heidegger, 1967).

Thus, even though the name of M. Heidegger remains "behind the scenes", there are connections between the philosophical content of the composition *Eonta* by I. Xenakis with the provisions of his work. It should be noted that the English translation of *Being and Time* by John Macquarrie and Edward Robinson was published in 1962 – a year before the start of work on *Eonta*. This fact increases the probability of non-random coincidences in the worldviews of I. Xenakis and M. Heidegger (2009).

### ANALYSIS OF THE MOST FAMOUS WORKS OF XENAKIS

Eonta holds a unique position in the works of I. Xenakis – this composition is a kind of transitional form to piano concertos, and it opens a gallery of compositions on autobiographical themes. The key to understanding this transition is Xenakis's first Concerto for Piano and Orchestra Synaphaï (Connexities), or more precisely, as it is called, the Piano Concerto and 86 instruments. The creation of Synaphaï (Xenakis, 1969) was first created during the military dictatorship in Greece, which lasted from 1967 to 1974. These events were widely covered in France through the work of the popular singer and actress, winner of the Cannes Film Festival (1960), wife of a director and actor Jules Dassin (Jules Dassin, 1911-2008) Melina Mercouri (Μελίνα Μερκούρη, 1920–1994). The compositions of the junta prisoner Mikis Theodorakis (Μίκης (Μιχαήλ) Θεοδωράκης, 1925-2021, which he transmitted from the Greek concentration camp where he was at the time, were performed in Paris. The year that Synaphaï debuted (1971) coincides with the arrival of M. Theodorakis in Paris after the change of imprisonment into exile as requested by the Committee of Prominent Artists, including Melina Mercouri and a French actor and chansonnier Yves Montand (1921-1991).

Literally reflecting the name of the *Synaphaï*, its musical language acquires coherence, durability, as opposed to mosaicism and discontinuity, due to the emergence of a new texture – *tremolo*, which by sound producing is characteristic not to a piano, but to string-plucked instruments, or carillon. The content of the

name Synaphaï from a philosophical perspective can be clarified by the already mentioned work of M. Heidegger Being and Time: Connexities – from σύν (plus) and  $\alpha\pi\tau\dot{\omega}$  (interrupt) is a necessary attribution of Heidegger's thesis about the "disclosedness of being" ("Erschlossenheit"). The titles of the mentioned piano compositions by Xenakis form a logical sequence Being - Connexities which illustrates the capacity of Being to be receptive to existence. Conversely, this logical sequence is synonymous with the philosopher's linguistic position: "If disclosedness is primarily constituted by Being-in-the-world, then discourse too must have essentially a kind of Being which is specifically worldly. The intelligibility of Being-in-the-world – an intelligibility which goes with a state-ofmind - expresses itself as discourse. The entirety of meanings associated with intelligibility is expressed in words (Paragraph 34. "Being-there and Discourse. Language" (Heidegger, 2001)).

One of the subtexts of *Synaphaï* is the reaction to the tragic events in Greece and the sense of belonging to one's native land, which determine the sharp dramatic content of the composition and its fatal finale. The tragedy of the concert can also be found in the composer's own fate, in which fame and fortune were preceded by a horrific injury and death sentence (Schalow and Denker, 2010).

Successfully overcoming the "rupture" of the musical fabric encourages the composer to look for unexpected effects of piano sound for the audience. *Connexities* adds even more drive to the musical composition of I. Xenakis and

enriches the palette of means of expression inherent in his stochastic compositions. In fact, "combining" himself with reality through emotional empathy is a personal act for I. Xenakis (1979), as well as for M. Heidegger. This action uses the emotional and volitional domains to overcome the coincidence of being "thrown into being".

From the very first performance, Synaphaï was recognized by the audience and critics as a particularly successful composition, one that stands out from other outstanding works of I. Xenakis. In a review for the Parisian magazine Le Monde, Jacques Lonchampt described the concert as "endless tremolos, on top of which fierce rhythmic sequences break through, in the complete excitement of which a real musical expression is born" (Heidegger, 2001). It is possible that such associations of critics led I. Xenakis to the further idea of reproduction of ancient Greek autochthonous images, which he would realize in the next two piano concertos.

One-part Synaphaï, according to some researchers, including the author of the introductory word to the score of Maurice Flouret's composition, "does not have the usual genre of concert dialogue between soloist and orchestra, which coexist in different sound "worlds" (Xenakis, 1981a). But, as they grow apart, the parties of the soloist and orchestral groups react to each other as certain "elements" that obey the general laws. This coexistence does not set any norms and priorities: it is unpredictable in its consequences, paradoxical and ruthless. At the same time, the piano part is not inferior in range to the orchestra and does not look like the final "object" of the action,

although it moves into different registers and is reincarnated due to changes in texture and dynamics. This position coincides with the opinion of M. Heidegger, formulated in the penultimate chapter of his work *Parmenides: "As for a person, he <...> is forced to enter the relationship with the object in front of which he appears as a subject"* (Heidegger, 2009).

The similarity of the tragic epilogue of Synaphaï to the almost similar emotional load of the final image of "non-existence" of the composition Eonta suggests the biographical paradigmatics of the compositions of I. Xenakis. As we can see, the experience of being on the edge of death and the fallout from the injury are recurring themes in his music. The mirror constantly served as a reminder to him of these things. Here is what he personally says about the events of December 1947, which could be the last day of his life: "I was with three other people near the house when mortar shots started being heard. One of the shells hit us. A girl and two boys died on the spot. The girl's brains flew to the wall. I fainted. Soon I was transferred to another house, where there was a medical center. I heard people saying about me: "He will live only a few hours, at least let him die peacefully". I was only given an analgesic injection – no anti-inflammatory, no other help. But I did not die. My face looked catastrophic: my left eye was damaged. I moaned. And in this state, the National Guard "handed me over to the enemy", the British military, who took me to the hospital".

Further recovery, defense of his dissertation in the illegal situation, escape, and ten years of creative development, which eventually led to world fame, did not erase this difficult memory from the memory of I. Xenakis. He clearly repro-

duced the tragedy in *Eonta* by modeling the transition to non-being and in *Synaphaï* – by modeling the "disclosedness" of his being (Schalow, 2019).

If in Eonta I. Xenakis demonstrates a new language, a new way of musical composition and structural logic, able to reflect in sounds the general processes of being, Synaphaï is an attempt to find not language but speech, with the difference that speech is "language about ..." - not a self-goal in itself, but, above all, a "claim to the world", which was mentioned by Heidegger (Xenakis, 1981a). An important detail is the reappearance of the theme of "transition to non-being" at the end of the composition, similar to that depicted in Eonta. It moves between compositions, taking up their last stages, which could be a sign of the composer's physical trauma's psychological insurmountability.

The genre of piano concerto will continue to be a field of self-reflection for I. Xenakis - probably - spontaneous rather than conscious. As previously mentioned, it makes sense that the instrument selected for this relates to his mother and her passing away and is for the composer a certain practice of the Gestalt, or rather, Gestalts, the first of which were the experiences of early death, personal trauma, and alienation. The second indicator, after the already explained choice of instrument, is the choice of themes and names of concerts, in the sequence of which there is also an introverted perspective. From the general presentation of being through the unity, I. Xenakis moves to the images of the Greek mythological half-human kings *Erikhthon* and *Kegrops* (Concerts *Erikhthon* (1974) and *Kegrops* (1986)). It should be noted that the theme of *violation of homogeneous integrity* is the key to the biographical paradigm of I. Xenakis – a Greek born in Romania, a man with partly damaged face, an architect-composer, then – a Greek with French citizenship, Greek and French composer.

Another striking feature of I. Xenakis's personality can be reflected in one of M. Heidegger's personal philosophical discoveries, namely, his position on "being thrown into being" (Geworfenheit), formulated in Paragraph 29 – "Das Da-sein als Befindlichkeit" ("Presence as location"): "This hidden /... / existential feature of presence, this "so it is" we call the throwing of this essence into his /... / being-in-theworld" (Xenakis, 1981b).

"Being thrown", explained as "the appearance of any time in any place", corresponds to the theory of probability, which was the subject of interest of I. Xenakis (1981b). The archetype of "being thrown" in the material sense is present in the myth of Erikhthon: the king of Attica was born after Athena threw a scrap of wool with the semen of Hermes on Gaia-Earth ( $E\rho\iota\sigma\nu$  (wool) –  $\chi\theta\acute{\omega}\nu$  (Earth). For Xenakis, the appearance of images of indigenous kings is also a test of the reaction-to-reaction of his mutilated face to those around him. This reaction, multiplied many times in his painful perception, can be compared to the horror of Kegrops's daughters, who saw the newborn king for the first time:

There was once Erikhthon – a child who had no mother at all – By Paladia maiden in a basket closed with actean vines. Hiding, to three girls, from Kegrops born, Strict order she gave her the secret to keep,

And hiding, she peeked through the elm foliage,
What were they doing? Without deception, two of them guarded that basket –
Hers with Pandros. But Aglavra calls suddenly indecisive sisters,
The third one opens the basket and they see: in it
Either the child is lying, or the dragon has stretched.

(Nason 2016: 552-567).

The factor of "uniting with the Earth" is reflected through the unusual organization of the texture of the Concert, in which the parts of the soloist and the orchestra are inseparable parts of a single organism. This conglomerate, the only such conglomerate in the piano literature, combines opposing substances, taking theatricality to a new conceptual level. It should be noted that since Kegrops and Erikhthon are intermediate forms between pantheistic gods and mythological kings, their physical ugliness does not detract from their inherent greatness. This feature in the Concerto is best supported by the specifics of the monolithic texture, which visualizes the features of the hero: currently I. Xenakis uses his architectural skills in the musical composition. The combination of the minds of a musician and an architect creates a logical subject, the duality of which organically complements the duality of the characters. Awareness of being acquires speech features: both in M. Heidegger,

and in the composition of I. Xenakis "Die befindliche Verständlichkeit des In-der-Weltseins spricht sich als Rede aus" ("Located clarity of being-in-the-world speaks itself as a language") (Borukhevich, 1972).

M. Heidegger's striking depth and diversity of understanding of the manifestations of *Being* not only makes his philosophy relevant to the purely musical issues of the twentieth century, but also leads the scientist to pose new problems, including sound synthesis: "It takes a very artificial and complex setting to "hear" "Pure sound" ("reines Geräusch") (Heidegger, 1967). And the solution to the problem of the synthesis of "pure" sound is none other than Iannis Xenakis. Since the early 1960s, he has been working on sound synthesis with Fortran IV program, and, using a UPIC computer, he converts graphic images into musical phrases that can be thought of as the equivalent of "pure musical sound". Thus, M. Heidegger's concept is realized.

### CONCLUSION

The common paradigms of the worldview of M. Heidegger and I. Xenakis are manifested, above all, in the active search for the essence of being and their own place in it. Simultaneously, both the works of M. Heidegger and the compositions of I. Xenakis have certain methods of introspection – introspection by the methods of philosophy or musical composition. According to I. Xenakis, these questions coincide with the problems of reflecting life in art and the search for musical language. He was one of the first to try to reflect philosophical categories

in a musical composition, finding their equivalents in the forms of musical thought. The breadth of the composer's views is based on knowledge of ancient Greek philosophy and self-awareness as a descendant of Greek antiquity.

Coincidences with the philosophy of M. Heidegger are due primarily to the general classical basis of philosophical views. The provided examples exhibit the common connotations to the modern world and its aesthetics expressed by the great thinker and the great "architect of music". With the numerous dualities of I. Xenakis's personality, his work organically combines contradictions, compensating for the unity that is lacking in external manifestations.

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