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# Xenakis and Romanian music: An unspoken relation

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**Abstract**: Xenakis' music can be related to an ancient cultural background composed of Thracian, Byzantine and oriental elements, shared by Greece, Romania and other South-East European countries. A central element of this background is mythical thinking as defined by Mircea Eliade: a forma mentis involving a particular relation to the sacred, the coexistence of the archaic and the modern, and the attachment to archetypes. Mythical thinking accounts for the affinities existing between Xenakis and Romanian composers like Niculescu, Olah and Rădulescu, which concern specific aspects such as heterophony, modalism and spectralism. However, Xenakis' Romanian roots are unassumed and unspoken as they belong to the unconscious and the repressed. They nevertheless occasionally emerge precisely as manifestations of a return of the repressed.

Keywords: Xenakis, Romanian music, East-European music, mythical thinking, heterophony

# 1. Introduction

"I don't want to have roots", Xenakis declared. In his quest for originality, he firmly denied any attachment to any particular musical culture (Varga, 51). He did, however, incidentally admit that the Romanian folk music - among other music he had listened to as a child in Brăila - had influenced him (Varga, 10)<sup>2</sup>. But he never specified how, and it's not easy to find any tangible trace of such an influence in his works. The links between Xenakis and Romanian music are in fact for the most part deeply buried, unconscious and unassumed.

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<sup>&</sup>lt;sup>2</sup> Xenakis (2006b, 62) moreover suggests that his interest in traditional Indian and Japanese music is also due in part to the fact that he was born in Romania, where he was in contact with traditional music from various origins. Brăila was indeed a multicultural city hosting Greek, Armenian, Turkish, Russian, Jewish and Italian communities.

In trying to unveil them, I would first point out that Greece, Romania and other South-East European countries share a very ancient cultural and musical background in which a primary Thracian element seems to have played an important role<sup>3</sup>. A significant Byzantine layer and various oriental influences were later added. Romanian composer Cornel Jăranu is one of the few to have intuited Xenakis' attachment to this immemorial common background. He confessed:

When I hear [*Charisma* by Xenakis], I have the impression of discovering the moans, the modal inflections or the mourning laments from lands that we share. There is something prehistoric in  $it^4$ .

I hear echoes of these mourning laments [in Romanian, *bocete*] and of other archaic ritual chants in Xenakis' *Nuits*, but also in works of Romanian composers inspired by traditional funeral or ceremonial music<sup>5</sup>. In *Oresteïa* and *Persephassa* some passages are also reminiscent of the *simantro* (in Romanian, *toaca*), a percussion instrument used in Greek and Romanian orthodox monasteries<sup>6</sup>.

Xenakis evoked the Greek musical expressions of this common ground, but he almost never referred to the Romanian ones<sup>7</sup>. The later are in fact hardly distinguishable as they are often close and intermingled to the Greek elements. But they are also repressed. Yet, they rise to light from time to time in Xenakis' music, precisely as an expression of the return of the repressed.

#### 2. Mythical thinking

One of the most important components of the cultural background shared by Greece and Romania lies in what Mircea Eliade called mythical thinking. I will refer to three aspects of mythical thinking: the relation to the sacred, the coexistence of

<sup>&</sup>lt;sup>3</sup> The Thracian origins of two legendary figures of ancient Greek music, Orpheus and Linos (the latter's mythical battle with Apollo is evoked by Xenakis in *Linaïa-Agon*) are generally admitted. Beyond these iconic figures, the importance of the relations between Greeks and Thracians allows to speak of a Hellenic-Thracian cultural and musical sphere (Tomescu, 234).

<sup>&</sup>lt;sup>4</sup> Paper published in *Tribuna*, Cluj, february 1993, quoted in Toma Zoicaş (2002, 150). Georgescu (1972, 16) also briefly linked Xenakis to Stroe and Ligeti as being representative of a common *Zeitgeist*.

<sup>&</sup>lt;sup>5</sup> For example, Ancestral laments [Bocete străbune] by Alexandru Pașcanu and Earth thirst ritual [Ritual pentru setea pamântului] by Myriam Marbé.

<sup>&</sup>lt;sup>6</sup> Xenakis visited orthodox monasteries in Romania (Sinaïa) then in Greece (Mount Athos) and was greatly impressed by the *simantro* (Xenakis 2001, 14).

<sup>&</sup>lt;sup>7</sup> He often refers to Bartók to whom he associates the aksak rhythms. Yet, he also points: "I come from a place where these rhythms [...] are indigenous. [...] I was brought up on them" (Varga, 146).

the archaic and the modern and the attachment to archetypes. The simple enunciation of these three aspects is revelatory, as they are widely regarded as essential to Romanian culture and spirituality<sup>8</sup>. I will try to show that they can also be observed in Xenakis' music.

## 2.1. The sacred

Xenakis was an atheist but, contrary to a common assumption, this does not imply the rejection of the sacred nor of notions like revelation and transcendence. Art, Xenakis maintains (1963, 15), "can lead to areas that religions still occupy for certain people". Through the "total exaltation" it provides, music can in his view give access to an "immediate and enormous truth" – which, he points, "is beyond, as Beethoven's 7th is beyond music". He moreover defines music as a mystical but "atheistic ascesis" (Xenakis 1992, 165).

Xenakis remembers having expressed in his work for the Couvent de La Tourette "thoughts and acts of faith that the modern life repressed"<sup>9</sup>. This reference to faith is typically that of the modern man who, as Mircea Eliade argues, even if he is not religious, maintains a certain relation with the sacred. Yet Xenakis' attitude is above all that of the ancient Greeks for whom science and faith, *logos* and *mythos* are not antinomic, and for whom salvation lies in knowledge<sup>10</sup>.

Xenakis evokes in fact the power of music to induce a kind of extatic experience and thus to open up an irrational path to knowledge. In this framework he makes use of words like "revelation" and "*ekstasis*", typical of the Hermetic mystical texts he included in the literary argument of the Beaubourg Diatope. However, for him the Greek word *ekstasis* (which literally means "going out of oneself" (especially when possessed by a god) signifies "going beyond oneself", implying "striving to improve oneself".

Much of Xenakis' music has a ritual dimension which, as François-Bernard Mâche points (2000, 321), provides a "sacred thrill" and which is in fact the expression of a profane mysticism. This is obvious in an early composition like *Procession aux eaux claires*, inspired by a half-pagan and half-religious ceremony practiced in certain villages in Greece and Bulgaria<sup>11</sup>, but also in later works such as *Oresteïa*, *Aïs* and *Nekuïa*, in particular in relation to the subject of life after death.

<sup>&</sup>lt;sup>8</sup> Romanian musicologists highlighted this emblematic character. One can cite three synthetic works on this subject: Anghel [1997] 2018, Sandu-Dediu (2002) and Stan (2007).

<sup>&</sup>lt;sup>9</sup> Letter to the Dominican Father Couesnongle dated January 2, 1958 (Xenakis 2006a, 103).

<sup>&</sup>lt;sup>10</sup> Mâche (1968, 352) points out that, for the ancient Greeks, "the real way to salvation is [...] that of knowledge".

<sup>&</sup>lt;sup>11</sup> In this work, Xenakis superimposes three ritual layers: totemic, Thracian (related to the cult of Dionysus) and Byzantine (Mâche 1968, 309-310).

#### 2.2. Archaism and modernity

The second aspect of mythical thinking that I will discuss, the coexistence of archaism and modernity, is also highly characteristic of the Romanian music of the second half of the 20th century. It is indeed through the use of an immemorial folklore that Ștefan Niculescu, Tiberiu Olah, Myriam Marbé and many others have composed a definitely modern music<sup>12</sup>. By privileging the immutable and the eternal, these composers inscribed themselves in an unhistorical stylistic perspective.

Xenakis' approach is quite similar. His radical modernity is anchored in a mythical primordial world. Like Brancusi, Xenakis could have said: "the newness I bring comes from very far away"<sup>13</sup>. He actually saw himself as a Classical Greek living in the 20th century. Thirty years after having elaborated his revolutionary "formalized music" it is thus not really surprising that he declared quite the contrary: « I'm not against tradition. My music makes no revolution; it comprehends the forms of expression used in the past" (Varga 1996, 50).

The mythical reduction of historical time finds a musical expression in the denying of the time flow. Romanian composers thus produced a *non-evolutive* music, a category in which can be included Aurel Stroe's technique of *static movement*, Corneliu Dan Georgescu's *intemporal music*, Horațiu Radulescu's *plasmatic music*, or Iancu Dumitrescu's *static improvisation* (Anghel 2018, 208). Xenakis' musical categories *outside of time* bear the same signification<sup>14</sup>. They illustrate a Parmenidean and Platonical ontology "uncontaminated by time and becoming"<sup>15</sup>. Beyond that, they perpetuate the attitude of the archaic man for whom, as Eliade (1989, 104) argued, life "although it unfolds in time, does not bear its burden, does not carry its irreversibility".

<sup>&</sup>lt;sup>12</sup> Eliade (1985, 84) interprets the iconoclasm of modern avant-garde artists as a manifestation of the mythical hope to periodically create a new universe.

 <sup>&</sup>lt;sup>13</sup> As Stan (2007, 397) remarks, the influence of Brancusi was essential in defining spiritual but also musical Roumanity.

<sup>&</sup>lt;sup>14</sup> The "temporally validated artistic field" observed by Irinel Anghel (2018, 112) in Aurel Stroe's music seems to be similar to Xenakis' "outside-of-time" musical structures being validated "in-time". On these xenakian structures, see Iliescu (2017).

<sup>&</sup>lt;sup>15</sup> Puech (1978, 136) also observed that the Greek ideal of intelligibility equates the authentic and plenary being with "that which is in itself and remains identical to itself, with the eternal and the immutable".

#### 2.3. Archetypal morphologies

The third issue I will address in respect to mythical thinking is that of the archetypes.

The third issue I will address in respect to mythical thinking is that of the archetypes. My point is to show that Xenakis' approach can be related to an archetypal direction to which most Romanian composers are attached, and that some of his works refer to specific archetypes also discussed by Romanian musicologists<sup>16</sup>. This is the case, for example, with the cosmogonic archetype (*axis mundi*) in *Metastaseis*<sup>17</sup>, with the dualities birth-death in *Concret PH* and *ascensio-descensio* in *La Légende d'Eer* (Iliescu 2015).

However, for Xenakis (1963, 35) the word "archetype" initially designated abstract mathematical models likely to engender various compositions of a same class or family. Using such models, he conceived what he called sonic and visual "beings", "entities" or "incarnations". Archetypes of this kind can be given a geometrical expression, like the cube whose successive rotations determine the musical structure of *Nomos Alpha* (Figure 1).

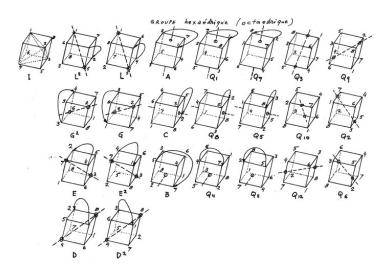


Fig. 1. Sketch for Nomos Alpha (1965-66) (Xenakis 1976, 98)

<sup>&</sup>lt;sup>16</sup> They were discussed in particular by Octavian Nemescu, Corneliu Dan Georgescu, Dan Dediu and Despina Petecel-Theodoru.

<sup>&</sup>lt;sup>17</sup> Xenakian unisons, especially that of *Metastaseis*, associate the infinity of the *axis mundi* archetype, embodied in the columns erected by Brancusi, to the idea of an unending time. They can be related in this respect to those of Giacinto Scelsi as they were interpreted by Halbreich (1992, 6).

This cube could be linked to the famous sentence "Let no one enter here who is not a geometer", engraved according to the legend at the entrance of the Platonic Academy. It illustrates Plato's notion of archetype: a purely intelligible essence that can be expressed in various ways into visible and audible shapes<sup>18</sup>. Xenakis uses several times the word "archetype" when referring to such shapes which are omnipresent in his music as in the physical universe.

Xenakis' works are largely built on this kind of archetypal morphologies, for example the spiral<sup>19</sup> (1994, 137) or the cloud. The simplest of them are the point and the line, in other words the short punctual sound and the continuous one, be it static like the *ison*, or dynamic like the glissando. Their various combinations gave rise to complex dynamic morphologies such as the sound masses and the arborescence which represent original illustrations of the notion of archetype.

#### 2.4. Glissandi

The curved surfaces represent the glissandi in *Metastaseis* defy by their abstractness the difference between music and architecture<sup>20</sup>. That abstractness allowed Xenakis to transcribe the glissandi into the architectural design of the Philips Pavillon (Figure 2).

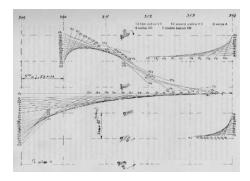




Fig. 2. Sketch for Metastaseis (1954); photo of the Philips Pavillon (1958)

<sup>&</sup>lt;sup>18</sup> This meaning of the word archetype is close to the one given by Mâche (2001, 34), for whom mythical thinking generates certain "schemas that can spontaneously be translated into gestures, rites, words, forms, etc., prior to any artistic specialization".

<sup>&</sup>lt;sup>19</sup> Several Romanian composers, in particular Octavian Nemescu and Doina Rotaru, also refer to the spiral as an archetype (Anghel 2018 210; 213).

<sup>&</sup>lt;sup>20</sup> For Xenakis (2006, 433), "the best work of art is the one that calls for the highest degree of abstraction". In art, he explains, abstraction is "more flexible, more effective, more striking" – more real in fact, one could say, than figuration.

This kind of equivalence between sonic and visual shapes is also typical to works like *Arcade* by Aurel Stroe or *Study for the infinite column* by Corneliu Dan Georgescu, while Tiberiu Olah, in his *Infinite column*, gives to the archetypal shape imagined by Brancusi a more autonomous musical expression<sup>21</sup>.

The glissandi in *Metastaseis* and the perfectly smooth ovoid that Brancusi titled *The Beginning of the World* offer another example of two abstract artistic expressions attached to one and the same archetype

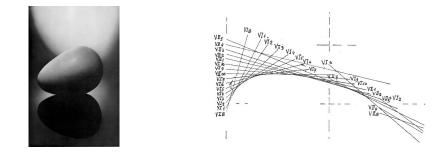


Fig. 3. Brancusi, The Beginning of the World; Xenakis, sketch for Metastaseis

Both works embody in my view the same cosmogonic motif of the primordial egg. Moreover, they illustrate the Brancusian definition of simplicity as "solved complexity"<sup>22</sup> which also applies to Xenakis. The shape of the ovoid corresponds to the expansion of the initial unison in *Metastaseis*, coupled with the final contraction of the sound mass leading to unison.

I also would identify in the design of the Philips Pavillon and in the Xenakian project of a Cosmic City the Brancusian archetype of the ascending movement embodied by the *Birds in space* (Figures 4 and 5). Like the birds, the pavillon's spikes express the will to tear oneself away from the earth and fly away in a space that, to quote Mircea Eliade (2006, 225), "cannot have any limits since it stems from the ecstatic experience of absolute freedom"<sup>23</sup>.

<sup>&</sup>lt;sup>21</sup> For a comparison between Olah's and Georgescu's musical translations of Brancusian archetypes, see Frățilă (2016, 8).

 <sup>&</sup>lt;sup>22</sup> Xenakis remembers: « Boulez said my music was too simple [...] and that music had to be complex.
I engaged in a debate with him, saying that if music reaches a point where it has become too complex, you need a new kind of simplicity." (Varga 1996, 29)

<sup>&</sup>lt;sup>23</sup> I would note however that while the Brancusian birds, like the ovoid, are close to an ideal (superhuman) archetype, the asymmetrical spikes of the Philips Pavillon witness to a human struggle involving groping and readjustments.



Fig. 4. Brancusi, Bird in space; Xenakis, sketch for the Cosmic City





Fig.5. *Xenakis*, The Philips Pavillon; *Brancusi*, Bird in space.

# 2.5. Sound masses

The sound masses in *Pithoprakta* (bars 52-59) (Figure 6) capture the abstract essence of a particular range of aural and/or visual dynamic phenomena that strongly impressed Xenakis in his youth: panicked crowds chaotically moving and shouting during the anti-fascist protests organized in Athens by the Greek Resistance, clouds, swarms of birds (Figure 7), hail, rain, songs of cicadas, etc.

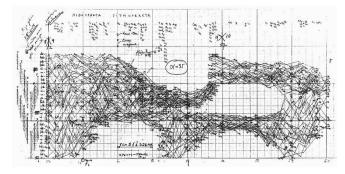


Fig. 6. Xenakis, sketch for Pithoprakta (bars 52-59) (Xenakis 1976, 167)

All these phenomena share the same pattern involving transitions between order and disorder, between continuity and discontinuity. Xenakis' masses but also the light flashes he utilizes in the Polytopes (Fig. 8) foreshadow as early as the fifties the mathematical expression of these transitions formulated by René Thom in his seminal "catastrophe theory" (to which Aurel Stroe's "morphogenetic" music also refers, albeit from a quite different angle) (Iliescu 2015).

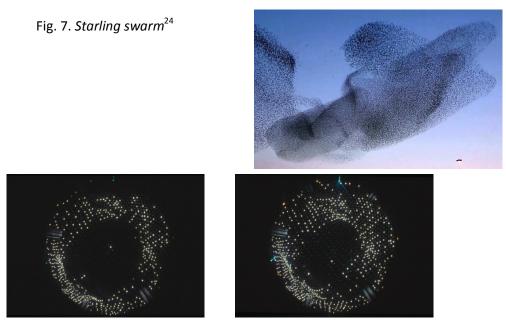


Fig. 8. Xenakis, evolving flashes in the Beaubourg Diatope. Photo: Bruno Rastoin

<sup>&</sup>lt;sup>24</sup> <u>www.youtube.com/watch?v=WAA6sdWrV20</u>© Philippe Lavaux - Biosmotion.

## 2.6. Arborescences

Xenakian arborescences (Figure 9) introduce another archetypal morphology which refers to a natural model, that of ramified forms such as tree branches, hydrographic networks, vascular systems, lightning bolts, etc. (Figure 10). While in Xenakis' music these ramified forms undergo considerable topological transformations (translations, contractions, expansions, various deformations, rotations in a three-dimensional space), their archetypal essence does not alter.

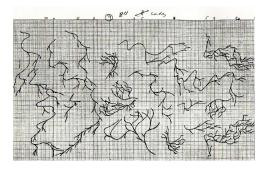


Fig. 9. Xenakis, sketch for Erikhton

As René Thom has shown, the bifurcation, which is characteristic of the arborescent forms, is a universal phenomenon. In the context of this contribution bifurcation is relevant because it is inherent to heterophony, which is to be a marker considered (perhaps the most important one) of musical "romanity". Thus, for Stefan Niculescu, "almost all Romanian composers practice heterophony" (Stan 2001, 15). I will try to show that this is also the

case for Xenakis, even if, as far as I know, he never used the word "heterophony".



Fig. 10. Ramified natural forms: tree branches, lighting bolt

## 3. Markers of Musical « Romanity »

### 3.1. Heterophony

It is not surprising that one of the first to identify heterophonic passages in Xenakis' works was a Romanian composer, Tiberiu Olah, himself a master of heterophonic techniques<sup>25</sup>. Olah also employed on this occasion the words "bifurcation"<sup>26</sup> and "ramification". Moreover, in his compositions, he conceived a "poly-dimensional" musical space recalling that in which Xenakis imagined his arborescences (Olah 2008, 119; 133).

Several examples of heterophony have been identified in Xenakis' scores by Makis Solomos<sup>27</sup> and James Harley<sup>28</sup>. They perfectly illustrate the two canonic forms of heterophony defined by Ştefan Niculescu: the alternance between unison and "plurimelody", and the slightly displaced distribution, in different voices, of related melodies<sup>29</sup>.

Concerning the first form, relevant examples can be found in the opening sections of *Terretektorh*, *Empreintes* and *Phlegra*.In *Phlegra*, the initial *ison* on *D* fulfills both functions Ștefan Niculescu assigns to it: that of a nodal point to which the individual voices converge from time to time, and that of a support of melodic lines<sup>30</sup>. The second aspect of heterophony, the slightly displaced melodic lines having similar contours, can be found in works like *Jonchaies* (bars 10-62)<sup>31</sup>, *Ikhoor* (bars 94-101, heterophonic interplay on four pitches: *G-B-C-D*<sup>2</sup>)<sup>32</sup>, *Lichens* (first section), *Horos* (bars 109-130) and *Nekuïa* (bars 40-41)<sup>33</sup>.

<sup>26</sup> In principle, Olah observes (2008, 125), "every note might produce a branching".

<sup>&</sup>lt;sup>25</sup> Olah (2008, 136) refers in particular to Xenakis' works in which the orchestra is spatialized.

<sup>&</sup>lt;sup>27</sup> Solomos (2004, 63) mentions *Jonchaies, Nekuïa* and *Ikhoor*.

<sup>&</sup>lt;sup>28</sup> Harley (2001, 40; 43-44) cites the first section of *Phlegra* (2004, 90) and the opening of *Lichens*, *Horos* and *Terretektorh*.

<sup>&</sup>lt;sup>29</sup> In a more general way, for Ștefan Niculescu (1980, 279), heterophony is an expression of the relation between the One and the Multiple.

<sup>&</sup>lt;sup>30</sup> To listen and see: <u>www.youtube.com/watch?v=MprfwqwIBvA</u>, the two first minutes. Ligeti noticed a similar form of heterophony widespread in southern Albania and among the Aromanians, characterized by sustained sounds (*isons*) on which melismatic melodies are superposed. (Anghel 2018, 166).

<sup>&</sup>lt;sup>31</sup> To listen and see: <u>www.youtube.com/watch?v=MZ5771zMOeE</u>from 50" to 1'20".

<sup>&</sup>lt;sup>32</sup> To listen and see: <u>www.youtube.com/watch?v=AWVVeYNU9Qg</u> from 7'35" to 8'.

<sup>&</sup>lt;sup>33</sup> I would remark that, in a section of *Procession aux eaux claires* analyzed by Xenakis, quoted in Solomos (2001, 23),the permutations of a four notes motive announce a technique that the composer will use later in heterophonic passages like that of *Nekuïa* (bars 40-41). To listen and see: <a href="http://www.youtube.com/watch?v=NSkr33eVASg&t=264s">www.youtube.com/watch?v=NSkr33eVASg&t=264s</a> from 4'09" to 4'20".

When applied to the orchestra, this heterophonic writing, sometimes close to polyphony<sup>34</sup>, may generate textures comparable to those of Niculescu or Olah. However, by this means, Xenakis performs a kind of spatialization, which enables him to "sculpt "the sound. One may cite in this context the following remark formulated by Olah (1985, 113) as a question: "does not heterophony amount to a sound heard [...] in several dimensions?".

This spatial dimension of sound is more evident in the "poly-heterophonic" passages, as Olah called them, especially in works where physical space also comes into play<sup>35</sup>. A composition like *Alax*, for three small orchestras disposed in a triangle, perfectly illustrates Olah's idea that the "interaction and osmosis" between several superimposed heterophonic layers lead to the merging of the vertical and horizontal dimensions within a homogenous musical space (Olah 2008, 133).

If Xenakis did never use the word heterophony<sup>36</sup>, he nonetheless speaks of a "multiplicity of displaced melodic lines" producing "like an artificial reverberation"<sup>37</sup>, a compositional technique of which he claims authorship. As he explains, "instead of having one line there are many lines, but all in the same range using the same scales. It makes a kind of flux, or vapour, of music" (Varga 1996, 164-165; 175). Solomos (2004, 63-64) used in this regard the image of a "sonic halo".

Xenakian heterophonies can be considered in the light of Anatol Vieru's remark that heterophony is "opposable to the Western polyphonic tradition" and as such it represents "a great resource of autochthonous originality" (Anghel 1996, 165). I would attach them to an extended category of the autochthonous. In fact, for Xenakis, heterophony was not an exterior theoretical subject as it essentially was for Boulez. It rather belongs to the immemorial identity he shares with Romanian and other East European composers<sup>38</sup>.

<sup>&</sup>lt;sup>34</sup> The passage from the *Procession aux eaux claires* (bars 169-189) described by Solomos (2002, 8) as a gigantic polyphony where the ten voices of the choir sing the same melody (sometimes transposed to a third or a fourth) with a shift of a dotted quarter note, arguably falls under a hybrid syntax between polyphony and heterophony. In another paper, Solomos (2016, 2) considers that the term "polyphony" is "inappropriate" to Xenakis and that "it is better to simply speak of superimposition."

<sup>&</sup>lt;sup>35</sup> Petecel-Theodoru (2003, 327) identified in Xenakis' arborescences "polyheterophonies layered as in a palimpsest". Lupu (2008, 616) used the term "polyheterophony of events" referring to Tiberiu Olah's choral symphony *Timpul cerbilor* [*The Time of Deers*] while Olah (2008, 117-139) used the notion of polyheterophony in his analysis of Enescu's *Chamber Symphony*.

<sup>&</sup>lt;sup>36</sup> One may speculate that Xenakis did not speak of heterophony because, as Mâche (1981, 163) remarked, the heterophony of the arborescences sometimes seemed "to return to the entanglement of the serial counterpoint" he had previously criticized.

<sup>&</sup>lt;sup>37</sup> Iannis Xenakis, preface to Nekuïa.

<sup>&</sup>lt;sup>38</sup> While Chintzoglou (2022, 481) associates heterophonic passages in *Oresteïa* to the Japanese Noh theatre, autochthone heterophony could have played a more significant role.

#### 3.2. Modalism

Among the distinctive features of Romanian music Costin Cazaban mentions the "presumption of modal thinking" (Stan 2007, 49), and I assume that the same applies to Greek music. It is actually as a presumption that I should evoke the modal dimension of Xenakis' music, because he formally rejects the term "mode", to which he prefers the notions of scale and sieve. A sieve, he insists, should not be confounded with a mode (Xenakis 1994, 75), for it is nothing else than a generalization of the notion of scale on a mathematical basis.

Yet, his sieves are not devoid of recurrencies, internal hierarchy, tensions, polarizations, leading notes (Varga 1996, 145-146) or of modal colours. It even happens that a sieve's structure is identical to that of a mode, as the Indonesian *pelog*in *Jonchaies*<sup>39</sup> (Figure 11), a work in which Makis Solomos (1996, 90) perceived a modal *ethos* and "a modal *esthésis*"<sup>40</sup>.



Fig. 11. The first section of a sieve in Jonchaies (bars 10-62)

In this particular sieve the first eight-pitch segment (*A-B-C#-D-E-G#-A-C#*) installs a modal colour through the répétition of *A* and *C#*. The same happens with its transpositions on *D* and on *G* (which are actually presented first). Only at the eighteenth element of the sieve,  $A \[mathbb{R}\]$ , the frame of the octave is really broken. Xenakis admits that his music may create a "modal atmosphere"<sup>41</sup> but this eventuality is rather embarrassing to him, prompting him to qualify the use he made of scales in *Jonchaies* as a "mistake" (Restagno 1988, 60).

In this context it is tempting to cite again Vieru (1994, 61), who observes that "the vocation of modes is to come back on stage in times of musical vacuum, when the sources are drying up and other possibilities seem exhausted". In this spirit, Xenakis might have felt in the sixties, in particular while composing *Oresteïa*, the

<sup>&</sup>lt;sup>39</sup> Xenakis observes that this scale includes two leading notes (Varga 1996, 145).

<sup>&</sup>lt;sup>40</sup> Matossian (1981, 205) also remarked that "much of the Xenakian instrumental writing is based on freely ranging modality, tetrachords and microtones".

<sup>&</sup>lt;sup>41</sup> Certain scales, Xenakis observes, have an intrinsic power which sometimes suffices to render a piece of music interesting (Varga 1996, 144-145; 159).

need to resort to archaic scales<sup>42</sup>. Then, in order to be consistent with his mathematical approach, he developed the sieves theory in which these scales are considered as particular cases.

The choral parts of *Oresteïa*<sup>43</sup> and works like À *Hélène*<sup>44</sup> and À *Colone* associate this kind of archaic modalism to a declamatory, ceremonial or ritual character. One may rank these compositions under a large aesthetic category of the "metabyzantine" and evoke in this regard the "Byzantium after Byzantium" coined by Romanian historian Nicolae lorga, as well as the archaic modal scales belonging to the musical background common to Greece and Romania.

I would argue that Xenakis' modal - or crypto-modal - approach is not fundamentally different from the "archetypal modalism" of Tiberiu Olah neither from the "artificial modalism" of Anatol Vieru (Anghel 1918, 61). However, while Xenakis conceals the resurgence of the mode behind a mathematical approach, for Romanian composers' the mathematical approach does not imply the abandonment of the concept of mode.

#### 3.3. Spectralism

According to Solomos (2002, 14; 1996, 23 note 17), Xenakis could be considered a precursor of spectral music. *Pithoprakta* thus would relate to spectralism insofar as its overall design follows "the model of sound" (Solomos 1996, 27). In Xenakis' last works, Solomos (2001, 61) also observes that the harmonic aggregates almost constitute sound spectra. Moreover, in a general way Xenakis is interested in the progressive transformations of sound, in other words in what Gérard Grisey called the "becoming of sound".

Through an original approach announcing that of the French "spectral" composers, Xenakis overcame not only the harmony-timbre duality but the pitchtime duality as well<sup>45</sup>. "Sound can include pitch", he assumes. It can even "becomes an exclusive factor" (Varga 1996, 67). This is why, in his instrumental music as in his electroacoustic one, Xenakis works directly on the innermost fiber of sound. He thus seeks to inject "life" into it, to "make the sound live", as he says, so that it "becomes" music (Varga 64; 70).

However, Xenakis' peculiar spectralism, like his heterophony and his (crypto) modal approach, does not pertain to the Western tradition to which the French

<sup>&</sup>lt;sup>42</sup> One may also speak in this respect of a "return to origins", as conceived by Mircea Eliade, implying a renewal allowing to revitalize artistic creation. Niculescu (1980, 278) mentions this concept with regard to the recourse to heterophony in Romanian music.

<sup>&</sup>lt;sup>43</sup> To listen: <u>www.youtube.com/watch?v=1S3E72INIWU&t=495s</u> from 1'10" to 1'45".

<sup>&</sup>lt;sup>44</sup> To listen and see: <u>www.youtube.com/watch?v=H6PD1gE1Nn0</u> the beginning.

<sup>&</sup>lt;sup>45</sup> Xenakis declared that spectral composers interested him "because they try to escape the sound of traditional instruments" (Albèra 2018, 6).

spectral school belongs. When listening to works such as *Charisma, Anaktoria* or *N'Shima*, with their "cracked sounds" and other rough sonorities rich in inharmonic "impure" but also the breathing sounds close to silence, one realizes that Xenakis is closer to Horațiu Rădulescu (who is also one of his greatest admirers) and his concept of sonic "aura" than to Gérard Grisey or Tristan Murail<sup>46</sup>.

The sonorities of the piano sustained by the pedal in the first section of *Paille* in the Wind<sup>47</sup> remind Rădulescu's sound plasma<sup>48</sup>. They generate a kind of sonic magma which also falls under the concept of "naturality" as Nemescu (2015) conceived it. Some instructions he gives the performers, for example to suggest an eolian harp or to "play with the in harmonic sounds"<sup>49</sup>, remind even the empiricism of lancu Dumitrescu. In their way, Xenakian sonorities point to an orphic origin of music to which many Romanian composers use to refer<sup>50</sup>.

# 4. Differences

The musical and aesthetic differences between Xenakis' music and that of contemporary Romanian composers stem from a different philosophic standpoint that could be explained by various historical and biographical factors such as Xenakis' uprooting, his experience of exile or his traumatic childhood memories. His participation in the Greek Resistance played an important role, explaining his commitment to struggle but also his familiarity with danger, suffering and death.

# 4.1. Promethean Man and Homo Religious

A first major difference concerns the definition and the place given to rationality. Xenakis refers to a mythical Greece, cradle of the *logos* and of a rational human justice – the *nomos* – different from the arbitrary one applied by the gods. He puts forward a philosophical domain which, Xenakis (1994, 67) argues, was "issued from religions [but] survived them in spite of them". For him, this way of thinking endowed man with "the mastery of Self and of Nature".

<sup>&</sup>lt;sup>46</sup> In a general way, for Xenakis, "impure" sounds are more "interesting" than the pure ones, because they are richer (Varga 1996, 66-67). To obtain such sounds, while composing *Anaktoria* he had worked with clarinetist Guy Deplus on particular playing modes (Varga, 102).

<sup>&</sup>lt;sup>47</sup> To listen and see: <u>www.youtube.com/watch?v=uniEWbuwITQ</u> from 1'15" to 1'38".

<sup>&</sup>lt;sup>48</sup> For Halbreich (1992, 9), this plasma presents a "variable distribution of spectral energy".

<sup>&</sup>lt;sup>49</sup> Anaktoria, score, m. 190.

<sup>&</sup>lt;sup>50</sup> As Anghel(2018, 208) remarked, in a general way Romanian composers illustrate the "orphicincantatory power of music".

In contrast, Romanian artists are for a large part representative of the *homo religiosus* described by Eliade who, in the last instance, defers to the heavenly justice and for whom, in a general way, nothing is possible without God: *nihil sine*  $deo^{51}$ . Whereas Xenakis' approach reflects a willingness to master that is typical of the modern man who strives to tame the irrational, *homo religiosus* submits to a God whose acts are beyond the reach of logical reasoning.

Xenakis thus embodies the promethean man who defies the gods, regarding him just as capable as they are of creating *ex nihilo*. Ursu (1996, 32) also identified Xenakis to "the Faustian man of the Occident" for whom "the artwork is the product of an engineer". As such, she opposes him to Octavian Nemescu, a composer considered to be representative of Eastern spirituality, for whom creation is "a receptacle of the Divine power" given to the artist by God's will.

Beyond this opposition - which does not take into account Xenakis' nonreligious spirituality - a more profound difference concerns the attitude towards fate and death. As a promethean man, Xenakis does not share the resignation and the acceptation of fate that one commonly associates with Romanian spirituality. His vital impulse thus contrasts with the lyrical-contemplative attitude of the shepherd of the emblematic Romanian ballad *Miorița* when he is facing death.

Hence, it is another difference, which concerns the perception of nature. Xenakis likes to get immersed in natural environments, but, unlike the shepherd of the Romanian ballad who communes with nature in the spirit of a "cosmic Christianity"<sup>52</sup>, he is fascinated by the raging elements. These form in his view a vertiginous, unfriendly or even cataclysmic universe, prey to terrific events such as those in which he plunges the audience of *Terretektorh* and of the Beaubourg Diatope.

#### 4.2. Sense of the Tragic and Lyricism

This harsh perception of the relation between the human being and the universe finds a particular aesthetic and musical expression. The sonic clashes of an extreme violence in Xenakis' orchestral works witness of a tragic dimension which seems to be related to an unending struggle against fate and death. This tragic dimension - more Sisyphic than Beethovenian - has no equivalent in Romanian music where even the hardest sufferings inflicted to Man by Fate find a lyrical outcome, as in Enescu's *Œdipus*<sup>53</sup>.

<sup>&</sup>lt;sup>51</sup> In contrast, Toma Zoicaş (2002, 136), attaches to Xenakis' musical approach the motto "nihil sine scientia".

<sup>&</sup>lt;sup>52</sup> Eliade (1980, 246) argues that the "cosmic Christianity" practiced by the peasants of Eastern Europe conserves important traces of the ancient pagan religions which were close to nature.

<sup>&</sup>lt;sup>53</sup> A comparison between Enescu's *Œdipus* and Xenakis' *Oresteïa*, that I cannot undertake in this frame, would reveal not only differences but also important similarities.

Xenakis' rejection of lyricism is indissociable from this essential tragic vein. "Perhaps [...] I do lack lyricism", Xenakis confessed. "Maybe life killed it in me" (Varga 1996, 63). Still, lyricism is not completely absent in his music; it is only repressed, much like his feelings that he desperately tried to escape. The following poignant declaration is revelatory: "I know it sounds ridiculous - Xenakis also confessed - but sometimes a sentimental melody can move me to tears. However, I don't want to be moved" (Varga, 10-11).

I guess the Romanian and Gypsy melodies he remembered having listened to in Brăila can be qualified as "sentimental". These melodies became however unbearable to him because, as Xenakis also confessed, he associated them with the traumatic memory of the early death of his mother (Varga, 8)<sup>54</sup>. He then relegated them to a secret, underground part of himself. It is out of these secret depths that a particular lyricism springs up nevertheless from time to time in his music.

The middle section of *Dhipli Zyia* represents one such moment<sup>55</sup>. Lyricism takes here even enescian accents, contrasting with the bartokian rhythmic emphasis of the two other sections. Its explicit *rubato* is reminiscent of the *parlando-rubato* specific to Romanian music. Like Enescu's *Third Sonata* for piano and violin, this section suggests the "mioritic" space as described by Romanian philosopher Lucian Blaga, with its infinite and unpredictable undulation<sup>56</sup>.

Years later, the melismatic wandering of the violin at the beginning of *Mikka* evokes the same particular undulation, but in an abstract way. *Thalle in,* the only work in respect of which Xenakis mentioned music he heard in Romania, can also be mentioned in this context. When asked about a passage in this work that may recall a bird's song, he pointed that it is not homage to Messiaen but - perhaps - a memory of a Gypsy violin (Varga, 175).

## 5. Xenakis' Roots

Xenakis embodies the figure of the uprooted, the exile, the stranger, the other. He thus forged to a great extent his own Greekness. Yet, once he had refunded music on abstract mathematical bases, he let some musical roots appear - or reappear - in his

<sup>&</sup>lt;sup>54</sup> "I don't like this [Romanian and Gypsy] music because it awakens very sad memories in me. My mother died when I was about five years old, and when I hear this type of music on the radio or in coffee-houses, it always reminds me of my mother" (Varga 1996, 8).

<sup>&</sup>lt;sup>55</sup> www.youtube.com/watch?v=F4tBwMJD7gU, between 1'15" and 2'23".

<sup>&</sup>lt;sup>56</sup> As an illustration of the *mioritic space*, Blaga (1969) repeatedly mentions *doïna*, a genre specific to Romanian traditional music characterized by its rubato.

works<sup>57</sup>. However, while he claims to have incorporated them, in his quest for absolute freedom he actually denied them. I will cite in this respect the following passage:

[...] Romanian and Greek folk music, Byzantine chant, Western music, non-European music: I've tried to understand them; I liked some and disliked others, but I had each one come close to me, not remaining outside any of them [...] In this way I succeeded in becoming free, and that's why I have no roots (Varga 1996, 51).

I would however confront this statement to another one: "the artist - Xenakis asserts - cannot escape from himself" (Varga, 71). I guess this also means he cannot escape his roots. I would moreover remark that the resurgence of Xenakis' roots in the mid-sixties entailed a stylistic turning point<sup>58</sup>: his "formalized music" came closer to the traditional one he once rejected by qualifying it, precisely, as "musical"<sup>59</sup>.

Xenakis will however continue to keep his distance with regard to an Occident he very early judged "barbarian and inculte" in comparison with Greek antiquity. He will rather retrieve the archaic musical background common to Balkan countries which also inspired Romanian composers. He will thus return to, but also reinvent a heterophony and a modalism of his own.

One may finally argue that Xenakis practiced, at least intermittently, a modern and original Greek variant of an East European musical dialect that also was illustrated by Stravinsky, Bartók, Janáček, Enescu (Olah 2008, 70), and more recently by Ligeti, Niculescu and Olah. Romanian echoes are audible in this personal idiom even if they are deeply buried, repressed, unassumed and unspoken.

<sup>&</sup>lt;sup>57</sup> It is not without interest to point the historical circumstances explaining why Romanian composers evolved in a quite different way. While in the fifties, in France, Xenakis could connect himself to modernity, they were constrained to follow the precepts of the "socialist realism". From the mid-sixties, freed from dogmatism and isolation, they embraced modernity while remaining attached to Romanian folklore. At the same time, with *Oresteïa*, Xenakis rejoined a Greek musical tradition he had already briefly illustrated before *Metastaseis* and that he will now largely reinvent.

<sup>&</sup>lt;sup>58</sup> As well as when asked about the modal colour of some of his works, Xenakis downplayed the importance of melodic passages in *Alax, Horos* and *Shaar*. There are "perhaps islands", he conceded, criticizing himself for having used "too much" such melodies (Varga, 184).

<sup>&</sup>lt;sup>59</sup> "To hell with the so-called musical music", noted Xenakis in his diary (Matossian, 1981). Several exegetes have noticed in Xenakis' works of the eighties and nineties some features suggesting a return to musical languages of the past: modal or even "neo-tonal" melodies, a "beautiful almost tonal harmony" creating "moments of a great beauty, of peace" (Varga, 141). Affinities with Berlioz, Messiaen, Shostakovich, Stravinsky, "a certain pre-war French music" and even a "neo-classical turn" have been mentioned in this respect (see Iliescu 2001, 57).

#### References

- Albèra, Philippe. [1989] 2018. "Entretien avec Iannis Xenakis. Musiques en création, Revue Contrechamps / numéro spécial. Online edition.
- Anghel, Irinel. [1997] 2018. Orientări, direcții curente ale muzicii românești din a doua jumătate a secolului XX. București: Eikon.
- Blaga, Lucian. 1969. Orizont și stil, Spațiul mioritic, Geneza metaforei si sensul culturii. București: Editura pentru Literatură Universală.
- Chintzoglou, Anastasia. 2022. "Xenakis' Oresteia: a reconstructed theatre". In Xenakis 22 Centenary International Symposium, Athens & Nafplio, May 2022, ed. by Anastasia Georgaki and Makis Solomos
- Eliade, Mircea. 1980. *De la Zalmoxis la Genghis-han*. București: Editura științifică și enciclopedică.
- Eliade, Mircea. 1985. Symbolism, the Sacred & the Arts. New York: Crossroad.
- Eliade, Mircea. 1989. Le mythe de l'éternel retour. Paris: Gallimard.
- Eliade, Mircea. 2006. "Brancusi et les mythologies". In *L'épreuve du labyrinthe*, interviews with Claude-Henri Rocquet. Paris: Éditions du Rocher.
- Frățilă, Andra. 2016. "De vorbă cu Corneliu Dan Georgescu », Muzica 4.
- Georgescu, Corneliu Dan. 1972. "Canto II de Aurel Stroe". Muzica nº 11.
- Halbreich, Harry. 1992. *Roumanie, terre du neuvième ciel,* ed. by Ana-Maria Avram. Bucharest: Axis Mundi.
- Harley, James. 2001. "Formal Analysis of The Music of Iannis Xenakis by Means of Sonic Events: Recent Orchestral Works", in *Présences de Iannis Xenakis*, ed. by Makis Solomos, 37-52. Paris: CDMC.
- Harley, James. 2004. Xenakis. His Life in Music. London: Routledge, online edition.
- Iliescu, Mihu. 2000. "Xenakis et Thom : une morphodynamique sonore." In Les sciences de l'art en questions, Les Cahiers Arts et Sciences de l'Art/1, ed. by Dominique Chateau, 181-204. Paris: L'Harmattan.
- Iliescu, Mihu. 2001. « Xenakis et le "destin" musical de l'Occident », in Présences de Iannis Xenakis, ed. by Makis Solomos, 53-58. Paris: CDMC.
- Iliescu, Mihu. 2015. "La Légende d'Eer à la lumière de son argument littéraire : symbolisme gnostique et morphologies archétypales. In Iannis Xenakis. La musique électroacoustique, ed. by Makis Solomos, 225-240. Paris: L'Harmattan.
- Iliescu, Mihu. 2017. "Xenakis, entre le hors-temps et l'en-temps." *Musicologies nouvelles* Opus 4, *Les temps de la musique*, 44-52. Lyon: Lugdivine.
- Lupu, Olguța [ed.]. 2008. "Tiberiu Olah și *Timpul memoriei.*" In Tiberiu Olah, *Restituiri*, 612-619. București: Editura muzicală.
- Mâche, François-Bernard. 1968. "La couleur grecque chez Xenakis." In *Encyclopédie des musiques sacrées*, t. I, ed. by Jacques Porte, 350-352. Paris: Labergerie.
- Mâche, François-Bernard. 1981. "Iannis Xenakis : introduction aux œuvres." In *Regards sur Iannis Xenakis*, ed. by H. Gerhards. Paris: Stock.
- Mâche, François-Bernard. 2000. "L'hellénisme de Xenakis." In *Un demi-siècle de musique… et toujours contemporaine*, 302-321. Paris: L'Harmattan.

Mâche, François-Bernard. 2001. *Musique au singulier*. Paris: Odile Jacob.

Matossian, Nouritza. 1981. Xenakis. Paris: Fayard/Sacem.

Nemescu, Octavian. 2015. "Istoria muzicii spectrale." Muzica 5: 3-24.

Niculescu, Ștefan. 1980. Reflecții despre muzică. București: Editura muzicală.

Olah, Tiberiu. 2008. Restituiri, ed. by Olguta Lupu. București: Editura muzicală.

Petecel-Theodoru, Despina. 2003. De la mimesis la arhetip. București: Editura muzicală.

Puech, Henri-Charles. 1978. En quête de la gnose, t. 1. Paris: Gallimard.

- Restagno, Enzo. 1988. "Un'autobiografia dell'autore raccontata da Enzo Restagno." In *Xenakis*, ed. by Enzo Restagno, 3-72. Torino: EDT/Musica.
- Sandu-Dediu, Valentina. 2002. *Muzica românească între 1944-2000*. București: Editura muzicală.
- Solomos, Makis. 1996. *Iannis Xenakis*. Mercuès: P.O. Éditions.
- Solomos, Makis. 2001. "Notes sur les dernières œuvres de Xenakis." Présences de Iannis Xenakis», ed. by Makis Solomos, 59-66. Paris: CDMC.
- Solomos, Makis. 2002. *Les Anastenaria de Xenakis. Une rupture paradigmatique.* Moussikoz Logos. Online edition: ffhal-01789810.
- Solomos, Makis. [1996] 2004. Iannis Xenakis. Revised online edition.
- Solomos, Makis. 2016. "Three components of Xenakis' universe." Online edition: hal-01789673.
- Stan, Luana. 2001. "Ștefan Niculescu Un public pentru muzica modernă." Muzica 4.
- Stan (Budei), Luana. 2007. Y a-t-il une « roumanité » musicale ?. PhD dissertation, Université de Montréal/Paris : Sorbonne.
- Toma Zoicaș, Ligia. 2002. Universul gîndirii xenakiene. Oglindă a unui secol cucerit de știință. București: Editura muzicală.
- Tomescu, Vasile. 1978-1982. *Musica daco-romana*, vol. 1. Bucureşti: Editura muzicală.
- Varga, Bálint András. 1996. Conversations with Iannis Xenakis. London: Faber & Faber.
- Ursu, Ileana. 1996. "Orizontul sacrului în muzica românească." Muzica nº 1.
- Vieru, Anatol. 1994. Cuvinte despre sunete. București: Cartea Românească.
- Xenakis, Iannis. 1963. "Musiques formelles." *La Revue musicale* no. spécial 253-254. Paris: Richard-Massé.
- Xenakis, Iannis. 1976. Musique Architecture. Tournai: Casterman.
- Xenakis, Iannis. 1992. "Interview accorded to Ileana Ursu." Muzica n° 22.
- Xenakis, Iannis. 1994. Kéleütha, ed. by Benoît Gibson. Paris: L'Arche.
- Xenakis, Iannis. 2001. "Problèmes de composition musicale grecque." In *Présences de Iannis Xenakis*, transl. and ed. by Solomos Makis, 11-14. Paris: CDMC.
- Xenakis, Iannis. 2006a. *Musique de l'architecture*, ed. by Sharon Kanach. Marseille: Parenthèses.
- Xenakis, Iannis. 2006b. "Transformation d'un combat physique et politique en lutte d'idées." *Propositions* de Madeleine Roy B. Paris: La main courante.