

## Aurel Stroe – the morphogenetic composition – contemporary synthesis

Ramona PREJA<sup>1</sup>, Elisabeta-Anda MOLDOVAN<sup>2</sup>

**Abstract:** *Music has represented throughout history a reflection of the socio-human attitude, so that its evolution has taken the most diverse forms, an expression of social and human requirements. Since ancient times, the artistic phenomenon was presented syncretic, constituting both a visual and auditory stimulus. So, music – after a long period of purging, in which it freed itself from visual expression and reached a pure form of music – it had reached, in the second half of the twentieth century, a time when it tended more and more towards visualization and theatricalization. Its visualization has found a framework of conceptual experimentation by bringing to the stage, as constitutive elements of the concert performance, both the instrumentalist and his instrument, transforming the musical act into a new aesthetic phenomenon - the instrumental theatre.*

**Key-words:** *Theatre, Creation, Melodies, Composers, Instrumental.*

### 1. Introduction

Music has represented throughout history a reflection of socio-human attitude, so that its evolution has taken on the most diverse forms, an expression of social and human requirements. Since antiquity, the artistic phenomenon was presented syncretically, constituting at the same time a visual and auditory stimulus. So, music – after a long period of purging, in which it freed itself from visual expression and reached a pure form of music – it had reached, in the second half of the twentieth century, a time when it tended more and more towards visualization and theatricalization. Its visualization found a framework of conceptual experimentation by bringing onto the stage, as constitutive elements of the concert performance, both the instrumentalist and his instrument, transforming the musical act into a new aesthetic phenomenon: *instrumental theatre*.

---

<sup>1</sup> PhD, University of Arts Târgu-Mureş, Mus. Dep., [lectuniv2009@yahoo.com](mailto:lectuniv2009@yahoo.com)

<sup>2</sup> National College „Mircea Eliade” Sighişoara, [andamol@gmail.com](mailto:andamol@gmail.com)

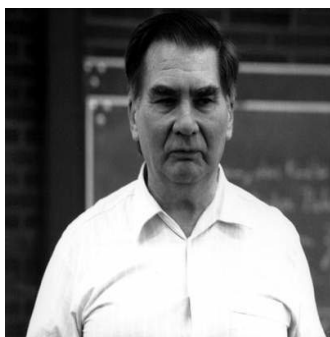
## 2. Contemporaneity in the sound space

The spectacular development of video techniques creates multiple possibilities for the visualization of music, emphasizing elements of stage expression, so that this new musical genre fits perfectly into contemporary society, into the new stylistic and aesthetic directions.

Instrumental theatre appeared in Germany between 1965–1967, invented by Mauricio Kagel, who started from a few ideas: music must be seen, not just heard; the theatrical effect must stand out during the performance of the music through the differentiated use of the instrumental approach; the instrumentalist and his instrument must be placed in a certain theatrical context. Semiography takes on new dimensions, its symbols expressing both the sound and the gesture of the works. A gallery of composers rediscovered their musical language in this new direction: Karlheinz Stockhausen, Krzysztof Penderecki, György Ligeti, John Cage (who goes beyond the limits of music into a clearly metamusical realm), Luciano Berio, Iannis Xenakis, and others.

Synchronizing with the Western European avant-garde in a period when access to such information was restricted, the Romanian school quickly became one of the most daring in aesthetic terms, proposing new directions and currents in the international context. “Heterophonic music, morphogenetic music, spectral music, archetypal music, metastylistic music, imaginary music are landmarks of the general history of music, being linked to the names of Romanian composers such as Ștefan Niculescu, Aurel Stroe, Anatol Vieru, Horațiu Rădulescu, Iancu Dumitrescu, Octavian Nemescu, Doina Rotaru”.<sup>3</sup>

## 2. Aurel Stroe – the morphogenetic composition



Aurel Stroe was not only a composer of contemporary, experimental, avant-garde music, but also a philosopher, mathematician, linguist, musicologist, author of a considerable body of work. He was born on May 5, 1932, in Bucharest and studied composition at the Bucharest Conservatory, where he later taught; between 1975 and 1985, he had his own composition class. Starting in 1986, he lived in Mannheim, and after the Revolution, beginning in 1993, he resumed

---

<sup>3</sup> Irinel Anghel - musicologist

teaching composition in Bucharest, as well as at a summer school held annually in Bușteni, where he owned a vacation villa. In 1969, he was awarded the Cultural Merit Order, 4th Class. He received the Romanian Academy Prize in 1974. He was awarded the Chevalier des Arts et des Lettres of the French Republic (1991). In 1998, he received the Grand Prize of the Union of Composers and Musicologists of Romania. In 2002, he was honoured with the prestigious Herder Prize by the University of Vienna. He passed away on October 3, 2008, in Mannheim.

Aurel Stroe's work was inspired by avant-garde fields of contemporary thought. He conceived *the theory of morphogenetic music* (based on René Thom's *catastrophe theory*<sup>4</sup>), which establishes the occurrence of fissures, of programmed ruptures at the ontological level of musical works. Furthermore, Stroe found such a tendency in other composers too (for instance, Shostakovich), indicating a clear philosophical implication. The composer always relied on his "encyclopedic culture," of which all who knew him spoke, his intense readings in mathematics, symbolic logic, thermodynamics, history of the sciences, linguistics, and more. His vast body of work includes opera, theatre music, vocal-symphonic music, symphonic music, chamber music, vocal music, choral music, and electronic music. Among his most important works are: "*Oedipe la Colonos*" (stage music for Sophocles' play, 1963), the opera "*This play will not receive the Nobel Prize*" (1971), the opera "*Peace*," after Aristophanes (1973), "*Orestia II: The Choephoroi*" from "*The Trilogy of the Closed City*" after Aeschylus (1978), the *Third Piano Sonata "in palimpsest"* completed in 1991, "*Prairie*," "*Prières*" (concert symphony for saxophone and large orchestra, 1993–1997), and the *Concerto for Clarinet and Orchestra* (1975).

Aurel Stroe conceals his compositional procedures and allows the music to speak to us. This rare artistic gift fundamentally distinguishes him from many other contemporary composers. Stroe's music is perceived by anyone listening to it as a continuation of the great universal musical tradition, which he attempts to deepen without straying from it at any point.

For the composer, music was always a medium through which thought was expressed, where ideas were primarily formulated, not emotions. The strongest influence on his musical thinking came from physics (Ilya Prigogine), mathematics (René Thom and Alexander Grothendieck), and ontology (Parmenides, Martin Heidegger), disciplines open to an analogy with music. How can ideas be expressed in music? Certainly, through defining structure. "What I like most is to create such

---

<sup>4</sup> The theory of catastrophes was founded by the English mathematician Christopher Zeeman and the French mathematician René Thom who created mathematical models capable of taking into account the existence and totality of forms, their appearance and disappearance, in a word of morphogenesis. He called the points of discontinuity and leap in the evolution of a phenomenon, catastrophe.

musical structures that, once formalized, I can imagine modelling other things on Earth, or spiritual things. (...) That's what interests me, if it can be done."

The work that especially addresses the problem of morphogenetic ruptures is *the Third Piano Sonata "in palimpsest"* completed in 1991. Among its fissures, the Sonata includes recollections of older music, suggesting a kind of compositional self-portrait, "a palimpsest of memory," as musicologist Alexandru Leahu has called it. The same technique is used in *"Fantasia quasi una Sonata"* for cello and piano or in *"Chorals et comptines"* for saxophone, vocal sextet, and four trombones, in which such stylistic references appear repeatedly, shaping a multitude of portraits dedicated to personalities such as Erik Satie, Daniel Kientzy, Ion Negoitescu, and others. Despite these programmed ruptures, the music retains a very clear internal coherence, evident not just upon in-depth analysis but also upon careful listening. Its beauty stems from the fact that it is guided primarily by expression, rather than technique. The novelty of the sonorities comes from inventive timbral combinations and the colours that emerge from them, from the preference for contrasts in which passion and drama blend pleasantly with song-like lyricism (in the truest sense of the word), from stylistic superimpositions harmonized with discernment, from the seemingly classical shape of the phrases. The form of Aurel Stroe's works takes shape and becomes substantial through the discontinuities that appear "in the qualitative properties of the support," and repeated interventions upon the "support of morphology" give rise to multi-layered connotations, with features typical of a palimpsest—features that in turn are characteristic of the musical structures the composer envisioned. At the same time, this process of alternating the continuum with discontinuities generates a genuine "spectacle of the Universe," whose "phenomenological appearance" is harmony.

The rigor with which Aurel Stroe grounds his aesthetic ideas does not contradict the expressiveness of his music or the cult he had for the sonic detail. A pivotal moment in his reinterpretation of the mythical, the starting point of a unifying philosophical and aesthetic vision, is what he himself calls "morphogenetic composition."

**Morphogenetic composition** is "a musical work that, through its deeply structural characteristics, addresses the issue of the birth and evolution of forms (structures) in general."<sup>5</sup> It is the essence of Aurel Stroe's aesthetic conception, in which he shows the ability to transpose his aesthetic ideas into the musical domain, constantly reconfiguring and imbuing them with new meanings.

His music possesses three qualities. "First, *trezvia* (vigilance), as hesychast monks might say. It is always alert, introspective, and active, never dozing, never

---

<sup>5</sup> Cosmin Georgescu, *Preliminarii la Orestia I de Aurel Stroe*, in *Revista Muzica*, nr. 5/1983, p. 14

letting you go. While you listen, it becomes a musical consciousness that confesses to you, and you cannot stop yourself from hearing it. Such a thing happens rarely in the history of music. The second quality is its *strangeness*. It is unusual and unexpected, full of hidden traps, yet objective, without personal attacks, without offense, even when dissonance is used to the maximum. Combinations of instruments one would never have imagined, the most unlikely amalgamations, the most uncomfortable instrumental positions—all are used deliberately by Stroe precisely to produce a bizarre effect that feeds the work's structure with semantic fuel. The third, fundamental quality is that of asking questions and trying to find answers. His music is reflection in sound, in the literal sense. It transcends stylistic thought, going 'behind' the musical material to discover the 'theater of principles' that confront, ally, or annihilate one another, as well as the cultural paradigms influencing perception".<sup>6</sup>

**The Concerto for Clarinet and Orchestra**, an illustrative work of Aurel Stroe's artistic conception, starts with a gran cassa pedal, over which the clarinet comes in with two simultaneous harmonics. The first section is carried by percussion and the solo clarinet alone.

In the second section, *mobilele* (the mobiles) and *transformările* (transformations) synchronize at the beginning and the end, while in the rest of the section they create a heterophonic texture like a transparent veil allowing a glimpse beyond, each performer developing his or her own melodic line independently. For the maracas, Stroe uses a special notation. Indeed, the entire score is written with particular indications and instructions on how to perform, as the composer wanted a certain sonic effect. The clarinet here becomes the hero of the story, who, as in a fairy tale, follows an initiatory path in which he experiences the outer world but most of all his inner self (Figures 1, 2).

---

<sup>6</sup> Dan Dediu, Cu Aurel Stroe prin cotloanele minții și bizareriile muzicii - eseu morfogenetic -



The orchestra functions as a collective character accompanying the hero on his journey toward self-knowledge. The variety of percussion instruments and the brass at certain moments enter oppositionally, causing changes in the unfolding of the musical discourse, which is fragmented by fissures leading to evolutionary leaps, building a structure that then evolves into another. This is essentially the morphogenetic theory Aurel Stroe applies consistently in his works.

Opera has always represented the triumph of the sensitivity of the human voice in relation to instrumental timbres. Starting with the *“Orestia”* cycle, these two means of expression achieve equality in a new type of sonic and dramatic progression, as the insertion of instrumental characters in the opera’s plot influences the musical form.

**The opera *“Orestia II – Choephorele”*** (The Choephori) is the second part of the *“Trilogy of the Closed City”* composed between 1973 and 1988, bracketed by *“Agamemnon – Orestia I”* and *“Eumenidele (The Eumenides) – Orestia III”*.

The first part of the tragedy, *“Agamemnon,”* presents his return home at the conclusion of the Trojan War (Figure 3).



Fig. 3. *Orestia II – Choephorele*

The second part, *“The Choephori”* recounts the reunion of Agamemnon’s children – Electra and Orestes – their plan for revenge, and its enactment. The title *“Choephori”*

refers to the group of slave women who accompany Electra to her father Agamemnon's grave, bearing ritual offerings for the deceased.

The third part, "*The Eumeides*", is dedicated to the judgement of Orestes' deeds by a celestial court.

In "*Orestia II*," Stroe perforates the structure of chaos with what might be considered beams of light formed from *the pure, archaic sonorities* of extra-European modes, heard especially in the vocal lines of the female performers. He uses various *musical tuning systems* – harmonic series of a fundamental pitch, the Pythagorean system, the proportional system, the tempered system, and the multi-fundamental system the composer himself introduced – as well as a variety of rhythmic systems (parlando-rubato, giusto-divizionar, giusto-silabic) and rhythmic devices such as glissando, continuum, and discontinuity. He alternates the latter two, for example by inserting motifs from a ritual song of Transylvania, layering them on top of the polyphonically harmonized texture in the organ and a cantus firmus played aggressively by the trombone (Figures 4, 5).

**2. PROCESSIONE**

Choenhorele. Processione. actul I. n. 14

Fig. 4. *The Choeophori*



**9. CANZONA - CORO -**

*Choeophorele, Canzona-Coro, primele 11 măs., p. 107, idem sursă*

*Choeophorele, Lamento e coro, p. 136*

Fig. 5. *The Choeophori*

Another composition method he employs is the palimpsest, layering diverse sonic worlds represented by noises, musical pitches, the upper harmonics of G, tempered scales, proportional notation, and varied rhythms.

Each of the systems Stroe uses in “The Choeophori” introduces its own element of purity or tragedy through either relaxation or maximum compression of sonic energy. The composer himself declared that this piece tells the story of how music, initially unified, gradually breaks down under the weight of the tragic text, producing different modes of musical expression, along with a series of isomorphisms – such as the chorus’s rhythm and the trombone’s rhythm – constructed from simple

intervallic frameworks (major and minor seconds, octave, twelfth), retrogradable intervals giving the music a certain sinuous quality.

### 3. Instead of a conclusion

Composer Dan Dediú outlines a guiding thread through the expanse of Aurel Stroe's thought, offering a summary of his preferred concepts and a hypothesis regarding the way his thinking operates:

- **Breviary of Aurel Stroe's theoretical-musical ideas** (in alphabetical order)

*Clase de compoziții (Classes of compositions)* – A formal model containing musical rules from which arises a class of variants, not just one single composition.

*Diada lui Stroe (Stroe's Dyad)* – A formal model that brings together and builds bridges between two incommensurable musical paradigms. Examples: the dyad of *caprices and ragas*, the dyad of *bells and echoes*, the dyad of *chords and children's songs*.

*Entropia (Entropy)* – A musical process through which a theme is progressively dismantled to the point of becoming unrecognizable (e.g., the "*Fugue dissipative*" from the *Concerto for accordion and orchestra*).

*Folclorul planetar (Planetary folklore)* – An imaginary sonic universe simulating certain folkloric sonorities from around the world.

*Morfogeneza sau teoria catastrofelor (Morphogenesis or the theory of catastrophes)* – The capacity of a musical form to reach a catastrophic point (by expansion or contraction), from where it shifts to a different form. In this category are anomalies of musical form: hernias, enclaves, and tumors of form (terms used by Aurel Stroe in his analyses of Mahler's symphonies).

*Multimobile (Multimobiles)* – A group of given melodies, each played in random order by every member of the orchestra, yielding a sonic conglomerate controllable only in intensity and volume.

*Ontologiile muzicale (Musical ontologies)* – Different ways of understanding, producing, and perceiving music, depending on cultural paradigms of origin.

*Palimpsestul (The palimpsest)* – A technique of overlapping very different musical paradigms.

*Paradigma muzicală (Musical paradigm)* – A musical category, governed by a cultural model of how music is produced and understood. Incommensurable musical paradigms are those that cannot be measured against each other, lacking a shared unit of measurement.

*Puntea (The bridge)* – The specific method of linking two incommensurable musical paradigms, by finding elements they share and expanding the analogies between them.

*Sistem de acordaj (Tuning system)* – A proportional complex that defines the relationships between pitches within a simple or complex scale. A tuning system is influenced by the cultural paradigm it comes from. Tuning systems are convergent when arising from the same cultural paradigm, and divergent when derived from incommensurable cultural paradigms (for example, Western European music and North Indian music).

• **The genesis of the musical universe according to Stroe:**

1. In the beginning, the Composer created the model.
2. And the model was barren and void of meaning.
3. And the Composer said: Let there be a paradigm. And there was a paradigm.
4. And the Composer saw that the paradigm was good, and he separated the paradigm from ontology.
5. And the Composer said: Let there be a firmament among incommensurable paradigms, to unite paradigm with paradigm. And so, it came to be.
6. The Composer named that firmament “the bridge”.
7. And the Composer said: Let the rules of each paradigm gather, and let their results appear. And so, it happened.
8. The Composer called these results “classes of compositions.” And the Composer saw that it was good.
9. Then the Composer said: Let the classes of compositions bring forth processes.
10. And thus, they brought forth morphogenesis, leading to catastrophic anomalies; entropy, dismantling a theme; and the palimpsest, layering paradigms.
11. And the Composer said: Let there be tuning systems and signs to distinguish tempered from untampered tuning.
12. Next, the Composer made two great lights: planetary folklore and the multimobiles. And the Composer saw that it was good.
13. And the Composer said: Let there be a dyad. And there was a dyad.
14. And the Composer beheld all he had made, and indeed, it was very good”.<sup>7</sup>

Aurel Stroe’s works are surprising both conceptually and emotionally. His compositions stimulate thought and then awaken feeling and experience. His personality – accentuated by the originality and breadth of his musical-philosophical

---

<sup>7</sup> Dan Dediu – *Cu Aurel Stroe prin cotloanele mintii si bizareriile muzicii* - eseu morfogenetic

thinking – remains vivid in the memory of contemporaries and younger generations alike, through his avant-garde creations that fascinated the European intellectual world.

## References

- Bughici, Dumitru. 1974. *Dicționar de termeni muzicali* [Dictionary of musical terms]. București: Editura Muzicală.
- Bughici, Dumitru. 1978. *Dicționare de forme și genuri musicale* [Dictionary of musical forms and genres]. București: Editura: Muzicală a Uniunii Compozitorilor.
- Nemescu, Octavian. 2016. *Ce spune muzica lui Stroe?*, [What does Stroe's music say?]. [http://revistaarta.ro/ce-spune-muzica lui Stroe](http://revistaarta.ro/ce-spune-muzica-lui-Stroe) (online).
- Preja, Ramona. 2018. *Evoluția creației muzicale*, vol.2 [The evolution of musical creation]. Târgu-Mureș: Editura UArtPress.
- Georgescu, Cosmin. 1983. "Preliminarii la *Orestia I* de Aurel Stroe" [Preliminaries to "*Orestia I*", by Aurel Stroe ]. *Revista Muzica* 14(5): p.14.