

HETEROPHONY IN “SOLO FOR MARIMBAPHONE AND VIBRAPHONE”, COMPOSED BY ȘTEFAN NICULESCU

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SUMMARY. Composed on the background of heterophony “*Solo for marimbaphone and vibraphone*” remains a unique opus in the genre’s literature. Certainly, an opus which highlights the composer’s remarkable style and talent for creating new compositional techniques having links with modern mathematics, especially with graph theory and group theory. That is why this work illustrates the composer’s modern vision on music in respect with the rising of heterophony, at the standard of syntax and stylization proper to XX century contemporary music. This article seeks to demonstrate that the aesthetic value of “*Solo*” is given by an internal unity making both marimbaphone and vibraphone complete heterophony, to give out a simultaneous variation of a single melodic line.

Keywords: heterophony, sound edifice, intensity and string of sound events

Musicologist, composer and university teacher, Ștefan Niculescu remains one of the most important exponents of the Romanian musical literature, creating an aesthetics which illustrates not only a carefully planned and organized discourse but also a special interest in heterophony and modern mathematics so to create a quite expressive style in music.

To some extent, the use of modern mathematics (graph theory and group theory) reflects what Volkelt, the well-known aesthetic critic, affirms in restore aesthetics, namely, “art is one of the great and distinguished domains of human activity which takes a guide from science, philosophy ethics or religion so that to create a spiritual paradigm pulling them together”.²

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² Johannes Volkelt, *Estetica tragicului (The Tragic’s Aesthetics)*, Univers Publishing House, Bucharest, 1978, pp.17-18.



Or, according to Volkelt's judgments about art one might easily accept that Ștefan Niculescu proved his inauguration of a crossing point between music and modern mathematics giving to his musical vision a new substance and an unique discourse.

Undoubtedly, his spiritual biography reveals plenty of examples of why and how a self-interested artist creates continuously and consistently a new musical paradigm and a remarkable didactic career, not to mention his status as a theorist of music.

He was born in Moreni, Dâmbovița district of Romania, on 31 July 1927 and died on 22 January 2008 in Bucharest, leaving away a pious memory of his work. The film of his studies shows that he studied and graduated both *Mihai Viteazul High School* (1938-1946) and *The National University of Music*, in Bucharest (1957).

It is worthy to notice that he started his career as a researcher at "*The Institute of Art History*" belonging to "*Romanian Academy*" where he remained three years (1960-1963). At the end of this period, he became university professor at "*The National University of Music*"-Bucharest (*The Academy of Music* in our days) where he taught Composition and Music Analysis.

His high plan continued with attending "*The International Courses*" in Darmstadt (1966-1969) and the "*Courses for Electronic Music*" at the Siemens Studio in Munich (1966). He returned to Darmstadt as a professor in 1993. Much more, he got the title of composer in residence at *The Deutscher Akademischer Austauschdienst* (1971-1972) and later he lectured in Zagreb, Paris, Valencia and Darmstadt. In 1991, he founded "*The International New Music Week Festival*" in Bucharest and in 1993 he was appointed as Corresponding Member of the Romanian Academy, becoming a full member in 1996. Niculescu got also an international acknowledgement by Herder Prize (1994) and The Prize for Musicology offered by the French Academy in 1972.

Regarding his creation, it consists in a diverse body of works, including more than seventy-five compositions covering many musical genres, symphonic, chamber, choral, children's opera, ballet which were published by *The Musical Publishing House of Bucharest*, *Salabert* (Paris), *Schott's Söhne Musikverlag* (Mainz), *Gerig Musikverlag* (Cologne).

His remarkable compositions include *Heteromorphie for orchestra* (1967), *Aphorism by Heraclitus* (1969), *Ison I* (1973), *Ison II* (1975), *Echos I for violin* (1977), *Synchrony II for orchestra* (1981), *Invocatio* (1988), *Axion for women's choir and saxophone* (1992), *Psalmus* (1993)³. Among his writings, we mention the *Studies of heterophony* (1969), *A theory of musical syntax* (1973),

³ Aurel Muraru, *The symbiosis between microtonality and sprechgesang in Psalm 124 by Ion Coțofan*, STUDIA UBB MUSICA, Cluj, (LXII) 2017, p.270.

Between the individual and the general (1983), *A new spirit of time in music* (1986), and *Reflections on music* (1980).⁴ These works bear testimony to his entire creation, to his gift to communicate a genial spirit of music.

From the aesthetic point of view, Niculescu created a new compositional skill, techniques based on heterophony and elements of modern mathematics (graph and group theory), a kind of sacred music, running between Dionysian and Apollonian orchestration in which rises not only a rapidly growing but also a sweet temperance like in a well-designed and merged sonority proper to Nietzsche's pleading for music.⁵

We also must understand that "The principle of the duality one – multiple, monody – heterophony, univocality – pluri-vocality appears as a coincidentia oppositorum (as Ștefan Niculescu defines the heterophony syntax) as a unit that contains in nut all the developing, evolutionary virtuality of a temporal processualism... In this sense, in the musical discourse, the spatial agglomeration occurs from unison or monody to the heterophonic texture, from horizontal to vertical, the thinning of the verticality and the return to the monodic thread".⁶

Much more, Žanna Pärtlas states that: "the term 'heterophony' may be used to define *different types of music making, both one-part and multipart, which are characterized by a multilinear texture, and which come into being through the process of the simultaneous variation of the same melody when the performers do not control the quality of the vertical sonorities*".⁷

A modern characteristic of Niculescu's compositions is that he incorporates lots of transfigured features of Byzantine, Gregorian music and of similar cultures all over the world, "to capture both the descriptive aspects of the idyllic universe and the archaic, archetypal, timeless ... essences".⁸ An illustrating example is offered by two works, one is *Requiem*, a piece for orchestra where the vibraphone is integrated especially for its unique timbre and another is "*Solo for marimbaphone and vibraphone*" composed in 1981. As the title highlights, this composition is created for these two instruments but needs to be performed by a single music player.

An analysis on "*Solo*", in fact, an opus illustrates that its aesthetic value is given by an internal unity making both marimbaphone and vibraphone

⁴ <https://www.casedemuzicieni.ro/stefan-niculescu/> (04 March 2024)

⁵ Friedrich Nietzsche, *Nasterea tragediei "The Birth of Tragedy"*, Pan Publishing House, Bucharest, 1992, p.25.

⁶ Mirela Mercean-Țârc, *Archetypal Discursive Typologies in Hetero(Sym)Phony by Cornel Țăranu*, STUDIA UBB MUSICA, Cluj, (LXVI) 2021, p 181.

⁷ Žanna Pärtlas, *Theoretical Approaches to Heterophony*, in Res Musica 8, 2016.

⁸ Paula Șandor, Interferences between tradition and modernity in the symphonic and concerto works by Adrian Pop – (2) ETOS I, STUDIA UBB MUSICA, Cluj, (LXVIII) 2023, p. 409

complete heterophony. From the very beginning, the composer tries to create a special sound world by combining the unmistakable tone color of the vibraphone, obtained by striking the metal bars, with that of the marimbaphone, a tone color much more static than that of the vibraphone, obtained by striking the wooden bars.

Due to the different vibration of the duralumin bars, which is prolonged by the pedal, compared to that of the wooden bars, which is much shorter, these two-tone colors are totally different. Through Ștefan Niculescu's writing they tend to merge, right from the beginning of the work, through that *ostinato* in unison, and even to merge at certain moments, by placing the grace notes on the marimbaphone, the base note being on the vibraphone, doubled then by the return of the marimbaphone tone color, with a note sustained by tremolo, or shorter time values. (E.g.1, E.g. 2).

E.g.1

♩ = 50

Ștefan Niculescu, *Solo*, bars 1 to 3

E.g. 2

Ștefan Niculescu, *Solo*, bar 6

From the form point of view, *Solo* is a monopartite and fits into the stylistic framework of Ștefan Niculescu, being a heterophonic music.

The work is divided into three sections a), b) and a'), a) - from the beginning to bar 27 (first on page three), b) - from bar 29 to bar 51 (first in the last system, page four) and a') - bar 52 (second in the last system, page four) to the end. The three sections differ both in tempo and sound material.

Section a) begins with an *ostinato* of unison eighth notes in different octaves on the note D, *rubato* rigorously notated on each of the three bars: *ritenuto* - *accelerando* - *ritenuto*. The first phrase ends in the fourth bar, with a sixteenth, unison also on the note D, after the first moment at the beginning of the bar when the tone color of the marimbaphone tends to merge with that of the vibraphone, with the grace note on the marimbaphone, followed by the base note on the vibraphone supported by the pedal.

The second phrase, which also lasts four bars, is based on other sound objects that create a spatial structure in terms of frequency and duration, as well as intensity and tone color, through the sustained notes on the two instruments, where the composer induces extreme states obtained by the passages from *sforzando* to *pianissimo* and then to *fortissimo*, followed again by a *crescendo* from *subito pianissimo*, to *fortissimo*, returning abruptly to *pianissimo*.

In the last bar of the first page the effect of *staccato* on the vibraphone appears for the first time, obtained by keeping the pedal in its original (unpressed) position. Also in this bar, we can see the use of wide intervals, *fourth-tenth* (between the marimbaphone grace note, B flat 7, and the vibraphone base note, C 5), followed by a tenth (C 5 - E flat 6), and *fourth-tenth* (E flat 6 - D 4), then a small seventh (D 4 - C 5) and a tenth again (C 5 - E flat 6), (E.g. 3).

E.g. 3

Ștefan Niculescu, Solo, bar 9

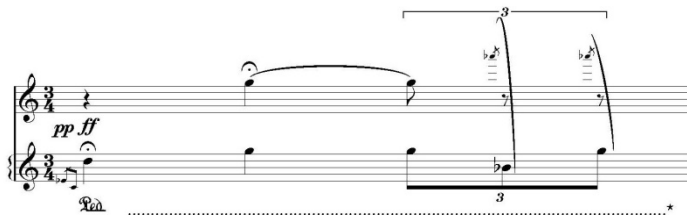
In the next bar, the use of extreme intervals continues (*third-tenth*, B flat 6 - D 4), even going beyond the double octave (D 4 - E flat 6). The composer also uses the double grace note for the first time in this bar. After another two bars, the *ostinato* returns from the beginning, condensed from three to two bars, this time on B-flat, and in the following bars, we see both rhythmic and intervallic (melodic) heterophony, where new rhythms and intervals appear much closer than the extremes in bars 9, 10 or 12.

In bar 20 the composer introduces a sound grid made up of three sound objects: a double-grace note *vibrato* fourth followed by another fourth, a vibraphone-marimbaphone unison, linked by a triplet. He repeats this

sound grid in the next bar, then inverts it in bar 22, returns to it in bars 24-25 and to its inversion in bars 26-27, to end this section again with the sound grid from bar 20.

Although this sound grid and its inversion constitute the same sound material, they never appear the same, either by placing crowns on different sound objects (in bars 20-23), or by using nuances on different sound objects (in bars 24-27), and as a structure, the first four bars of this sound edifice have an ad-libitum character, and the next four return to *tempo giusto*, the quarter note approximately 50, (E.g. 4).

E.g. 4



Ștefan Niculescu, Solo, bar 20

Then follows the bridge to the second section, consisting of repeating, from 7 to 10 times in *accelerando*, the same inverted grids in bar 28.

Section b) in a new tempo (quarter note - about 70) opens with sound material like that in the first section (made from the same sound objects - triplets, eighth notes, quarter notes), but after only three bars it begins to change. If in the first three bars the composer recalls the elements used in the first section, from bar 32 the marimbaphone *ostinato* appears again, but the vibraphone has different sound objects than the previous ones. Gradually, the sound material changes, the composer using other sound objects around detail. As Ștefan Niculescu himself states, "from the point of view of aural perception (but the same observations are also valid visually) we distinguish three cases: 1) rarefaction, 2) detail and 3) agglomeration. In the area of rarefaction, events are so distant or dilated that we can no longer incorporate them in the same cursivity. In the area of detail, we perceive more or less clearly the details of sound configurations, and in any case, we recognize syntactic categories. Finally, in the zone of agglomeration, events are so numerous that we no longer hear them separately, but globally, integrated into a whole, a sound being, collective, which cancels out the features of the subsumed individualities".⁹

⁹ Niculescu Ștefan, *Reflecții despre Muzică (Reflections on Music)*, Romanian Academy Publishing House Bucharest, 2006, p.16.

All these stages of auditory awareness are present in section b), starting with rarefaction in bar 31, continuing with the area of detail in bars 32-40 and ending with crowding in bars 41-48.

In bar 49 there is again a zone of rarefaction like that in bars 31 and 6-8 of the first section, accentuated by the sudden decrease in tempo from about 70th to about 60th. This zone of rarefaction lasts for four bars and prepares the entrance to the third section.

Section a') returns with the same *ostinato* as at the beginning of the work, preceded by a first bar like the fourth bar at the beginning, thus achieving an inversion. A rhythmic inversion of bar 10 also occurs in the next bar (56), where the double-grace note quarter moves from beat two to beat one of the bars, and the dotted, grace note eighth from beat one moves to beat two. The following two bars (57, 58) which are like bars 11 - 12, are continued by a reversal of bars 13 - 14 - 15, 59 - 60 - 61. Next, we find structures from section a) partially modified: bar 62 versus 22 and 63 versus 16. From here a new rarefaction begins, this time towards the end, achieved by notes held with tremolo and pedals, then superimposed with *ostinato*, changing twice by the end, from one voice to another, (E.g. 5).

E.g. 5



Ștefan Niculescu, *Solo*, bar 16



Ștefan Niculescu, *Solo*, bar 63

"Solo" is a work where Ștefan Niculescu applies many techniques which he introduced in the universal musical language, such as: sound structures (timbral, modal or spatial), frequency spatial structures, duration, intensity and tone color, sound grids, sound objects, sound edifice, string of sound events.

As a matter of fact, “Solo” justifies the fact that Niculescu rises up the heterophony, well represented in nature¹⁰ at the standard of syntax and stylization proper to XX century contemporary music. No wonder that the texture of the heterophony is characterized by the simultaneous variation of a single melodic line, a kind of complex musical texture having a basic melody played in different rhythms or tempo but with various embellishments and elaborations¹¹, fact that makes people to listen to such a music.

It would be no strange exaggeration to conclude that Niculescu’s interest in heterophony qualifies him as a modern and brilliant composer who will be surely inscribed on an Agenda for Tomorrow.

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¹⁰ Steven Brown, *Contagious heterophony: A new theory about the origins of music*, in *Musicae Scientiae*, Spring 2007, Vol XI, n° 1, 3-26, p.3.

¹¹ <https://www.britannica.com/art/heterophony>, (28 February 2024)