SEMIOGRAPHIC ASPECTS IN THE MUSIC OF THE 20th CENTURY

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Abstract. The stylistic diversity of the 20th century music has shaped the various semiographic aspects, marked by changes of the musical language. The diverse aspects of the musical semiography reveal bench-marks in determining the stylistic elements, the level of complexity and the novelty of the musical language in a musical creation, thus creating the possibility of integrating the respective work among the known structures of distinct cultures. If painting and literature have absorbed in their configuration aspects of philosophy and science, the musical art of the 20th century attached to its own means dimensions belonging to other arts, it offered to performers multiple possibilities of expressing their own personality, exploring the sound effects of the surrounding environment.

Keywords: Musical culture, semiography, the 20^{th} century, sound effects, improvisation.

1. INTRODUCTION

The musical art is reflected by a large ensemble of specific signs which communicate information, which determines the performers' actions, perceived in various ways by the mind and imagination of the listener. The new trends of the 20th century brought changes to the sound material, as well as new rules in the composition and sending of the message and validated techniques of processing sounds, expressed in different semiographic systems.

In music as well as in art in general, the semiographic research has focused on the ways of expression, influenced by the structure of the scientific and poetic language. Semiotics has introduced in the musical field the linguistic analysis, but also the subsequent notions and terminology. The sign represents the basic notion in musical semiography and is reflected by two basic components: the signifier, referring to the exterior, acoustic or phonic component and the signified, which contains the idea presented by the sign, with fluctuating limits. The two have arbitrary relationships, the numerous researches not being able to establish the limits of signification in music, as it remains in an extremely permissive area from the point of view of the exact notion of meaning.

Although general semiotics studies all types of signs (in literature, mathematics, music etc.), it is not yet established whether the musical signs are a language capable of expressing precise ideas and feelings (as it happens in literature). The minimal level from which significance begins in music is also controversial (sound, interval, melodic cell, motif, phrase etc.), thus which would be the minimal unity with a perceivable significance is uncertain.

The main objective of musical semiotics is explaining the nature of signs and the descriptions and interpretations refer both to form and contents, the two levels being complementary to one another. General semiology (mostly based on linguistic structures) requires semantic, syntactic and programmatic analyses [7] of the variations of the relationship between the signifier and the signified in order to obtain rules with explicative value.

2. SEMIOGRAPHIC CONCEPTS AND EXPERIMENTS IN 20th CENTURY MUSIC

In the context of the variety of modern compositional approaches, the problem of semiography has become fundamental as it shows the composer's message. The various forms of musical writing of the 20th century have opened new roads for the interpretation of the sound, of the relationship between music and audience, for the understanding of the ways of perception and selection of the sound and it has brought new trends in the musical creation, interpretation and perception.

A musical notation accessible to everybody (not only to musicians) was an aspiration of the 20th century music, musical notation being made not only to be performed or listened to, but also to be read.

The great composer Stockhausen K. considers that the musical scores of the 20th century bring the following configurations from the point of view of the relationship between writing and sound:

- o There are scores which are more explicit than the written text;
- o There are scores which reveal to the reader more relationships than a sound;
- o Intermediary compositions which articulate form in a mutual exchange.

The author himself concludes: "the disputes on reading and listening cannot reach a conclusion, they don't exclude one another, they complete each other like two autonomous areas" [9].

The distinction between interpretation, listening and reading is obvious in the different forms of musical graphism, in music, as opposed to the classical literature, the creation of the Vienna School, the contemporary music notated by active, project writing with ideograms, with different formulas for the interpreter and composer, as well as the music which doesn't require notation, only sound support or electromagnetic support.

In a research about the signs used in the 20th century notation, the researcher Jacques Bertin put together a picture containing all the meanings of signs (Fig. 1):

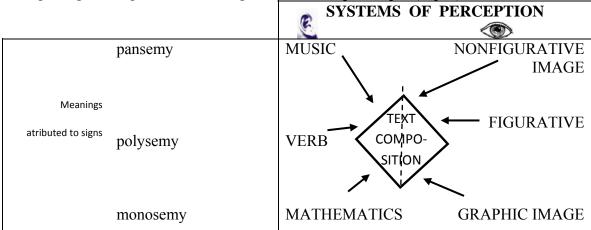


Fig. 1. The fundamental systems of signs and the meanings attributed to signs [1].

According to this author:

- o In monosemy knowing the meaning of every sign precedes the acknowledgement of the ensemble of signs;
- o In polysemy the particular meaning and the general view of the ensemble coincide; (this is the level of music);
- o In pansemy the understanding of each sign comes after the acknowledgement of the ensemble of signs.

The multitude of notational forms in the 20th century music was researched by Costin Miereanu in a study entitled: Text composition-voie zéro de l'écriture musicale [5] classifies

sounds not only by the way they are produced, but also by their degree of determination. Everything that appears as a sound in a certain unity and uniform unfolding of phenomena of the same nature is called sonorous event. The event, a basic notion in the probability theory, was taken from mathematics and was used in the stochastic music, based on probabilistic calculus. Text composition as a syncretic and intermediary field is situated at the meeting point of the other systems and is revealed as uniting several types of semiotic practices. If in concrete music the events are unpredictable, undetermined (they become determined after being processed on magnetic tape), in aleatoric music they are predetermined, according to the degree of control of the composer and of the interpreter during the performance. The events are determined only in the score, in the traditional notational system, as subjective, temporal factors appear, different for every performance. Moreover, the production of sounds will always depend upon the dynamic, timbre and acoustic variations, thus upon the construction of the source of sound and upon the environment.

The author has shown that the human mind can only perceive three main types of sonorous events, with no clear boundaries between them, only a series of intermediary stages. They are as follows:

- a) rare, isolated sonorous events, with no relationship with one another and which cannot be put in a relationship because of the distance between them. In this category we find most of John Cage's works, the American School in general (Morton, Feldman, Cristian Wolff, Earle Brown) as well as some of the oriental traditional music;
- b) detailed sonorous events, perceived analytically, in relationship with what precedes and what follows them (ex.: all the European literature of the modal and tonal system up to serialism, some of the traditional music outside Europe);
- c) agglomerated sonorous events (or textures) perceived globally because of the extreme density of rhythm (ex.: the great stereophonic works Grupen, Carré, those called Raummusic, Ensamble, Musik für ein Haus by Stockhausen, almost the entire work of Xenakis, Ligeti's textures, many of the scores belonging to the contemporary Polish school, some scores of electronic music (Bohor by Xenakis), some of the oriental traditional music (Gagaku).

Texture is considered a syntactic phenomenon requiring a global perception, the horizontal and vertical distribution of objects in a dense time and space creating in the perceiving mind the sonorous image of a whole where detail loses its meaning. The name of texture for this phenomenon comes from the association with the dense image of the writing and it appeared in close connection with the introduction of mathematical notions in music.

Julia Kristeva associates to these categories of sonorous events (connected with the limits of human perception) three types of semiotic practices:

- o The systemic and monologic semiotic practice where the system is founded on signs, its meaning is the predetermined and presupposed element;
- o The transformative semiotic practice, where the sign as a basic element fades away;
- The programmatic semiotic practice, in the form of a dialogue, where signs are suspended by programmatic correlative captures (the semiotic practice of writing) [4].

We can thus conclude that a certain notation in the 20th century music is a way to determine the stylistic elements, the level of complexity and novelty of a certain work and implies the integration of that work among the familiar structures of the cultural systems.

3. FACTORS DETERMINING THE VARIETY OF NOTATION

During the 20th century creation has had multiple and various forms which could only be noticed with the help of elements of traditional notation. Several innovations appeared

from the point of view of musical writing reflecting these changes, as well as the transformations of the musical language.

Among the numerous factors which generated new notations we mention:

- o radical changes in the concept of creation, materialized in forms and elements of expression differing from the traditional ones;
- o the use of new sound effects in the technique of the instruments (with no correspondent in traditional music) generating modified timbres;
- o the much more numerous sources of sound because of electronic devices which offer to the composer the entire sonorous material possible;
- o the birth and development of electronic music;
- o working with the computer in the musical field also;
- o the birth of aleatoric music promoting open forms, where the interpreter has to compose and improvise himself;
- o the tendency to mathematize the relationships in the musical field and to use calculus and mathematic procedures;
- o the extremely personal nature of certain works of experimental music, which made some composers create their own notations, with references to tables usually containing indications on the various notations on the scores.

According to the new possibilities of musical expression, notation acquired a relatively large number of semiographic procedures, consisting either of new symbols (ideograms, lines, geometric figures), or of combinations of numbers, mathematic relations, frequencies, algorithms and other elements, which have completely erased the traditional notations from the scores.

The research of the notation systems in 20th century music has revealed the direct relation between the compositional concept and its visualization with the help of signs and that is the reason for the following systematization of the new semiographic tendencies:

- o the birth of intellectual and visual music mostly derived from the notation of written music, then from the heard or performed one;
- o the birth of a rigorously determined music and notation leading to the diminishing of the role of the interpreters (they just reproduce sounds);
- o the birth of undetermined music (opposed to the total determinant) and the establishing of a new role for the interpreter (that of co-author);
- o electronic music, eliminating the interpreter.

These stylistic tendencies were generated by the elimination of general syntax (as in the tonal-functional system, where several musical forms such as the fugue, the sonata, the lied etc. were considered universal) in favor of individual solutions. Each work expresses itself by its own code, each composer solves the problem of the new symbols in their own way, thus resulting in the large variety of semiographic systems. After having applied its own code of form, each work will institute its own, individual system of communication. Therefore, from the universal symbolic language like the classical notation, the 20th century music has reached a Babylon of signs leading to the impossibility (even for a specialist) to read a score without an explicative legend.

Analyzing the semiographic procedures of the 20th century musical creation, we notice that their diversity was largely determined by the following factors:

- o the widening of the sonorous field;
- o the freedom of improvisation granted to the interpreter;
- o the introduction of visual concepts in music.

3.1. THE WIDENING OF THE SONOROUS FIELD

Starting with the 20th century, the ensemble of sounds produced by the piano, divided into registers, became insufficient. For this reason, at first the composers tried differentiating the sounds according to the way they are produced. Besides the details regarding the technique of playing the instrument, frequent indications regarding the instrumental color appear such as: the metallic sound of the piano (Eduárd Terényi – Capriciu pentru mâna stângă – Capriccio for the left hand), or karate blows, like a flash, jamming, halo effects (Vlad Opran – Preludii pentru pian – Preludes for piano).

Shortly, the dynamic differences, the agogic fluctuations, the enriched timbres, all the technical procedures applied became insufficient for the need of renewing the musical language. The need to enlarge the musical field became obvious, by using all the components of the instruments – made of different materials – which, by playing them have widened their range (considered limited before). In the legends of the works the composers have used sophisticated terminologies to mark where the interpreter has to interfere, the musical treatises contain detailed schemes, proving the necessity of a detailed knowledge of the components, in order to establish the adequate technique.

All the components of the instruments were played in various ways: directly, by using parts of the human body (other than the fingers), or indirectly, with the help of other objects. New sound effects were consequently obtained, generating musical timbres unheard of before.

Timbre, quality determined by the number, intensity and duration of the harmonic series of a fundamental sound, represented, by the multiple technical possibilities, an inexhaustible source of expression. Because of the major importance given to this quality of sound, the contemporary composers have often left it to the interpreter to give color to the work, although other parameters remained open. The contemporary score became therefore more and more complex, bearing numerous notations and indications, or being written by using graphical signs different from the usual ones, drawn or explained in the legend.

The preparation of instruments, where sounds can be modified by working on the chords of the instrument, is considered a special case. The introduction of various objects (sheets of paper, plates etc.) made of special materials (plastic, paper, rubber, metal, cloth etc.) will create unusual timbres and new sound effects.

3.2. THE FREEDOM OF IMPROVISATION GRANTED TO THE INTERPRETER

During the development of aleatoric music, the interpreters had to improvise certain fragments, to fill certain parts indicated by the authors. In the musical culture of the 20^{th} century, the improvisational phenomenon developed in three directions:

- a. the improvisation coming from the aleatoric music and imposed as a reaction to the limits of serialism (which, reaching the area of perception of agglomeration of the sonorous phenomenon, expressed in textures, lost the role of detail, enabling the improvisation during the performance);
- b. the free improvisation of the type of the American school (John Cage and Earl Brown) which refers to the improvisation generated by phenomena outside music (drawing, painting, sculpture);
- c. the improvisation inspired by the folklore, where it actually originates, used in the works of George Enescu and Aurel Stroe.

The degree of improvisation of a fragment or of an entire work can be constant or fluctuating and it is established according to the number of parameters left to the interpreters. A much debated aspect among musicians was that of the boundaries of improvisation, that is the difference between spontaneous improvisation (connected with inspiration on the spot)

and the improvisation following well grounded rules (in the works following the '50s). Between the two aspects there are no limitations, many situations can be revealed where free improvisation is combined with the improvisation following certain patterns.

Another classification of improvisation is the one regarding the way it is fixed from the semiographic point of view, taking into account both the written and the unwritten aspects. Written improvisation can have multiple aspects, situated between moments with sketchy indications (in some aleatoric works) and moments with precise notations. Enescu's works fall in this last category, being born from the combination of the folkloric, improvisational character with rigorous, European construction, which indicates the smallest details.

Between these two limitations we can find the cases where sketches or other particular semiographic elements are used, as the graphic expression of the improvisational freedom granted to the interpreter needed the creation of specific symbols, which also mean something, communicate the musical message, being conditioned by the ability of the interpreter to perceive and communicate. By way of generalization and abstractization the interpreter must be able to make analogies between the data offered by the author and the production of sound, thus making a connection between the signifier and the signified. By the musical form and the graphic aspect, the interpreter will deduce the ways of expression and will organize them in the musical space and time, by laws belonging to an era, a style, or his own personality.

For improvisational moments, composers often use notations from outside the musical field, which only represent inspirational sources for the interpreters. Among them we mention:

- a. visual elements: drawings, combinations of colors, different forms of plastic arts;
- b. graphic elements: artistic or technical drawing, black and white or colored, materialized in the score of musical graphics;
- c. semantic elements (similar to poetry or literary prose), found in textcomposition. In these creations the composer starts from a complex of data (from the musical to the philosophical ones), materializing them in verbal indications, sometimes also accompanied by graphics.

Seeing these notations, the interpreters will start by translating the message, reconstructing all the elements of the musical language by their own operations. So they won't be able to operate in their own hearing system with elements of a graphic code as they are written (by visual identification), they will have to use complex re-codifications, operations of processing data at different levels.

In the music of the 20th century musical graphism and Textcomposition by notation are visual stimuli inviting the interpreter to associative musical interpretations. These types of creation will generate unique sounds (subjective), the interpreter having the decisive role to make a connection between the visual world and the acoustic one. The graphic score is therefore, polyvalent in its nature, being able to have an infinite number of versions, not necessarily resembling one another.

3.3. THE INTRODUCTION OF VISUAL CONCEPTS IN MUSIC

If painting and literature have absorbed in their configuration aspects of philosophy and science, the musical art attached to its own means dimensions belonging to other arts, especially the visual ones. Thus, even the musical rhythm, a concept belonging to music both in a general sense (music is temporal) and in a more restricted sense (where it is a projection corresponding to its development in the mind of the receiver), suffers a radical change.

A new direction of time appears in the creations of the 20th century – a temporality – as opposed to temporality. As this aspect regards a meaning not belonging to the art of sounds, the concept is called by the aestheticians of the 20th century trans-temporality. This aesthetic movement gave birth to the non-evolutional music, taking as a model musical formulas belonging to E. Satie. In his work Vexations, he asked that 32 measures be played without variation, 840 times. The defenders of this vision have processed the idea in their own languages, by traditional notations or using new symbols. Among the relevant works of this genre we mention: Aurel Stroe – Muzică de Concert pentru pian, percuţie şi alămuri – Concert music for piano, percussion and brass; Horaţiu Rădulescu – Astray pentru saxofon şi pian preparat – Astray for saxophone and prepared piano; Corneliu Dan Georgescu – Opt compoziţii statice pentru pian – Eight static compositions for piano.

The new philosophical, aesthetic and scientific concepts which evolved during the 20th century (concepts connected to the idea of time, space and universe) become more and more prominent in the musical field also and are expressed in a fertile communion between the arts. The inter-relations created, such as: music-visual arts-literature will trigger new directions and even radical modifications of the concept of creation (for example: textcomposition, photocomposition, kinecomposition, electronic music). As a natural consequence of these inter-relations, notions belonging to the visual world – space, color, shape – have entered the musical field, leading to a new system of symbols.

Space, the matching concept of time (especially present in the works of composers of serial music such as Pierre Boulez), was considered an abstract element, it didn't exist in the musical reality which is a temporal art. Initially space was approached theoretically, as an imaginative projection of the musical processes in the mind of the composer, interpreter or listener.

The creation of a plan of notional elements has led to a new semiographic system, where the symbols were arranged in space and treated differently from one composer to another. The elements connected to space were rendered by addition of terms such as: updown (to indicate register) or close-far (for intensity). Some composers, in order to reveal the spatial aspect, use in their writings stereophonic sounds. Such an effect can be obtained by arranging the instruments in the score according to their position on stage.

The spatial dimension is also facilitated by the use of electro-acoustic devices, which direct sounds in different directions, giving to the listeners the impression that they are in the middle of the sources of sounds. Stereophony, an electro-acoustic technique of spatial generation and direct transmission of sound, gains special properties through electronic music, facilitating the creation of the spatial dimension in the art of sounds.

Numerous works belonging to universal literature are created in accordance with this view, thus based on stereophonic effects: K. Stockhausen – Gruppen für drei Orchester or I. Xenakis – Terretektorh, and in Romanian music: Aurel Stroe: Arcade – Arcades and M. Istrate: Concert pentru două orchestre stereofonice – Concert for two stereophonic orchestras.

The color effects materialized in 20th century music in various ways of articulating and playing the instruments, in technical procedures used to obtain contrasts like: light-darkness, ferocious, brutal, lucent sonorities etc. The preparation of instruments itself, playing them using different articles (rubber, wood, glass, paper, sticks, electro-acoustic elements) would lead to new sounds from the point of view of color: mat, metallic, faded, brutal, glassy sonorities, different noises.

The idea of color associated with the musical text is not surprising in contemporary creation, as the performance of light and color synchronized with musical performance is one of the directions embraced in the world of artistic representations nowadays.

Another dimension of the 20th century culture is that of form, as the creation of a structure outside time was the aim of numerous musical works. Ideas are born in this area and

they will generate various trends. Some composers, following the model of Iannis Xenakis, follow objective laws of structural transformation, by applying modern mathematical theories in music (for ex. Anatol Vieru, Dinu Ciocan). Others, because of their tendency to express themselves graphically, will bring about new aspects and dimensions used in the music of the past centuries. Beginning with the need of equilibrium and symmetry in the arrangement of the sounds according to an (imaginary) axis, the musical language will converge towards distinct limitations in time and space of the sonorous events.

The 20th century music originated in a rediscovery of the old principles, for example that of symmetry, composers showing interest in this idea in numerous directions: in the architectonic construction, language, dynamics etc. The construction of the sequences itself (in serial music) is based on symmetry, which allows recurrences and related reversals. As a consequence, there is a large number of works written in an arched form or with arched sections inside, where symmetry was a basic principle, needed for balance.

The symmetry of form can also be noticed in the contour of the angled dimension (frequent in contemporary music), used as a technical support in the accumulation or scattering of sonorous tensions. The approach of this dimension implies the incidence of two different parameters (for example register with rhythm) in an angled perspective. The use of the angle is possible in all the syntactic categories and it involves factors like: density, agogics, and musical dynamics. Such moments can be found in Aurel Stroe's works (e.g. Arcade - Arcades).

A new way of distributing the sonorous objects (in monody, homophony, polyphony or heterophony) requires the dependence of the sonorous material to the density of the sonorous events. Thus we have three areas of defining musical syntax:

- o the area of detail;
- o the area of agglomeration materialized in textures (perceived globally);
- the scattered area aiming at the distribution of the sonorous objects in the wide space, creating feelings of discontinuity in perception.

Going back to textures, the area of maximal density, we emphasize that the genre has imposed semiographic procedures (associated with dense, agglomerated visual images) shaping a new type of writing. The introduction of texture in music is closely connected to the introduction of mathematical notions, which facilitates this type of constructions.

Wishing to find new ways of expression, composers often approached the open forms in their works. With the help of visual factors or of the text, they will suggest possibilities of formal articulation of their works to the interpreters. We mention a few ways of building architectonic structures implying the improvisational factor: Adrian Raţiu in his work Monosonata I notes: "The interpreter can start with any of the 15 sections of the work. Then the sequence of the following sections must be followed until the end, continuing with the performance of the first sections, reaching again the starting point. The interpreter can set the tempo: slow-fast-slow, or the other way around and several successive sections can be played in one tempo. Optionally, after playing the entire work, one section can be replayed as a conclusion, but in a tempo opposed to the one used first" [8]. We appreciate the circular form given by the composer to this work.

Circular mutations are made by the composer Mihaela Stănculescu Vosganian in Trio Contraste pentru saxofon, pian și percuție – Trio Contrasts for saxophone, piano and percussion, where the opposite groups (continuous-discontinuous; in rhythm-out of rhythm) are materialized in rhythmic categories (Aksak I, II, III – rubatto I, II, III) and alternated either simply (A.R.A.) or in a complex way (AI RI AII RII AIII RIII). The composer wishes though that, for a complete perception, adequate for this opus, the work be integrated in a concert and alternated with other sections between the sections mentioned.

4. THE INTER/RELATION OF SEMIOGRAPHY WITH REPRESENTATIONS BELONGING TO OTHER ARTS

The shaping of new aspects of the 20th century culture was possible because of new expressive, theoretic, imaginative, visual and sonorous means and ideas. They came as a consequence of the multiple researches and experiments, but also of the new vision of complementarity between arts, science and philosophy. With the purpose of visualizing the musical message, composers have initiated a series of procedures and in the other arts (like painting and poetry) representations as diverse as possible were conceived, while between all of these forms of artistic manifestation there were parallelisms.

We can notice tendencies to include in the arts a few new dimensions such as: relief, depth, special preeminence and, as a consequence of the existing relations, they borrow from one another certain characteristics [6]. For example, if in music we speak about the spatial perception of sound, for which composers refer to a number of artifices, in contemporary poetry we notice its tendency of visualization and in painting, the poetry of color.

The premises of the specialization of the sonorous space can be found in the rigorous serialism of Karlheinz Stockhausen (in the work Kontrapuncte) and Pierre Boulez (in Structures I pour deux pianos). The interest of the composers for "pictural" notations is considered a tendency of programmatic spacing and it is characteristic for post-dodecaphonic music. In music, this will reveal a new characteristic of notation: the picturalism of musical notation"[3], materialized in the graphic spacing of the semiographic elements. The phenomenon extended with the invention of stereophony and the use of electro-acoustic devices by Stockhausen.

In contrast with music, the visual arts try the acquiring of the time dimension and poetry reveals the spacing of the lines and letters, using specific patterns.

Researchers who have studied these arts in parallel from the point of view of characteristic representations wondered about their accessibility to the public. They concluded that, if painting, by its forms (more accessible) makes a positive contact, poetry, although uses a semantic basis equivalent to the spoken language (therefore it should be accessible to everybody), is being met wit lack of interest by the readers, proving thus that an understandable code is not enough.

The situation is similar in music, as the visual ways of projection of sounds cause difficulties in deciphering it and contemporary music is often not accessible and not accepted. This is also due to a much too abstract musical construction, the musical message being sometimes impossible to be communicated. We can also mention the lack of artistic education of the public, the forced subjection (sometimes involuntary) to old artistic forms.

The complexity and novelty of certain graphic expressions in the 20th century music was also appreciated by John Cage, who organized in New York an exposition of scores which he then sold as graphic works. They were strange semiographies, meticulously drawn signs, arabesques belonging to mathematics and even notations on milimetric sheets (for electronic compositions). Another suggestive example of connection between music and elements belonging to other arts are the complex forms of syncretic performance appeared in the second half of the 20th century, which use in their context: fragments of theatrical or plastic representations, quasi-autonomous musical structures, sound effects, projections, choreographic movements or attitudes or movements and attitudes taken from daily life.

This is how the happening was born, a form of theatre contemplated around 1952 by John Cage, as a pictural-musical genre which proves the contamination of arts with dimensions of related arts, for example of visual arts with the time dimension characteristic to music. The happening constantly involves the artist and the audience in improvised creations containing plastic gearings accompanied by gestures, dance and music, proving the intention

of painting to transform into action and performance. Music is being used during these syncretic performances in two ways:

- o either in the form of improvisation characteristic for the aleatoric music (when music responds to the general aim of these performances, that is to make the differences between the creator, the performer and the audience relative, by involving them in a real or potential way in the syncretic flowing);
- o or in well determined structures, which undoubtedly recognize the paternity of the composer for the entire performance.

Researchers of this genre such as: Wolf Voestell in Happening or John Gruen in The New Bohemia, have mentioned the characteristics of instrumental theater with composers like: Cage, Raik, Chiari, Warhol. Among Cage's disciples who have contributed to the development of the syncretic theatre we mention: George Brecht, Richard Mawfielda, Dick Higgins, Allan Kaprow, Nam June Paik.

In the vast audio-visual syntheses belonging to the newest forms of the genre we emphasize the fact that the electro-acoustic techniques of recording and processing contribute to the widening of the concept of performance and sometimes even to attract the composers towards this type of creation.

5. CONCLUSIONS

By the multitude of semiographic aspects, the music of the 20th century has configured a stylistic diversity, marked by changes of the musical language. We witness a reform of the ways of expression, beginning with simple improvements or modifications of the old ones and reaching the invention of new sonorous structures, semiographically rendered by extremely innovative procedures.

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