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**WEST – EAST: FROM THE USA TO THE EUROPE**

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**Summary:**

*One of the basic qualities of the XX Century musical art – a new attitude towards the sound, which is different from the tradition one, as towards a self-sufficient, self-valued phenomenon, is a common and unifying principle for different artistic and creative individuality of the modern and avant-garde periods.*

*The purpose of the article is to present only a small part of the diversity of innovation that is connected with one of the elements of the musical language, associated with the sound-pitch parameters. In addition, it is not limited to the role of the element of composing techniques representing aesthetic and artistic-content aspect of the work. The interest towards creation of sound-pitch structures, which are different from traditional ones, more widely speaking, an interest to a new attitude towards the sound are those artistic processes that have been going on synchronously and frequently independently in the works of the western and eastern<sup>1</sup> composers.*

*It should be noted that academic music exported from Europe to America, returned to Europe qualitatively renovated in the second half of XX century. It is important that the composers working in the United States created the artistic reality free from centuries-old historical consciousness which were open to creative experiment. These processes were led by Charles Ives and Henry Cowell.*

*Ives and Cowell's numerous creative findings were born as a result of free experiments with different parameters of sound material. It is important that similar processes took place in the European music, for example, in the works of Debussy, Bartók, but with special intensity they were developed in the works of Varèse and later in the creations of Crumb, Cage, on the one hand, and Nono, Stockhausen, Ligeti, on the other.*

*Thus, the principles of academic music of the European tradition, enriched with new resources in the USA, returned to Europe. These creative processes took the form of an infinite chain.*

**Keywords:** *20<sup>th</sup> century Music; Henry Cowell; Charles Ives; Edgard Varèse; George Crumb; John Cage; Claude Debussy; Béla Bartók; György Ligeti; Karlheinz Stockhausen; Timbre and Texture; Microchromatic; Prepared Piano; Cluster.*

The Geographical orientation “West – East” is a comparative notion and changes its position according to the starting point. To proceed from the traditional Eurocentrist conception, exactly that culture and cultures like that are considered to be the Western; other cultures are acknowledged as non-European or Eastern. Our purpose is not to discuss the relationships between two different cultures, but to find differences inside one European culture – to discuss the innovations occurred in musical art of the USA and Europe. In this article I’d like to display not traditional point of view – how the European

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<sup>1</sup> In this article geographical orient "West-East" means US and Europe.

musical culture influenced the American, but on the contrary, how the American musical culture influenced the European, the young culture influenced the centuries-old traditional culture. I'd like to pay attention on the innovations which appeared in the USA and introduced into Europe, or innovations that appeared at the same time independently of each other on the two continents.

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The basic feature of XX century music is to take the new attitude towards the sound, different from traditional, to understand its phenomena as a self-sufficient, perfect thing. This approach is common and serves as unifying principle of Modern and Avant-garde epochs, of different artistic direction and creative individuality.

The renovation and transformation of expressive resources of music, like processes existing in literature and other fields of art, is connected to the creation of the new model of the world, as an endless and always changeable integrity. This imagination generates the creativity, free from the existing regularity and is based on the endless experiments, which strives to discover, reveal the hidden essences of the world.

The aim of the report is to display even the smallest part from the existing, various innovations which is connected to the sound – as a complex phenomena. I don't want to be limited only with composing technology, I'd like to display it through the aesthetic and artistic essence.

The interest to the new attitude of the sound, the creation of different from the traditional structure of sound height – are the artistic processes which took place synchronously and very often independently from each other in the works of composers living in the USA and Europe. It should be noted that “exported” from Europe to the USA so called academic music, returned to the Europe completely renovated. It is important, that composers who lived and worked in America, created artistic reality free from centuries old historical consciousness and open for creative experiments. These processes were led by Charles Ives and Henry Cowell.

The idea of my today's report is based on the demonstration of new resources of music. It's impossible to speak about this thematic and not to mention the book of Henry Cowell – the famous composer and theoretic. The title of the book is *New musical Resource*. In this work, published in 1930 [Cowell, 1996] the author pays attention on the important issues of the contemporary music such as polyharmony, the quality of the sound, dissonanced counterpoint, meter, dynamic, the form etc. He discusses the different parameters of music and divides as a category new type of harmony which he names as a cluster (tone-clusters). Cluster, by Cowell is a chord consisted of minor and major seconds and is got with the upper part of obertone row. The musicologists mention that the first work, where the clusters are used is the piano cycle of Cowell – *Three Irish Legends*, 1912. It is interesting that the same discoveries we can found in the works of other composers, such as Ives and Bartók. The Clusters, which are particular as a sound complexes by structure and sound, were used by composers in piano works, because to perform pieces by using clusters is possible only by hand, fist, elbow. Later, Bartók uses analogical sound complexes in his *String Quartet # 4*. More intensively the clusters were met in the orchestra at the end of 1950 s artistic direction – sonoristic. In this direction clusters were given the particular meaning and the status of the structural unit of new musical language. It should be mentioned that in the works of Xenakis, Ligeti, Penderecki etc, the clusters went out of the frames of equal temperament. These composers started to use widely microchromatic, for getting the cluster vertical. The numeral creative discoveries of Ives and Cowell bore by using numerous new experiments towards the sound. In their works the sound – more widely the musical language, getting free from the frames of musical grammar and the tissue of sound gets new quality. Similar processes took place in the European music at the beginning of XX century, for instance, in Debussy and Schoenberg works. In their works the musical sound (of course in some pieces, not in all works) appears not as a representent existing out of musical reality, but the object of physical, acoustic reality. (Schoenberg, *Fünf Orchesterstücke, op. 16 #3*). On this issue we have to remember necessarily the “inheritance”, got from

Charles Ives' Father, George Ives, about acoustic of the sound. It is known that his favorite book was Hermann Helmholtz's *On the sensations of tone as a physiological basis for the theory of music*. On the basis of this doctrine Ives tried to expand the world of the sound, to exempt from the frames of equal temperament. He thought considered that in these processes expended Pythagorean tuning system would help him. It's true that it is impossible to take interval less than a half tone on the piano, but Ives considered that it depends on the musicality of a performer to do this. The Composer makes such notes about his the *First Piano Sonata*: "I was asked once by Dr. G., 'was this E# written instead of F natural because E# and F natural are not (not always) the same note?' 'Yes...only in the piano machine.' 'But they can be [different] if they are in the thought, and in a certain imaginary way in the ears as such'" [Ives, 1991, p. 255]. Later, in 1924 Ives realized his aspiration towards the new acoustic not only by using such notation of the musical text, but in reality – he creates *Three Quarter-Tone Pieces* for two pianos, where he uses two instruments tuned by quarter tones.

As we already mentioned the experimental nature of the American composers might be explained by socio-cultural reasons and we can consider this feature as a natural. Because of this, we can distinguish among them the works of Edgard Varèse, the European emigrant, who was the owner of European cultural traditions and the novation might have been connected with the tradition, even with an invisible threads.

Edgard Varèse, who was born in France, studied at the Prussian Academy of Music in Berlin and after the *World War I* he moved to the USA. It's very interesting that nothing is known about his "European" period, for all his scores were burnt to the fire. The author never worried about it, because in those works he wasn't able to realize the general purpose. He considered, that it was "the exemption of the sound, discovery of the new universe in music" [Ouellette, 1966, p.83]. Unlike from other modern European composers, Varèse was interested not in creation of new musical language, but was interested in "the movement of sound masses, in the meaning of different layers, in the exact dosage of the volume" [Карпентьер, 1990, p. 127]. And I'd like to discuss one more issue, which is the new resource of music and nourishes the composers next generation. It is the specific selection of musical instruments. Varèse derives from the true essence of music which is connected not to the sound relationships in equal temperament, but to the sounds existing in nature, to the natural material of music. Such position conditioned the overcoming of immediate, direct feelings, the lyric and gave priority to the alienated emotional condition. He considered that for this was absolutely inappropriate the sound of string instruments. "Our time is the time of active speed actions and not strings' vibrato" says the composer [Charbonnier and Helbreich, 1970, p. 85]. We can rarely meet the traditional composition construction of the orchestra with him (the only exception is: *Ameriques*, *Arcana* and *Ecuatorial*). Most of his works are written for instrumental ensembles, where the priority takes percussion and wind instruments resources. It must be specially mentioned that the percussions are used by Varèse not for strengthening the sound, but they are used as self sufficient instruments. Composer considers, that the percussions have expressiveness that any other instruments are deprived and they are distinctive with timber richness, volume, with the outlined attacca and without traditional melodic feature. "The percussions have such power of life, as no other instruments have. First of all they have such volume as the other instruments don't have, their aspect of sound is more alive, the attacca is more obvious, clear and fast". Discussion about Varèse won't be complete, if we don't mention his great interest of new technical resources to discover new sound and solve nonstandard creative tasks. To gain the new quality of the sound, Varèse aimed the creation of a new electronic instrument. He constructed the instrument at first with Leon Theremin and then with Rene Bertrand and hoped that as a result will get:

1. Clear sounds, without overtones;
2. New timbers, with the overtone stratification on it;
3. Will perform the combination of the sounds;

4. Will get high frequency sounds with satisfactory intensity.

Unfortunately, in 1930s the condition of the technique was unsatisfactory and his dreams came true only at the end of 1950s, in one of the first electronic music studio in Paris.

Edgard Varèse, who went to America and became the American composer to fulfill his dreams, gained his desire in the Europe. Understanding the sound as a color, composer makes it free from the strict traditional structure of height and rhythm and turns the sound to the independent element of the musical work. Such attitude towards the sound composer expressed in one of his lecture, which he reported in Santa Fe University 1936. “The role of the colour is no more accidental, episodic, sensual or picturesque; on the map divided in different flatness and spaces it turns to the effective power for expressing the different colours and to the factor unifying the form” [Simms, 1986, p.128].

So Edgard Varèse who, even in 1920s was called “the pioneer of new music” [see: Klaren, J.H. Edgar Varèse: Pioneer of New Music in America. Boston, 1928] is the creator of the new sound model the realization of which became possible only in 50-60s of the XX century in the European Avantgarde composers’ works. In the works of these composers, like Varèse, the priority is given to the instrumental ensembles, non-traditional articulation, electronic sound etc. To the creation of new world of sound strived, also, John Cage, who chose another, different way than Varèse. It should be mentioned here that in the Cage’s, who was the one of the most active “inventor”, works we must pay attention only on one of them and it will be connected to the quality of the sound, in particular, to the convention of the timbre of such traditional instrument as a piano. Several examples of “preparation” of the timber of piano we can meet in different periods of the history – in XVII, XVIII centuries and at the beginning of the XX century. It is known that Eric Satie and Maurice Ravel placed the paper or felt among the strings of piano to change the timber of the instrument. But these experiments were single. These processes – changing the timbre of the piano – took more systematical character in the USA. Approximately in the same period of time, in the 20s of the XX century, Henry Cowell writes the pieces for piano without using the key board, using only strings of the piano. These pieces (*The Banshee, Aelolian Harp, Sinister Resonance*) are significantly changing the common timbre of the instrument and are based on the totally new principles of sound making. The timbre of the piano is more radically changed in the works of John Cage. The idea of “preparation” of the piano appeared when Cage was not able to collect stable amount of musicians for Merce Cunningham troupe and found the solution of the problem in replacing several instruments with one instrument. Among the works written for Merce Cunningham troupe are the concert pieces for “prepared” piano, in particular, *Sonatas and Interludes, Concerto* for prepared piano and chamber orchestra etc. The experiment was absolutely unprecedented. George Crumb uses another ways of changing the traditional nature of the sound, as author says, he widens, extends the timbre of the sound. In his works the “preparation” is not made in advance but it is changing during the performance, as it is presented in Piano Cycles *Makrokosmos I, II, IV, Zeitgeist (Soul of the time)* for two piano etc. Expansion of the timbral resources of the instrument is gained by using different things, such as cups, metal chains, ball etc., by playing its strings or by using the special devices belonging to other instruments, ex., special stick for percussions etc. After Cage and Crumb, other European composers got interested in the conversion and expansion of the timbre of different musical instruments (among them by electronic). In this context Stockhausen’s *Mantra* for 2 pianos and electronic, where the sound of pianos extended by antique cymbals, wood blocks etc., has real high artistic value, in my opinion.

So, in the XX c music a lot of different means of changing the acoustic reality were created. But the innovations, we paid our attention, bears the particular importance for the art of the whole century and represents its important achievement. Exactly the sound as a physical phenomena revives the interest of different art directions, and serves as a center of art world of composers. This new center of music art makes active the different, something unheard before, acoustic resources by widening the

traditional instruments and their combinations, by using the absolutely new for music, brought by technical progress, instruments.

Finally I can say, that the principles of academic music of European traditions, enriched in the USA with new resources, returned back to the Europe, because, really they are the branches of one tradition. That's why the process of creative relationship turned to an endless chain.

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