Catalog of Samples of Music of the Peoples of the World and Music Computer Technologies

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***Abstract*:** *— The 20th century is celebrated by the emancipation of various parameters of a sound which has anticipated unlimited opportunities of the new synthesized soundings which have transformed sound perception, expanding musical sound range, doing possible use of nonharmonic reliefs of soundings, creation of various structures of timbres, various combinations of resonances and any combinations of harmonicas. The article considers a multidimensional timbre and micro acoustic perspective that creates various "dimensions" of multiple sound spaces, including using electronic musical instruments and modern music computer technologies (MCT).*

Keywords: *Digital Musical Instruments, Electronic Musical Instruments, Computer Musical Creative Work, Musical Art, Musical Sound, Music Computer Technologies (MCT), Sequencer*

1. Introduction

Today we are witnessing new forms of work with musical and technological means of creating highly artistic musical compositions. The rapid development of music and computer technologies, anticipating the unlimited possibilities of creating new synthesized sounds, conducting research in the field of studying various sound parameters that expand the musical sound range, making possible the use of inharmonic sound reliefs, the creation of various timbre structures, various combinations of resonances and any combinations of harmonics - all this has led to a significant transformation of the listener's sound perception of musical works and audiovisual compositions. In a number of our works we have repeatedly discussed this topic (see, for example, works [1-3]). One of the ways to solve the problem is a competent and functionally acceptable (and necessary today!) the use of contemporary music computer technologies for these purposes at various stages of the processes of collecting, processing and studying the music of the peoples of the world. Our work is devoted to the consideration of these aspects of these processes, the essence of which will be presented in the materials of our speech at the conference.

2. Traditional National Culture Is Difficult to Resist Globalization

The flow of unified global information, modern means of communication — contributes to the fact that globalization covers literally all aspects of modern human life, including cultural space.

The unification of cultural space leads to the loss of the uniqueness of original cultures.

This is especially true of traditional musical culture and folklore.

Some losses associated with the peculiarities of national music-making, intonation, may be irreplaceable and face the threat of extinction.

Special expeditions are working all over the world, they are in a hurry, before it's too late, to collect unique samples of traditional musical creativity.

It is equally important to professionally process, digitize, and annotate the collected material.

Currently, the problems of cataloging, classifying, and systematizing samples of musical folklore are of archivistic importance for musical culture — to have time to save and preserve these samples for future generations.

This problem is the problem of preserving the spiritual world, and it has the same significance for science and humanity as the famous collection of seeds of Academician Vavilov — a global treasure, the world's largest gene bank, which stores the codes of cultivated plants, including those that have disappeared.

Today, a "gene musical bank" is needed.

The main goal is to create an accessible, convenient for scientific research and musical creativity, a single, maximally complete (and constantly updated) catalog of samples of traditional music not only from various regions of Russia and Azerbaijan (countries represented by the authors of this article), but also from various states and peoples around the world. In a number of our works we have repeatedly discussed this topic (see, for example, works [4-6])

3. Music Computer Technologies

One of the ways to solve the problem is a competent and functionally acceptable (and necessary today!) the use of contemporary music computer technologies (further - MCT [7-9]) for these purposes at various stages of the processes of collecting, processing and studying the music of the peoples of the world. Our work is devoted to the consideration of these aspects of these processes, the essence of which will be presented in the materials of our speech at the conference.

Most likely, we will no longer be able to see in its original form and hear the entire musical and sound complex accompanying folk festivals, holidays, Shman kamlaniya and other bright musical and artistic phenomena of the indigenous peoples inhabiting the vast expanses of our planet Earth; we will not touch the primordial means that provide games, onomatopoeia, features of folk singing and much more. However, MCT opens up the possibility, based on the preserved descriptions, a few audio and video recordings, eyewitness memories, research, to construct the lost sound space. Studying the processes of audiovisual integration, scientists rightly point to multisensory as an integral quality of the human brain [10]), relying on the mechanisms of attention identified by researchers ([11], etc.), including tracing the influence of multimodal distractions on attention concentration ([12], etc.), one can state their significant, sometimes, a key role in the formation of musical thinking from the point of view of cultural-historical and practical-methodological aspects. Verbally formed communication of folklore carriers with musicians and taking into account individual associations based on personal life experience [13] allows achieving significant results in the preservation and translation of the studied traditions. Now it is possible to recreate the "lost reality" with the help of a sequencer. At the same time, each audio track of the sequencer can be a carrier of timbres (and/or intonation sequence) in the form of MIDI data, which are a kind of symbols of the simulated space. At the same time, we note that the sequencer is a more significant phenomenon than just a program or a hardware device for working with MIDI data [14]. It allows musical culture to exist in a new space and performs, in a sense, the function of synergetic coordination of timbres, styles, genres with each other, allowing to combine various musical traditions of different peoples and historical epochs.

One of the authors of the article (S. V. Mezentseva) has collected a unique collection of audio recordings of samples of folk art of the indigenous peoples of the Russian Far East [15-16]. Among them:

1. Nanai shamanic ritual performed by Belda Kanza Semenovna. Magnetic tape (bobbin, audio recording of L.G. Belda on 04.28.1984, village of Dzhari, Nanai district, Khabarovsk Territory). From the personal archive of L.G. Belda.

2. Nanai shamanic ritual performed by Geiker (Onenko) Gara Kisovna. Magnetic tape (bobbin, audio recording of L.G. Belda on 07.02.1983, village Daerga of the Nanai district of the Khabarovsk Territory). From the personal archive of L.G. Belda.

3. Nanai shamanic ritual performed by Zaksor Gaima. Magnetic tape (bobbin, audio recording of L.G. Belda 11.04.1988, village of Dzhari, Nanai district, Khabarovsk Territory). From the personal archive of L.G. Belda.

4. Udege fairy tales, songs and games performed by Valentina Tunsyanovna Kyalundzyug. Two audio cassettes (audio recording by S.V. Mezentseva, April 2005, village of Gvasyugi of the district named after S. Lazo of the Khabarovsk Territory).

5. Ulchi "bear melodies", rhythms of the "cult of twins" on a sound log (imitation) performed by Dechuli Mado Sopchevna. Audio cassette (audio recording by S.V. Mezentseva April 2005, village Sikachi-Alyan of the Khabarovsk district of the Khabarovsk Territory).

6. Negidal songs. Even songs. Audio cassette (audio recording by N.A. Solomonova in 1992, S. Beloglinka, s. Orel-Chlya of the Khabarovsk Territory). From the personal archive of N.A. Solomonova – [17].

7. Ulch songs, a conspiracy over a barren woman performed by Anga Sofya Yakovlevna. Audio cassette (audio recording by P.V. Lonki S. Ukhta of the Ulchi district of the Khabarovsk Territory). From the personal archive of N.A. Solomonova.

In particular, the rite of the indigenous peoples of the Russian Far East, which goes back to the distant past, is a bear holiday. This ritual action was more widespread than others among the Nivkhs, as well as the Orochi, Udege, Nanai, Evens and Evenks and other peoples inhabiting the Far Eastern region.

Thus, it is possible to recreate a multi-part variation-rondal polystructural composition of a bear holiday with characteristic timbres, intonations, stylistics, sound effects as close as possible to the original. Using the example of constructing the sound space of the bear festival, this paper shows that such experiments are possible with respect to any cultural artifacts, including partially or completely lost ones. With the participation of the MCT, it becomes possible to form a new unique structure of the musical space that exists thanks to the use of a sequencer in a new format [18-19].

4. Conclusion

A lot of regular work is required to collect, process and study folk music.

This goal requires coordination of the activities of Russian and foreign musicologists-folklorists and ethnomusicologists, psychologists, musical acoustics and engineers in the field of information technology and cybernetic ethnomusicology. The final version of the constructed sound space depends on the technical capabilities of the hardware and software complex used, including the features of the sequencer, of course, it is also determined by the qualifications of the specialist/specialists who create such compositions.

Our experience shows that the use of MCT contributes to the preservation and translation of the traditional culture of various peoples of Russia (and the world) due to the specific characteristics contained in these technologies, as well as the opportunities and prospects for their improvement.

5. References

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