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**Network art as a new trend of modern speculative art:   
a case of music experiments at HSE Creative Industries Faculty**

The «net art» as a complex matter for interdisciplinary research and a type of contemporary media art (Manovich, 2018) represents wide opportunities for academic and applied research. Digitalization of creative industries and associated technological and social changes in the music industry in the early 2000s and in the first half of 2010s (Paul, 2017; Duckworth, 2013; Mazzola et al., 2018), linked with the phenomenon of the digital transformation of the creative industries, have caused a new rise of research interest to the topic of music cybernetics (known as ‘generative music’ in the global academic literature), which is considered in the framework of exploring the aesthetics of minimalistic music of the mass culture and implementation of experimental music into the activity of sound designers and sound artists. The latter have been derived from the communion of creative professionals incorporating sound engineers and foley artists dealing with production of the audiovisual product.

Our research *focuses* on the principles of designing the actual infrastructure, aimed   
to be relevant to the modern digital economy paradigm and disruptive technologies in the core creative industries, including the stages of production, distribution, marketing and live performance of music product of the new generation; fundamental search of the values generation, and optimizing the approaches to creative product management and making practices,   
that is finally destined to form the aesthetics of music language of the live performative   
and streaming formats of the audiovisual content. Our *research object* is represented by the experiments of HSE Creative Industries Faculty’s students and teaching staff on making, distribution and public live performance of the audiovisual compositions at the edge of mass music culture and experimental live electronic music, made with applied AI music generation technologies and individual creative composition practices used by the composers of the music pieces. *The research subject* is a model of music creative process that fulfills the requirements of new realities of digitalized ecosystem of creative industries developing in the framework of economic and social uncertainty, and a search of the universal value proposal to the wide target audience of music product consumers living in the described ecosystem.

The research question is formulated on the basis of our *research hypothesis,* that postulates the net art in all its' formats to be speculative; and the speculation process is mainly connected with communicational aspects of distribution and popularization of the pieces of net art content to the target recipients’ audience via variety of network communication channels. Therefore, our *research question* is: «what is the principal difference of the methods of representation of the pieces of music content, that are representing the domain of net art in Russia, inside the categories of «human composer created music», «AI generated music», and at the edge of both directions – in cases of co-authorship between human composer and AI-based music generation services?»   
The empirical base of our research is represented by the texts of music critical articles, informative articles, press-releases and the titles of the music compositions linked to the domain of net art in the descriptions to the digitally published music creativity of teaching stuff and students of the Faculty of creative industries of HSE in the period between 2020 and 2022. The empirical base includes the music and sound experiments by Evgeny Voronovsky («Gen85» created with the usage of Mubert AI); Andriesh Gandrabur (the project «Non-Player Piano» Sound Performance created with the usage of Mubert AI); by Oleg Paiberdin, Evgeniya Evpak and Petr Skovorodnikov (Experimental evaluation of the production efficiency of Mubert, AIVA, TheWubMachine music and remix generation online services), and the experiments by students: works of NIkolay Grigoryants (JOLYNAU feat. Iosif Gri «Ladies Flaunt Fashion»), Peter Cheremnykh (remix «POBOLSHE KOFFEE» created with the usage of TheWubMachine) and Julia Kuleshova (DJulie «The Blue» created with generative synthesizers in Ableton Live DAW).

Music experiments created with the usage of Mubert AI music generation network service in the projects of Evgeniy Voronovsky and Andriesh Gandrabur have proven, that the music content, representing the limitless stream of sound samples compilation, that is set up by a user (author) choosing the setting parameters, in case if the author chooses the right venue (a website in case of Evgeniy Voronovsky, and a steam boat floating by the Moscow River in case of Andriesh Gandrabur) can be perceived by the listeners’ audience as an entertainment performance pretending for a status of the masterpiece of art. Our experimental evaluation of the production efficiency of the music / remixes generation online services Mubert, AIVA, TheWubMachine has proven relatively low adaption of the functions of the observed network music generation services for production tasks of composers and sound producers, and these findings prove the attractive value of the music generation services for the entertainment purposes of the end user. The experiments by the students of HSE’s Faculty of the creative industries, likewise the experiments made by Evgeniy Voronovsky and Andriesh Gandrabur, have proven that, provided a proper elegant advertising promo-campaigns for the digital releases of the music content, created / generated with the use of music generation / remixing online services, the interest of the target listeners audience can be arisen, especially in the countries where generative (music) art are in demand (e.g.: our experiment with transmedia effect of distributing the remixes on «#Coffee» song by Jennie Moz-Art in Japan and Great Britain– August, 2022).

The key points of our research can be formulated in the following way:

(1) the factor of uncertainty of the socio-economic conditions of creative practices, carried out by HSE Creative Industries Faculty students and teaching stuff, including variable number of creative and performing teams, determines the aesthetic and compositional principles of creating the music tissue of the repertoire and audiovisual content for the solo artists and concert bands;

(2) the reality of geopolitical and local infrastructural changes in post-COVID period after the February ’22 global military events have re-designed the institutional approach of music artists, curators and creative projects’ producers for selection of the partner networks for [digital] distribution, promotion and public recitals of the music product on Russian and global music markets;

(3) the key trend of forming the value proposal of the new music product is adaptivity of the product storytelling and myth strategies to the attractive concepts of developing innovation technologies and promising segments of real economy sector (e.g.: “A Sudden UFO” symphonietta performed by HSE Design Orchestra during “Cosmic Bodies” philosophic-musical party for (non)humans corporate event organized by the three faculty projects in the exhibition area of Moscow Space Museum, that has been welcomed by the visitor audience and the museum staff with a great enthusiasm);

(4) series of experiments with testing the AI-based music generation online services (Mubert, AIVA, TheWobMachine) has proven that most of the global mass market music generation online services still remain in the field of ‘speculative art’ and do not provide a real value on optimizing (automatizing) the routine components of the creative process for the composers and sound designers. The reason for that is educational factor: the professional background of the developers of such online services determines the fundamental approaches to sample selection and music tissue analyzing algorithms in the reference libraries. This thesis works in both directions: a creative artist (composer, sound artist, etc.) can use only understandable and applicable technological tools, needed for certain time and resources optimization. In its’ own term, it explains the resource-based music production model that is applied for producing the music content of the new generation.

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