

# Cinematic Narration Analysis And Music Computer Technologies: Meta-Subject Approach In Education

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**Abstract—** The article deals with music computer technologies (MCT) as an integral part of the technological modernization of contemporary culture and education, which is based on the theory of socio-humanitarian and cultural view. It is shown that an integrated approach to the study of the phenomenon of the music computer technologies in the context of contemporary culture can serve as a theoretical basis for identifying opportunities to overcome the imbalances arising between technocratic trends and technological growth of civilization and the spiritual and cultural development.

The paper analyzes the role of music in the film *The Assassination of Jesse James by the Coward Robert Ford*, 2007, music by Nick Cave and Warren Ellis. The structure, features of reproduction and perception of film episodes and their mutual relationship are considered.

**Keywords—** Aesthetics, digital arts, information technology in music, music computer technologies (MCT), virtuality.

## I. INTRODUCTION

Music Computer Technologies as an Innovative Field of Knowledge and Creativity

Music computer technologies (MCT – [5; 9]) is one of the concrete forms of existence of contemporary culture, characterized by internal dynamism associated with the introduction of innovative technologies, as well as the processes of virtualization and multimedia of various spheres of life. A necessary component of this process is the development of the so-called “digital art”, which is based on information technologies and transforms artistic works into digital form.

Modern achievements make it possible to create new original works using computer technologies and digital tools, as well as to cultivate artistic forms in the computer environment itself [3; 8; 10; 16; 17].

Experts in the field of digital technologies point to the relevance of developing various types of art on a computer basis: animation, video, hypertext literature, graphics, installations, photography, electronic music, etc. As a result of processing by means of digital technologies and works of art placed in a computer environment acquire the qualities of virtuality and interactivity.

The research is based on two basic definitions of MCT and digital arts presented in [1; 2; 23].

Contemporary musical experimental and creative

activity also includes computer programming [11; 12], which contains features and algorithms for creating the structure of a work of art, musical composition, arrangement, music editing, and so on (see, for example, [14; 15; 21]).

The leading innovative research and educational centers in this area are IRCAM (Institut de Recherche et Coordination Acoustique/Musique, Paris, France) and the HU University of Applied Sciences Utrecht (Utrecht, the Netherlands) together with RNTC, Radio Nederland Training Centre (Hilversum, the Netherlands).

It is interesting to study modern multimedia technologies using special equipment of Utrecht University (Netherlands, Utrecht University), the RNTC (Netherlands, Radio Nederland Training Center) in Hilversum and unique audio-visual data in the Museum Speelklok (previously known as Museum van Speelklok tot Pierement), samples of modern multimedia interactive art in museums in Amsterdam such as the Stedelijk Museum, the main Museum of modern art in the Netherlands, and the De Appel Arts Centre for contemporary art. This research was conducted as part of the study of MCT as a phenomenon of contemporary culture in the dissertation work of L. Romanenko [25].

The “Multimedia Storytelling” program, developed and co-organized by Utrecht University, Utrecht, the Netherlands; Utrecht University of Applied Sciences,

Utrecht, the Netherlands; and RNTC (Radio Nederland Training Center, Hilversum, the Netherlands), allows students to create new artistic genres and types of art objects. Often, the use of new technologies increases the differences between classical and modern art. As an example, the training process analyzes samples of multimedia installations and performances presented at the main Museum of modern art in the Netherlands Stedelijk and the Centre for contemporary art De Appel Arts Center.

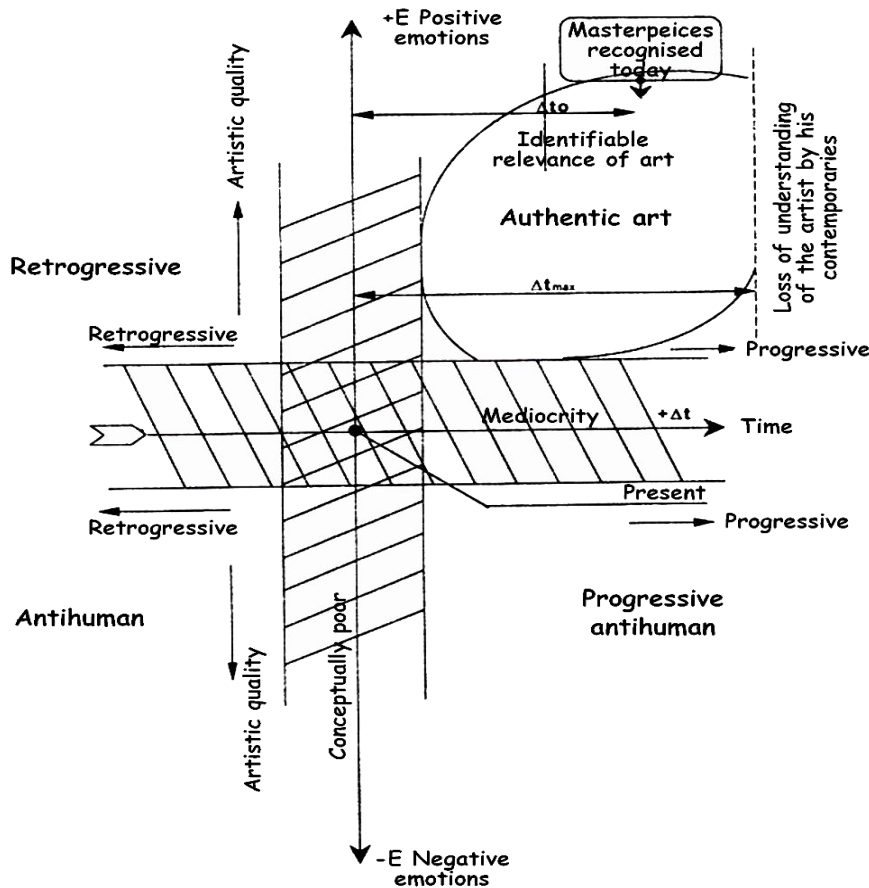
Attention is drawn to the fact that interactive software can be used not only for artistic purposes, but also for various socio-cultural projects: psycho-emotional therapy of people and children with autism (interactive project "Somantics", Pete Hellicar, Joel Gethin Lewis), "social design" for urban service and modeling of the industry and infrastructure of the future (Daan Roosegaarde projects). When implementing specialized cultural projects for inclusive education [13; 20] and designing the future, the studios bring together specialists of various profiles: artists, designers, programmers, musicians, sound engineers, doctors, screenwriters, engineers, etc.

There is also a special sensitivity of contemporary art to multimedia and music computer technologies [6; 14].

The possibilities of innovative educational centers in the field of music and computer technologies and multimedia in St. Petersburg (Russia) are analyzed separately): St. Petersburg State University of Film and Television, St. Petersburg University of Humanities and Social Sciences, Education and Methods Laboratory Music Computer Technologies at the Herzen State Pedagogical University of Russia. It is emphasized that the study of music and computer technologies (sound editors, sequencers, specialized plug-ins, sample libraries, etc.), means of audio and video synchronization, and means of subsequent additional video processing ("post-production») and visual network technologies for publishing multimedia stories on the Internet.

## II. COMPOSITION. AESTHETICAL CONTEXT

Evgeny Murzin's book *At the Beginnings of Electronic Music* is an important discovery in the search for attitudes to music. The chapters on emotions in art are an example of the beautiful articulation of thought.



E. Murzin. "Art in Coordinates Emotions and Time"

According to author, "the greatest aesthetic pleasure (from the perception of socially progressive works of art) occurs in the area of the optimal combination of positive emotions of joy and rage. No aesthetic information of true facts of life, undermining faith in a human and his ideals, that is, self-assertion itself, can bring the joy. Yet consuming authentic art contributes to our self-assertion." [24]

### I. HELPFUL HINTS

As an example, one of the authors of the report (Vladimir Zobkov) gives the experience of a comprehensive analysis of audio-visual content and technical means of its implementation in the film *The Assassination of Jesse James by the Coward Robert Ford* (2007). The structure, features of reproduction and perception of film episodes and their mutual correlation are considered.

In general, analysis is usually done in terms of structure, goals, feelings, emotions, and specific messages [22]. From the moment the viewer aware of the films name, it is offered to follow the story the final of which is known. Accents put in way so protagonist and antagonist switch places and chronological sequence perceived in reverse. Image and sound guide viewer in opposite directions (realities), when they clash creating moments of deeper, yet abstract, understanding of the drama.

Diegetic themes:

Background laughter and whistle-themes for Bob Ford.  
War song-diegetic for Jesse James.

Ambient sounds, with the outdoor scenes limited to wind and birds (upper frequencies) horseshoe sounds leaving the rest of the mix to the score, assuming if the score itself was all these sounds. Holistic environment sounds, almost unrealistic, only to signify the change of environment when necessary. The narrators voice key is set to complement the harmony of the theme.

Ambient quietness is not a silence of wild nature, low noise similar to the sound of distant highway, how we perceive quietness today.

Non diegetic music:

"Song for Jesse" - love theme.

"Lovely thing" and "Rather lovely thing" - driving

forces of narration, refer to passing time and travel. Also serve as transitional backgrounds when time and space change.

"Falling" - expresses attitude, whether applied to travel or event. Melancholic.

"What must be done" - soft take on track "Song for Bob."

"Song for Bob" - heroic, compassionate theme for Bob Ford.

"The money train" - epic theme, opening the story. The mix for train's arrival, made of descending folk song sound and ambient noise aimed to represent the silence and concentration of the moment. Sound of the train not a real train sound but either metaphoric noise of industrial nature and it introduces the music theme again responsible for every sound of the scene, as all the environment sound fades completely, the train approaches in the "quietness." Thus the arrival with the ambient sound cut off (expectations of hearing realistic noise in this case altered) stands for event of spiritual nature, fate, rather than solely realistic event.

### II. META-SUBJECT APPROACH IN EDUCATION WITH USING MUSIC COMPUTER TECHNOLOGIES

Active inclusion of MCT in the educational process allows to achieve the following learning goals:

- obtaining new sustainable educational results taking into account the specifics of the changing society and its modern needs;
- creation of an integrated digital learning environment;
- formation of students' activity research approach in the understanding of knowledge;
- mastering the ability to use computer technology as a practical tool for working with the use of MCT;
- formation of students' ability of independent formulation and solution of creative problems, critical attitude to existing information and intellectual involvement in the desired problem;
- education of students active position to knowledge [4].

The use of MCT in the activities of a contemporary music teacher involves the following tasks:

- to include in the system of music education of students modern technologies of sound reproduction;
- significantly expand the set of information and

illustrative materials available to students and teachers in the classroom and outside the classroom;

- improve the quality of presentation of the material and make it more interesting and attractive to students compared to traditional textbooks;

- to support the creative and research work of students and teachers, etc.

Computer musical creativity is a means of formation of information competence of both the student and the music teacher.

In addition to the solution of these priorities, the use of MCT and electronic musical instruments allows the use of computer services that greatly facilitate the work of the teacher and the student: a quick search for information, the preservation of intermediate results and its results, automatic verification of test tasks, etc. Based on the best examples of classical music, with the help of a set of programs developed by us, the introduction of MCT into the educational process, which corresponds to the contemporary level of education.

The experience of implementing a meta-subject approach to the process of integrating information and artistic learning means of education in the system of education on the example of college with in-depth study of music cycle disciplines and informatics allows you to create a model of synthesis of general and additional education of student by one educational institution, available for replication in various educational institutions (see, for exp. [18; 19]).

The process of integration of information and artistic means of education in the system of general education with the use of contemporary music computer technologies as one of the tools in the formation of high-tech educational creative environment of the school, aimed at achieving new educational results by all participants of the educational process is illustrated.

Set out metatechnology of the formation of values through (continuous) education using the tools of digital creative educational environment (media).

### III. CONCLUSION

Music computer technologies are an integral part of the technological modernization of modern culture and education, which is based on the theory of socio-humanitarian and cultural views. It is shown that an integrated approach to studying the phenomenon of musical computer technologies in the context of modern

culture can serve as a theoretical basis for identifying opportunities to overcome the imbalances that arise between technocratic trends and the technological growth of civilization and spiritual and cultural development.

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