INTEGRATION OF DIGITAL TECHNOLOGIES INTO THE SPHERE OF CULTURE AND ARTS

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Abstract

The article examines the relationship between modern trends in the philosophy of culture and the integration of digital technologies into the field of art. New digital art forms are not explored in a differentiated manner, in terms of technology and socio-cultural changes, but in an integrated one. This topic is relevant, since digital technologies have become engrained in our lives, forming new aesthetic ideals and language in art. The modern era of information technology entails global changes in the social system and affects all spheres of human activity. The integration of digital technologies into the socio-cultural environment is due to technological progress in the field of digital solutions. Among the existing variety of digital art, the following forms should be noted: the art of video art, digital painting, computer graphics and computer animation, electronic music, digital literature and much more. The development of digital technologies not only expands the theory and methodology of culture, but also the educational process in whole. Digital arts, which are based on the concept of using digital technology products for applying them in human artistic activity, while developing and progressing, equally attract the attention of both people of art and people of science. This progress has included not only the development of existing, already well-known art forms, but has also entailed the birth of new types and forms of artistic activity.

Keywords: Culture, digital arts, digital technologies, integration

1. Introduction

Digital technologies are solutions which are based on the representing the signals in discrete stripe of analog levels, rather than in the form of a continuous spectrum.

Digitalization is a natural stage in the society development, which has contributed to a change in human consciousness. Digital technologies, in contrast to analog ones, have a number of advantages, for example, they transmit sound signals without distortion, which contributes to listening to music in good quality. Storing information in digital systems is easier than in analog ones, etc. (Blagikh, 2021).

Integration, in its broadest sense, is the process of combining several disparate objects into a single whole.

Digital technologies are rapidly being introduced into all spheres of social life, primarily in the sphere of culture and art. Cultural codes and meanings are increasingly being digitized. Art has fallen under the influence of computerization, there is a rapid increase in new types of digital information: in multimedia, digital holography, virtual reality, video and other forms. There have been significant transformations of traditional art forms since the invention and development of information technology.

Digital art can be purely computer-generated or taken from other sources, such as a scanned photograph or an image drawn using vector graphics software using a mouse or a graphics tablet.

The relevance of this topic is due to the growing role of digital technologies in the cultural sphere and the emergence of a wide range of new media culture and art forms based on digital technologies, which go beyond traditional art, which makes it difficult to unambiguously define their nature.

Our article proves the need to consider the genesis of new digital art forms not in a differentiated manner in terms of technologies and in terms of socio-cultural changes, but in an integrated one.

The degree of this problem development is not high, since digital technologies in the sphere of culture and art are a relatively new problem field.

Among the studies devoted to the analysis of individual stages of digital culture, the formation of technological art, the works of Grigorieva et al. (2019), Kiseleva et al. (2019), Strokov (2021) and others should be emphasized.

2. Problem Statement

The modern era of information technology entails global changes in the social system and affects all spheres of human activity. Art is no exception. From the 1990s to the present, there has been a large-scale transformation in the sphere of art, due to the emergence of new digital technologies (Kiseleva et al., 2019).

The emergence of the World Wide Web allowed digital environment to become a global platform for communication of all art forms.

"Strategy of the state cultural policy for the period up to 2030" and an action plan for its implementation in 2019-2021 (Order of the Government of the Russian Federation, 2019) developed by the Government of the Russian Federation, allow actively using the digital technologies in the cultural space, which makes it possible for cultural institutions to become more accessible to visitors, as well as to improve the quality of cultural values perception.

Information technologies are integrated into museum and exhibition activities in two main areas: firstly, as an auxiliary tool for registration and storage (museum AIS), creating electronic explanations (electronic labels) and museum websites, and, secondly, as art installations, interactive tables, multimedia presentations and exhibitions, etc.

Introducing artists to new technologies has allowed to obtain a whole layer of digital art, which has become a part of mass culture. A completely new form of contemporary art has emerged – "performance", which has been actively spread at festivals, museums, theaters, etc.

One of the media art features is the ability to perform all kinds of manipulations with digital media, perform combinations between various art forms, organize space and time in a completely new way, and create optical illusions (Koroleva, 2018).

Currently, computer graphics have taken their rightful place among other art forms. All kinds of graphic editors allow artists to combine reality and virtuality, which is a defining feature of digital art. Modern technologies have allowed a person to augment reality, thereby influencing the culture ecology in whole (Barkova et al., 2017), more and more often the viewer becomes directly involved in the environment modeled by a graphic artist. Due to the ample possibilities, computer graphics has become an integral part of the modern society life, digital painting prevails over traditional art forms.

Augmented reality is used in printed products: posters, banners, magazines and other printed materials. In periodicals, augmented reality is used when visualizing the advertising text to attract the audience's attention (West et al., 2018). Therefore, advertising is becoming one of the key areas in which digital art is being actively introduced. One of the most popular ways to influence a potential consumer is Digital Marketing, which is used in any modern business sphere. The business industry attracts specialists who carry out creative projects to promote a certain brand (Jayson et al., 2018). Images or video sequences are the basis of a successful advertisement which has a certain aesthetic, emotional, psychological impact on a potential consumer.

Computer games have become another reality of our time; this phenomenon claims to be a new type of contemporary art which has emerged as a result of the "digital revolution". However, this industry did not receive official support due to the ambiguity of the focused targeting regarding art in general, therefore it is believed that a computer game can only become a kind of a platform for demonstrating already existing arts forms (Savchuk, 2017).

Digital photography is directly related to "digital art". Digital cameras built into cell phones allow us to create not only photographs and photo prints, but also installations, performances, etc.

When talking about digital art, it is impossible not to pay attention to another visualization phenomenon, such as video art, which has become a worthy alternative to television (Ford, 2019). Such a rather developed industry as animation and animated cartoons, standing alongside with other forms of digital art. Nowadays, more and more emphasis is being placed on 3D animation.

Among the existing variety of digital art, the following forms should be noted: the art of video art, digital painting, computer graphics and computer animation, electronic music and digital literature.

Technology makes works of art and cultural institutions more accessible to the mass consumer (Ponizovkina et al., 2017). For example, many Russian museums use interactive screens, slide shows, touch panels and other equipment in their work. All cultural institutions actively use social networks to

attract visitors and develop their websites. Museums create online educational programs, lectures and virtual tours which are highly popular during the pandemic (Evdokimov et al., 2020). As a part of the educational process at Plekhanov Russian University of Economics students and teachers, in addition to traditional excursions to museums of Moscow, actively use online excursions to the Museum of Entrepreneurs, Patrons and Philanthropists, the Russian Museum and others (Ismailov et al., 2021; Kindzerskaya, 2020).

In addition, within the framework of the National Project "Culture", multimedia guides are being created for state and municipal museums using augmented reality technology based on the "Artifact" digital platform.

Theaters offer a mobile application "Iskusstvo. Vslukh" (Art. Out loud), which needs to be downloaded to your mobile phone and, when you come to the theater, used with the headphones. The staff will help you connect to a Wi-Fi network for a seamless access to audio description, i. e. verbal explanations for the blind. Throughout the performance, the voices of the artists describe everything that happens on the stage in detail. With the help of the application for people with visual impairments, performances-nominees of the "Golden Mask" festival have been adapted, for example, "Oedipus Rex" of the Vakhtangov Theatre. Now in the "Iskusstvo. Vslukh" application there are 9 performances and the "Fair of Ideas" documentary at the Multimedia Art Museum (Moscow). In the capital, "Ivanov" drama at the Theater of Nations, "Sweeney Todd" at the Taganka Theater, "The Ugly Duckling" musical at the Russian Academic Youth Theater and the "Tartuffe" comedy at the "Stanislavsky Electrotheatre" are also available. In St. Petersburg you can watch "The Storm" at the BDT with audio description, in Novosibirsk – "A Nameless Star" musical, in Voronezh – "Uncle Vanya', in Perm – "Enough Stupidity in Every Wise Man" vaudeville, in Yekaterinburg – "The Passenger" opera.

The technological process does not stand still, so in the theater, for greater clarity, immediately after an artist completes the drawings and the set model, it is possible to create a full 3D model of the future production with all the properties, costumes, mise-en-scenes, sound, light and video scores. The Bolshoi Theater was the first one in Russia to successfully implement this technology in the process of creating a performance.

There is a certain confidence that the development of digital technologies and their use by various institutions of the cultural and leisure sphere will not stop there, and experiments and implementation in the sphere of culture will continue.

3. Research Questions

In the course of the research, we have raised the following questions:

1) What is the reason for the integration of digital technologies into the socio-cultural environment;

2) What digital technologies are used in cultural institutions, in museums and theaters, in particular.

4. Purpose of the Study

The purpose of the study is to identify the features of the integration processes of the digital technologies development in cultural institutions, as well as the impact of socio-cultural changes on the development of new digital art forms.

5. Research Methods

The study uses the methods of systematic analysis of this problem, as well as an interdisciplinary approach to the study of its various aspects, which required to refer to the search for publications concerning issues of digital technology, art history, new trends in the philosophy of culture and spatial arts. Applying the method of ascending from the abstract to the concrete (Strokov, 2021) is carried out in a conceptually grounded use of modern trends in the philosophy of culture and the integration of digital technologies into the field of art.

6. Findings

The conclusions and arguments, which form the authors' personal position regarding the approach to the analysis of the problem of digital technologies in culture and art, were the results of the study. It is proposed to consider the new digital art through the integrated genesis of technologies and culture, taking the integration peculiarities into account: the relationship between the philosophy of culture and the digital technologies development, the mixing of artistic and technological contexts of new media art, the importance of multimedia technologies as a toolkit and as an object of art.

Digital technologies have become engrained in our lives, forming new goals, objectives, aesthetic ideals and language in art. This is expressed in the engineering nature of creativity, in the fact that now art for media artists is akin to research, and art is being transformed into digital technologies and network architecture (Tang, 2017).

Multimedia technologies make it possible to use information in the educational process remotely, which is especially important during a pandemic. VR technologies in teaching are gaining more and more popularity. The use of virtual reality technology in the educational process changes not only modern education, but is also actively introduced into the sphere of culture and art.

7. Conclusion

In conclusion, it should be noted that, at the moment, all forms of digital art continue to develop and increasingly penetrate into various spheres of human activity.

The integration of digital technologies into the socio-cultural environment is due to technological progress in the field of digital solutions, the concept of "digital arts" has appeared, which are based on the concept of using digital technology products for applying them in human artistic activity (Oddane, 2015).

New art forms, while developing and progressing, equally attract the attention of both people of art and people of science. This progress has included not only the development of existing, already well-known art forms, but has also entailed the birth of new types and forms of artistic activity.

Taking the huge population's interest in digital technologies into account, we can confidently claim that the use of a multimedia guide with augmented reality technology in museums will contribute to the popularization of Russian art and culture.

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