

Conference Paper

Artistic Reality in the Space of Digital Technologies: Towards the Problem of Art Criticism

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Abstract

The article is devoted to the comparison of two realities – the digital and the artistic. We demonstrate the principal difference in the mechanisms of their creation. Contemporary artistic practice and theory are undergoing changes to reflect cultural and technological transformations. Today, digital technologies are ubiquitous and widely used in documenting artworks, making them popular and widely available. Also, digital technologies that work with more subtle tools and materials become especially popular and open new horizons for art. However, the structure of digital technologies does not, and possibly never will, enable a living energy impulse of the artwork to become a part of the virtual world. The nature of digital reality is rooted not in the rhythmic but in algorithmic elements, thus putting limitations to what can be achieved through such methods. We discuss the role of a work of art as a biogeochemical factor and the role of digital technologies in deeper connection between viewers and artworks.

Keywords: artistic reality, digital reality, "living matter", computer graphics, theory of art.

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1. Introduction

The present situation in science focuses on the subtle nuances that used to be evaluated earlier as inaccuracies. For example, it is important for the experiment results in quantum physics the presence of one or two test observers of their complete absence. Contemporary art theory is changing as well. It is striving to capture, describe and fix the ultimately subtle and impossible to capture phenomenon that is yet profoundly significant. I. Antonova in her analysis of present-day attribution of art works points out that the attribution process starts with an intuition of an art historian, which is indispensable for the researcher. That is the reason why digital technologies that work with more subtle tools and materials become especially popular today and open new horizons for art.

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2. Materials and Methods

Researchers study the relationship between artistic reality of a certain art work and digital technologies from different angles. Boris Groys analyzes art reality as a “fiction space” [1], accentuating its special status in relation to the constant reality, while information technologies, in general, and Internet space, in particular, as an tool for de-fictionalizing meaning that information technologies highlight the material reality or offline reality of the artwork (in a broad sense of this term). British musician and producer Max Cooper together with artists Kevin and Parike McLaughlin, Nik Cobby, Tom Hodge, Andy Lomas, Maxim Kozer and others are trying to question the possibility of drawing a border between physical, artistic and virtual realities in the space of our present-day life. They point at the invisibility of movements from one reality to the other. In his video installation *Platonik* [2] the artist is merging electronic, digital reality into video documentaries demonstrating the obvious expansion of digital technologies. In the work *Incompleteness* [3] the artist is revealing the invisible layers of everyday reality which become splintered and invisible due to the digital reality.

3. Discussion

It is true that modern tools of such popular graphic programs as Photoshop, InDesign, CorelDraw and others enable us to work with a great amount of super-thin layers that contain light and create the work of digital graphics (digital art, digital 3D-models and others) as a hyper-complex, super-thin structure that exceeds the thin and multiple layers of semitransparent scumble of traditional art manifold. Today technologies make working with invisible, absolutely transparent elements of images possible as if they were a fixable reality. For instance, BMP format enables us to save invisible layers, invisible parts and elements of the image, which are extensively used in contemporary design for printing on different color and texture foundations. Moreover, the Internet space or even a PowerPoint presentation can easily combine sound, light, movement and form and you don't need to be a professional to do that while these were the synthetic qualities of the formal language that the avant-garde artists were looking for on the beginning of the 20th century, viewing them as a way of radically transforming the world around.

An ability to create sophisticated simulating illusions in virtual reality truly seems to bring it closer with the subtle material reality of artistic work. It is really fascinating to take a closer look at the method used to create these realities. Digital reality produces

images that are built with pixels (from Eng. *picture element*), where every pixel has two characteristics – its position in space and local color that is identified by the digital code of the program. At the same time, every pixel is alienated, isolated from all the other pixels nearby. When there is a need to transform the image, it is rebuilt mathematically by recalculating space and color characteristics of specific pixels. For instance, JPG format remembers information not about every pixel but depending on their compression, information about every tenth or twentieth pixel, while the space between them is filled with pixels which follow a certain algorithm based on the characteristics of the last pixels. In other words, the image that exists in the space of information technologies can have very serious distortions in the way it shows the constant reality (including errors in depicting the works of real art). In such case, the break with constant reality is followed by the production of finite reality of the virtual space that doesn't have the endless depth of the real, original, "live" work of art.

The artwork that was created by an artist is built in a different way. Every element is closely linked to the work in general and with other atomic elements in artwork because of the live energy emanated by the artist himself. Many scholars (E. Basin, V. Bychkov, V. Tasalov and others) write about the special significance of energy as a notion in understanding the work of art, highlighting the crucial role of an artist as a condenser or transmitter of energy in the Human-Universe system. Describing artistic reality as a special spiritual and material substance, V. Tasalov stressed "the geometry of different light saturation for the eyes of the subtlest levels and surfaces of any cultural or artistic form" [4]. He also mentions the special light power of art. Eliciting the significance of an original artwork, N. Polyakova talks about micro-spaces adjoining the physical material of artwork and comprising a cardinaly important element in the structure of artwork itself [5]. W. Benjamin analyzes the situation of losing similar shells, losing the Aura of the artwork [6] in the age of mechanical reproduction of art objects.

Even in the situation when the principle of visible fragmented artistic reality is at work (for example in the works of impressionists, pointillists, masters of analytic art of P. Filonov etc.), energy of the live substance [7] (according to V. Vernadsky), whose circulator is the artist, represents the idea of integrity on the level of physical material of the artwork. Extensively using pointillism as an artistic technique Paul Signac underlined the importance of finding the right amount, dose of this or that color that the artist is working with. He believed that a stroke in the shape of a point to be just the means that create a vibrating surface of the painting, but which doesn't produce harmony or coloring.

The separation doesn't really need a stroke in the shape of a point: points can be used in canvases of small sizes but should be rejected for large-scale ones. If we want to avoid discoloring, we should take a size of an individual stroke and make it proportional to the size of the artwork. An individual stroke – changeable, living, luminous is not the same as a point – monotonous, dead, material. [8]

The point itself as the tiniest element in the works of artists of graphic artists demonstrates variety and diversity.

“Abstractly or imaginatively, the point is thought as ideally small, ideally round” – says V. Kandinsky. “In actuality, it is an ideally small circle. Nevertheless, just as in the case of its size, its limits are equally relative. In its material form, the point can assume an unlimited number of shapes: it can become jagged, it can move in the direction of other geometric forms, and finally develop into entirely free shapes. It can be pointed and tend towards the triangular shapes. Or, prompted by an urge for relative immobility, it can take on the shape of a square. When it has a jagged edge, the elongated projections can be of smaller or larger size and take on the relationship to one another. Here no boundaries can be fixed, and the realm of points is unlimited” [9].

This cardinal difference between a standard matrix of LCD screen mechanically divided into the same pixels and organic surface of canvas or paper that are permeated by intuitive measure of color and form that comes from the rhythmic pulse of the artist's heart through his motor skills, captures the difference in spatial depth between the two realities.

If we try to measure the depth of digital reality, then we can easily reach its limits which looks like a row of clearly distinctive squares (enlarged pixels). If we do research of microsection taken from the painting, which involves the use of a microscope – a procedure typical for art evaluation – we won't get to the end of the painted matter because the more we increase our microscopic range, the more and more entire worlds of microstructures diverse in shapes, colors, combinations etc. will be revealed. Thus, a life/original work of art is “a way of overcoming the abyss between the infinitely big and the infinitely small”. At this point, by transforming the earthly matter, art fulfills the role of biogeochemical factor in Earth's life and becomes more than just a sociocultural phenomenon.

4. Conclusion

Today digital technologies are irreplaceable in the process of documenting the artworks, making them popular and informatively available. They incorporate the art objects into extensive information flows that pass through human being. Nevertheless, the live stream of artist's power and his/her will is lost in this process of transformation, when the live work of art gets digitized. As an example, let us examine the display of the ancient Shigir Idol in Sverdlovsk Regional Museum. It reveals the possibilities of delicate co-existence of digital reality with the artistic one. Interactive screen that gives the viewer an opportunity to arbitrarily minimize or maximize the virtual copy of Shigir Idol provides a chance to take a closer look at the ancient sculpture from all sides and with maximum scrutiny, while the original work of art made of wood, which is over 11000 years old, is exhibited in the same space. Rising above the visitors, it makes them feel its greatness and monumentality, helps the viewers to do something more than assess the sculpture as a historical artefact, namely to measure themselves against the idol, to feel the poetry of its artistic form and to visualize the wisdom of eternity.

Constantly improving technologies warm-up, push and advance the human mind towards the live perception of universal interconnectivity, universal integrity of the world as an infinitely immense reality, as the most sophisticated space and time continuum. Although the structure of digital technologies doesn't, and possibly never will, allow to make a living energy impulse of the artwork a part of the virtual world. The nature of digital reality is rooted not in the rhythmic but in algorithmic elements. Consequently, the artwork as a part of artistic reality gains a special status in modern life by performing a sort of "handshake at a distance" (V. Favorsky) that is possible only between the living subjects.

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