

ART IN PIXELS

UDC 7.038.53:75

Krasimira Borisova Drumeva

University of Veliko Turnovo, Department Graphic Design and Visual Communication,
Bulgaria

Abstract. *The development of various technologies in the second half of the twentieth century brought about the emergence of new art genres. While these new forms of art were striving for recognition and gaining popularity, the older legacy forms were also undergoing some transformations. Undoubtedly, technological innovations alter the relationships between the forms of creative expression and the audience for which art is intended. Art has not been perceived in the same way after the digital media came on stage. While arguing if computer graphics is actually a form of art, we tend to overlook the main issue: does the development of new technologies changes the entire nature of art. Traditional aesthetics is faced with the huge problem to collect, analyze and summarize the wide range of newly emerging genres of art. Most of them are not susceptible of generalization and methodization because of the unlimited freedom and dynamism in their development.*

Key words: *fine art, cultural inheritance, digital technologies, visual communication, virtual environment.*

The development of technologies in the second half of the twentieth century inspired the emergence of new art genres. While these new forms of art were striving for recognition and gaining popularity, the older legacy forms were also undergoing some transformations. Photography became an alternative to painting, motion pictures succeeded photography, television absorbed cinema and the Internet engulfed television. Undoubtedly, technological innovations alter the relationships between the forms of creative expression and the audience, for which art is intended. Art is not perceived in the same way after the arrival of digital media. While arguing if computer graphics is actually a form of art, we tend to overlook the main issue – whether the development of new technologies changes the entire nature of art. Traditional aesthetics is faced with the huge problem to collect, analyse and summarize the wide range of newly emerging genres of art. Most of them are not susceptible

Received December 2020 / Accepted December 2020

Corresponding author: Krasimira Borisova Drumeva

University of Veliko Turnovo, Department Graphic Design and Visual Communication

E-mail: drumevika@abv.bg

to generalization and methodization because of the unlimited freedom and dynamism in their development.

Since its beginning in the eighteenth century, art history deals with the traditional classification of fine arts: painting, graphics, sculpture, drawing. This classification is the underlying structure in all spheres of art: from cultural institutions – museums, galleries, educational institutions – to consumers and funding organizations. Assemblage, happening, installation, performance, action displace this structure. These forms of art are often intangible as they use a combination of different elements of the artistic image or create an artwork that is beyond the object. The phenomenon of dematerialization of the artistic object was initiated by conceptual art. For the first time the artist's hand was liberated from its inherent role in the process of pictorial reproduction, its function was replaced by lens, tablet, software and other digital playback techniques. Technology allows for quick placement of objects, the process is so fast that it can keep up with the though emergence of the artist's concept. Video production captures the frames at the same speed as the event unfolds [2].

These developments in the visual scene set new tendencies in art. The trend is related to the changing attitudes towards the essence of art.

FINE ART ASSUMES THE SO CALLED NETWORK STRUCTURE

Art reflects the entire multilayer range of social relationships that inevitably define the context of its emergence and existence. These relationships form a network based on a new artistic principle. Art is engaged in representing interpersonal relations, recreating the relationship between at least two objects – no less than the artist and the spectator. In the past, fine art was seemingly based solely on the author's subjective self-expression, without considering the viewer's perception and reaction. When artists use the media, they overcome the difficulty ensuing from the condition to pursue sole self-expression. The artist and the viewer no longer play the static role prevalent so far. Art is now open to the new environment of the digital network. Its purpose is already different from the one-way self-centred intention of the representative media. The author finds expression through mediation in a "face to face" relationship [5].

The project "Interactive Generative Formations", a creative experiment of Svetoslav Kosev and Atanas Markov, directly illustrates the ambition of contemporary artists to interact with their audience (Fig. 1). The authors used high-tech equipment – Kinect sensor for Xbox and software processing – to visualize the movement of passing viewers. As a result of artistic and digital collaboration an artwork effect is achieved in the form of direct interaction between the object and the subject involved in the situation. A virtual field is created wherever a viewer appears on screen as a grid-line silhouette and is able to influence the dynamics of the artwork itself. The lines are connected by an algorithm which makes the installation both, interactive and generative. In this virtual environment, a pseudo-random network consisting of points with defined physical properties is scattered. They move and fall by the force of gravity, but can also interact when they collide with the viewers or with each other. They are connected by the same algorithm as the viewer's outline – an approach seeking to create a graphic experience. As a result, the viewers alter the dynamic images, becoming active part of their aesthetics. The aim is to provoke the viewers to participate more actively and engage themselves in a particular digital space by using a playful element to [8].

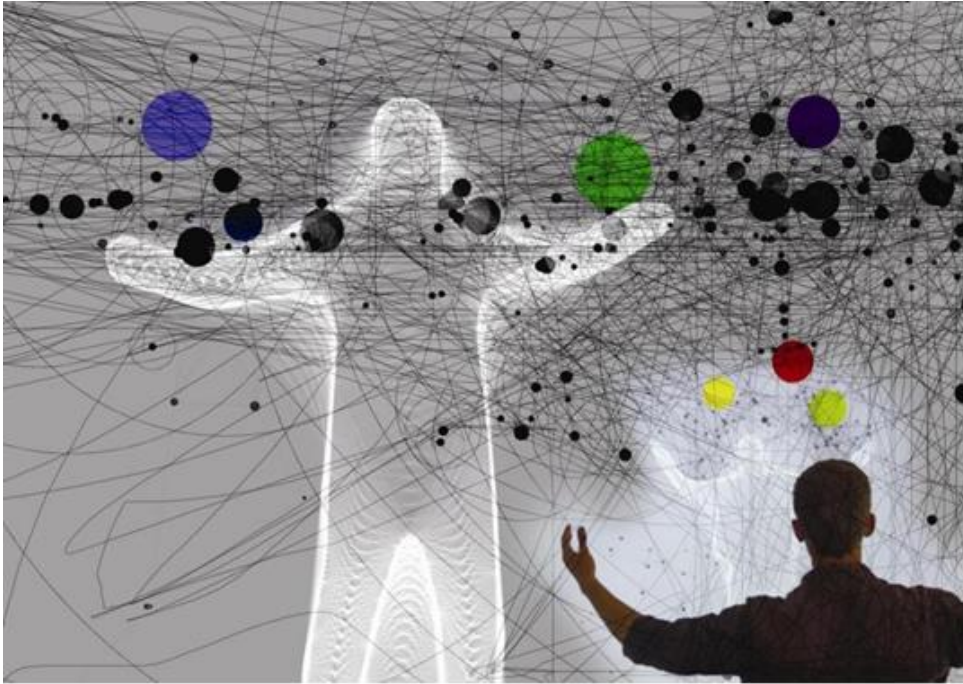


Fig. 1 "Interactive Generative Formations", a creative experiment of Svetoslav Kosev and Atanas Markov

ART BECOMES GLOBAL IN TERMS OF DISTRIBUTION

Globalization is inherently a process of establishing a common language of expression, understanding and perception of common cultural patterns and values. It sets the premise that one culture is assimilated by another, and is a process that generates something new or, in any case, substantially transforms the present. The transition to such "new" culture suggests certain crises, such as expansion of the assimilating culture that suppresses national values. In this context, globalization is both detrimental to uniqueness, and at the same time drives the development and promotion of art and cultural exchange [3].

DIGITAL IN TERMS OF PRODUCTION AND PRESENTATION

Utilising digital technologies for the purposes of art allows quick and easy reproduction of artists' works. Elite art becomes available to the masses and access is not limited. Photography, motion pictures, digital images generally allow the pieces to travel freely to viewers, wherever they are (Fig. 2).



Fig. 2 Adam Martinakis, Last kiss

The tendencies that we have just described facilitate the creation of art objects and their unlimited distribution, and provoke discussions on the ever more important question:

Original or Copy?

In visual arts, the notion of the original and its reproduction in various types of copies is a question inevitably related to the materiality of artwork. If new digital pieces are not tangible and exist only in digital form, the question of "original vs. copy" gains more relevance. The categories of "original" and "copy" lose their traditional interpretation, thus leading to the collapse of the entire hierarchical structure of art expression. The questions that gain importance are related to the place, time and medium of the artwork, which in turn reflect the positions of the author and the audience [10].

To a certain extent, the fake (or the copy) may also be interpreted as art. This is fully applicable to one of the most famous painting forgers in the world, prof. Daniele Donde. For many years he painted copies of the most famous paintings of old masters. The paintings were perfect copies of the world-famous originals – this was the main principle of the artist. Each reproduction is accompanied by a special certificate to avoid fraud (Fig. 3).



Fig. 3 Prof. Daniele Donde

It is no surprise that Prof. Donde says: "I turned fakes into art".

There are a lot of arguments about the significance of Daniele Donde's pieces. But we should note the fact that they provide a good opportunity for much more people to experience the art of great masters and to open their senses to art in general.

The entire history of art refers to the opinion of earlier authors and works that copying is a natural element of every creative process, especially as regards visual arts. The digital transformation of visual arts facilitates this process and introduces a model of continuity. Direct copying of popular images, such as Leonardo da Vinci's Mona Lisa, Michelangelo Buonarroti's The Creation of Adam, etc., and their use as a graphic element is acceptable in cases where it introduces new meaning and suggestion (Fig. 4).

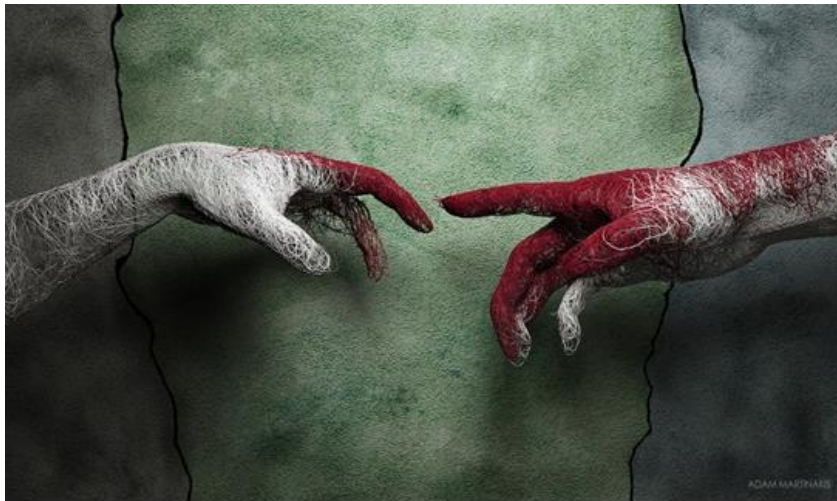


Fig. 4 Adam Martinakis – re (al) creation of Adam

The digital transformation of arts and the possibility for unlimited copying establish the industrial model of production as a common practice. A point is reached where software and hardware become a visible and basic imaging technique. Under the pressure of market demand, the contemporary artist is forced to become an art production factory owner, and has assistants and employees who complete the projects using methods that are very similar to industrial production. The product of art in this case is a mass product bearing the author's trademark, existing away from the artist's physical presence, laden with a complex symbiosis of semiotic signs.

THE GLOBAL NETWORK

By using printed graphics, photography and video, art acquires the mobility of images, thus allowing mass volumes of reproduction and distribution. Radio and television can even reproduce sound and picture in real time. Distribution of artworks on the Internet offers a completely new development. Art is now available not only for an unlimited number of users, but it is open for further processing and exchange between all members of the network. The

territory where objects of art are created and the territory where they are perceived are merged into a completely new environment: the virtual space of the computer. In this context, the places of the author and the perceiving person are not fixed, they rather become interchangeable.

The presence of the art piece in the digital network and the established position of media transform art's nature and manner of expression. The product of art becomes an object of mass culture and mass production and is increasingly drifting away from the unique touch of the artist's hand.

ARTISTIC VIRTUAL ENVIRONMENT

The Internet is a social and cultural phenomenon, its main purpose is to entertain, it follows the game model of communication and for that reason it has penetrated our everyday life so quickly. It offers an infinite amount of cultural information, the user can browse page after page, and it is virtually impossible to exhaust even a single topic. The perceived information is fragmentary, the virtual person consumes individual passages or separate pieces of the whole making no connection to preceding ones or the author of the work, but following only their own interpretation. This tendency tears the artwork to separate pieces, obliterates the context and is subjected to the specific consumer purposes. The virtual environment produces the so called "broadcast culture", which is characteristic of the radio, the television and the new visual forms. It registers the presence not only through the degree of provocation towards the perceiving audience, but also through the possibility for multiple reproductions of the images used by different artists.

In the virtual space, the separate kinds of arts intertwine and generate new creative spheres. Hence, we can explain the emergence of new cultural forms, such as digital arts, through unification of media, art and cinema.

Internet is the artists' preferred performance place and it provides an autonomous environment for presentation of artworks, development of creative views, finding followers and admirers. Artists and consumers participate in the global virtual space with the understanding that they are responsible for the situation in art, and that the direction of its development depends on them. Network communication ensures interactive links for cultural exchange, while the interest in diversity and specific characteristics presupposes the emergence of an entire virtual community.

Virtual space is used as a channel for presenting traditional art. Thus, we can make a distinction between Internet as a medium for presenting the known art forms – images of paintings, photographs – and the Internet as a medium for creating new ones – net art, which only emphasizes the advantages of cyberspace. The communication flows on various levels – between artists, between authors and their audience, between the very artworks, between the digital copies used as basis for new artworks, between the institutions supporting their creation and distribution. The characteristic incompleteness of artworks allows for variation of structure and interface, involvement of consumers, creative exchange and globalization of the author's message, collection of archives and a prospect for unlimited navigation. The virtual environment follows the principle of collective creation of art products, providing for equality between the author's original idea and the subsequent compilation versions of the audience. The author defines the rules and the development framework, while the user follows and gradually develops the work according to their own feelings and notions [7].

THE AURA OF THE ARTWORK

Each piece of art has the so called spiritual presence – an aura which imparts the uniqueness of the physical object and the indirect presence of the author. The artist is the owner of the intellectual work – the art piece – and therefore the visual work is considered his/her property. In the pre-digital era, artwork was regarded as a sacred object of art, the cycle of creation was completed, and the work existed in its absolute integrity, while in the early modern times, the author's figure has already become a fundamental subject around which the artwork exists. In the age of digital reproducibility, the technology of creative production has undergone another transformation: the territory where the "creation" of an art object takes place is now shifted in the context of the perceiving viewer – the mass audience in the museum or on the Internet. Even a spiritless object of everyday life placed by the artist in the gallery space acquires a spiritual meaning when presented in a different context. In the age of digital images, this has already become a common practice in the artistic world and a routine in popular culture.

"Today we recognize a work of art mainly as an object produced manually by an individual artist in such a way as traces of such work are visible or at least recognizable in the body of the artwork itself. In the nineteenth century, the painting and the sculpture were seen as extensions of the artist's body, as invoking the presence of the author's body even after the author's death. In this sense, the artist's work was not considered an "alienated" product – as opposed to the alienated, industrial labour, which does not imply any traceable connection between the body of the manufacturer and the industrial product." [4]

An absolute apogee of this tendency is one of the many "blockbusters" of Damien Hirst – "For the Love of God". A platinum cast of a human skull encrusted with 8,601 diamonds, with a production cost of £14 million and a sale price of £50 million. The piece generated an explosion of public interest. It illustrates a totem of death that reminds of the transience of human life and vanity. It is impossible for the viewer to perceive the work by ignoring the incredible materiality of the amount invested. It is probably not a coincidence that Hirst's work appeared exactly in 2007, just before the financial crisis, at the peak of virtual financial indicators in global economy. The encrusted skull is something that only an artist such as Hirst can create. This is the maximum distance that the figure of the superstar artist can travel away from every human dimension. The notion of art's eternity is recreated in a snobbish stereotype (Fig. 5).



Fig. 5 Damien Steven Hirst, "For the Love of God"

In the age of digital reproduction, the artwork loses its aura and the replica departs from tradition. The copies take the place of the original piece and become its mass resemblance. This makes it possible for the copy to reach the viewers in their momentary situation, and the digital technique updates the reproduction. These two processes lead to a total twist of tradition, which is the other side of the current crisis in art [1]. This wave of art devaluation has forced the professional world, the institutions on the market and the museums to develop their own strategies to deal with the collapsing cult of art uniqueness by introducing artificial "limited editions" of artworks.

"The distribution of such pieces as an exclusive limited edition is the way used by a conservative and slow-changing professional environment to produce artificial scarcity. This is their strategy to enhance the iconic value of the artwork as a product in an economy saturated by lightning-fast mobility of media objects between people, machines and networks." [6]

CONCLUSION

Contemporary art, based on the succession from the early vanguard, has spread in the vast area of cultural communication beyond the limits of traditional aesthetics. The product is an immense and dynamic art form, which does not exist in the material sphere of techniques, methods and media, but among the chaos of social relations developing around the artwork, which is increasingly taking on the nature of an event. The symbiosis of these relations creates a culture of remix and looks like art of the intangible. Creativity in the virtual world reflects the utopian ambition for democratization of the aesthetic experience, for participation of the audience in the creative process, for free transfer of cultural objects and content between different contexts, for removing the boundaries between genres, forms and languages of expression, between high and low culture. The digital media succeeded where the vanguard failed. These non-material artworks proved perfectly adapted to the reality of the new economy. As a result of digital media availability, a problem crystallised regarding the criteria to distinguish between elite art and amateur creativity. The classical tradition to display works of art only in institutions after preliminary selection is dying. In the digital world everyone should be free to express themselves.

Mastering digital tools in art has changed the idea – end product process for good. The ease with which the author's decisions are put into effect and the ability to generate an unlimited number of variants are the basic prerequisite for digital technology to become dominant so quickly in the artistic circles. This process creates favourable conditions for the emergence of not so professional graphics, the fruit of mass "kitsch" culture. The art lacking thought and content at first glance are being circulated. This is due to the skipping of the sketching, reasoning, assessment, self-criticism and editing phases. It should be noted that this phenomenon is becoming more and more popular among contemporary artists. Practice shows that the creation of primary sketches is a fundamental stage of creation. With their help a subconscious channel of ideas is realized before they are fully conceived by consciousness. Modern technology performs much of the routine activity, and it makes free a lot of time for the artists, yet, on the other hand it requires them to do the creative work that digital instruments cannot handle.

The democracy of the media in the contemporary phase of globalization, the lightning-fast and hardly traceable cultural flows give priority to compressed experience over

contemplation, of intensity over immersion, of rapid access and spontaneous participation over static perception, of the affordable over the elite, of the temporary nature of digital images over the durability of material objects.

REFERENCES

- Benjamin, W., (2009), *German essays and studies from the XX century*, Издателство LiterNet, Varna.
- Benjamin, W., (2006), The Work of Art in the Age of Mechanical Reproduction, *LiterNet*, 14.04. 2006, № 4 (77).
- Grigorov, A., (2000), *Thirteen Theses on Globalization, Geopolitics and the Culture of the Information Society*, Tsenov Academic Publishing House.
- Groys, B., (2010), *Marx After Duchamp, or The Artist's Two Bodies*, e-flux and the author,
- Димитриу, Д., (2002), Пресечни точки изток-запад, „Изкуството след мрежовите комуникационни меди“, Фронт за комуникация.
- Manovich, L., (2001), *The Language of New Media*, MIT Press, Cambridge.
- Popova, M., (2012), *The Virtual Man*, Faber Publishing House.
- Kosev, S., A. Markov, (2019), From "Interactive Generative Formations" to "Interaction with Technological Organism", Science series Cultural and Historical Heritage: Preservation, Presentation, Digitalization (G. Bogdanova & V. Mateeva, Eds.), volume 5, issue 2: pp. 81-88
- Terziev, K., (2011), Maneuvers of the good old aura: the work of art in the culture of convergence, Seminar - BG magazine, issue 6, <https://www.seminar-bg.eu/spisanie-seminar-bg/special-issue2/item/377-maneuvers-of-the-good-old-aura.html>.
- Terziev, K., (2012), *Re-composition: Author, media and work in the era of digital reproduction*, East - West, Sofia.

UMETNOST U PIKSELIMA

Razvoj različitih tehnologija u drugoj polovini dvadesetog veka doveo je do pojave novih umetničkih žanrova. Dok su ovi novi oblici umetnosti težili da budu prepoznati i prihvaćeni, stariji nasleđeni oblici su takođe prolazili kroz određene transformacije. Nesumnjivo, tehnološke inovacije menjaju odnose između oblika kreativnog izražavanja i publike kojoj je umetnost namenjena. Nakon što je na pozornicu stupio novi digitalni medij, umetnost se više ne doživljava na isti način. U jeku trajanje rasprava da li je računarska grafika zapravo oblik umetnosti, skloni smo da prevedimo glavno pitanje: Da li razvoj novih tehnologija menja celokupnu prirodu umetnosti? Tradicionalna estetika suočena je sa ogromnim problemom prikupljanja, analiziranja i rezimiranja širokog spektra novonastalih žanrova umetnosti. Suština je u tome da većina njih nije podložna generalizaciji i metodologiji usled neograničene slobode i dinamičnosti njihovog razvoja.

Ključne reči: *likovne umetnosti, kulturno nasleđe, digitalne tehnologije, vizuelne komunikacije, virtuelna sredina.*