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INTERCONNECTION OF SCIENCE AND ART AND THEIR ROLE IN CHANGING THE WORLD PICTURE

Sometimes it seems that science and art are opposite: technology and science are associated with the development of thinking, and art with the development of the imagination. Actually, they have always been necessary for each other: technology has helped art to become more complicated, and art has combined technology with everyday life. Ideas and works by artists have changed people's vision of how to understand art, and with it the world around us. And so I try to understand how the combination of art and technology has created design in the modern world.

Technology or skill? The relationship between science and art refers us to Antiquity. In ancient Greece, the concept of technology meant a strong association of intellectual, creative and manual work. Any of these works were important if they had "a beginning in the creator and not in the creation" and were based on the mastery that a poet, a potter or someone else could possess. But the twentieth century changed the association between scientific and technological teachings and art. During the first twenty years of the twentieth century, almost all the countries in Europe created movements of artistic avant-garde, their mission was to change the form of art and reflect the impact of the scientific and technological revolution on man and the world around him. The effect was not only positive - at the same time began the First World War, which changed world history almost completely. Avant-garde artists saw it differently. If for German Dadaists it was a catastrophe, for Italian futurists it was an absolute blessing to get rid of the cursed old culture and swear allegiance to national values. The avant-garde had many theorists and researchers. Benjamin's small but important work, The Work of Art in an Era of Its Technical Reproducibility (1936),

made it possible to see art not as an autonomous practice, but as an activity inseparable from changes in technology. Science also changed radically, moving from the old forms of describing the world to the new ones. And it is not without reason that in the 20th century the term "revolution" turned out to be characteristic of both art and society, and science. In all three areas, the transition from the "old" to the "new" was not gradual, but radical, revolutionary: the central event here was the discovery of a special theory of relativity by Albert Einstein. Of course, Einstein's discovery was not the only one, but it was this discovery that resulted in radical changes in the ways in which phenomena were explained and described. Later on, Einstein became interested in the art of cubism and found in it quite scientific methods of working with the material: analysis and synthesis. Cubism influenced almost all the fine arts and even the fashion of the XX century: from Pablo Picasso through Pete Mondrian to Yves Saint Laurent. Cubists (Pablo Picasso, Georges Braque) were breaking down the right perspective, turning to new ways of seeing an object or a person from several positions at the same time.

Futurism. Italian futurism in the figure of Filippo Tommaso Marinetti and his less loud but more talented companions (Luigi Russolo, and others) was one of the first artistic movements that wanted to reconsider the autonomy of art. Calling for the abolition of the historical logic of art - the museum was the most hateful place for Marinetti and his companions - futurists turned not so much to a narrow artistic layer as to the widest strata of society. Not by chance that their very first Manifesto of 1909 was published in the newspaper Le Figaro, which had reached its peak in circulation in those years. In the Manifesto, which has affected all such texts of the last century, which opens with its destructive and ageist passages, Marinetti and the company honor the machine, preparing to make a sacrifice to the technique: "1.We claim that the beauty of the world has become enriched by a new beauty - the beauty of speed. The racing car, the hood of which, as a snake, is decorated with big pipes; the roaring car, the motor of which works like a large buckshot, is more beautiful than the statue of Nicky of Samothrace.

Despite the loudness of the Manifesto's infantile language, it contains many themes that can be used to identify the impact of technological progress on aesthetic practice. To some extent, it continues to be a model of a categorical expression of ideas for all, even

if they do not know about it: from academic composers to countercultures and terrorists.

Bauhaus. The Bauhaus was formed in 1919 on the initiative of the German architect Walter Gropius, who became its first director. The school only has existed for 15 years, but during this time its colleagues and students have managed a lot: to make a way from almost medieval handicraft practice to modern industrial design, to design the style of everyday activities in which we live to this day. If you look at the room or cafés where we spend our time in a relaxed manner, there is more than one thing that we thought about and designed in Bauhaus. The school's style has had an influence on modern design, but this is especially true for IKEA brand products. Created ten years after the destruction of Bauhaus and grown to the level of a multinational corporation, the Swedish company used the main groundworks of the school, radically changing its mission: democracy, simplicity and functionality have become the attributes of the brand, but not the properties of the environment created for human beings.

Constructivists and manufacturers. In the 1920s, constructivists in the USSR came forward to overcome the autonomy of art and let communist reality into the work. The constructivists wanted to destroy the border between art and production, assimilating the artist to an engineer or technical worker who was guided not by inspiration, but by social necessity. The artist-productionist had to rethink his individualistic role and integrate the procedures of art into production practice, which at the same time was a research practice. The place of the artist's work was not a studio or stage, it was a factory where his work performed a serious social function. Unfortunately, this unprecedented experiment was stopped by the gradual "correction" of Soviet aesthetics on all the fronts of the moving to the doctrine of socialist realism. Is it possible today to continue production art? It is difficult to answer this question. Separate attempts to reanimate it have been and are being made in different countries from time to time, but the most important aspect of production art - universality - is hardly achievable today. As well as the specific ascesis of the production workers who prescribe an important but limited role for the artist. At the same time, industrial art is becoming a popular topic for academic study, which makes it possible to see it closely, while maintaining a distance from it.