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# Space changing in the art with the digitalisation Meral Batur

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#### **Abstract**

Development of digital technologies accelerated with the intensive technological changes which are with a return of the machine age, digital technology into all areas of our lives and has become widely accepted; thence our lives have greatly changed. This is such a progressive technology and its reflection of the art which is closely related with technology, it also changed the perception of space in the art. Space change from traditional forms which are we are accustomed to, that is physical space, to the virtual reality space. In this study, with using the literature searching method, I aimed to demonstrate the changing the sense of space in the art with the changing technology.

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## 1. Introduction

From past to the present, the phenomenon of space in art has several changes and improvements. These changes and improvements have come up today in different ways passing through a rapid process due to especially the environment, the time and the events that occur over time. In the represents the tradition of art, there is a clear distinction between virtual space and physical space and this limit is usually drawn with a rectangular frame. For example, a mural is divided from physical space with a wall and describes its location within the boundaries within that wall. Pictorial traces on the cave walls are painted by the people of ancient have a great importance for monitoring the birth and development of styles through the ages, in developments of creative and civilized humanity arrived today. They may have been painted with based on the magic, for the first time, clearly show space in the picture. Differentiation and changes continued to show themselves in the process. In these changes, working about space by artists had been varied in accordance with social changes.

## 2. Changing Space

Middle Ages artist, has taken space in the picture depending on their legion, make a spiritual impact on using the gilt behind figures. There are not shading behind the figures, so deep in the space can not be mentioned. The main aim of Icon painting is show the religious to illiterates with the visual way, for this they expressed their divinity with symbols (Sayın, 15).

14th century in Giotto's works figures are a monumental property, there is a space, breathe and occur figures in. Also Giotto brought a case of volume to painting. But the audience is outside of the event. The idea of space and the illusion of volume first appeared Giotto's work in a strong way and then has been in the art of painting (Art In Turkey, 1995).

After Giotto, Masaccio found the first conception of unfragmented space. Using the perspective, he has brought an illusion of depth of space system. During the same period Pierrodella Francesca brings out the atmosphere by

including the light at the painting and creating a depth effect. With the redevelopments, concluded the expression of the Renaissance space.

In 15'th Century, for the first time with the contributions of Brunelleschi determined laws of perspective based on the rules of mathematical and reality, with a scientific sharpness, with the help of anatomy knowledge and mathematical calculations, tried to be applied to art exactly as. With perspective of many escaped, real and natural spaces started painting with the flooring stone and also given importance to figures in space (Krausse, 2005).

Renaissance art is a linear style and figures and space independent of each other (Eroğlu, 1997). In each type of Renaissance room artists provided the viewer to see the exterior of the space with concave mirrors and illusory games (Batur, 2004).

At that time, Leonardo, via the perspective expanding real-space with the depth of the space created by illusion. For the first time Leonardo, in his work named Mona Lisa gived sunlimited space with using a combination of portrait and landscape with landscapes infinite in the background (Lhote, 2000). Also painting which is named the last supper, is one of the first paintings started to move the composition to interior. Its the monumental effect left over us stems from the relationship between space and domination of light and it gives a depth to painting gives the impression of the hall extension (Vezzosi, ed.).

Artists in Mannerist sometimes highlighted the spatial effect utterly; sometimes space is completely excluded by. Figures and space are depicted exaggerated a long way. Baroque art, the main objective is to give a convincing seems to be the way as it really is, light in its painting will cause to changes in, creating moving forms in space. So that the color that appears in space, creates wealth with the contribution of light (Little, 2006)

In Cezanne's paintings, aiming to ensure harmony of form and volume space approaches the surface. Instead of the illusion of space, color creates shape and volume, space is limited.

Neo-Impressionists' paintings, Seurat was a pioneer, looking from a distance allows to illusion of space and figure. So, this approach to piece space and surface is an important milestone in the history of art.

In Impressionist artists' paintings, for melting the contour, join with each other form and space. Most importantly, they applied air perspective in space. Form approaches the surface corresponding to given color with the color, using the degrees of color for defining the space and providing to relation the front and back.

At Fovistartists's paintings a sense of incompleteness and searching for balance between nature and imagination away from the mutual distance, space and the concerns of bulking. For example, Matisse affected Gauguin' wants to placement in space by removing the floor and a large colored surfaces and directed to flat and thin painted color areas, creates a new understanding of space and light in the painting. Artist moved away from the concept of three-dimensional space in the painting (Öztopçu, 1995).

In expressionist artists' works, an abstract production is dominated by, is reached an artistic synthesis is with objects in place and emptiness around them, the remarkable contrasting colors are used without planning and figure is deformed.

Cubist artists pieced the form, texture, color and places in nature instead of imitating. In paintings, describing the objects from different perspectives they researched the movements in time and space (Tunali, 1981). Space abstraction started with cubism. With analytical cubism, space is fragmented, volume is opened so multi-surface formats have become synonymous with space. In synthetic cubism surfaces are expanded and areas of color are smoothened. Changes occurred in place with the contrast effect between the light-dark. Thus, forms, converging and away from the surface of the canvas, occurred. For example, Picasso's "The Avignon Young Girls" has created great astonishment with shredding figures and space, undo style. So that the art become abstract and therefore as a space, abstract space can be mentioned. Thus traditional art collapsed with cubism. Surrealist artists who described objects with unusual ways in their works while painting space in paintings, they were not only turn upside down the space but also take up a single the image more than one place.

After these developments, with the effect of the industrial revolution, come into prominence of the machine aesthetic and the spread of industrialization, motion and speed with a universal dynamism has managed to take its place in the modern world. Futurist and Cubist artists became a pioneer in for the development of digital technologies during the period of industrial age, since 1910.

In the second half of 20'th century, like Action painting, Pop Art, Op Art, Kinetic Art, Performance Art, Happening and Land Art, all of these disciplines are used elements of machinery, technological equipment and so on also noteworthy that the use of interactive digital technologies. In addition, the combination and interaction of these disciplines with technology led to the formation of different expansions for contemporary art. Especially Kinetic Art and Performance Art also adding the audience 'transactional', 'participatory' known as begun to be felt the basics of the disciplines of art.

The discovery of the Internet in 1989 with the advancement of computer technology formed the starting point of doing the interactive art works with digital technology. Furthermore, all of these new searching and formatting in art, re-questioning of art have led people quite different orientations exposed in lived environment and age. The most important reason of this is non-stop and fast-growing technology and effect of technology to art.

Contribution of Technology to contemporary art is certainly very important. Recent times the arts, especially it is attention that the technology art, art affected by technology. Some of contemporary artists whose digital technologies with the computer system for a creative as an element, the greatest purpose is undoubtedly by including to the viewer into works of art that they produce, become to the audience an important part of the work, show off the interaction between the viewer and work of art and this interaction results to be obtained and with this interaction, to do different work for the art.

19th Century have been an era of technological and scientific advances. Technological innovations have used for the gun industry during the Second World War, after the end of the war, they were moved other areas. Thanks to these investments, the first electronic computer was invented. This rapid progress and inventions that trigger each other, caused changes in all areas of life including art. While for some artists, the computer is a simple design tool, for some is a serial production form, for the others is as an asset on its own creative.

Computer technology provide to artists the different working areas and experience. The computer by some an artist was used as only an assistance that does, a canvas or a sensitive palette they can do to painting using different methods.

Artists used to computer for the first time to obtain simple images. With the rapid development of computer images this simple emerged from one dimension to a two-dimensional and from two dimensions to three-dimensional images. All of these developments have reached in many disciplines from the pictorial image to video, installations, performances, games, etc. by using the computer support gradually.

Interactive art works, is a dialogue between art product and participant. Participant has a chance to act on a work of art. Work arouses curiosity with content so it may encourage visitors to affect works.

Like Robert Smithson's earth works, the work of Robert Morris's not land scape determine their own space, create three-dimensional spatial visualizations by linking a deceptive with the physical space. At first glance even if Smithson's works seems a continuation of the physical space, these works are actually Smithson's virtual earth. It's same for the work performed by Morris in exterior with mirrors. But Morris did it with a material that does not belong to earth repeated texture of the earth. In both examples, works which appears to be a part of physical space by creating an illusory space, actually offer their own space the audience.

Installationals creates virtual environments. Installation with in the spatial arrangements combines images, video, text, graphics and the elements of 3-D. a virtual space which are created in installation surrounds the viewer and the audience besieged usually left to free to acts in this space.

Sophie Calle' installation "Take Care of Yourself", exhibited at the Venice Biennale 2007, consists text and video. In the placement consisting of a few rooms, while audience is left free in the entire space, is also siege versatile. At Bruce Nauman's "Live Taped Video Corridor," the movement of the viewer's determined and restricted by the artist in space. Described as to assemble a place, its broadest meaning of the installation, at the same time space has the subject position in the some works in. The gallery has become itself the art object. Ex: Yless Klee "Empty room".

In paintings, sculptures, as well as installations virtual spaces created by are, places is usually completed in the viewer's imagination. However, the virtual spaces created by digital technologies, creates a virtual-reality spaces. Virtual environments are completed by the viewer's imagination in traditional works, are enabled to visible with digital art, the movement of the viewer within this space is provided. Virtual reality spaces with the

technological developments, transformed into audience drawn into the spaces and these places stimulated the viewer's more than one of sense so it is enabled to live a full experience. Thus the viewer is now faced with a new experience.

In Simon Biggs' work, dated 1992, Solitary named, space, in an interactive projection image, projected on the wall in a dark space is dark just as the physical space. If the audience doesn't move, he can not see anything and he remains in the dark. When he acts, a big man forms begins to follow the viewer, which direction the person goes, the forms go with him. Thus, by using remote visual sensing techniques, the audience is pulled into the installation, so the focus of the work establishes its dominance over the audience. http://hosted.simonbiggs.easynet.co.uk/installations/solitary/solitary.htm (2009, 15 September)

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