

Color in Organic Architecture and its Effect on the Design of Printed Hanging

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• Abstract :

Organic architecture refers to the design and construction of buildings compatible with nature and with the function it provides to its residents, so that the organic buildings appear mixed with the surrounding landscape, or they rise from them as if they were born and grow from the ground and become part of nature, and the idea of membership revolves around choosing one shape for the building And merging it into the site on which it is located and using the natural color combinations surrounding it, in addition to the use of building materials and materials from the same site in which the building is located, and allowing the provision of spaces for the surrounding landscape, and in general, organic architecture aims not to destroy the surrounding environment of the building, or in other words, to complement it so that it becomes Ultimately as a part that already exists in nature .

And Frank Lloyd Wright is considered the pioneer of organic architecture, who was interested in the relationship between buildings and humans and their relationship to the surrounding nature, and explained his belief that an organic building should complement its environment and not contradict it in order to create a single space that appears to "grow naturally" from the ground, Wright also believed that the building should be treated as a living being affected by nature, so its organic architectural designs appeared compatible with the elements of nature such as light, plants and water.

"Wright" explained that the colors in organic architecture require imitation and simulation of colors in nature, and the architect must take advantage of the colors of nature and move to the forests and fields to identify the color combinations in nature, and use the colors of gray dust and green color of tree leaves and plants in addition to the use of red in some Its organic works are the most adapted colors to create a suitable and comfortable decor.

The study aims to clarify the role of color in organic architecture and its effect on designing the printing of pendants and creating designs for pendants inspired by organic architecture models.

• Keywords:

Color, Architecture, Organic, Hangings .

•an introduction :

Color is an integral part of human life, and the world around us is a world full of colors that are constantly changing, and color has a great impact on human life. An organic and psychological effect and this is shown through some functions, for example, the red color has a physiological effect as it increases the heart rate, and gives a feeling of energy and vitality, and increases appetite. production, and human interaction with the environment around him.

Nature is the best fertile source of colors, whether in its inert elements such as rocks, stones and sand, or in plants and flowers, or in birds and fish, which contain an infinite number of colors that are difficult to count.

Colors have had a great importance in human life, for example, the rainbow phenomenon has aroused the interest of man since ancient times, like other natural phenomena, as it added to the depths of man a special feeling of hope and optimism, to the extent that some peoples believed that the appearance of this phenomenon in the sky is what Except as a sign from the Lord of the heavens to His creation that the earth will not be subjected to a flood again.

The use of colors in architecture began since the dawn of history, as walls and ceilings were painted in the Pharaonic civilization, and in Greek architecture, various color combinations of marble and granite were used, and in Gothic architecture, colored glass was used in the interior spaces, and in folk architecture, various colors were used, such as the villages of Nubia and also the villages of southern Africa, in which colors are considered a very important building ritual. The color in a particular culture may have a meaning that differs from its connotation in another culture, for example, many peoples use the white color to symbolize purity and purity, while the white color in the culture of the Chinese people and also the Arabs of Andalusia symbolizes sadness and mourning, but in general, most cultures agree There are connotations of some colors, the blue color of the sky symbolizes spaciousness and serenity, and the green color symbolizes the beauty of nature and goodness.

In the modern era, many architects excelled in the use of colors in architecture, such as the American architect Frank Lloyd Wright, who is considered the pioneer of organic architecture, the American architect Frank Gehry, the French Jean Nouvel, the Dutchman Ben van Berkel and others, and this study is about clarifying the effect of color in organic architecture and creating designs Three-dimensional printing suspensions inspired by it.

Hence, the research problem was identified in answering the following question:

How can the analytical technical study of color be used in organic architecture, with its plastic principles and values, through the application of computer programs specialized in creating three-dimensional designs for printing textile hanging fabrics?

•research importance:

The importance of the research lies in:

Clarifying the role of color in organic architecture and its impact on the field of textile design printing, which is a new addition to the Arab library in enriching the field of textile design printing.

Research objective:

The research aims to create designs for printed textile hangings inspired by organic architecture and its colors.

•Research hypotheses:

- The works of the organic architectural style are rich in the values and aesthetics they carry, which can be used in the field of three-dimensional design.

The analytical study of organic architecture is a new addition to the field of scientific and technical studies in the field of designing the printing of textile pendants.

•search limits :**A- Objective limits:**

It is represented in creating printed designs for textile hanging fabrics by:

- Analytical and environmental study of organic theory in architecture.
- Applied and technological experiments using the computer for the printed tissue commentator.

b- Time limits:

The beginning and development of the philosophy of organic theory.

C- Spatial Boundaries:

Many countries have applied the theory of organic architecture.

•Research Methodology :

A- The descriptive-analytical approach: It includes a descriptive and analytical study of some models of organic architecture and an analytical technical study of models of architecture since the inception of the organic theory in architecture.

B - The experimental approach: in the student's own artistic experiences inspired by the analytical study of selected models of organic architecture works.

And through the experiments of applied and technological methods using the computer implemented for the textile printing commentator.

•Results :

(1) The analytical study of the works of the organic architectural style showed the ingenuity of the use of colors in architecture, which is a distinct entrance to allow the element of creativity in the printed design.

(2) The study proved the wide scope of benefiting from the analytical study of some works of organic architecture, which is a new addition to the field of scientific studies in the field of designing the printing of pendants.

(3) The student was able to invent 2 three-dimensional designs derived from selected models of organic architecture suitable for hanging fabrics.

• Recommendations:

(1) The necessity of paying attention to the printing press and developing it through modern technical and scientific theories such as the organic theory to improve the design of the interior space of the place.

(2) Focusing on computer programs because of their multiple capabilities that allow the student to reach a creative and technical level of innovation.

(3) Directing interest in deepening studies related to color and its connection to design in general and textile printing design in particular, and benefiting from modern academic studies internationally and regionally.

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