

Effective use of digital technology and employing its capabilities in achieving artistic values in decorative design

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Abstract:

The research aims to investigate the effectiveness of using digital technology and to employ its capabilities in achieving artistic values in decorative design, as technology has become the basis for the artist to support his creative and innovative capabilities, by adapting computer software not only in the field of design, but also in the field of implementation because of the possibilities provided by technology. Of an interactive nature between the innovative and productive process, and high flexibility, and dealing with the design process variables.

The research concluded that The digital technology can be used and its capabilities can be used to achieve artistic values in decorative design by developing the design formulas used to enrich decorative designs, by combining traditional and novel plastic methods such as construction, assembly and mating between materials, and preserving the nature of the material from the plastic side. With the diversity of plastic formulas for decorative panels in terms of texture, color, different levels, and the intermarriage of multiple materials, as well as the diversity and change in plastic formulas to build an innovative vocabulary for contemporary decorative panels by making use of designs created using computer software used in digital arts.

With the emphasis that the decorative paintings combine multiple materials to achieve a new expressive and formal vision in terms of using a variety of vocabulary, employing computer software technologies and digital arts, and making use of various techniques to form contemporary decorative paintings for graphic design formulas.

Keywords:

Potency; Use of digital technology; Decorative design

An Introduction

Our Arab society and the international community are witnessing a scientific and technological development, which requires us more effort and work to keep pace with this development. During the past two decades, plastic art has been subjected to the field of experimentation, by searching for unconventional tools and modern techniques, until technology has become the basis for the artist to support his creative abilities. And innovation, by adapting the computer not only in the field of design, but also in the field of implementation because of the possibilities provided by technology of an interactive nature between the innovative and productive process, high flexibility, and dealing with the design process variables.

Research problem

The research problem is determined in the following question:

What is the role of digital technology and the effectiveness of its use, and employing its capabilities in achieving artistic values?

The goal of the research

The study of this research was concerned with the extent to which the era of technology provided in the enrichment of decorative designs. As well as revealing the importance of keeping pace with this age and making use of its data in the production of decorative designs that meet the new needs of it and produce aesthetics of deep dimensions in the soul.

The study aims through research to the following:

- Learn the concept and characteristics of digital technologies, used in decorative design.
- The importance of linking plastic art to digital technologies.
- Clarifying the most important ways to take advantage of digital techniques in decorative design.
- Recognizing the importance of graphics programs and digital technologies as an aid to decorative design to produce complex designs and compositions in order to enrich the artwork:

Research Methodology:

In order to achieve the objectives of the study, the researcher used the descriptive and analytical method, stating the relationship between its components, the opinions that are raised about it, the processes it includes and the effects that it creates, and it is one of the forms of organized scientific analysis and interpretation to describe a specific phenomenon or problem and portray it quantitatively by collecting codified data and information about the phenomenon, Or the problem, classifying it, analyzing it, and subjecting it to accurate studies.

What we know about digital arts nowadays has important historical roots through two great inventions; The first is the invention of the printing press in the fifteenth century at the hands of (Johann Gutenberg), and the second was the industrial revolution in the eighteenth and nineteenth centuries, and the most important revolution in the field of digital arts was when computers entered this field in 1960.

It is noticeable that by the end of the twentieth century the term digital arts began to be a prevalent term as spaces were allocated for these arts in all technological exhibitions, and museums interested in art began to collect these works and provide exhibition halls for them, and the term digital arts has gone through many different idiomatic developments since The seventies, when it was called (Computer Art), then (Multimedia Art, and it was also called (New Media Art) Christine Paul :, 2003- P.7.(.

The beginnings of digital art:

It is noted that the development in the digital arts was not only an electronic scientific development because of its connection with the development of digital devices and equipment. It was also related to the development of the various plastic art movements, as we find that digital art in its inception coincided with the plastic movement of "Pop Art" in the era of the fifties. Whereas, "Pop Art" is folk art, and it is an artistic movement that appeared in Britain in the mid-fifties, which aimed to employ vocabulary of vernacular or popular arts such as advertising art and storyboard art in the production of artworks.

The decoration is a group of points, lines, geometric shapes, drawings of animals and plants, and intertwined and harmonious words with each other, giving a beautiful shape and used to decorate buildings, utensils, clothes, mosques, churches, cemeteries, money, currencies, palaces and some country flags.

Plastic art and digital technologies.

Ornamental design is defined as a work of art with two dimensions or inspired by the third dimension. Decorative designs have a close relationship to the method or material of execution, space and the subject of expression. Accordingly, the decorative design has a close relationship with three variables (the material of implementation - the purpose or function - the subject), and here we can sense that there are successive developments that occur on these factors through the progress in this era, which is called the era of technology. And artistic education represented in the field of decorative design and the experimentation and practice of everything that is available and new to what is produced by the age of technology and the means and materials and technical employment that produces decorative designs that are the product of this technological progress and try to benefit from its data and employ that in a way that reflects new feelings of aesthetics emerging from Those ideas that are implemented depending on materials, subjects and employment are characterized by the characteristics of the technology age.

Therefore, some decorative designs have benefited from that as they are based on employing those available capabilities that suit the requirements of this era and the fields of uses of those decorative designs in what is visible through various screens (computers - modern mobile devices ... etc.) through computer programs or through a network The Internet or printed with giant and various media and printers.

Dealing with these designs came with multiple ideas and visions from designers and scholars, whose decorative designs were based on these variants. To be what the era of technology offers as an exciting excitement rich in the sources of artistic vision.

The concept and characteristics of digital technologies,

Digital art has become today an accelerated step to take a place in the family of fine arts, which is that aesthetic work by means of modern technology, which Arab societies have known and expanded in use in recent decades, and this use is no longer confined to practical aspects only, but goes beyond it to expand the horizons of creativity and its work. And to define it, a few years ago, what was called digital art appeared as a competitor to plastic art.

Technology has not only affected the way we live our lives; It even changed our perception of art, such as painting, sculpture and music. Its use in art became one of the recognized practices in the production of art, after which the term "digital artist" appeared.

Digital Arts Streams and Technologies:

We can divide the schools of digital art from the technical point of view (Haitham Adel Muhammad Nawar: p. 10):

Morphing from one form to another

Collage

- Photomontage cutting and paraphrasing

Synthetic Reality

- Selecting and Erasing items

Hyper Reality depiction

Enhancing Nature Elements

- Manipulating realism portrayals

Technologically Formed Organisms

Virtual reality creation

Media Fusion

Graphic and perceptual treatment of shapes and their use in the art of decoration:

1- Graphic decorative treatment through shape-forming elements:

2- The decorative graphic treatment through the artistic foundations of employing the shape:

3- Decorative graphic treatment through trends of art schools:

- Decorative graphic treatment by relying on the principle of imagination
- Decorative graphic treatment by relying on the principle of reduction:
- Decorative graphic treatment by relying on childlike tendency:
- Decorative Graphic Treatments through Optical Illusions:

4- Graphic decorative treatment by relying on surface dimensions:

5- The decorative graphic treatment by relying on the principle of manipulation or distortion:

6- Decorative graphic treatment by sealing:

8- Decorative graphic treatment through the superposition and interconnection of shapes:

- Full overlay

Partial overlay

- Overlay based on transparency

9-Decorative Graphic Processing through Experimentation:

10 - Graphic decorative treatment by repeating the shape:

Kinetic repetition:

Types of repetition:

Regular repetition.

Irregular recurrence

- Graduated repetition

11 - Graphic treatment of shapes through the element of motion:

- Estimated movement of the figure:

Actual movement of the figure:

In sum, the researcher believes that digital technology can be used and its capabilities can be used to achieve artistic values in decorative design by developing the design formulas used to enrich decorative designs, as they are compatible with her creative thought, by combining traditional and novel plastic methods such as: construction, assembly and intermarriage. Raw materials, preserving the nature of the material from the plastic side. With the diversity of plastic formulas for decorative panels in terms of texture, color, different levels, and the intermarriage of multiple materials, as well as the diversity and change in plastic formulas to build an innovative vocabulary for contemporary decorative panels by making use of designs created using computer software used in digital arts. Bearing in mind that the aesthetic concepts of contemporary decorative paintings are in a state of constant change and are subject to society and its culture.

Research Results

1- The latest employment of computer programs in the art of digital decoration has made important variables in shape, as it established an integrated system that contributed to the multiplicity of its tools, including brushes, colors, tools and virtual effects that provided the digital artist with the opportunity to produce various formal characteristics according to the type

of self-shape similarity. Promote a culture of creativity, innovation and innovation, as in all models.

2- Enable the digital artist to achieve complex digital decorative shapes with accuracy, ease and saving in effort and time, with the ability to display or print them in different sizes and with any type of printing, and in all stages of print production, and store them on any medium with the ability to refer to, edit and modify them, As in all models.

3- Computer programs have contributed to realizing the ability of the contemporary decorative artist to create decorative motifs

Heterogeneous formal similarity between the identical, the virtual and the random, through tools that were not available in the near future .. in terms of the transition from the physical to the default.

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