

## **Technological treatments for the glitch art to Enrich the Design Visual Image in Light of the Global Trends**

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### **Summary:**

In light of the scientific and technological progress and the awaken of the digital revolution, modern design trends emerged based on new foundations and ideas in terms of form and content that have formed new visions of the plastic foundations and techniques that the designer could not have reached through their traditional design tools. Modern technology has been able to prove its ability to reformulate design with new and unconventional visions and unlock new horizons that were not available in traditional systems. It has provided great solutions to many of the difficulties that has been limiting creativity in design. In particular, the effects of technical defect, which is the technology of image movement on the scanner during imaging and allows the designer to have unlimited ability to control the movement of the image, in addition to the ability to generate many ideas for the imaginary movement that is produced through vibration and disrupted visual image and leads to dynamic movement turning the image into a unique piece of art. Then, it is formulated and translated into the design, causing it to be freer and thus expanding creativity to create innovative goals and methods in design treatment.

The modern glitch art technique has opened many horizons to the designer, as creativity has no limits and the transition to new concepts in design achieves creativity. It has had an effect on many trends and modern currents that depend on spontaneity, trial and error. Therefore, the research problem emerged and is embodied in how to uncover new methods and techniques that allow to stimulate creativity and achieve the dynamic movement of design images, allowing the designer to provide designs that imitate their global trends. This can be considered an experimental approach that opens new horizons for creative design practices.

Finally, the research is concluded with some findings and recommendations. The most important results entailed are shedding light on modern technological treatments for the glitch art because of their positive impact on keeping pace with the changes and data of modern artistic trends. The research recommends the importance of benefiting from the scientific and technical development of the artistic treatments of the glitch art to achieve dynamic movement and create new plastic solutions in the design that keep pace with the global trends.

### **Key words:**

glitch art, technological treatments, Image language, dynamic movement, scanner.

## **Introduction:**

Since recent times, a major change has occurred in the field of technology used in design. This has contributed greatly to changing the concept of art and the methods of dealing with it. As a result of the amazing development in computer technology and its applications, new design concepts have emerged, such as the glitch art, smart design, interactive design and more. In addition, old concepts, such as accusative motion designs have evolved. Design is a process that requires searching for all that is new in terms of techniques and media and scrutinizing to reach the best innovative solutions that achieve the design goals. Recently, designers have not been searching for traditional ideas, but instead they seek uncommon ideas that reflect contemporary features. This could be achieved through the designer's permanent search for non-traditional resources and techniques to generate the design idea, whether it is technological applications or using the electronic medium in an unconventional way, which works to develop and escalate the idea, vision and design horizons in a different way.

Some applications and design media processors technology allow a variety of shaping and rhythm in design, which is reflected positively on the product, design processes and transforming the image into a unique piece of art. Development in the use of technological media directly affects the possibilities available for design digital treatments and methods of formation. The research deals with the plastic possibilities of the glitch art that the scanner can provide through the effect and manipulation of the image movement during the scanning process. This affects the creative aspects of the visual output of that process and trend more effectively towards the use of various new media and solutions that entail an intellectual shift in line with the successive developments in the postmodernism stage, contemporary arts and the resulting plastic characteristics and features that move them from the traditional standard level to the surrealist level in the design image. Then, the digital outputs of the scanned image are processed, which is considered the beginning of the creative product of using free image processing technology that carries various movement rhythms and makes these creative wizards accessible to everyone, as the transfer of technology to configurations and design structural construction which is a desirable process due to the urgent need to switch to systems that give more efficient results, allowing the designer to create new and unfamiliar creative spaces based on the laws of movement, spontaneity, trial and error. (Jencks 1997)

## **Research Problem:**

The research problem emerged as a result of the development in digital technologies. Through studying modern design methods and application principles, on which many contemporary design ideas are based, we find that some of them have new and different artistic formulas that are linked to the continuous changes in culture and technology, which are contemporary and easier than before. This would highly affect the design output to give a wider and greater mental space for creativity, as the image movement during scanning gives a visual output that reflects the interconnection of technology and skill with imagination and the ability to pre-visualize the possible shape and ends with new images that were subjected to changes and transformations during the imaging phase in response to the designer's adaptation to achieve his new aesthetic assumptions. Creativity

and innovation are the most important concerns of the designer, who seeks to achieve them through technology. **On this basis, the researcher formulates the problem in the following question:**

To what extent is it possible to develop and uncover contemporary plastic art methods and techniques inspired by the glitch art that allow stimulating creativity and achieve the dynamic movement of images in light of the technological innovations and according to the variables and data of contemporary arts and their global trends?

#### **Research Objectives:**

**The research objectives could be summarized in the following points:**

- Identifying the features of contemporary design in light of technological developments.
- Deepening and developing the technical side of the glitch art dynamic movement and achieving creativity and innovation in design.
- Extracting the digital treatments of the design image and emphasizing the elements of formation and the movement of the component from fixed to mobile.
- Drafting design works inspired by the glitch art and reaching new gateways for creative visions.

#### **Research hypothesis:**

The research assumes that it is possible to develop and reveal contemporary plastic techniques and methods inspired by the glitch art, which achieve the dynamic movement in the design image in light of the global developments.

#### **Research Importance:**

**The research is important as it:**

- Sheds light on the plastic and technical formulations of the glitch art, the continuous development in the context of technological treatments of the design image and its data and emphasizing the research for any updates in the field of design;
- Takes advantage of the technical development to achieve the dynamic movement and reach new plastic and technological goals in design;
- Adds new vocabularies and tools to the foundations of the formation, on the basis of which the design elements can be reformulated and new creative spaces can be found.
- Addresses the negative side of the outputs of some technological applications and creates new plastic solutions in the design.

#### **Research Methodology and Procedures:**

This research follows the descriptive, analytical and semi-experimental approach to test the research hypothesis and give and answer to its question. It deals with explaining and clarifying the most important technological developments of the design image digital treatments and the effect of the glitch art or movement during scanning on the design image, achieving creative and plastic aspects that enrich the kinetic expression in designing.

#### **First: Theoretical Framework, which includes:**

- Studying the general specifications of contemporary design and their global trends.
- Explaining the dynamic movement philosophy in light of the technological innovations and its relationship to contemporary thought transformations.

- Identifying the role of the technological treatments of the glitch art to achieve dynamic movement in design.

***Second: Application Framework, which includes:***

- The researcher has attempted to conclude a set of technological treatments for the glitch art that achieve the dynamic movement of the design image by scanner and some technological applications, which allows the designer )research experiment students ‘ (٢٠٢٠/٢٠١٩ to develop contemporary plastic formulas because of their new visual insights that develop the creative and innovative capabilities of the designer.

**Conclusions:**

The conclusions of the theoretical and practical study based on the verification of the research hypothesis were as follows:

- The glitch art techniques provide new solutions to the dynamic movement in the contemporary design visual image by controlling intellectual and technical capabilities and technology skills.
- The use of digital technologies reflects a great development in the field of contemporary design, which gives the ability to produce a sophisticated design that keeps pace with the updates of this age.
- Tracking motion systems for the glitch art through gradation in the elements proportions and the proportions of the spaces between the shapes so that the movement percentage, amount and direction express an aesthetic value related to the actions made by the designer while scanning the object.
- Transforming the dynamics of plastic elements into aesthetics in order to transfer visual energy to viewer.

**Recommendations:**

- Studying the motion systems and linking them with the technological techniques to provide an entry point to achieve dynamic movement in design.
- Searching for new vocabularies and tools for the formation foundations, on the basis of which the design elements can reformulated and new creative spaces could be created.
- Inspiring new plastic technological techniques that enrich the field of contemporary design.
- Shedding light on the new plastic formulas and the continuous development in the context of technological treatments of the design image and its data, as well as emphasizing the search for any updates in the field of design.

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