Reflection on the mirror in contemporary glass sculpture to enrich the educational vision

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Abstract

The research deals with the use of some contemporary glass sculptors of reflective glass (the mirror) to form their sculptural compositions, taking advantage of the properties of light and its reflections on the sculptural glass figure, which worked on changing the sculptor's thought and creating a kind of interaction between scenes and the sculptural work. The research also dealt with the concept of light reflection on the mirror. As well as the law of the reflection of light on the mirror, which is that the angle of incidence is equal to the angle of reflection, as well as the factors of reflection of light on the mirror, so the light is reflected on smooth objects, as well as the opinions of some critics in some sculptural works formed by the material of the mirror glass with the presentation of some sculptural works of the most famous sculptors who used the material of glass Mirror like sculptors: Lucas Samaras - Dan Gerham - Josiah McElheny Vanessa Stanley

On the other hand, taking advantage of the properties of light and its reflections on the sculptural form helps the student to integrate with the sculptural work, which straightens the aspect, as well as helps art students to acquire many new artistic skills and experiences that help them achieve their artistic self.

As for the change in the concept of the contemporary sculptor and his artistic vision in dealing with the material of reflective glass. Likewise, the sculptor dealt with new materials with unfamiliar qualities in the art of sculpture, such as the reflection feature of the light in the widening circle of plastic solutions and artistic concepts due to the contemporary sculptor dealing with new materials bearing new qualities such as reflection trait Light and this led to a variety of artistic techniques, which enriched the three-dimensional sculptural shapes

The art teacher also urges the practice of experimentation by developing the technical means developed as artistic mediums for artistic formation to find new areas for aesthetic taste and interaction of the viewer and arousing his mind.

Keywords:

(contemporary - glass - mirror)

Introduction

Scientific and technological progress has brought about many changes in the art of contemporary sculpture, and the result of this progress was the emergence of theories related to light related to the material of glass, such as the theory of penetration, refraction and reflection

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of light, and the reflection of light on the material of glass was prominent sculptural works. The reflection of the surrounding environment on the sculptural form, and for this reason some contemporary sculptors found in the material of the reflective glass a field that can be used to create a sculptural style that keeps pace with the rapid development of contemporary sculpture because of the aesthetics that the reflection brings to enrich the art of contemporary sculpture, which is what the critic Manuel Segade called to say:

"Any change in the surrounding conditions of the artwork, such as the intensity of the lighting or the degree of illumination, or any movement of viewers that changes the view of the artwork, which causes a kind of visual interaction between the viewer and the artwork. It has a modern side.

The contemporary sculptor's use of mirror glass in their sculptural formations changed the sculptural form, as the mirror worked on the appearance of an imaginary volume, due to the reflection of the environment on the surface of the mirror, so the volume merges with the surrounding space in the sculptural works formed by the mirror. Sculptural and a kind of interaction occurs between the viewer and the sculptural form, causing an exciting visual phenomenon, because the woman does not only reflect space, but also the viewer, which creates an imaginary space depth within the sculptural form, which creates an optical illusion in the sculptural form; This is due to the view of the surrounding environment through the internal space merging with the form of the environment reflected on the surface of the sculptural form.

Research problem

In this research, we will focus on the phenomenon of light reflection and the environment on the contemporary abstract glass sculpture by using the mirror to form works of art, as well as the artistic innovations it includes, which is considered as entering a new stage of sculpture art in which a new vision appears in contemporary art, as the researcher found The reflection of light and the surrounding environment on the sculptural form is widely used by some contemporary sculptors in the contemporary sculptural form of glass. Hence, **the research problem is determined:**

How to take advantage of the light reflection and the surrounding environment on the abstract glass figure to enrich the educational vision?

search objective

• Develop an analytical study of works of glass sculpture formed using reflective surfaces (mirrors) to show the effect of light reflection and the surrounding environment on the figure to be employed in enriching the educational vision in the field of art education.

Research hypotheses

- There is a relationship between the reflection of light and the surrounding environment on the sculptural form and the creation of abstract glass sculpture formations to enrich the educational vision in the field of art education.
- There is a direct relationship between the development of sculptural forms and the enrichment of the educational vision in the field of art education. search limits

• The research is limited to studying and analyzing the phenomenon of light reflection and the surrounding environment on the glass sculpture formed from the reflective surfaces of glass (mirrors) and its use in the educational field.

research importance

The importance of the research appears in the following:

- Seeing the art of sculpture through the lens of the reflection of light and the surrounding environment on the contemporary abstract glass sculpture formed with mirror glass.
- Realizing the concept of light and the reason for its reflection and its impact on the surface of the contemporary abstract reflective glass sculpture.
- Shedding light on the reflective glass sculpture form in contemporary sculpture and its use in the field of art education.

research results

- The artist's subjectivity has played an important role in the sculptural formation, and this is what led to the multiplicity and change of methods of glass sculptural forms.
- Abstract, reflective glass sculpture has achieved a revolution in artistic traditions, and this has been represented in changing the thought of the contemporary sculptor. Sculpting is no longer with stones and clays, but there are reflective materials that reflect light, which led to the multiplicity and change of the form of light in contemporary sculpture.
- The value of the works of reflective glass sculpture is not only represented in sculptural works of art, but also in the change in the artist's thought and the creation of a kind of interaction between the viewer and the sculptural work.
- The reflective abstract sculptural form changed the artistic vision of the viewer.

Recommendations

- The artist-educator should establish educational positions for sculpture based on the practice of experimentation in artistic formation, which emphasizes the importance of art as an effective element in education, and the art educator should train the student on how to perceive the new aesthetic belongings.
- The art teacher should benefit from the innovations of contemporary art, which include new technical solutions.
- Taking into account the benefit from studies and contemporary artistic experiences in achieving new artistic innovations.
- The need to practice experimentation through the development of new technical means as technical means for artistic formation to find new areas for aesthetic taste and interaction of the viewer and arouse his mind.

References:

 $1.\ muhamad\ ,\ wayil\ fathi\ 'iibrahim\ ''dinamikiat\ alruwyat\ min\ khilal\ aistikhdam\ al'astah\ aleakisat\ fi\ bina'\ alshakl\ almujasam\ wal'iifadat\ minha\ fi\ tadris\ alnaht\ litulaab\ altarbiat\ alfaniyati''\ ,\ risalat\ dukturah\ ,\ manshuratan\ ,\ kuliyat\ altarbiat\ alwataniat\ ,\ jamieat\ eayn\ shams\ ,\ alqahirat\ ,\ 2002\ m\ 2.http://mawdoo3.com$

3. https://uk.phaidon.com/agenda/art/articles/2014/january/14/what-is-it-about-dan-grahams-pavilions/

1.https://art21.org/read/josiah-mcelheny-total-reflective-abstraction/

2. https://uk.phaidon.com/agenda/art/articles/2014/january/14/what-is-it-about-dan-grahams-pavilions/

3.https://www.almaany.com/ar/dict/ar-ar/%D8%B2%D8%AC%D8%A7%D8%AC-

%D8%B5%D9%81%D8%AD%D9%8A%D9%91/

4.https://www.britannica.com/technology/glass

5.https://www.lissongallery.com/exhibitions/dan-graham-sculptures-pavilions

6. https://www.mfa.org/collections/object/endlessly-repeating-twentieth-century-modern is m-503178

7.https://www.moma.org/collection/works/88958

8.https://mymodernmet.com/lucas-samaras-mirrored-infinity-rooms/

9.http://calcego.com/en/graham-dan-en/

10.http://twistedsifter.com/2015/08/lucas-samaras-mirrored-room-installation/

11.https://www.britannica.com/art/sculpture#ref400867

12.https://www.lissongallery.com/artists/dan-graham

13.https://www.sculpture.org/documents/scmag04/nov04/webspecials/mirrors.shtml

14.http://calcego.com/en/graham-dan-en/

15.https://ar.wikipedia.org/wiki/%D9%85%D8%B1%D8%A2%D8%A9

16.https://imageobjecttext.com/tag/triangular-solid-with-circular-inserts/

17.

http://mawdoo3.com/%D8%A7%D9%86%D8%B9%D9%83%D8%A7%D8%B3_%D8%A7%D9%84%D9%88%D8%A1_%D9%81%D9%8A_%D8%A7%D9%84%D9%85%D8%B1%D8%A7%D9%8A%D8%A7

18.

http://mawdoo3.com/%D8%A8%D8%AD%D8%AB_%D8%B9%D9%86_%D8%A7%D9%86%D8%B9%D9%83%D8%A7%D8%B3_%D8%A7%D9%84%D8%B6%D9%88%D8%A119.

https://ar.wikipedia.org/wiki/%D9%81%D9%86_%D9%85%D8%B9%D8%A7%D8%B5%D8%B1

20.

https://mawdoo3.com/%D8%AA%D8%B9%D8%B1%D9%8A%D9%81_%D8%A7%D9%86%D8%B9%D9%83%D8%A7%D8%B3_%D8%A7%D9%84%D8%B6%D9%88%D8%A1