

The dramatic effect of light in Installation Art

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Introduction

Drama has an essential role in supporting the psychological side of the human as it develops the sense of taste and understanding and enriches emotions. Drama is a mixture of laughter, seriousness, reality, fear and sadness. The dramatic dimensions and visions differ according to its artistic features through the timeline history; starting from the primitive age in ancient arts up to contemporary art, styles and ways of expressing art have been changing continuously according to technology, culture, and raising concepts in each artistic era.

Art recreates the space, from interiors; theaters, museums, houses, to exteriors; building facades, streets, squares, and urbans. All depend on what we see and how we see it. We sense Art and interact by sensing color, image, form, sound, character, phrase, behavior. Installation is one of the visual arts type which recreate the space, in which the role of the viewer is not limited to merely watching the work, the viewer can also interact physically with the artwork, and sometimes, the viewer can take a stance towards the work through its reconstruct of the content.

Research problem:

The problematic of the research lies in the answer to the following question:

Is it possible to create installation artwork that achieve dramatic dimensions through “Light”?

Research Aims:

The research aims to study the “Light” as an effective element in enhancing the Installation artwork structure by creating different dramatic environment and images that could have a great psychologically influence on the recipient.

Research Importance:

The research is important for its objectives that helps Installation artists to recognize the dramatic side which lays in “Light” as an effective art formulation element in constructing their artwork.

Research Methodology:

The research follows the experimental descriptive analytical approach.

Drama concept

Drama is a Greek word derived from the Greek word “Dran”, meaning an action that takes place, and then transformed into its current form, Drama.

Although its meaning in Greek is (work), it passed into the Arabic language as a word and not a meaning and was used in ways that make it difficult to interpret, as the term drama was used in many forms, some people give the word drama to the tragic and sad events, and sometimes there are those who name a play the word drama.

Drama is a method of imaginative representation through dialogue and performance, and it is written literary texts that are represented, reformulated and translated into visual or audio works for theater, television, radio or cinema. It can be considered as one of the best literary images that can speak directly to the readers or the audience.

Drama was also known as "an event involving a struggle to reach its climax through action to create a very special case characterized by movement, expression and emotional puns."¹ "And the drama in the art of poetry is represented in tragedy and comedy, which are simulations of the actions of people."⁵

Dramatic visions in postmodern arts

The intense technological developments in the nineteenth century contributed to a strong shift towards the use of the machine, which affected human capabilities, especially those capabilities that include visions, thought and philosophy, and artistic methods and trends were no longer appropriate to the conditions of society and culture, and therefore art had to reform itself and conform to the state of society. So the so-called contemporary art or postmodern art appeared and it includes trends from the post-sixties of the twentieth century until the end of the twentieth century and the beginning of the twenty-first century, including; Conceptual art, Performance art, environmental art, body art, pop art, video art, installation art, and other trends that made the "idea" the basis of the work and not the work itself. Drama became a variety of images, and content drama became the largest aspect of artistic drama, in addition to form drama and self-drama.

Dramatic dimensions in installation art

The drama in the installation art is based on the fact that it reflects the subjective experience, feelings and stimuli that the artist is exposed to exclusively in the space, so installation art consists of a contradictory and non-continuous range of different and heterogeneous forms so that the work and the artist separate from the material world.

Light ... and how to perceive it

Light physically is a form of energy and consists of a group of electromagnetic waves, which differ in terms of wavelength, where the wavelength of light is (400-700) nanometers.

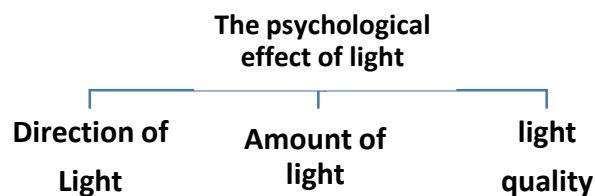
It perceives light by translating sensory cells in the retina of the electromagnetic waves that make up light. The retina contains two different types of cells that detect and respond to light,

cone cells and rod cells. Rod cells are activated when the light is low or dimmed. The cones are stimulated when the lights are high. Humans have about 6 million cones, and 110 million rods. And cone cells contain pigments or molecules to detect colors, which are three types of pigments (red, green and blue). Each type of cone is sensitive to different wavelengths of visible light.

L-cones are responsible for perceiving long-wavelength colors and are in red, M-cones which are responsible for perceiving medium-wavelength colors and they are blue, and s-cone cells are responsible for perceiving colors of short wavelengths and they are blue.³

The psychological effect of light in Installation Art

Light creates a psychological and physical effect on the recipient of the work by attracting attention to some or all of the work elements, so that the designer expresses with light the content and significance of what he intended, and the psychological effect of light depends on three factors⁴:



1- The direction of light

It depends on the direction of the light source and its position in relation to the element, and each direction of the light differs with it, accordingly, the direction of the shadow, so each direction of the light gives a different psychological effect.⁴

Facing light (from the front): it gives shadows directly behind the element, and therefore the amount of shadows becomes invisible, so the size and depth of the element are small, and the elements in this case give a feeling of clarity, brightness and strength.

Light at an angle of 45: gives an ideal effect in terms of the size of the element and its depth in the space and helps to show the general shape of the element.

Side light: The element in terms of size and depth is less effective and suggests ambiguity and somewhat lack of clarity.

Backlight: the details of the elements disappear as the surfaces darken and the shadows are in front of the elements, which give a feeling of the mystery and prestige, and this case from the direction of the light shows the size, but it does not show the depth.

2- The amount of light

The lighting may be intense, or moderate, or it may be weak, and each has a different psychological effect. The intense light suggests radiance, movement, activity, life, vitality, strength, determination, clarity, completeness, radiance, and dazzle. The less amount of light is reduced, the less the sense of clarity, and the greater the feeling of mystery, decrease, incompleteness, and stillness, Figure (1).



Figure (1) the dramatic effect of indirect lighting with the work (Pulse and Bloom) by a group of designers - Burning Man Festival - Nevada - 2014

3-Light quality:

light may be direct and is a result of the presence of natural light sources and it may be indirect as a result of the presence of reflective surfaces between the elements of work, which gives different dramatic states related to the color of the reflected lights, Figure (2)



Figure (2) Installation entitled Daehan yeonhyang in Seoul, South Korea, in the form of several pergolas and a bench for seating. A reflective material designed by Sojung Lee & Sangjoon Kwak-2020.

Lumia Art ... and preparation in a vacuum

Light art is a form of art in which light is the main way of expression for making sculptures and shapes, or objects and carvings that produce light in some way. A new trend in art emerged in the 1920s based on the use of color with light, and this art was founded by a group of artists Theosophists who searched for various sources of light to express their spiritual principles, Figure (3).

There are installation works in space associated with the art of light (light installations) whose diversity has helped the development of techniques for light such as LEDs to be formed or combined with other elements, and artists install works in streets, squares, and also on trees.

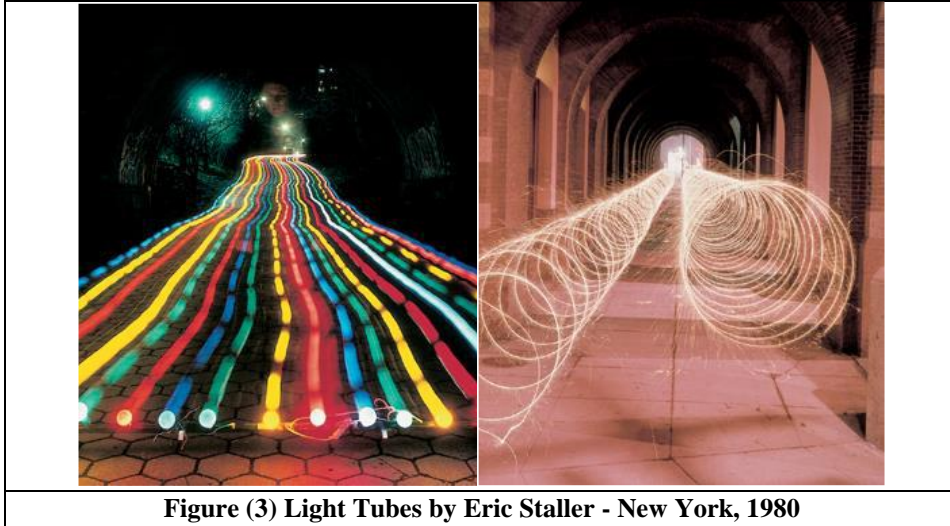


Figure (3) Light Tubes by Eric Staller - New York, 1980

Researcher's applications:

The researcher tried, through some practical experiments, depending on the element of light and the use of its effects. The difference in creating dramatic situations and enriches the philosophy of work.

Figure (4-5) The idea of work was based on the need of birds to humans, in an attempt to highlight the positive emotional relationships between humans and other living creatures. The work relied on the element of lighting as a symbol of safety and danger. The blue represents the intensity of closeness and safety between man and the elements of work, and the red color represents the color of danger whenever a person moves away from work or does not approach any person to work, in an attempt to contrast the reality that man is sometimes a source of danger and insecurity for other living creatures.

Light effects, and the indirect lighting changes according to the distance between the person and the work in the blue color, then yellow, then orange, then red as the person moves away from work.



Figure (4) Shot showing turning the lighting to yellow within a certain distance the researcher) closer to the work (designed by



Figure (5) A Shot showing lighting in red and orange according to the distance of the researcher spectators (designed by

Results of the research:

- 1- The drama of the artistic work, especially the work of installation in the space, depends on several elements, such as the drama of linear and color formation, the relationship of mass to space, the dialogue between the sizes of the elements, hot and cold color, in addition to the dramatic image complements of sound, light and movement.
- 2- Through the methods and techniques of the art of light, it is possible to achieve and confirm the dramatic dimension of the installation art, as light played a major role in confirming the philosophical aspect of the work.
- 3- The dramatic effect of lighting varies according to its color, as the color directly affects the reception of work and the interaction with it.

Recommendations:

- 1- Paying attention to research on philosophical and dramatic inspiration and its relationship to art and design and the rigorous scientific study that helps in that.
- 2- Raising students in technical colleges on technical, intellectual and philosophical depth during the design process, and trying to find out what things are and their content, in order to deepen a sense of the philosophical and dramatic visions in nature.

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