Pedagogy of the Iconic Image and its Educational Dimensions in Contemporary Formation

(Optical Art as a Model)

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Abstract

The image or the culture of the image is based on the pictorial embodiment of the cognitive pattern that includes all experiences, knowledge and values whose meanings can be deciphered, reconstructed and employed in a way that achieves educational goals and helps the learner to approximate the mental image. It has a great role in enriching artistic culture, educational and ethical values. From here came the problem of the current research in answering the following question:

What is the pedagogy of the iconic image and what are its educational dimensions in contemporary formation (Optical Art as a model)?

The aim of the current research is to identify: the pedagogy of the iconic image and its educational dimensions in contemporary formation (Optical Art as a model). The two researchers adopted the descriptive and analytical approach, as it is the most appropriate method to achieve the goal of the research. The research community included (20) artistic works of visual art, (3) artworks were selected as a sample for the research, and the results of the search resulted in the following: The creative artist employed design elements of font and color and gave him iconic connotations capable of activating the imagination to identify the content and the communicative message that the artist wants to communicate it to the recipient.

Keywords: pedagogy, image, contemporary formation.

Problem of the Research

Technical development and contemporary trends in information technology have contributed to the introduction of new and advanced theories of learning and education, which have had a major role in bringing about positive changes and developments in the different methods in which learners learn and providing other forms of methods in communicating information, as well as delivering the content and curriculum according to what It is commensurate with these trends, raising scientific competence, and facing social and scientific changes that help in improving the educational process and the interaction of the learner in the classroom.

The image or the culture of the image is based on the pictorial embodiment of the cognitive pattern that includes all experiences, knowledge and values whose meanings can be deciphered, reconstructed and employed in a way that achieves educational goals and helps the learner to approximate the mental image. He has a great role in enriching the artistic culture and educational and moral values, as well as the educational role in refining and integrating the personality of the learner, the change in his behavior, the education of his artistic and aesthetic duke, and the acquisition of artistic, aesthetic and educational skills, and giving freedom of self-expression through mutual communication between (the sender - and the receiver). The iconic image of visual art is a purposeful educational method that contributes to the development of the learner's mentality, in addition to its importance as an educational system concerned with art and education in light of the technological struggle in our time, because it is one of the important and effective means of knowledge in the formation of the learner's personality and behaviors and works to develop his cognitive, motor and emotional abilities , As it is an important area to enrich the process of communicating with others. From here came the problem of the current research was determined in answering the following question:

What is the pedagogy of the iconic image and what are its educational dimensions in contemporary formation (Optical Art as a model)?

Importance of the Research

1. The current research is useful in clarifying the pedagogy of the learner and the mechanism of understanding the artistic product because of its intellectual connotations, as well as the fun and excitement it carries.

2. The current research is useful in clarifying the pedagogy of education and the communicative relationship between the learner (the recipient) and the artistic product and this works on the learner's motivations for an effective communication process to occur.

3. This research contributes to deciphering the codes and codes of the plastic art (visual art) by clarifying the nature of images and symbols, including the connotations they contain that require reading them, and forming a mental image that explains its meaning.

Purpose of the Research

The current research aims at identifying: *the pedagogy of the iconic image and its educational dimensions in contemporary formation (Optical Art as a model).*

Limits of the Research

The current research is determined by schools of postmodern arts (Optical Art as a model) for the period from 1980 till 2000, in addition to the iconic image, and pedagogy.

Terminology

❖ **Pedagogy**: It means leadership and context, and it also means guiding and leading or raising a person (Shawqi and Bousaha, P.T., p. 53). (Folkier) defined it as the method or system that follows the formation of the individual, so it includes, in addition to the child's knowledge, knowledge of educational techniques and the skill in using those techniques (Khairy and Busanboura, 2006, p. 58). And defined by (Syibi) is the ideal theoretical conception that is applicable in the field of education, and the learner can reach the maximum benefit and thus it is a set of methods, media, technical and technical steps and approaches that organize and direct the educator's work in order to achieve the desired goals and objectives (Saibi and Akrifi, 2013, p.79).

Both researchers define **pedagogy procedurally** as: It is the best application of educational methods and methods that help the learner to read the image of the plastic artist.

❖ **The image** was defined by (Jamil) as: the geometric shape composed of the dimensions in which the ends of the body are defined, such as the image of the wax hollowed out in the mold). As for (Al-Tawhidi), he believes that the image represents the sensible physical state in which the reality of the thing is embodied so that the senses and the mind can communicate with it and perceive it, and this image includes all the abstract sensory and mental objects (al-Tawhidi, bt, pp. 178-179).

❖ **The iconic image**: It is a mental representation that is far from the sensory feeling based on a set of features that are deposited from the thing in the mind of the creator through various and multiple shots. Society. (Fatima, 2016, p. 37)

Both researchers define **the iconic image procedurally** as: that iconic image that presents intellectual and cognitive contents and represents an educational pedagogical pillar that is illustrated by its symbolism in the optical art products.

❖ **Optical Art**: It is an art that is based on the rules of visual perspective to generate the unseen or non-existent third dimension through repetition supported by the illusion of sight by shadow and light to color (Al-Bukai, 2005).

Chapter II: Theoretical Framework

Topic I, The Concept of Pedagogy

Pedagogy is an applied theory of education that derives its concepts from psychology and sociology, and it seeks to develop the learner's capabilities for independence and self-learning and is based on three main elements: teacher, learner, knowledge, and the teacher's role here is to transfer knowledge to the learner through the contents and contents, pedagogical methods and means Dialectics, which does not lie in actions, but in theories; These theories are patterns that depict parenting concepts and not patterns of their application. Education is only a pedagogical subject, so Emile Durkheim says that we have

confused the two words education and pedagogy. Education is the act practiced by parents and teachers on children who consciously communicate through education the results of their experiences to the emerging generations. As for pedagogy, it is concerned with the task of providing the learner. With knowledge, ideas, experiences, and experiences that fall within a dialectical and pedagogical relationship, what knowledge and information the learner obtains is included in the learning and inclusive relationships between the three pillars called the pedagogical space (Masoud, 2019, p.112). The pedagogical objectives are summarized as follows:

- Reducing the phenomenon of academic failure.
- Achieving equal opportunities among the educated, democratizing education, and reducing disparities related to social affiliations.
- Enabling the learner to reach the maximum possible level of cognitive development.
- Providing the learner with competencies and skills and meeting the desire to learn in all its cognitive, emotional and social dimensions.
- Improving the relationship between (teachers and learners) and (learners between themselves).

What the pedagogy seeks is the organization of the individual for all that he sees and uses of the methods of perception, remembering, analysis, synthesis, understanding, thinking, imagining and recalling what is stored in the memory, and other psychological processes of induction, inference and conclusion in which the mind is a system or a system of the general principles organizing the data of the sensory experience That is stored in the individual, for knowledge "is a historical process that develops and grows with the development and growth of the human being and plays its role in educating the learner's aesthetic taste based on induction and production and understanding it scientifically and critically" (Hella, 2017, p. 15), until it is used in educational situations and what results from those elements Of the effects of learners' behaviors on the educational situation.

Pedagogy Types:

The pedagogy varied and entered into all fields of education and played its role at the level of teaching to a large extent, and it is in constant change as a result of the development of the educational field, and we can mention of them:

1. **Pedagogy of Goals**: is the division of the scientific content into procedural goals that the learner must achieve, in addition to the necessity of commitment by the teacher in achieving the desired goals by adopting small methods and techniques during the presentation of activities and at the end of them.

2. **Pedagogy of Integration**: This pedagogy encourages the learner to gather his mental reserves, organize them, and work on installing and integrating them into new and targeted situations called integration, and the learner uses his knowledge in it, relying on his preparations and skills to solve these situations.

3. **Pedagogy of Competencies**: It is an educational pedagogical conception that starts from the targeted competencies after the completion of the educational activity in order to adjust the training strategy in terms of methods, methods and evaluation. In meeting the needs of contemporary man, reality on the other hand.

4. **Interactive Pedagogy**: This pedagogy focuses on the principle of interaction between the teacher and the learner or the learners themselves, as it is concerned with the group and does not care about the traditional pattern that depends on diction and indoctrination, and takes into account all interactions between group members and the teacher's position during the educational act, as it aims to achieve the desired goal in Learning.

5. **Pedagogy of the Project**: It is a project that the teacher undertakes with the learners to achieve the desired goals in the end. Successful educational work is based on positive interaction between the elements of the educational process, in addition to the fact that the learner in the project method acquires experience, skills and other psychological characteristics such as sobriety, social control, love of work and the ability to Continuity (Gaston, 2001, p. 104).

6. **Pedagogy of Awakening**: It is the activities and processes that regulate the educational pedagogical situations of how to enable the learner to awaken the activity for the sake of research and discovery, and that pedagogy accompanies and supports the continuity of the learner that works to separate him from his surroundings, and the basis of that pedagogy of experimentation and research and works to improve the intellectual capabilities of the learner.

7. **Pedagogy of Imagination**: It is the set of activities and processes that the learner performs in an organized manner after seeing the real reality, and then the learner creates a picture of the truth. Imagination will grow in the intellectual, aesthetic and physical realms. (In the opinion of the researchers, both the pedagogy of awakening and the pedagogy of the imagination fall within the jurisdiction of artistic and aesthetic education).

8. **Differentiated Pedagogy**: it is the pedagogy of paths that establish a flexible framework in which the instructions are explicit and varied to the extent that each learner is allowed to work and learn according to his own pace and rhythm within the framework of a collective teaching of the knowledge and skills to be acquired by the group.

Topic II: Optical Art and its Intellectual and Aesthetic Premises

Optical art is one of the currents of postmodern art, and visual art originated in Europe and America in the mid-sixties and was derived from the trend of abstract expressionism, and the event of the assassination of the American president (John F. Kennedy) in 1964 and the shock it posed to the American society, a role in which the rights movement developed. Civilization, there was an invasion of pop and rock music that expressed ideas and a new way of life, and this led to the explosion of the new art movement of the square (and the term optical art appeared in (time magazine) in 1964 and the reason for this name is the adoption of the illusion of mathematical formation that appears in front of the eye, and spread in Artistic circles and became involved in advertising, television, deception, cinema, electronic technology, decoration and fashion) (Mahmoud, 1996, p. 358). It focused on the interest in movement and the relationship of drawing to kinetic surfaces.
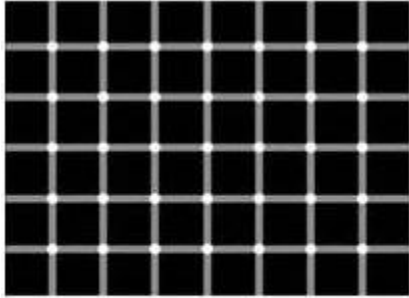
Fig. 1

Fig. 2

Optical art first originated by the artist (Joseph Albers), the founder of its theory, and set rules for its visual experiments and was officially recognized in the "New Eye Exposition" for modern art that was held in 1965 in New York City, and since that time the expression of optical art has emerged, and optical art is an abstract movement related to the various discoveries of the visual effects resulting from stimulating the retina of the eye, and among the most famous artists of this trend are (Victor Vasarly) (1908-1997), (Bridget Riley) and (Raphael Soto) (1923-2005), These artists rebelled against artistic painting and devised a new style of painting that depends on the eye. "Optical art did not become an art within the arts until after it appeared in the wake of popular art as a journalistic phenomenon, and there was a tendency among some journalists to search for the largest number of optical artists" [1].

The Optical Artists have benefited from the effect that works of art leave on the viewer's eye, so the first attempts were in black and white because the intensity of the contrast between these two colors leads to the interaction of those opposing spaces, so the recipient feels the movement, and this current invested the visual sensations by searching for the effect that the scene left to the recipient And what it generates from visual illusions, and the attempts of visual artists have developed in achieving visual illusions using cold and warm colors, cold colors appear to be retreating and hot colors appear as advanced and that these practices by pop artists remained for a long time in the beginnings of visual art based on visual illusions resulting from convergence The spacing between lines and distances, the color contrast, the repetition of shapes and units, and the difference in size, increasing or decreasing, or both together. An example of this is in the contrasting color box in

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[1] Muhammad Ali, History of Modern Art, p.204.

Figure 1. The adjacent point, and it is impossible for us to count it because black points do not exist inside the square, and we can verify this through Covering the border of the tapes by hand because the human eye is unable to move between two opposite colors due to the extreme contrast between the two colors) [2], and that the continuous fluctuation of the plastic elements within the structure of artistic productions contributed to creating a visual relationship between those products and the visual ability of the receiver when viewing those products.

(Vasareli) was interested in color, optics, and construction methods and did a lot of research in these fields. He also took interest in calligraphy decoration and drawing many models with symbolic and abstract styles, such as the donkey and the wild figure 2 and a series of subjects composed of tigers, as well as (he used layers of Cellophane paper in the implementation of multi-dimensional works to achieve the illusion of depth (Mahmoud, 1996, p. 360).

As for the English artist (Brigitte Riley), who is considered one of the most prominent artists in optical art, she used the geometric method: "squares, triangles and circles, as well as a network of straight and parallel lines. Black and white contiguous lines are used, so the lines are illusory to movement, as well as black circular lines on a white background, which illuminate movement", (Mahmoud, 1996, p. 362). Optical art
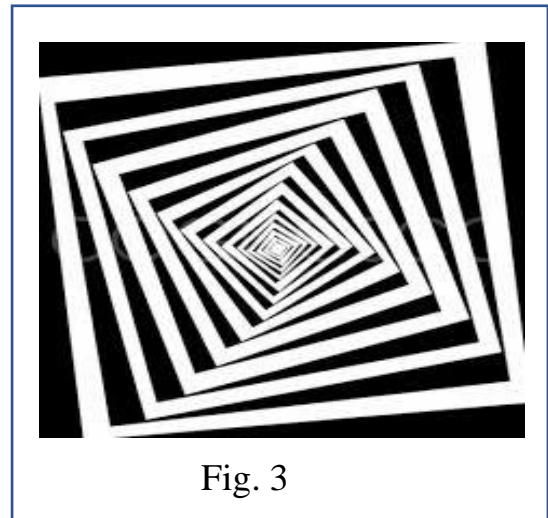

Fig. 3

depends on time, which turns into movement and is associated with the movement of rhythm, so that the form becomes palpable and can be controlled dynamically, that this rhythm has its importance in confirming the temporal movement in the painting) (Talal, 2001, p.78). The artist adopted her style on two dimensions and rejected the claim that her drawings lack expression and convey emotions, and her works are often programmed in a thorny way. Through it, the colors can be made to sequence to another color and by the development of the muted colors, or the colors can be used in a gradient that makes them start from the warm color to the

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[2] Oliver,Julian,Perceptual Play, Optical Illusion Art as Radical Interface ,2008
https://ar.regionkosice.com/wiki/Julian_Beever

cold color with the development of the color tones (Al-Karaghouli, 2006, p.209). In her work (Plaza) Figure 3, she created other kinematic phenomena through the accumulation of areas and surfaces and the superposition of units and the convergence of colors, which is a deviation of the light rays heading to the eye, which gives an illusion of movement, and also reached the same results using geometric units and the optical illusion method. And it relied on the kinetic side to make the spectator imagine that the painting is moving with lines and colors as well, and that each color affects and is affected by the color next to it, and Riley's works were characterized by a visual and emotional response in an attempt to find a balance between the external form and the internal content to revive what is monotonous and normal to a mysterious form in front of the recipient. To search for a meaning in which there is a lot of doubt about what he sees, and (Riley) says in this regard, "Part of the meaning of the artistic work is that I do not want to interfere with the experience of what we see" (Elwan Farah, 2016, p.7).

As for the artist (J. R. Soto), he was influenced by the style of the artists (Mondrian and Malevich), and his style relied on repetition of units and a monotonous rhythm "because the picture does not compose something integrated in itself, but rather is a part taken from a vast and boundless fabric that the recipient must imagine" (Smith, 1995, p. 151). And from his works he worked on depicting structures, so he borrowed from the idea of geometric lines
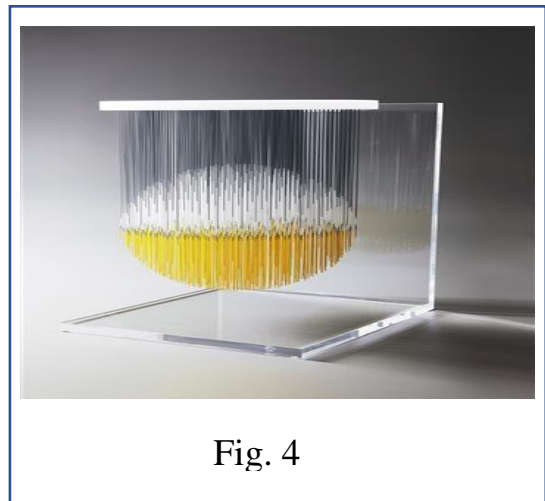

Fig. 4

with iron bars that are suspended in front of horizontal lattice barriers accompanying them with a movement to represent the rods a kind of visual interaction" (Nicholas, 1988, p. 64). Soto's works are characterized by precision and the implicit movement or so-called with "kinetic art," the viewer can (enter the artwork and rotate around it, and has used many modern materials such as aluminum, glass, metal rods and nylon tapes) [3], and also used light effects inspired by reality to reveal what will be interpreted in connection and show techniques that work within abstract formations. (Karaghouli, 2006, p. 165).

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[3] **Jesús-Rafael Soto**,2008. http://**arthistory**/about.com

Optical art has opened the field to artists using multiple materials and new techniques that have worked on the use of kinetic shapes that produce visual vibrations, and this development has led to changes in the concepts of space, and that is why the visual art has given a lot of surprise and affected the concepts and visions of the recipient, (the materials and color surfaces used reveal the relationship between Parallel lines, shapes, and between the foreground and the background in order to generate movement in three-dimensional shapes and protrusions. He also used the method of integrated movement on two-dimensional surfaces, such as the use of structural compositions of strings, hanging elements, and geometric shapes that create visual vibrations when the viewer moves), (Valte, 2008, p.18)

A number of currents have emerged within visual art and accompanied by new aspirations that have introduced art into contemporary social life within the framework of architecture and city planning and push the recipient physically and psychologically into the aesthetic process and the scientific and modern technological endeavors to merge visual and kinetic art, as well as art (photokinetic) that combines light and movement on two- or three-dimensional surfaces of real sizes.

Theoretical framework indicators

1. Visual art relied on optical illusion to a large extent, so that the holograms appear in a strange and new way.

2. Pedagogy is based on the principle of interaction between the teacher and the learners, or between the learners themselves, as it is concerned with the group in the context of their interaction.

3. The Optical Artists were interested in color, optics, and constructional styles. They also took care of the linear decoration of the image and painted many models with symbolic and abstract styles.

4. The pedagogy does not recognize the traditional pattern that relies on indoctrination and recitation, whereby the teacher is the basis of the teaching-learning process. Rather, it allows each learner to work and learn according to his own pace and rhythm within the framework of collective education.

Chapter III: Research Methodology and Procedures

First: Research Methodology: Both researchers adopted the descriptive and analytical approach as it is the most appropriate method for achieving the research goal.

Second: Research Community: The research community included (20) visual artworks.

Third: Research Sample: The samples of the research sample were chosen in proportion to the limits of the research (temporal and spatial) in order to achieve the aim of the research. The research sample of (3) an artistic work was chosen, which reflects the characteristics of the original community.

Fourth: Research Tool: The two researchers took into consideration the literature and sources that had been consulted, particularly with regard to pedagogy and visual art, and the samples were analyzed in terms of the following principles:

* General visual scanning of the image and the enumeration of its components.

* Level description: in which the recipient describes the components of the image, explaining the features and characteristics of its parts.

* The level of interpretation: in which the recipient creates the relationship between the components of the image and connects them together.

Fifth: Samples Analysis
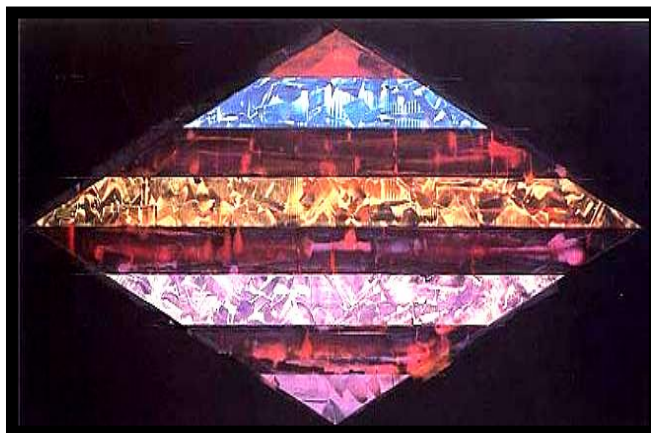
Sample "1"

Artist Name: Kenneth Noland

Title: Composition

Material: Screen Printing

Production Year: 1985

Dimensions: 221 x 554 cm

Origin: David David Gallery 215 735 2922 **Send Email**

It is clear from the general survey of the board that it is in a specific form interspersed with eight bars dominated by the colors red, purple, orange, then the blue color in one bar and adopted the computer-designed glyph, which are drawings of irregular shapes, and adopted sign language within these overlapping shapes such as Squares, lines and color spots, ready-made formations similar to color reflection on surfaces, but in an abstract way. It is known that the style of (Nuland) in most of his paintings is that it consists of four sets of circles, lines, and the canvas forming a series of studies on concentric rings, usually referred to as the goals, and the edges of the canvas have become structurally important, i.e. close to the strength of the center, depends In his style of staining the canvas with colors, he emphasized the spatial relationships in their work by leaving the canvas unstained, and he used simplified abstraction so that the design does not detract from the use of colors, and in this painting he did not use the canvas but adopted his print of the saccharine, as for the colors, they were overlapping and prevailing in this painting They are hot colors, and all parts of the painting are filled with colors, and there is no space.

Sample "2"
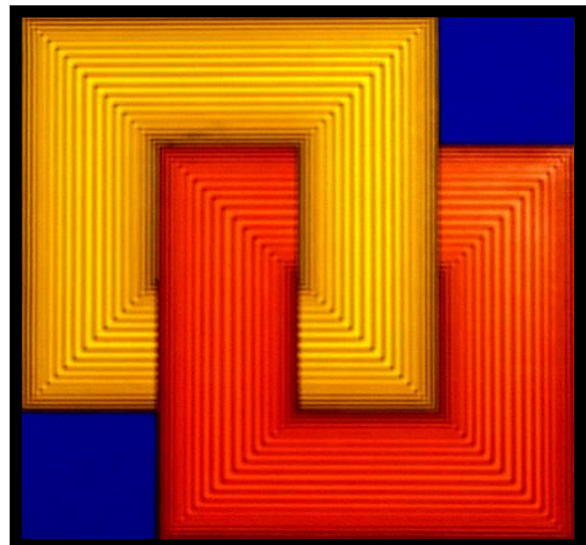
Artist Name: Richard Anuszkiewicz

Title: Composition

Material: Screen Printing

Production Year: 1986

Dimensions: 61 x 61 cm

Origin: ACA Galleries, est. 1932 (212) 206-8080 **Send Email**

The general composition of the work shows overlapping geometric shapes, which is a group of interwoven squares in the yellow color unit as well as in the orange color unit, and it appears inside the deep formation inside these interlocking or interlocking squares, and this style belongs to modernity, and the artist used infinite frequency within this The shapes, as the artist employed the shape of the two intersecting squares with the sides in a modern way, investing the visual data and the color gradient between yellow and

orange, employing the visual art style, which made it the basis for his artistic work, and the artist used a new color technique, as well as the vertical and horizontal lines that formed from these interlocking squares an iconic image that follows these repetitions And a sense of the depth of the space surrounding the work, and with this formation he tried to approach between plastic art and architecture by using color, and this work opens the way for the recipient to interpret with multiple readings, that is, it is an open text of a number of readings and perceptions, and it is the square that forms new aesthetic values This is postmodern arts on the use of the unconventional and Westernization in art instead of previous rules and concepts to analyze the Panel But these multiple readings are a symbol of permanence and continuity.
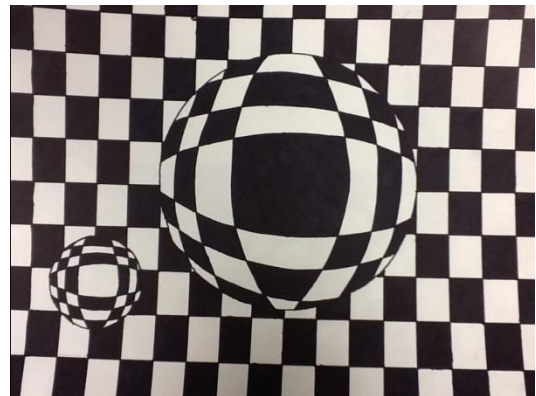
Sample "3"

Artist Name: Brigitte Riley

Production Year: 1982

Dimensions: 43 x 43 cm

Harbor Museum

Material: Silkscreen Printing

The artist Brigitte used the diagonal overlapping squares to generate a perspective and a sense of depth to infinity, as well as white and black in the diagonal squares of white color and the background is black and there is a spherical shape in the middle of the work with a large size and a small ball in the left side and here the artist tries to create an iconic image supported by the plurality of interpretation and interpretation And reading of what these diagonal lines raise, which symbolize instability and anxiety, or curved lines, they indicate dignity and beauty. Here, an interpretation of these symbols can be given that the artist wanted to suggest the nature of the vast life of contradictions between good and evil through white and black colors, with its horizontal and vertical lines and lines. The curve that overlaps in a struggle between dignity and beauty on the one hand, and the struggle between truth and falsehood, and good and bad on the other. The nature of the design of the squares in its diagonal form intertwining to infinity, and this style belongs to postmodernism and the artist was

able to control colors, shapes, lines and adjacent squares to give a sense of color and its aesthetic dimensions.

Chapter IV

Results and Discussion

Results

1. Visual art is one of the arts that has importance as an educational tool that helps visual observation in understanding and analyzing the existing symbols and connotations, which helped to give the aesthetic taste, as it appeared in all samples.
2. Visual art relies in its delivery of the idea on visual perception of its artistic and aesthetic importance and its role in raising the observation of formal, linear and color elements within an aesthetic framework contrary to nature, as in samples (1) and (2).
3. The creative artist employed the design elements of font and color and gave him iconic connotations capable of stimulating the imagination to identify the content and the communicative message that the artist wants to convey to the recipient. As in Figure (3).
4. The visual art includes shapes and colors that have capable psychological and symbolic connotations, and the more the imagination is wide, the greater the impact, because of the diversity in the nature of the structural and technical nature that depends on mathematical proportions, and this is what all samples showed.
5. The pedagogical method of education is concerned with examples and experiences drawn from the environment. Most of the products of visual art include icons and iconic images with which the recipient interacts with his thinking, perception and his own environment, and this is what all samples showed.

Conclusions

1. Visual art resembles the technical treatments based on optical illusions, and a link between the technical sides and the shaping mechanisms, in providing the learner with values and information that are a complementary means to the theoretical subject.

2. The research samples took a transitional character from the realistic, iconic level of the shapes to the abstract level, which is based on the abstraction of geometric shapes in lines, squares and circles that are repeated in a systematic framework that depends on visual superposition.

3. The constructive style of optical art achieves a communicative dimension through visual compositions in form and content, according to the controls imposed by the educational goals and elevates the student's insight and guides him to distinguish between right and wrong.

4. The symmetry of the appearing features of the figure in visual art with dynamic analytical approaches to the geometric iconic image through the relationships between the image and the meanings it bears.

5. The pedagogical image of the iconic image that is employed in the field of education is related to the components of the purposeful image, and that image characterizes the reality of education and captures purposeful educational worlds that benefit the learner.

6. The visual image includes many mental processes that refer to a set of interconnected and complex variables and factors and have levels because the process of decoding the message codes to reach the meaning.

Recommendations

The researchers recommend the following:

1. Preparing a study on the aesthetic and artistic function of visual art.
2. Preparing workshops by art education teachers to teach students how to design and implement visual art.

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