

AESTHETICS OF TOPOLOGICAL COMPOSITION IN CONTEMPORARY IRAQI CERAMICS (AN EMPIRICAL STUDY)

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Abstract:

This research is concerned with studying (the aesthetics of topological composition in contemporary Iraqi ceramics) and is divided into four chapters. The first chapter includes a statement of the research problem, the importance of the research, the need for it, the goal of the research and its limits, and defining and defining terms. The problem of the current research included the topic (What are the aesthetics of topological composition in contemporary Iraqi ceramics?), which is a remarkable phenomenon. The current research aims to reveal: (The aesthetics of topological composition in contemporary Iraqi ceramics.) The limits of the research: First: Objective limits: Study of formations Topology in contemporary Iraqi ceramics. An applied study of ceramic works made with different materials.. Second: Time limits: (2023) AD. Third: Spatial borders: Iraq

The second chapter included the theoretical framework and previous studies and consisted of two sections: the first included (topological composition in the concept). The second section included (representations of topology in global ceramics).

As for the third chapter, research procedures, the research population, and intentionally selecting the research sample of (3) as a sample, then the research tool, research methodology, and analysis of the research sample.

The fourth chapter, which was concerned with (results and conclusions), included, among other results:

1. The stylistic diversity in the structure of the topological composition of the sample models helped to demonstrate the effectiveness of the space with the elements of the composition to form effective geometric structural units that establish aesthetic features through their interconnected relationship with the space that they accommodate.

2. The intellectual transformation is due to building a plastic style that keeps pace with the artist's vision, the extent of his interaction, and his cultural, civilizational, and aesthetic dialogues, as well as his endeavor to keep pace with the radical transformations in the world of contemporary plastics in general and contemporary ceramics in particular.

Keywords: aesthetics, composition, topology, ceramics, Iraq

Chapter one

Firstly, the research problem

In accordance with his innate nature, man has always sought to discover everything new around him, which is an important factor in achieving artistic achievements, as man continues to tame the requirements and data of life due to the mechanism of thought that gradually worked to harness

the material environment, as well as the intervention of the hand. Man achieved more achievements that made him more solid and stable, and the building systems for artistic forms crystallized. The art of ceramics recorded an active presence that accompanied the intellectual and life path during the ancient times of man. Architectural topology formed the basic vocabulary that the potter artist used in building his artistic works, but the method in which these structures were organized, it is what distinguished the works of art, one from another.

Viewing art in general as a phenomenon or form of social activity, where its importance is determined by human culture as a social being working to change nature and transform it to meet its growing needs at various stages of development of societal intellectual activity. The plastic arts in general received the attention of successive human civilizations and had a clear role. In guiding and educating human societies, the art of ceramics is one of the branches of the plastic arts, which is considered one of the ancient arts. It is the art that is based on creating formations with specific dimensions and shapes, and ceramics is like other arts that developed over time as they were influenced by the tremendous transformations in the history of human thought and the emergence of many modern artistic trends that were accompanied by a diversity of methods and characteristics used in constructing ceramic work. After the emergence of the arts of modernity and what came after it, with its various schools and trends, the artist began to benefit from the course of science and practice experiments more than creating aesthetic works of art. Through the enormous expansion of successive technical achievements at the end of the twentieth century and the beginning of the twenty-first century, plastic art in general and (ceramics) surpassed in particular) previous traditional patterns led to the emergence of new patterns at the intersection of art and society, as the desire of contemporary ceramic art was to reach a recipient who would be able to dialogue and respond with the artist. Therefore, the artist turned to architecture to embody the tangible reality by removing the barriers between the areas of different neighboring structures. .

Architectural topological designs are a problem for reading eras and their achievements. In light of this, the problem that the research addresses is identifying architectural topology in movement and stillness, in a time when the arts met and new names were given to their production. Contemporary ceramic production is between two concepts in one industry, architecture and ceramics. . Accordingly, the research attempts to delve into the movement of this art and its capabilities to achieve its style, context, production, and diversity in the same achievement. This transition did not come as a surprise, but was contributed to by a set of circumstances and needs that accompanied human cultural development, so that architectural structures became a superstructure in their intellectual and aesthetic research, forming a stand-alone artistic achievement.

The data of architectural topology had representations in the space of contemporary ceramics. The potters' works represented a departure from the traditional pattern of the ceramic form image, and had contemporary modernizing features. These architectural representations were part of the constructive representation in their work, which is an expression of the contemporary potter's interest in the level of aesthetic research, especially in its nature. Architectural topology, which affects form, content, technology, method of implementation, drafting, and design. Thus, we note

that architectural topology is an effective axis that produces the structural reality of contemporary ceramics, despite the multiplicity of methods, visions, and ideas. Contemporary ceramics constitute an aesthetically transformed structure because it has undergone a system of aesthetic transformations throughout its historical stages, as well as the shift from a system of closure to openness in aesthetic disputes in form, content, and technique. We find the necessity of designs in contemporary ceramics according to architectural visions, and in particular, studying the implications of architectural topology on contemporary ceramics. So we wonder to what extent it works in the visual field of contemporary Iraqi ceramic formation? Through this, the problem of the current research is crystallized by the following question:

What are the aesthetics of topological composition in contemporary Iraqi ceramics?

Second: The importance of research and the need for it:

The importance of this study and the need for it through the following:

- 1) The importance of the current research is to shed light on how architectural topology appears in contemporary ceramics.
- 2) The importance of research in analyzing the architectural topology, its interconnection and interaction with each other is to clarify the intellectual concepts included in the ceramic work and to study them aesthetically.
- 3) This study constitutes a documentation of ceramic artistic achievements, and benefiting from them in arriving at new ideas in architectural structures executed in contemporary ceramics.
- 4) The current research benefits specialists in the plastic arts in general and those working in ceramic art in particular. It also benefits undergraduate and graduate students.

Third/The aim of the research: to reveal (the aesthetics of topological composition in contemporary Iraqi ceramics?)

Fourth / Limits of research:

- 1) Objective limits: a study of topological formations in contemporary Iraqi ceramics. Applied study of ceramic works made with different materials.
- 2) Time limits: (2203) M.
- 3) Spatial boundaries: Iraq.

Fifth: Defining and defining terms:

1- Aesthetics: beauty:

- **Linguistically:** So-and-so treats people with kindness, and he treats people with courtesy, and he must be polite and courteous with people, and you say that if he cannot tolerate you, he will not

concept of topology brought about a real transformation in architectural circles after the discovery of complex topological geometry and free forms demonstrated their ability to achieve geometric transformation, as well as topological ideas and concepts, with the emergence of contemporary technology, the digital revolution, reliance on the computer, and the great connection between architecture. Technology and its use in the field of architecture and the appearance of Möbius surfaces (Moebius) In producing forms based on topological thought, which allows many different new ideas for art in general and ceramic art in particular, which are based on new innovative forms that were not easy to expect before. There is a major intellectual breakthrough between traditional ceramics and topological ceramics in the age of technology. Topological ceramics brought about a major shift in thought, concept, and formation based on the rules of flexible topological geometry. Topological science is also called (rubber plate geometry) with all the possible transformations of the shape drawn on the rubber plate when... The plate is processed in every possible way without any cutting or tearing. Flexible rubber surfaces, which are easy to control and modify through the distribution and density of points on the surface, which increases its curvature, are soft elastic geometry that is able, due to its elasticity and elasticity, to interact with external events, deform and change into a smooth, continuous void, and is formed. These curved shapes are defined by their specific content and environment, but they do not represent those external forces and conditions ⁽⁷⁾

The roots of topology extend to geometry and mathematical analysis, but as it grew, it became independent of them and has now become a tool that serves all fields. Topology has grown from geometric aspects, as in combinatorial topology. This shows that topology has become the basis for most contemporary mathematics. In general, the theoretical basis for all types of topology is the composition of the topological space and analytical topology. . Topological science is one of the branches of research and applied mathematics that has worked to expand the circle of thought to be more flexible and to include many aspects that Euclidean thinking or trend was unable to address. It is the new science that uses flexibility instead of Euclidean firmness, and topological space is an abstract mathematical model of cosmic space, and there is Some recent trends in looking at the topological structure as a base or knowledge basis on a set of data extracted from experiences in practical life, where its creation is considered a mathematical model from which new properties of the group of elements can be extracted ⁽⁸⁾.

The artwork includes a plastic form that the artist creates to express his emotion towards what arouses him in the outside world. He searches for various means available in form to convey his ideas and feelings and translate them to those around him in a way that highlights his own point of view and vision towards the world. This is done through artistic components on which the artwork is based, formulated by the artist. A formulation consistent with the various aspects of his creativity. The researcher here addresses these elements as they represent the basic components of the formation of topological works of art.

⁷ (http://images.slideplayer.com/25/7665673/slides/slide_24.jpg)

⁸ (<https://ar.wikipedia.org/wiki/%D8%B7%D9%88%D8%A8%D9%88%D9%84%98>)

The point:

The point is considered one of the simplest elements of an artistic work that can be included in the structure of the composition, and wherever it is, it is not considered a mere spatial definition. It may arouse in the viewer a feeling of its tendency to move, thus arousing a kinetic activity that is not limited to the place specified by the point, but rather extends to what is adjacent to it in space. It expresses itself differently in every position the artist chooses on the surface of the artwork, and if it exceeds two points, this is a definition of the distance between them and a specific direction, and this is determined by the imaginary line connecting them ⁽⁹⁾There are forces inherent in it, along with the tension that it raises in the soul of the viewer, and although the point has no dimensions from the geometric interface, the artist uses it in the arrangement of his artistic works in different sizes, colors, and shapes. The point represents the priorities of the relationship between the artist and the artistic work, as it is in itself It has no value, but it gains its importance from its presence in a comprehensive system within the multiplicity of uses depending on the position, body and expression, and the point is (rising - attracted - moving - changing) according to the topological space that contains it ⁽¹⁰⁾.

The structural system of the point represents the basic generator of all elements, and it transforms the space dealt with from a mere space into a visible topological space, as its entry generates relationships that change the meaning of that space, and through the movement of the point the line comes into existence to represent the first dimension, and the line generated from the point moves to be The plane in which we obtain the two dimensions within that element, and when moving from the plane to space, when the planes meet, the shape is in three dimensions. If the points multiply, whether they are together or scattered, this is because there are forces of attraction and repulsion between them ⁽¹¹⁾

Line:

Line is one of the simple means of composition, and at the same time it is the most important and useful of the forms used by the artist. It is also one of the most complex things, as it may be something precise, yet it performs many tasks. It may be the outline of a specific space or a shape. Or a tool for determining, and it also determines the direction of movement and the extension of space ⁽¹²⁾. The structural system of calligraphy is indispensable in a work of art, whether it is two-dimensional or three-dimensional, and it has a very influential role, as it is the first thing that the hand moves with for artistic expression. The artist expresses it through his ideas, and without it

⁽⁹⁾Abdel Fattah Riad: *Training in the Plastic Arts*, Dar Al-Nahda Al-Arabi, Cairo, 1974, p. 58.

⁽¹⁰⁾ *Opening the Door* Abdel Halim, Ahmed Hafez Rashwan: *Design in Plastic Arts*, Faculty of Art Education, Helwan University, World of Books, Cairo, 1984, p. 41

⁽¹¹⁾Marjoric Elliot: *Design through discovery*, New York, 1974, p31

⁽¹²⁾ Myers, Bernard: *The Plastic Arts and How We Taste Them*, published by: Saeed Al-Mansouri, Musaad Al-Qadi, Franklin Printing and Publishing Foundation, Egyptian Nahda Library, Cairo, New York, 1975, p. 237.

we cannot know any shape, form, or format as well. The line adds structural descriptions to the form, such as texture, light value, determining the direction of movement, and the extension of space. Thus, the line is a foundational and effective element for visual tension and attracting attention because the element of movement is inherent in it. The line is considered one of the most flexible elements in building the composition of the work and plays an essential role in it. Lines may be (Strong, weak, intense, and dispersed. John Dewey defines lines and says: “Lines are the boundaries of things. They describe the shape of the volume you know, and they are defined and connected to each other to give direction and movement”⁽¹³⁾

Lines are divided into two types: straight lines and curved lines. ⁽¹⁴⁾

1. Straight lines: These are lines that influence the type of composition, and are divided according to their movement and direction:

a. Diagonal lines: These are the lines that evoke feelings of movement, ascending or descending, and despite the imbalance that the diagonal line provokes, it suggests movement, and the feeling and strength of it varies according to the degree of inclination of the line. Diagonal lines increase or decrease the length or width depending on the degree of direction of the angles. These lines create a desirable movement and activity in the composition.

B. Vertical lines: They represent vertical longitudinal lines, and you find strength and balance in vertical lines, as they express a state of balance with the forces of gravity, and they also have a connotation that expresses straightness.

2. Curved lines: These are the lines that enter into different compositions of the artwork. They have flexibility and high movement that reduce monotony and boredom within the space of composition of the artwork.

The shape:

Everything in existence has a form, and form requires matter to support it and a body in which it exists, and matter is the means of feeling form. If there are formless things in the universe, it is not possible for a person to know or perceive them. The topological pattern of form increases the intellectual and emotional significance, and gives it Unity, and radiates a kinetic spirit that pervades it and brings together its limbs. Form is the means by which intellectual discourse is transformed into plastic discourse, and it is the visual language that the recipient sees to perceive the inner meaning that is revealed in it. Meaning cannot be conveyed without form, as every meaning needs a support or medium to carry it. And transmit it to others, and the pillar of the plastic arts is the form⁽¹⁵⁾.

(¹³Dewey, John: Art is Experience, published by Zakaria Ibrahim, Dar Al-Nahda Al-Arabiya, Cairo, 1983, 169.

(¹⁴Sadiq Mahmoud Muhammad, Jihad Suleiman Ammari: Art Education (its Principles and Teaching Methods), Dar Al-Amal, Jordan, 1992, pp. 13-15.

(¹⁵) Muzaffar Adel: The significance of form in formal aesthetics, Arab Renaissance House, Beirut, Lebanon, 2001, p. 60

Form is the form that a work of art takes. It is the basis that embodies the work and gives it its own nature. Form is a constructive formula for a subject that includes sensory, intellectual, and imaginative elements and values derived from human experiences. It is the result of a systematic process represented by constructions that involve innovative activity with a creative capacity that is full of aesthetic values that suit the functional purpose of form.¹⁶

The form of a work of art is nothing more than the form or arrangement of its parts. We will see a form as long as there are two or more parts combined together in order to achieve a visual arrangement. However, it is natural when talking about the form of a work of art as soon as the conversation includes that it is a special form in a certain way or that it is a form that affects the recipient. In a certain way⁽¹⁷⁾.

The plastic arts are known to be arts with shapes that can be seen and occupy space in existence, and have fixed shapes. The task of these shapes is to express human conscience, convey meaning or idea, and embody them in accordance with precise plastic systems. Form is only one element of the composition of a work of art.¹⁸ The shapes that the plastic artist deals with are many and varied, some of which are organic shapes characterized by their flow and irregularity, and some of which are geometric shapes (such as triangles, squares, rectangles, circles), all of which are characterized as shapes with a specific structure, or creative shapes emanating from the artist's imagination, which are In any case, shapes are organized according to what the artist wants to achieve his goals. The shape consists of the meeting of lines in directions that contain various formations⁽¹⁹⁾.

Direction

Direction represents the characteristic that directs towards a specific aspect of the composition of the artwork, and it is considered the most powerful thing that attracts attention, as it pulls the eye towards the direction, whether it is of a straight, curved, vertical or oblique nature, and each direction has an effect on the viewer with the suggestions it gives. The horizontal direction gives stillness and stability and is inactive and calm. As for the vertical direction, it suggests balance, strength, and stability. As for the diagonal direction to the left or right, it is transitional and movement, and movement is clearly represented in it. More than other trends, this movement results from instability.²⁰ It is known that the lines in the composition of a work of art have four main directions. They are either horizontal, vertical, or slanted to the right or to the left. As for the directions within the artwork, they can be symmetrical or harmonious, as in the vertical direction

⁽¹⁶⁾ Ali Raafat: *Artistic Creativity in Architecture, Part 2*, Al-Ahram Press, Egypt, 1997, p. 14

⁽¹⁷⁾ Reid, Herbert: *The Meaning of Art*, published by Sami Khashaba, House of General Cultural Affairs, Baghdad 1982, p. 51.

⁽¹⁸⁾ Jerome Stolnitz: *Art Criticism*, edited by: Fouad Zakaria, Ain Shams University Press, Beirut, 1974, p. 363.

⁽¹⁹⁾ Meiser, Bernard: *The plastic arts and how we taste them*, previous source, p. 344

⁽²⁰⁾ Paul Klee: *Formation Theory*, previous source, p. 120

slanted to the right and the vertical slanted to the left, or they can be... Opposing each other to make right angles. Direction is therefore the first characteristic of movement. It can either be continuous in a certain direction or change in other directions. Each of these directions has an expressive and indicative property. Direction is not limited to lines or shapes, but extends beyond that to other structural elements such as color. Texture and light value, we cannot imagine movement without direction. There are two types of direction: ⁽²¹⁾

The first type Direction that arises from the sensation generated by the movement of only one element.

The second type: A direction that arises as a result of the interaction of the movement of all elements with each other, creating a sense of a kind of direction that dominates the rest

The movement:

Movement appears to the perceiving person based on the presence of one or more static points, and the perceptual systems distinguish what is moving and what is static according to the individual's frame of reference. Wherever there is movement, there is stillness. Movement is one of the basic principles that must be present when completing any artistic work. What exists in this universe, and in its smallest units, is in continuous movement. The universe does not stop moving, and movement is an indication of life, as everything moves because it possesses the quality of life, and movement is one of the most prominent. Dynamic manifestations in plastic art, which are among the elements that the eye responds to and are affected by their strength and simplicity, and which lead the visual path within the composition and on the visible surface towards topics that the artist follows ⁽²²⁾.

Movement in a work of art is the artist's ability to make the viewer's eye move through parts of the work, through lines and shapes that go to certain aspects of the work of art and are perceived mentally as the structural elements interact with each other to produce a kinetic action. Movement in artistic work is divided into two types: ⁽²³⁾

a. Movement of the distribution of the elements of the artwork: There is a space in the work, which is the work space. The elements included in the artwork are distributed, and the movement is produced through the distribution of the elements in that space.

B. Self-movement in the figures of objects and shapes: This is where each element within the artwork contains self-movement, and its performance depends on its relationship with the subject and content.

⁽²¹⁾ Nassif Jassim Muhammad: *An Introduction to Media Design*, Ministry of Culture and Information, Baghdad, 2001, pp. 15-16.

⁽²²⁾ Al-Husseini, Iyad Hussein Abdullah: *The artistic formation of Arabic calligraphy according to the principles of design*, House of Cultural Affairs, Baghdad, 2002, pp. 15-16.

⁽²³⁾ Faraj Abbo: *Science of the Elements of Art, Part 2*, Delfin Publishing House, Milan, Italy, 1982, p.

Movement in a work of art allows the artist to clarify his ideas and psychologically introduces the viewer into the cognitive process by attracting him to active experience and contemplation. (Al-Basiouni) confirms that “movement is a characteristic of the artistic work, and movement is either static or moving. Static has an architectural and geometric basis, while moving is filled with elements of the nature of movement”⁽²⁴⁾

The color:

Color occupies an important place in our lives in all aspects of our activities. Artists, archaeologists, psychologists, and others have paid attention to the various functional and psychological aspects of color. Color imparts a kind of effective dynamism in the visual field, as color is one of the structural elements in the plastic arts. Form cannot exist other than colour, as no form can be represented without being characterized by a colour, and a form cannot be seen unless it is present in a colour, and through the contrast between colors the form emerges, and color can convey a sense of movement as in harmonious tones⁽²⁵⁾.

The structural topology of the colors that a work of art gives is different and in many ways. Some of them are light or dark, or brighter or less to deceive the sight, in addition to the feeling that is linked in an integrated way with the variables of measurement, size and proportions, and these are qualities that have an independent physical existence, which increases energy and expressive power. Which in return gives it color, and the structural values of colors differ greatly. A particular color does not have the effect of another color because of the difference in the effect caused by the senses. The stimulation of red differs from the stimulation of yellow, and also differs from the stimulation of blue, and so on. Therefore, each color has a special effect and amount.⁽²⁶⁾

He also promised the foundations of composition represented by (contrast, balance, rhythm and repetition, sovereignty, proportion, unity, harmony,...) as laws that govern the structural relationships of the formal topological structures and their relationship to the surrounding space through what is organized in the overall artistic work, where (the The foundations are the law of relationships or the plan of organization that specifies the way in which elements are brought together to achieve a specific effect.²⁷⁾ According to its importance in the topological composition of the construction of the artistic work, and on which topology is based as an effective element in its influence, it can be dealt with as follows:

Topological variation:

Contrast is one of the important organizational means in a work of art, whether two-dimensional or three-dimensional, because it indicates diversity, as it gives the work of art vitality and emphasizes the chosen elements. Contrast is the state of bringing together elements that are opposite in form, direction, movement, size, etc., and creates space. It plays an essential role in arousing pleasure in the work of art. Without it, the work becomes monotonous. Contrast is one of

⁽²⁴⁾ Al-Basiouni, Mahmoud: *Creativity and Appreciation of Art, Dar Al-Maaref, Egypt, 1993, p. 43.*

⁽²⁵⁾ Myers, Bernard: *The Plastic Arts and How We Taste Them, previous source, p. 243*

⁽²⁶⁾ Dewey, John: *Art is experience, previous source, p. 330*

⁽²⁷⁾ Marjione, Elliot: *Design through discovery, op. cit, p7*

the most common types of formal organization. Contrast works to create visual variables whose purpose is to attract and excite the desired idea because it has a dynamic basis for existence that appears clearly through the formal elements or communication. In the composition of the artistic work ⁽²⁸⁾.

Contrast is one of the important organizational foundations in the topological composition. It achieves clarity and works to highlight a form that is different from the rest of the surrounding things and draws attention to it alone and thus attracts attention in a better way. It is considered one of the foundations that lead the composition and plays a role in alerting the recipient's sensory perceptions and creating contrast. In (line, shape, color, direction, value, texture, dimensions) of one of the units, contrast also occurs, between the components of the topological composition, working to draw attention and visual tension resulting from the extreme limits of contrast, which is contrast. In addition to the diversity and visual enjoyment it achieves, and the expressive and aesthetic values it adds to the overall structure of the composition ⁽²⁹⁾.

Topological dominance:

The concept of sovereignty is based on the uniqueness and concentration on a specific element of the composition of the artistic work, which represents exceptional importance in stimulating interest, movement, and attention towards that element, which makes the rest of the other elements as subordinate to it and a secondary role in relation to the main element within the artistic work. The predominance of the dominant element does not mean diminishing the rest of the elements, but rather represents a characteristic that some forms acquire on the basis of the focus and attention given to it, and the dominance of two elements may occur within the relationships of the artistic work - the completed - by creating structural systems that work separately to achieve a specific goal, the importance of which overlaps between the addition and reduction" ⁽³⁰⁾

The concept of dominance can be achieved through the difference in the characteristics of the dominant element from other common elements, in addition to the fact that dominance is achieved through lines that have a specific direction and variation in value and color, as one color can dominate over another and variation in texture if we have a large smooth area. Next to it is a small area with a rough texture. The latter will dominate, and a moving object can dominate among static objects and vice versa ⁽³¹⁾.

Topological proportionality:

Proportion is an organizational method that refers to the relationship of each part of the organization with the other part and then its relationship with the whole, with regard to size and area, but it is not determined by a fixed scale or a law of its own. Proportion is the work of

⁽²⁸⁾ Al-Husseini, Iyad Hussein Abdullah: *The artistic formation of Arabic calligraphy according to the principles of design, previous source, p. 16*

⁽²⁹⁾ Paul Klee: *Formation Theory, Dar: house Mert, Cairo, p. 332.*

⁽³⁰⁾ Farouk Abbas Haider: *Architectural design, Facility Knowledge Alexandria ,Egypt , p. 149.*

⁽³¹⁾ Abdel Fattah Riad: *Training in the Plastic Arts, previous source, p. 187.*

combining multiple elements that differ in dimensions (size - area - Color - shape - texture - direction), and the spaces separating each of them may differ or agree to make these elements an artistic composition with diversity so that it does not cause boredom. Ratio is synonymous with proportion, but within the limits of the variation in the relationship between the properties of two elements only and the difference between them. Ratio is the relationship between two things, while proportion is the relationship between three or more. It is a discovery or description of the nature of the relationship between the properties of several things of the same type, and represents the comparison of sizes, areas, lengths, and measures. And the quantities are together, and in all cases we cannot understand the proportionality of any shape except by comparison with what is adjacent to it, as the shape alone may be estimated to be small or large, but with the presence of the neighbors we will be able to estimate the proportionality of that shape compared to others ⁽³²⁾.

Proportion is not limited only to the space dimensions of the topological composition, but rather the relationship of proportions and distance between its component parts, which is important for determining the dimensions of each part in the visual field as a separate unit, and the dimensions between the parts on the other hand, and the overall relationship with the external form of the composition. Thus, proportionality in the topological composition leads to the creation of an organizational relationship that determines the position of each part and its dimensions with space according to its importance, level of performance, and impact on the overall space. The formal proportionality that occurs in the composition is to achieve the functional and aesthetic goals that are achieved through proportionality between the parts, balance and harmony, and thus it is considered the basis of the aesthetic taste that occurs in every composition by achieving an impression and response in front of the recipient ⁽³³⁾.

Topological unit:

Unity is one of the main requirements for the success of any artistic work, as it links its parts together to form a single whole. Therefore, any successful work of art does not gain its aesthetic value without the unity that connects the parts to each other and makes it a cohesive whole. Unity does not mean similarity between all the parts of the composition. Rather, there can be a lot of difference between them, but these parts come together to become a cohesive whole. Unity arises as a result of a sense of completeness, and the feeling emerges as a result of consistency between the parts, which results in integration and interconnectedness, which are considered essential factors in The success of any artistic work, and this is achieved through the artist's success in finding a relationship between the parts of the artistic work with each other, thus creating the

(³²Safa Lutfi: Industrial design, the standardization of products and packaging between beauty and use, Dar Ibn Al-Nafis for Publishing and Distribution, Amman, 2020, p. 43

(³³) Jihan Ahmed Rashti: Advertising and communication systems in developing countries, Arab Thought Publishing House, Cairo, P.T., p. 27.

interconnection between the elements and the availability of the relationship between each part of them in the final whole, thus creating integration ⁽³⁴⁾

Unity is a special system of relationships whose parts are interconnected so that it can be perceived through its unity in a coordinated, harmonious system in which all details are subject to a specific approach. Unity in the formation of an artistic work has several requirements that fall within two main axes: (unity of idea - unity of style)The idea gives matter form and composition. In addition, the idea is what motivates the artist to complete the artistic work, as through the idea of composition, the work gives a creative and distinct thought, and when the artist is able to express his personality in his works, this shows the style through the use of the elements involved in the artistic process in an integrated manner, which are subject to a system One in the manipulation of form and color, within the composition ⁽³⁵⁾.

Topological equilibrium:

Balance in the concept of life is the law of survival, the natural law of its activities and the actual survival of life. Without balance, life cannot continue and it is not possible to move and move. The recipient does not feel comfortable if the artistic work he sees lacks a pattern of balance in the distribution of compositional elements, and balance arises from the sharpness of contrast. Between the units and how they are organized in the composition space, it is the case in which opposing forces are balanced. Balance is the basis that is stronger and more effective than other organizational methods. Without balance, the artistic work falls and the value of the art collapses. Balance generates the visual topology for the composition of the artistic work ⁽³⁶⁾

Rhythm and topological repetition:

Rhythm and repetition appear in many areas of human activity, and they have a meaning related to the field of visual arts. They also have a fundamental value in the integration and coherence of the unity of the artistic work, and they exist when the artist tries to achieve unity, balance, and balance in the composition of the artistic work. In essence, rhythm means a state of change, and it is closely linked to the meaning of movement, and the presence of change means events and actions that can be perceived. Regular rhythm is a dynamic, influential movement that takes the consideration of an easy path towards continuity that connects with each other through plastic elements, in an organized progression of lines, shapes and other elements. Rhythm is not measured by standards, but is achieved by movement and form, and it is of the following types: rhythm of movement, rhythm of form, rhythm. Space, and each of them has its significance when we see it in the composition of the artistic work ⁽³⁷⁾

⁽³⁴⁾Ismail Shawky Ismail: *Art and Design*, Helwan University, Faculty of Art Education, Cairo, 2002, p. 232.

⁽³⁵⁾(Graves, Maitland: *The Art of Color and Design*, op. cit, p. 95

⁽³⁶⁾Gillam, Robert Scott: *Foundations of Design*, T: honorary Khalil, Dar: house Al-Mamoun for printing and publishing, Baghdad, 1994, p. 54

⁽³⁷⁾Abdel Fattah Riad: *Training in Plastic Arts*, previous source, pp. 95-96

Rhythm is composed of two basic elements: (period, unity), which exchange one with the other in batches that are repeated often or little, and without them we cannot imagine rhythm, whether we are dealing with the arts (ceramics, sculpture, architecture) or with other arts (photography, music). And others) and rhythm, whatever its form in an artistic work, must fall into the following ranks:
(38)

- Monotonous rhythm: The units and periods are completely similar in shape and size, but differ in color, creating an exchange between form and ground.
- The rhythm is not monotonous: in this type, all units are similar to each other, all periods are similar to each other, and the two (units, periods) differ in shape, size, and color.
- Free rhythm: in which the units are completely different in form from each other, and the periods are completely different in form from each other.
- Decreasing rhythm: in which the size of the units gradually decreases while the size of the periods remains constant, or both the units and the periods gradually decrease together.
- Increasing rhythm: in which the size of the periods increases gradually while the size of the units remains constant, or the size of the units and periods gradually increases together.

Rhythm is achieved through repetition of forms, and it is associated with repetition and follows it, whether within the unit or in the general form, because it represents a characteristic resulting from the effectiveness of the repetitive multiplicity of units, which is the organization of the elements that make up its movement, and this movement is sufficient to create on it a temporal character that makes it exist alive. The spirit radiates in it, and the meaning of this is that the artistic work must emerge from creative skill, starting from the static and achieving the temporal starting from the spatial. Here the artist uses the methods of rhythm, of repetition, symmetry and symmetry, so that they are all artistic phenomena⁽³⁹⁾.

Repetition is an important key in the composition as it supports the linking relationships between the units. It is a unifying element for organizing the topological composition and the rule that governs the movement of the recipient's eyes and attracts his attention for the longest possible period. Rhythm is the repetition of a structural element several times regularly, or of an aspect of the composition's vocabulary, with the aim of imparting a state of dynamism to the static units according to a specific pattern to achieve the goals of image pluralism in commercial advertising designs.⁴⁰

Topological space:

(³⁸)Ismail Shawqi Ismail: *Art and Design*, previous source, p. 224

(³⁹)Zakaria Ibrahim: *The Problem of Art, Modern Printing House, Egypt, 1988*, p. 31

(⁴⁰)McMorris, Allison & Shaw, T. James, cited, p.3.

Space is an essential element that goes into building the composition of a work of art, whether it is two-dimensional, such as photography, or three-dimensional, such as ceramics and sculpture. The space that matters to the visual artist is the space that contains and surrounds all bodies of matter. The space interacts with the other elements of the composition, thus giving it a special meaning that contributes to the main topic, and its direction. Therefore, the artist must be aware of how to exploit spaces and not leave a space without expressing a specific meaning. "Space is the ground on which the elements are distributed, that is, it will be the field that contains them, and the perception of space is sensory, and it is a visual phenomenon, through separating one form from another, and this depends on the artist to show the value of space and its impact on the recipient" ⁽⁴¹⁾Space is the thing in which the body exists, surrounds it, and contains it, because it cannot have particles in one place and at the same time. The topology of space constitutes an important property in the movement of elements. When the intrinsic properties of the elements appear equal to the artistic properties, the element will appear without movement. While if it appears with characteristics of greater value, the element will have a positive attractive force, but if the element appears with characteristics that are less than the other characteristics, then the element will have a negative attraction value ⁽⁴²⁾.

There may be an exchange between form and space, which is referred to as form, which represents positive space, and the floor is negative space, and sometimes the opposite is true within space, as positive space creates a feeling of openness and freedom of openness and movement. ⁴³The phenomenon of alternation between shape and background leads to the process of visual perception, as shapes are perceived accordingly through the movement of the negative and positive elements contained in the space. As for the aesthetic effect, there are static spaces, within which the shapes are stable and do not suggest movement, as for moving spaces. They arise from the movement of shapes within space. Forms in the formation of works of art act as surfaces in their relationships with their space, and vary in size, some tend to advance and some to retreat, or they move or remain still in their own context. Whatever they are, they have a formative or symbolic nature that leads to the spatial or spatial space. ⁽⁴⁴⁾.

Space has the main role in creating the process of balance in order to achieve movement from one center to another, through the eye of the recipient, in addition to its role in creating the process of proportionality, which is a mathematical subject related to distances, dimensions, and light values, and space is divided into two parts: ⁽⁴⁵⁾

⁽⁴¹⁾Nassif Jassim Muhammad: *Introduction to Media Design*, previous source, p. 90

⁽⁴²⁾Nassif Jassim Muhammad: *Introduction to Media Design*, previous source, p. 91

⁽⁴³⁾ Schulz Christian, *The Light of Nuremberg: Existence, Space, and Architecture*, published by: Muhammad Ali, Al-Adeeb Al-Baghdadi Press, Baghdad, 1996, p. 29.

⁽⁴⁴⁾ Shaker Abdel Hamid: *Aesthetic preference, a study in the psychology of artistic taste*, World of Knowledge series, Kuwait, 2001, p. 256.

⁽⁴⁵⁾Marjoric Elliot: *Design through discovery*, op, p.41

A - Actual space: It is the space that is included in the formation of three-dimensional works of art.

B - Pictorial space: It is the space that enters into the formation of two-dimensional works of art. The researcher believes from the above that the topological properties of space play an effective role in influencing the visual illusions and the temporal calculation of the artistic work, as the process of manipulating the formal gradations, whether in decreasing or increasing gradation, leads to the perception of temporal and spatial situations, by identifying themes and relationships of overlapping and overlapping, and each of them plays a role in Perceiving time and temporal transition in the formal and intellectual sequence of the content of the artistic product.

The second topic: representations of topology in global ceramics

What constitutes the general body is defined by the limits of the ceramic formal structure in relation to its speciality and the field in which it exists. Therefore, the topological concept of the form comes in accordance with the specificity of achievement and the inevitable necessities upon which the structural structure of the topological ceramic form is established. Accordingly, the form is organized in the field of visual arts by the pressure of the expressive and aesthetic artistic act that It rises to the analytical, synthetic level within the space of intention and conscious will, which is intentionally charged with imagination at its constructive, utilitarian level in the plastic visual text. "Utility and beauty intertwine, whether in the utilitarian subject or the aesthetic subject. Each of them is a response to human needs according to the fluctuation of these needs, and each of them expresses a person's relationship with his world at this or that moment in order to change and beautify it" (46).

The topological ceramic form is composed of mathematical structures that gain their effectiveness and aesthetic activity because they represent the inside and the outside in the same structural sense, and what appears to be what it represents. Therefore, the form is beautiful insofar as it is reduced and simple in its structural system, despite the reduction and high abstraction in the apparent structure, meaning that the effectiveness of the form increases. Genius and aestheticism by breaking the previous laws of form that mimic reality and iconography that represents only one visual meaning. If we follow the ceramic form through what was proposed, the topological concept, which represents its concept within the circle of its work and the space of its implementation, as the topological ceramic form contains within it an aesthetic and expressive content that its outer surface may not reveal in its interior, then "the beauty of forms is not what is thought to be the beauty of living bodies and images, but rather it is Also the beauty of straight lines, circles and other shapes."⁴⁷

The art of ceramics in general developed through the enormous diversity in the use of materials, techniques, concepts, and methods of presentation, especially during the decades following World

⁽⁴⁶⁾Tayseer Sheikh Al-Ard: *An Examination of the Foundation of Arts*, Arab Writers Union Publications, Damascus, 1991, p. 13.

⁽⁴⁷⁾Ali Shalak: *Art and Beauty*, University Foundation for Studies, Publishing and Distribution, 1982, Beirut, Lebanon, p. 40.

War II, with the help of artists. Behind this transformation was what was produced by contemporary philosophy, as well as the changes that occurred in society through the broad breakthroughs in the field of science, discoveries, and means of communication. Which made the modern person indispensable with technology in his daily life, to the point that everything that fell into the hands of the artist became used in the production of ceramic discourse. The contemporary potter did not adhere to the changes that afflicted the world, which were represented by the two world wars, the decline of countries or the rise of other great powers, and the development of means. Communication, the tremendous progress in industry, and the economic crises hitting the world have all had a clear impact on the global artistic discourse. Contemporary global art has been influenced by intellectual currents that proposed new concepts that opened wide horizons for the artist to freely launch into the production of artistic (topological) rhetoric. There were transformations and changes in aesthetic and artistic thought (ceramics have changed more during the last thirty years than the changes that occurred in It was a long time ago, and this change is attributed to us because we have changed.)⁴⁸.

The potter (artist) has striven to establish creative methods for his art that compete with existing developments and research into the different. Through the gradual succession of the aesthetic discourse of art through modernity and beyond, ideas are formed as a history in which the human being is an essence contemplating the concepts of truth based on the contradiction of dualities. These cognitive ideas in the aesthetics of art and its creations are nothing but transformations towards systems in which what is different is the mechanism that expresses the human self that is concerned with development and transcendence. The potter artist found it necessary to tend to the advent and development of the art of ceramics in order to keep pace with the process of art in general, through... Technical research and the need to expand and develop previous experiences to achieve continual progress to look towards the future. This can only be achieved by adopting artistic methods that indicate valuable creative employment in shaping the ceramic work and celebrating its external appearance, which reflects the artist's vision and personal desire. Ceramics focused on producing shapes with aesthetic features by emphasizing the texture of surfaces, as well as on the mechanism of projecting architectural ceramic works into expressive structures.

The development that occurred in the contemporary ceramic form was essentially linked to the individuality and personality of the potter, his environment and culture, and the desire to pay attention to expression prompted the potter to introduce new stylistic innovations. The contemporary artist (potter) has no limits to his desires and innovations, as he experiments, modifies, deletes, and adds to forms and materials. And the raw materials to establish its construction again. This possibility gave the art of ceramics fluency and freedom in shapes and aesthetics, followed by fluency and freedom in formation and expression. Now the whole world leaves the potter free to expand his creativity and the techniques required⁽⁴⁹⁾.

⁽⁴⁸⁾ Collinsk, Judith. *Sculpture today*, Phaidon. New York, 2010, p6.

⁽⁴⁹⁾ Rita Gilbert: *Living With Art*, McGraw Hill Inc, London 1995, p. 280-281.

Contemporary international ceramic work has been able to shed its creative, aesthetic composition in defense of a position that it has undeniably seized and which it has ascended with great, clear and unambiguous diligence, paved for it by the vision of a latent creative scene intended by the contemporary potter, whose source is enduring and capable of serving a broad style to a long extent, whose wisdom is ingenuity. Technology and novelty of ideas. It is an extension of a rich and fertile heritage that derives its strength from several civilizations such as (the Greeks, Romans, China, Japan, Russians... and others). The fundamental concept of the formal stage in topological architecture is to unify the elements and units with each other, in a way that forms integrated forms that are harmonious with each other so that they leave a certain impression on the recipient, which is a simulation of those units and the cohesion of spaces and all parts for the purpose of forming a contemporary topological architectural form. These relationships are The formality of the elements serves as the basic principles for the concept of the external form of architecture.⁵⁰

The referral of topological projections in ceramic formation may differ from its predecessor. In fact, the standard is dispersed here in the face of activating the concept of performance that is open to the interpretations of the recipient by bringing the recipient closer to the artistic text, and sometimes it becomes part of the ceramic formation, as ceramic art here borrows its executive and technical concepts from architectural structures. Contemporary ceramics, through the formal transformations and technical content that it has witnessed, has moved far away from the traditional approach in circulation and has come very close to the composition of its systems resulting from the liberation and activation of the creative imagination, as the synthetic image is what reveals itself in the apparent material product and the great ability it contains to create balance and birth. Harmonic relationships between contradictory qualities. Indeed, the compositional structure of the imagination enables the creation of creative imaginative structures that agree to transcend contemporary and new sensations with old objective visions and juxtapose between a state of intense emotion and the precision of a logical system⁽⁵¹⁾.

Here it is worth noting that contemporary ceramic art has forever transcended the functional, performative, and utilitarian goals that were inherent to it over time, and new functions have begun for it, represented by both the intellectual and aesthetic functions. The Italian potter (Salvatore Fornarola) created ceramic works with architectural geometric shapes bearing special agreed-upon features, such as the cubic shape, which suggests stability and constancy, and the spherical shape, which suggests continuity. As in Figure (1) The potter's openness helped to bring the topological architectural structures into the ceramic composition into a dialectical relationship between the space and the recipient, who participates in the process of reshaping according to his vision, and proceeds to describe everything using very strange similes and metaphors. The forms, whether ancient or modern, have in their essence a content that carries a special language. These forms can

⁽⁵⁰⁾Harvey, David: *The Postmodern Condition*, published by: Muhammad Shea, Arab Organization for Translation, Beirut, 2005, p. 67.

⁽⁵¹⁾ Smith, Edward: *Postmodern Art*, Trans.: Fakhri Khalil, Cultural Affairs Publishing House, Baghdad, 1997. p. 9

be identified through their language, which is symbols and signs, as the form of the artistic work is the key to effective visual impact, which creates a cohesive field of dialogue between the artistic work and the recipient by influencing and being influenced by the recipient and his response, which allows him to link that work with a similar style and vision. In formation via symbolic reference⁽⁵²⁾.

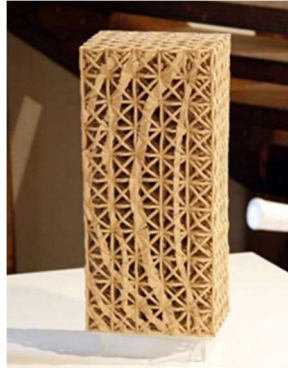


Figure (1)
The artist
Salvatore Fornarola

As for the artistic view of the material, it is a means with an undefined expressive ability that is used for expression or employed in aesthetic expression. The spontaneity of the raw material is part of its expressive value. Some potters deliberately left the color of the raw clay without changing or adding it, and here the technique becomes for the artist the way in which it is used. The material used to highlight the effects of the topological architectural structure, both in terms of texture and the direct immediate emotions it causes, such as curvature, adjacent to smooth, sunken, and prominent polishing, and color contrasts, such as light color and dark color, to obtain the desired effects, as in Figure (2) for the potter (Gustavo Perez Gustavo Perez is characterized by removing excess details by synthesizing his elements. Over the past two decades, he has created a visual language that seems closely related to music. Pure in form, with significant structure, completely abstract and without specific associations, the curvature of the forms, and the definition of the bowl characterize the form as not just a bowl; It's architecture. The work is also mathematics, symmetry and an intuitive sensitivity to proportion are the foundation of his work. The material here becomes a state of stability and abstraction, and thus reflects a modern aesthetic thought that shows a state of aesthetic awareness in topological architectural structures. Accordingly, the awareness of the aesthetic structure here is an awareness of its essence and its inner foundation, and this is what was stated in the confirmation of the philosophical theories that look at beauty, an evolutionary view based on action. Interaction processes in the cognitive structure, It is the

⁽⁵²⁾ Winter, Telma, Frazier: *The Art and Craft of Ceramic Sculpture*. 1st. Ed., Applied Science Publishers. London. 1973. p. 112.

harmony that matter gives through form. Therefore, “one of the basic principles of arts in general and architecture in particular is the compatibility of matter with form”⁽⁵³⁾



Figure (2)
the artist
Gustave Perez

It represents the ideas of the potter Maria Oriza Pérez (Maria Oriza-Perez) as in Figure (3), in which the method adopts optical deception in topological architectural structures in a hidden, non-apparent manner, so the suggestions in it are general and abstract, carrying with them different meanings, as topological structures of contemporary architecture are collected and installed with an abstract image of high technology, and this method provides To achieve volume from a flat surface the possibility of filling the resulting space with meaning and clearly perceiving the energy that flows between inside and outside with the different surfaces of the walls. Intervention by drawing lines, nets or patterns are repetitive elements in the surface that serve to show the formal structure of the volume, giving it unity and coherence when approached. From the installations, I explore the occupation of space through the repetition of elements, and the resulting work is similar to the growth of abstract nature. The surface of the drawing changes through the movement of viewers and the change of perspective, bringing with it many connotations that extend the boundaries of the form.⁽⁵⁴⁾

Oryza fully explores the possibilities of matter and achieves great perceptual intensity. Her works have a poetic source in which intuition, experience and balance harmonize a feeling of unity. She says, “Space is at the genesis of my work as a material container. This is a direct result of my understanding through the construction of volume that focuses on the manipulation of the plane: cutting, joining, bending, folding... All of these material actions directly affect the material that determines the flow of form and the mapping of language.” which describes part of the content. From this analysis, multiple symbolic and metaphorical connotations arise.”⁽⁵⁵⁾

⁽⁵³⁾ Sherzad, Shirin Ehsan: *Principles in Art and Architecture*, library Renaissance Arabic Baghdad 1985, p. 35

⁽⁵⁴⁾ <https://www.aic-iac.org/en/member/maria-oriza-perez/>

⁽⁵⁵⁾ <https://diariodeunceramista.wordpress.com/2021/03/08/entrevista-a-maria->



Figure (3)
The artist

Maria Oriza Perez

Architectural topological structures were embodied in the works of Japanese potters, including (Kurokawa Toru takes Kurokawa) As in Figure (4), the emergence of topological architecture with its new concepts and methods caused the disputes, criticisms, and discussions that it provoked, sufficient shock that made it contribute to breaking the grip of the old system and reconsidering all previous concepts and systems. Since the beginning of the nineties, a new trend has appeared among some architects towards the characteristic of balance and proportion in architecture. Topological architectural structures on the one hand and aesthetic aspects on the other hand. Proportionality in architectural structures must be thought of in two ways: the first, specific, structural, expressive, provided that there is no conflict between them, and the second with what is mental and visual based on what is perceived from external relations. Aesthetic, and thus (architectural structures can be viewed as a manifestation of reason, thinking, and utility)⁽²⁾ Each material gives a special impression and has advantages in terms of the possibility of processing and formulation. It can be said that the artist's creative ideas cannot be embodied in a special work of art except through the material and skill in processing it. No matter how smart and distinct the artist's ideas are, he also needs a high ability to implement his ideas practically. "No work of art will be created without relying on some degree of creativity." Technical skill... the better the technique, the better the artistic work" ⁽⁵⁶⁾.

⁽¹⁾Reid, Herbert: *Art and Society*, published by: Fares Mitri Zaher, Dar Al-Qalam, Beirut, p. 179.

⁽²⁾ Wellingwood, Robin George: *Principles of Art*, published by: Ahmed Hamdi Mahmoud, Egyptian Publishing House, Cairo, 1966, p. 37.



Figure (4)
the artist

Kurokawa takes

In such contexts, it should be noted that the artistic characteristics of contemporary ceramic art have forever transcended the goals of utilitarian symbolic representations that were inherent to it over the ages and new functions have begun for it, represented in both the intellectual and aesthetic function, as the artist emphasizes new formulations outside the limits of literal representation. And the symbolic form of forms, so the main function of form becomes in intensifying the power and feeling of the aesthetic content through the artistic formations and entity and their internal composition in the structure of these elements in order to serve expression, so the function of form becomes essentially the announcement of the artistic work and its aesthetic content. This was also mentioned in the works of Japanese potters(Harumi Nakashima) as in Figure (5). The potter can find artistic properties characterized by the symbolic ability of the clay mass to achieve ceramic topological shapes. The basic technical considerations that govern ceramic work have become the relationship in its artistic and aesthetic dimension outside the limits of its instrumental function, as it was before, within the limits of the potter's attempt to find new forms that characterize the ceramic work in an attempt to achieve aesthetic artistic values in form and at the same time find topological formulas in it. Although the general form is close in composition to traditional forms in the art of topological ceramics. Since all the things in nature that the artist introduced with a new approach were transformed into something else due to his innovation of new artistic relationships that generate a new emotional response ⁽⁵⁷⁾

⁽⁵⁷⁾ Reid, Herbert: *The Meaning of Art*, previous source, p. 237.



Figure (5)
the artist

Harumi Nakajima

Freedom became one of the most important characteristics of the contemporary artist, as his denial of reality was one of the expressive manifestations of his self. Art no longer cared about the external form, perspective, or strict traditions, but rather his experiences became an expression of what is inside the artist and the creativity he carries, and thus art simultaneously expressed the truth. And imagination, and about seriousness and absurdity, and about matter and thought ⁽⁵⁸⁾We find that the works of American potter (Kieu Tran (Kieu Tran) mixed in its formative structure the character of topological architectural structures between the diagnostic and the absurd, and here is a reference to the subject of the architectural intellectual structure, through the concepts of modernity that seeks a balance in aesthetic functionality in ceramic formations. Changing the layout of the topological structures of things and formations is a change in the layout of the function itself, and this principle explains to us the idea of development occurring in the functional structure of the topological architecture. This leads to the development of the level of function according to the change in the level of models and structures, but the whole change is based on scientific and theoretical foundations that may be ((The change that occurs in one style indicates the emergence of new aesthetic standards and the agreement of artists who are able to achieve these standards))⁽¹⁾As in Figure (6)



Figure (6)
The artist

Qtran

(58) Muhammad Jalal: The Art of Modern Sculpture and How We Desire It, 2nd edition, Hala Publishing and Distribution, Giza, 2000, p. 8.

⁽³⁾Arnold Hauser: *The Philosophy of Art History*. T: Ramzi Abdo Girgis, Cairo, 1968, p. 240

We see curves in architectural topological structures as a complete element in space, such as a circle or an oval, or they are derived from part of another element. These curves may be the result of influences from the art of sculpture. Most of the works of the Dutch potter (Harry Ajima) were Harry Agema) architectural topology with topological curved shapes as in Figure (7). Every artist has his own style of formal change, which stems from pure subjectivity originating in the subconscious. This absolute subjectivity, in its interaction with transformations and changes, tends to produce general features, which allows the freedom of the potter to use whatever materials and raw materials he wants, so that the artistic work becomes an intensive work on a ceramic architectural structure, and this work is built within ceramic sculptures, and the convergence of these works and their constructive nature between two formal areas, namely architecture and ceramics, and linking them to a dialectical relationship based on revealing the energy of beauty through the diversity of construction techniques. And exploding the expressive energy from the body of the material through the diversity of media and his formal metaphor with inferential and performative action. The artist also abandoned some traditional concepts, such as prior design and preliminary study, so that the artist became concerned only with what is generated during the work, based on the raw material and the way it is used or used. His choice of her⁵⁹



Figure (7)
the artist

Harry Ajima

And the state of progress to the level of awareness of the topological meaning, that meaning that is synonymous with the difference in the search for the true feasibility of all types of expression, which depends on the production of the topological architectural ceramic composition and the way it is presented, and the possibilities that may confront the recipient, through shock and what emerges from the unfamiliarity of the presentation and artistic direction, And the disruption of the foundations and elements and the discovery of analytical approaches that penetrate into the circle of uncovering the task of communication between the functionality of ceramics and its aesthetic concepts. Hence the specificity of the research into the aesthetics of the topological composition of the potter (Cree Kars Marshall Cri Kars-Marshall), as in Figure (8) Simply design, curves and intersecting lines are important elements in topological geometric construction. And creating open abstract shapes with sensual folds and cheerful colors. Exploring open spaces is an integral part of the final shapes. They are integrated within a research sequence consisting of two main structures: a deep one related to the interior building and its relationship, and the other is a phenomenon

(⁵⁹Sultan, Sajjad Mahmoud: *Architectural composition design*, Printing press Dar: house Al-Araji, Baghdad, 1997, p. 174.

related to the design surface, its space, and its technology. Both structures give value. A dialogue to resolve the problem between the recipient and the icon of the ceramic formation that moves within the space of the general design structure (it represents a geometric formation in the form of an oval strip, standing and another representing the same shape but upside down next to the first, and it was built according to the principle of matching, even though it represents apparently different shapes)



Figure (8)
The artist

Cree Cars Marshall

The researcher believes that the ideas, concepts and practical applications in the fields of art and knowledge, especially contemporary ceramic art, have made the neutralization of the functionality of topological architectural art a mere actual transition to topological ceramics that accommodate all the simultaneity of the aesthetic effect, and the sequential practice of the nature of the driving structures of the architectural ceramic context, through which interpretations are imprinted. Linking the functional and aesthetic aspects.

Theoretical framework indicators:

- 1) Form and content are inseparable from each other, as the first complements the second. The form organizes the basic formulation of the body or matter, and organizes the elements in the topological space
- 2) The aesthetics of the topological ceramic composition is formed through two axes: the first: the actual components, artistic elements (point and line, shadow and light, color, texture, shape, direction, space) and the second: the foundations and means (unity, rhythm, balance, movement).
- 3) The topological system is the law of the ceramic structure. It involves an autonomy that forms a unified whole, and its totality is linked to the entity of its relationships, the parts outside of which have no value.
- 4) Topological properties enable the performance of the technique used in the architectural construction of contemporary ceramic composition
- 5) The topological structure does not represent the partial details, but Anmaa presents a comprehensive vision that surrounds the details to elevate them, emphasizing the specificity of the architectural structures themselves.

6) Topological structures flow to transcendent levels of encoding, memorization, and exploration, and deal with cumulative data formats that establish an intellectual vision that emerges from experimentation and research in the aesthetic field.

7) The void has the direct influence of visual stimulation on the structure of the topological composition, so the void plays a role in the process of architectural construction and kinetic attraction for contemporary ceramic works.

Chapter Three: Research procedures

First: the research community:

The researcher challenged the research community with (17) models of research applications within the temporal limits of the research (2023), whose study was determined to relate to and serve the goal of the research and show the possible results.

Second: The research sample:

The researcher selected the research sample, as the number of samples reached (3), in an intentional manner. The process of selecting the research sample was carried out according to the following:

1. The selected models represented diverse visions of architectural structures by shaping the researcher's ceramic products.
2. The sample forms bore different forms with diversity in methods and techniques, which allows the researcher the possibility of achieving the research goal.
3. It should include some of the general features of topology, which can be compatible with the work of contemporary Iraqi ceramics.
4. The sample models achieve a renewal in their plastic structure based on the intersection between all types of arts.

Third: Search tool:

The researcher relied on the indicators that the theoretical framework concluded as criteria and benefited from them in the process of analysis and investigation, in a manner consistent with the goal of the research.

Fourth: Research methodology:

The researcher followed the descriptive approach in analyzing the research sample models.

Fifth: Analysis of the research sample:



Model (1)

Researcher's experience

Work name: Mesopotamian doors

Work dimensions: 35 x 25 cm.

Production year: 2023

Al-Aidiya: The artist's private collection

Visual description

The work is a topological strip in a wavy shape, resting in the middle of a ceramic base, and inside the wavy strip there are spaces in two shapes, the first is people in a diagonal shape, and the second is in the form of gates arched from the top.

Analysis

The artwork was constructed with a structural system that controls its construction and integration. The formal, semantic lines control its construction and integration. The use of simple incisions and engraving in the clay before paving to show the shape of the bricks. The finished work was covered using colored oxides. An unidentified figure inside the wall appeared in the view of the text from the front. It was executed using the bas-relief method. The upper part is formed It consists of four people in an abstract shape, of varying sizes, and the fifth is in the shape of a brick. The lower part consists of a gate in the shape of a void, and the lower part consists of a gate in the shape of a void and a gate as well, with an arched upper end, a gate with a triangular end, and a void in the shape of an abstract person. The ceramic base is in the shape of roads. In her aesthetic speech, the potter sought to reveal the contents of the pure feeling of the viewer regarding human feelings in life, to engage the recipient's sensory, mental, and emotional mechanisms to reveal the structural pattern of her ceramic work, as the aesthetic structure came to express solidarity between the basic parts of the artistic work. According to the directorial design that was established for it, which can be accessed and discovered through the symbolism stemming from the content, Al-Khafazah intended to work on ceramic topological systems, show some of the architectural vocabulary in a topological way, and insert people in an abstract way. This is to represent contemporaryness with heritage, as if the heritage is renewed and continuous. Al-Khafazah was employed in this. Work, the void with its direct ethereal power of visual stimulation in the structure of the topological composition, so the void plays a role in the process of architectural construction, and to achieve the kinetic

attraction with this crowned strip, the technique that I used added a visual language, as the researcher used cellulosic clay made from used or even damaged paper after the process of mashing it well, He mixed it with white clay with a grain larger than the red clay and a small percentage of black dirt, and fired the work with a first burn of up to 900, after which he rubbed the work with manganese oxide and colored some areas of the work with a light blue color with a light sprinkle of clear glass oak to burn the work a second burn at 920, and the burning was completed. With an electric oven.



Model (2)

Researcher's experience

Work name: Qabbab

Work dimensions: 40 x 20 cm.

Production year: 2023

Al-Aidiya: the artist's private collection

Visual description

A ceramic work consisting of a number of domes, shaped topologically, mounted on a ceramic base

Analysis

The ceramic text being analyzed depicts a semi-geometric ceramic composition in which curved and solid strips appear, occupying the entire area of the work. The researcher used red clay, grade 920, as the first firing, and after kneading it with chromium oxide and washing the work with just a sprinkling of water, after that with iron oxide and washing it lightly, and then kneading it. With a mixture of iron oxide, chromium, clear glass, and a second firing at 930 degrees, the firing was done with an electric kiln.

The potter clearly indicated to the ceramic topological systems that this idea found the necessity of embodying it in this innovative formula in order to achieve the element of suggesting the primary idea, the idea of (the absolute), and starting from it the representation, the specificity of the artistic proposal, to show it with a new semantic and symbolic interpretation that distances itself from the sensory perception in form, in order to relate to it an idea and a topic, with great brevity in the details. Formalism serves the symbolic content of the topological structure, as it is a message carrying a symbolic meaning that includes that deep structure hidden under appearances

that are not devoid of a system of subjective signs for an Islamic reference. What filters from this reference is the foundations of the specificity of the stylistic potter, leading to originality in the artistic proposal, which is linked to contemporary aesthetic taste in all its implications and problems within. Its compositional system is based on line and color, and its topological space is in motion

The potter sought to find balances in a way that demonstrated knowledge of the rules of artistic ceramic formations and their technical characteristics, and the significance of the composition gave the work high aesthetic values. The potter achieved a symbolic semantic work for the dome, but according to a new, contemporary formal organization in which its references were not forgotten as well, returning to the art of Islamic architecture, in which it abounded. Such a kind of topological ceramic configuration. Thus, we see that when the contemporary Iraqi potter sought inspiration from the past, he was not concerned with the formal icon itself, but rather with the spirit that animated it through the geography of travel and capturing the terrain of those cultural symbols and dragging them into our extended time within the throes of creative debate. The past is part of the present and the present has not reached What it is now if it weren't for that past



Model (3)

Researcher's experience

Working name: Volcano

Material: porcelain

Working dimensions: 40 x 20

Production year: 2023

Al-Adiyya: Private collectibles

Visual description:

The ceramic work represents the shape of a half cylinder, with multiple colors due to the reduction of oxides entering with the glass. Among these pots of lead and rusty red, the front of the work is smooth and the inner side of it has a rough texture. The work is as if it were torn pieces, as if the lava was collapsing to the top and not to the bottom.

Analysis

The work has a clear meaning from the name, which is Volcano, as the artist deliberately dismantled the work from its various parts, as the topological properties and performance of the technique used in the architectural construction of this ceramic composition, and the topological formations took place in forming this work from clay mixed with crumbled paper prepared by the artist, With red and white clay, fired at a temperature of 950, the work was glazed with a layer of white glass as a lining, and then the work was sprayed with iron, manganese and copper oxide and burned to a temperature of 920. The work was reduced inside the gas kiln by inserting a piece of wood and closing the kiln openings.

Through the process of visual analysis of this work in order to reveal the aesthetic values through the aesthetic visual constructivist style of the work, we find that the adoption of the cylindrical system was not a closed reliance on the cylindrical system, but rather it created a violation of that system through its use of a group of formal elements that are also characterized by a linear character. Circular, which emphasizes the unity of formal and stylistic formulation

Ceramic topological systems are characterized by the method of geometric formation. In this work, it is the process of geometric irregularity represented by that ceramic cylinder. Its compositional system is based on line and color, and the topological space of movement. The structural system in this work operates according to the geometric rule that the potter adopted because it is a synthetic rule that formed the most extrapolated system. In the constructivism of ceramics, in addition to the nature of the ceramic work in its abstract compositional construction, it imposes a kind of artistic buildings of a geometric nature in its structures and topological systems. This work is one of the indications that constitute the value of the visual experience within its limits, achieved by the potter and represents part of the visual abstracts and formal metaphors in most of its areas. Reductively and abstractly, despite the act of connotation and meaning elicited by the form, which governs the language of reading and gives identity to the form through its visual structure, it is a semantic reading from an aesthetic angle that is opposed to the realism of the subject and its semantic meaning.

The fourth chapter-Results and conclusions:

Results:

1. The stylistic diversity in the structure of the topological composition of the sample models helped to demonstrate the effectiveness of the space with the elements of the composition to form effective geometric structural units that establish aesthetic features through their interconnected relationship with the space that they accommodate.

2. The intellectual transformation is due to building a plastic style that keeps pace with the artist's vision, the extent of his interaction, and his cultural, civilizational, and aesthetic dialogues, as well as his endeavor to keep pace with the radical transformations in the world of contemporary plastics in general and contemporary ceramics in particular.
3. Most of the sample models came from a cluster in achieving bonding relationships between them and their multiple spaces to achieve the functional and aesthetic purpose
4. Contemporary ceramic production has a unilateral formative context in its compositional structure, meaning that the works sampled for research have unity in the geometric topological form as a structure that is not an imitation of nature or a copy of it, but rather a stand-alone building based on a creative structural composition.
5. The potters' reliance on the unconscious as a starting point for topological formation in a disjointed formal openness that has no center and no form in the marginality and superficiality of free play, and that every potter has his own formal language (subjective) based on those concepts, and concepts such as, absurdity, chaos, superficiality, change of reading, and individual style apply to him.
6. Contemporary potters rely in their formal language on abstract overlapping shapes of geometric or semi-geometric form and on some intellectual and aesthetic concepts in displaying their artistic works.
7. Contemporary potter relied on symbolism as a purposeful method to achieve effectiveness between the basic topological structure and the spaces that surround and accommodate it.
8. The contemporary potter sought to innovate and develop topological ceramic formations and maintain the general form of the composition and embarked on a new world of architectural ceramics.

Conclusions:

1. Contemporary ceramic forms have achieved an influential aesthetic dimension through the function of the artistic elements and foundations related to topological ceramic work
2. Contemporary intellectual transformations called for the denial of all semantic and reference centers, and brought about a transformation in the nature of artistic production. The formal possibilities were infinite, and the artist worked without rules to formulate his own rules, and no aesthetic theory could apply to him.
3. The contemporary potter emphasized the importance of the relationship between ceramic composition and architecture, which relied primarily on the relationship between them and their spaces to give it another creative motivation in his artistic achievement.
4. The artistic style of the contemporary ceramic piece contributes to a dialogic synthesis of the form itself and the artist's style through the subject, idea, and function.

5. In topological ceramics, space in general has a major impact on the integration of the relationships between its building units, achieving artistic and aesthetic effectiveness.

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