

**Possible Design Solutions in Mural Painting on  
the Rhythm of Contradictions**

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**Abstract**

Hegel points out that the beauty of harmony is represented in the unity of contradictions and the framework of the mutual dialogue between the thing and its opposite. He argued that the sense of harmony and rhythm is due to the tension between contradictions because conflict is the basis of every development. The conflict of contradictions stems from the attraction of each phenomenon toward its opposite. Beauty is represented in the unity of contradictions. From this proposition, we find a philosophical introduction to an expanding field of forms through the analytical and intellectual context of contradictory relations, which are closely related to the values and forms of balance in nature, from a harmonious unity on a balanced rhythm, which includes all the contradictory paths, and it is easy for the artist to reformulate them philosophically to form a new formal system that provides design solutions based on unity that results from the rhythm of contradiction and harmony formulated within it and its relationship with it.

**The research problem** is inferring from that philosophical vision implemented in mural painting on the architectural surface internally or externally is based on devising possible design solutions through the formative values of rhythm contradictions in the language of form and the use of concepts of contradiction in the construction of mural artwork based on examples of works implemented in modern and contemporary art, and its analytical study and identifying the extent of its enrichment of the plastic, aesthetic, expressive, and creative aspects of that vision, as the researcher sees to produce an artistic work in line with the scientific discoveries of raw materials and new techniques that influenced the current ideology by proposing ideas and concepts reflected on the vision of the formation and visual from the differentiation of formal relations on the methods and trends of each artist to achieve that vision and interpret the contradictory formal relations in different forms in the production of mural artworks; so as to use such vision in formulating multiple treatments based on the rhythm of contradiction, to enrich the aesthetic values presented in the artwork through the formal employment of architecture and the design employment of the mural painting i.e. the subject of the research.

**Keywords:** Diversity of Surfaces, Architectural, Olympic Street, Wafi Mall, MRT Station

### **Introduction**

The concepts of contradiction, and opposition are linked to intellectual values, as it is confirmed that human history has a real interaction based on opposition, and the unification of contradictions; thus, an exchange of roles between strength and weakness, right and wrong, victory and defeat appears. That is because of the contradictory and constant meanings in its reality, which constantly move to take more than one appearance, they all emphasize the interrelationship between man, nature, and society.

Such interrelationship is based on confronting the permanent controversy between the young human groups, and the groups that are heading towards demise. This confrontation ultimately leads to a sharp movement in favor of the young powers. History records that the integration of contradictory variables is like a theater of the opposites' struggle in all aspects. From this point of view, the researcher refers to the language of form, as the artist formulates all contradictory formal relations together in their designs, or focuses on one of them to lead to a design solution, and then one leads to the other that they allude to or refer to in the design by symbol, for example, or explains it in the way they see suitable. Through the aesthetic method based on the collection of contradictions, we find that the most contradictory elements exchange mutual obligations with each other to achieve equivalence and integration between the two extremes.

The artist expresses these design relations through the language of form through the equivalence of the meanings of contrast with the design elements, combining in the graphic artwork (bold and thin lines, thick and thin in levels, high and low, large and small, many and few, stillness and movement, the softest to the roughest in texture, transparent and dark, light and heavy, hard and soft, bright and dark, or contradictory in the direction: to the right or the left, or from the top to the bottom or vice versa).

Examples of contrasting color relationships in living nature, for instance, the zebra, the penguin, the whale, and the dark-skinned man with gray hair, all of which share the appearance of black and white as contrasting colors, as well as different flowers, fruits, vegetables, and red fruits that grow on trees and green plants, they all combine red and green as two contrasting and opposite colors in the color wheel, likewise blue is the color of the sky and orange is the color of the sun and they meet in the sky and they are contradictory and opposite.

The interaction of all the components of the artistic work within the framework of contradictions emphasizes unity, when the artistic work is based on the harmony of opposites to be the unit of artistic work, then all the used design elements emphasize an overall positivity of the artistic work as one unit. Moreover, the researcher reviews these contradictory relationships in light of the solutions that the artist assumes as a hypothetical design solution that can fit and live within the workspace. The priority is for the solution that is most consistent with the space, the most expressive of the subject of the artwork, its function, and the nature of the place around it; taking into consideration the contradictory rhythm in building the design solution for the artwork and its review of the rhythmic values inspired by the values of contradiction in design.

The researcher presents the most important features of contradictory design solutions in modern and contemporary painting by proposing some design solutions associated with mural painting and architectural areas through five different examples in which the design solutions chosen by the artist to provide a design that solves the surface area to be worked on, and how they formulated the design based on the rhythm of contradictions.

### **The Nature of Design Solutions in the Presence of Contradictory Relationships**

The basic elements in the formation are the indispensable items in any artwork, known as "design elements", and they are defined as the plastic elements, and they are called the elements of the formation from the design point of view, and this is because of the extent of their potential in the flexibility of the formation and their ability to integrate, mix, coalesce, and make relations with each other in a whole unit, so their distinctive images are defined in an integrated whole that represents the artwork. In addition, there is no doubt that they are like the vocabulary of the language of the form used by the artist and designer, and here their variables are derived from the experience of design and linking them to nature.

Through examination and reflection, we find that the initial elements visible to the forms of nature are the same as the initial elements of design and have been listed as (font, shape, size, space, texture, and color.) In essence, they are stimuli for the sense of sight that arise from the interaction of light with the form, to reflect different values of light, shadow, and color that pass through the eye for the process of vision to occur with its variations starting from the point to the size; emphasizing that all the plastic elements in their design solution of mixing, coalescing, organization, and rhythm work to achieve the third dimension at times, they are all characterized as being three-dimensional, as each of the design elements (point, line, area) of the total two-dimensional flat design elements, which have an effective role in triggering the feeling of motion that seems to be static, we find it movable towards the side of the sight.

The artwork contains a lot of spaces and appears significantly in predominantly flat formations, and appears in regular or irregular relationships by identifying, coordinating, and harmonizing the principles of the construction of the formation; thus, the artist must distribute the spaces of the design elements into occupied-areas and empty-areas, and transform them into spaces that merge and intersect; in addition, color plays an important and key role in identifying and showing these spaces.

Referring to the apparent kinetic forces in the design, differ from the latent kinetic forces that are contained in the design formative elements within the framework of contradictory formal relations. Anti-statics and latent movement exist, and an important type of cognitive energy is achieved. We can call them “kinetic dynamics”, which are described as continuous. If the nature of design solutions differs in the presence of contradictory relations, there are many ways in which more than one design solution and multiple items of the elements of design formation can be developed by selecting the best suitable of them in terms of (subject, place, and colors) to reach the best design solution.

**The use of the contradictory rhythm in the construction of the design solution** appears in the innovation of the relationship based on equivalence and equality among the elements of design and their backgrounds. By using the deceptive relationships of the formal concepts that affect perception, the balance in contradiction and contradiction between the shape and space or the background is confirmed. through the use of some variables such as the balanced difference in direction, for example, a kind of convergence in the rhythm of the design is achieved, and this is consistent with the types of patterns of relations of the form associated with the concept of (action and reaction) because it is normal for each action to have an equal and opposite reaction in amount and in direction, where it is possible to combine the direction towards the inside or to the outside, or to the right or the left at the same time from the plastic point of view. The designer combines the two contradictions and opposite directions in one balanced design, form, or plan in order to achieve a kind of effective rhythm and aesthetic connotations since the contradictory rhythm in the design is a form of multiple forms of using design elements in a way that expresses the content of the mural painting.

### **The Value of the Rhythm Inspired by Contrast Values in Design**

Rhythm is the connection between the constituent elements of the work that unifies them in a musical-visual system, in which the moment of stillness and pauses are important in giving the formal structure a final character, and it is represented in the spaces between the shapes and units that make up the mural work, thus giving it its vital characteristic, and the rhythm comes in balance and repetition.

Rhythm has multiple and different images that depend on the repetition of the movement of shapes in a specific way that combines unity, change, and diversity as concepts through which the aesthetic value of design in plastic art is confirmed, and this is due to the fact that “the concept of rhythm means in its essence a state of change, and in that it is closely related to the meaning of the movement.

The existence of change and movement means perceivable events, actions, and forms, and necessarily means the existence of the active force that causes movement, change, or action.”

Rhythm in the image means the repetition of blocks or spaces; such repetition raises Units that may be exactly the same or different, convergent or divergent. There are distances between each unit, known as Intervals. Thus, we see that the rhythm has two basic elements that exchange one after the other, and these two elements are the Units, i.e. the positive element, and the Intervals, i.e. the negative element.

It is worth mentioning that the relationship between the negative and the positive is mainly based on the contradiction in the different ways of formulating the negative and positive relationship, and the rhythm is considered a key factor for the direct combination between the negative and the positive in the design of the artwork. It is the internal music that organizes the design elements within the artwork by repeating them in a design system that leads to the confirmation of the meaning and content. Usually, there is more than one type of expressive artwork, and the rhythm arises from the differences among the elements of the artwork, whether in lines, colors, or spaces. It is attributed to these elements; thus, we find a linear rhythm, color rhythm, spatial rhythm, and so forth.

There are many forms of rhythm in the design configuration, it is based on the value of structural repetition in a framework of contradictory variations, including the forms of systematic rhythmic contradiction, static (symmetrical) rhythmic contradiction, anti-static (asymmetrical) rhythmic contradiction, and free rhythmic contradiction.

Some sub-values affect the emergence of the rhythm and highlight it in order to achieve one of the most important elements related to the rhythm, namely the extension and time, and these values have an effective role in achieving the rhythm of design contradictions among the forms in the general composition of the artwork, as follows:

- 1- Rhythm of the volumetric gradient of the form and floor.
- 2- Rhythm through the gradual repetitive exchange of a specific design element within the artwork and is related to the organizational method of the form positions in the formation against its inverted or reversed image.
- 3- Rhythm through sharp variation in sizes and forms, and the use of regular colors to achieve change and rhythmic toning of the design of the artwork.
- 4- Rhythm through continuity that works on the interconnection between the parts of the artwork, starting with the two contradictory forms to the rest of the artwork in terms of formative construction, and in terms of visual perception.

**The gradual rhythmic organization** of the design of the forms in the context of gradual volumetric and color variations is a type of contrasting rhythmic organization through which the illusory dimensions are achieved in the design space, through which the contradictory formation relationship acquires an aesthetic dimension based on the type and space of the gradation on the one hand, and the nature of the unit of contradiction and the number of contradictory elements in terms of the conceptual context on the other hand, as they combine within the framework of the formulation of the overall design form.



The gradual organization of the elements reflects the dimensions of the artwork. In addition to the possibility of organizing the tones between the dark and the light, it is possible to gradually organize the spaces and shapes of different sizes, and it is also possible to gradually organize the directions of the shapes from one place to another until the movements of the form are perceived in the space. Here, gradation is a system of distributing elements and shapes in a design within any formation.

The gradual rhythmic organization of the elements of the artwork always expresses a noticeable movement either by increasing toward the recipient or decreasing into the depth of the artistic work. The gradual rhythmic organization may be slow, that is, wide-ranging, and may be rapid, and the more rapid it is, the closer it is to the state of contradiction. The wide-ranging gradation creates a sense of comfort and calm - in contrast to the rapid gradation that quickly moves the eye from one state to another contradictory one - thus, it is psychologically linked to conflict and strength and is appropriate for artworks that express these meanings.

Rhythm and texture, where the distribution of elements is related to frequency through the tactile rhythm of repetition and color rhythm – in different parts of the artwork, and the artist tends through this to emphasize the content or meaning intended within the design of the artwork and from this directly related to the rhythm and distribution of the repetitive texture.

All of them are different types of rhythm and the skilled artist must employ what he chooses from multiple types of contradictions and chooses the appropriate rhythm in the design process to provide a work of art rich in design values and innovative solutions for the spaces, the suitability of the subject, and the selection of appropriate design elements in the formulation that indicate this meaning and confirm it, which is the unit that is created under a design full of contradictory values on the suitable rhythm or rhythms.

### **The Most Important Features of Contradictory Design Solutions in Modern and Contemporary Painting**

Through reviewing the values of harmonious contradiction in the design solutions, i.e. subject of research, we find that dealing with them through a historical context demonstrates them thoroughly, through philosophical, historical, and formal dimensions via sensory, mental, and cognitive aspects that deal with the concept of contradictory design relationships in mural painting in modern and contemporary artistic trends to clarify patterns of intellectual difference in plastic approaches for the contradictory relationships within the framework of the philosophy of each artistic direction in modern and contemporary art.

In addition to the results of the handling methods of various plastic techniques and processes that were reflected through the diversity of the formal solutions to the values of contradiction, which were linked to the concept of changes in each period, and the nature of the contradiction based on change, distortion, simplification, exaggeration, and reduction of the elements of the form of realistic, expressive, abstract, and symbolic shapes and their meanings.

Not to mention how to achieve the aesthetic dimension in the construction of the artwork by relying on the organization of the perceptual vision in its organization of the composition elements and their arrangement in the artworks and the consequent innovative solutions inspired by the artist to confirm and define the relationships and possible solutions among the design elements.

The constructive method of design aims at achieving the diversity of creative aspects within the framework of patterns of the contradiction inherent in creative work, and how to deal with the mural artwork through its explicit nature within the framework of contradictory formal relations, which includes the plastic aspect of the external surfaces, as well as the expressive concept of the space extending horizontally and vertically.

Likewise, the multiplicity of executive and constructive levels are required processes related to the advanced technology and its employment, and what is related to it in whole or in part with one of the manifestations of the formal relations on the rhythm of the contradiction and its structural and architectural aspects, according to the multiple concepts of innovation and diversity.

### **Design Solutions Associated with Mural Painting and Architectural Surfaces**

Mural Painting is fundamentally different from the rest of the branches of painting, as its architecture-related nature imposes on it a set of artistic foundations that give it its own taste, although it shares some of the characteristics of portable painting in the general design foundations, it is characterized by certain imposed characteristics due to the nature of its association with architecture. For instance, working on large and extended areas gives rise to many technical problems, that have an impact on its formations of the extended, successive, compound, or simple nature.

Mural Painting derives its distinctive character from its association with architecture, as it enters within the architectural structure, adding through the pictorial illusions of the space represented in the formations and subjects depicted on the surfaces of the walls of the architecture new dimensions associated with the real value of architecture, nature, and constructed nature, which imposes on mural painting its commitment - in the method of its formulation - to the nature of the structure of architecture,

which forms the basis for the shape of its formations and the logic of the distribution of the subject of the mural artwork.

We find that the real content provided by the values of contradiction is to give aesthetic and intellectual dimensions to the reality of the place, where the artist uses virtual formative solutions through which he seeks to imagine the dimensions of the place in a new and different way, which is, in fact, an analysis of the total spaces in line with the design and materials used and the nature of the place and its function.

### **Contradictory Design Relationships in Mural Painting**

#### **Painting on walls and Architectural Surfaces Since Ancient Times**

The plastic relations based on the relationship of contradiction, emerged with the beginning of the first deal with the internal walls of caves and tombs in the ancient Egyptian civilization, and therefore the development of mural painting has been linked to the development of human existence itself, and therefore the nature of dealing with the wall has evolved within the framework of the requirements and needs of man, where the relationship between man and the wall was linked according to his renewed and continuous needs and interests associated with the features and characteristics of this man, as he used it to record by drawing or digging or adding what he sees of his perceptions and visions to express and serve all purposes and concepts.

The primitive man was able through the simplicity of the formation to devise some of the performance solutions that enable him to acquire contrasting forms that emphasize each part of his vision recorded on the wall, in order to increase the relationship of contradiction to the desired shape, to work to highlight it realistically and expressively in many kinematic situations, we find the clarity of the image of the animals that he was implementing on the wall and emphasize it in color, the external lines of the element that he implements to confirm the shape,

exaggerate the magnification of the size, and take advantage of irregular rock surfaces with different textures, stressing in this way the aesthetic values of contradictions, using the method of drawing, scraping, or drilling specified for the external body of the elements on the flat and semi-flat surfaces, or finding a design and historical dimension for the values of contradictions.

What is noticeable throughout the history of art is that man has been able to control the surfaces of the wall, because he succeeded in designing his world composed of systems of color and rhythm, the raw materials he uses, the division of spaces, and the order and variety of sizes of the elements he uses, with the appearance of the realism of the elements he tried to simulate in various ways, he may add a distortion or be less vital to suit his needs to give some forms a wide degree of distinctiveness and visual sovereignty; thus, they were characterized by exaggeration in the proportions of the elements, the use of contrast and sharpness in lines and colors, and the use of automatic innate formulation of the relations of contradiction. We also find symbolic and abstract employment of the forms of the motion of the elements.

The artist in ancient times adopted in his automatic organization of the formal groups on the wall some structural aspects, though most of them are free of achieving perspective and depth, where the majority of the forms are flattened, and even the colored parts of them do not emphasize the forms clearly and are not linked to the floors, but represents the extended wall of the cave, cemetery, or temple ... A ground for all shapes, it extends to unite the shapes, each of which constitutes a separate subject.

From this reference to mural painting and its contradictory relations in design since ancient times, we move to the emergence of modern contradictory design relations, which emerged with the development of man and were linked to human nature and the manner of employment associated with the methods of formulating and dealing with different materials, ideas, and techniques, as well as the nature of the diversity of topics and the development of concepts.

The concept of mural painting is newly expanded to include interior and exterior murals, as well as all architectural artworks, decorative openings, graffiti, direct printing on the wall, or architectural sectors, which are carried out directly or indirectly on the surfaces of architectural installations of different types, areas, materials, and techniques, and at different times and places.

We find that mural painting is an entity that falls within the components of the physical environment, that is, the artistic activity shifts from the limits of expression to become part of the constituent parts of the features and character of the place itself and not just a painting hanging on a wall, but the wall itself becomes the artwork or in other words, the artwork becomes a wall. Mural painting is also not independent in itself, but must be integrated with the architectural form, so that it becomes part of what surrounds it.

This requires a high degree of control over tools, materials, and experience. It is a serious artistic work that is done tightly and proficiently, and its impact is heavier and more effective on the recipient because of its aesthetic artistic creations and an organic unit associated with architectural facilities. These facilities that the recipient deals with visually and intellectually are always directly dealt with, and therefore his eyes often fall on the wall work, until his eyes are familiar, and he is accustomed to this vision of the facility and its design aesthetics and formality merged with it.

Mural artworks are represented in the works carried out very wide in the longitudinal and transverse areas, which sometimes include the total area of the wall so that its width requires large areas of the wall or the wall internally and externally of the entire building takes in its external form the same terrain qualities, whether it is a flat work or multiple or varied surfaces. The work cannot be separated from its wall, as mural painting has the ability to confirm the sense of place and identity, it is characterized by permanence and continuity in the presence of the wall despite the factors of erosion and neglect that may harm it, it needs continuous periodic maintenance to avoid those problems, especially since the architectural form contains a set of architectural openings and different levels of surfaces that must be addressed in the design.

This type of painting is often represented in the interior and exterior longitudinal and exhibition walls, for example, in public ceremonial halls and large hotels, as well as in palaces, parks, museums, and universities. Throughout history, large or very large models of mural paintings have appeared in temples, ancient Egyptian tombs, Roman temples, Assyrian murals, cathedrals, churches, mosques, educational institutions, and different traditional decorative murals of Coptic, Islamic, and popular nature.

Cave mural paintings created a cultural significance that differed from the murals of internal and external inscriptions in ancient Egyptian art, Byzantine art, Gothic art, and the geometric direction of Islamic art because through them the artist adhered to a religious commitment in the first place. We can clearly see that faith trait, as this is confirmed by the creations of mural paintings in the Middle Ages, which was characterized as a religious art of places of worship, as it was a public property of the public worshipers and believers, so the wide and extended spaces, inside the places of worship, were the most appropriate place that everyone can share in owning,

and in general, religious subjects were represented inside churches on walls, architectural openings, ceilings, domes, dividers, columns, and architectural sectors that linked the mural design among them, it was an inseparable part of the building that was dedicated to decorating it. And in the medieval arts, we find that mural paintings and religious paintings are inseparable in form and content as shown in the style of Davinci and Michelangelo.

The concept of the material has changed, and it has become in itself a source of value to the modern artist. Mural paintings have spread through this premise to add to the history of mural painting distinctive values and status in the modern era, whether for purely aesthetic motives, or ideological motives; therefore, the important role played by the material cannot be overlooked within the framework of real transformations in its concept and within the framework of the huge technological development of its functional and aesthetic characteristics, which can be invested in the fields of architecture, interior design, theatrical decoration, and backgrounds of theatrical performances, which effectively contributed to changing the forms and patterns of mural painting through intended or spontaneous performance.

It is worth mentioning that the last period of the twentieth century has been accompanied by a remarkable change - we can call it a breakthrough - because of the new materials produced in it, and what has been redeveloped and produced again from natural materials in line with modern architecture, advanced construction methods, and longitudinal murals like edifices, in addition to chemically treated industrial materials; like granulite and chemical stones, in addition to industrial materials; like polymers and polyesters, as well as read-made pastes used for restoration works, oxides, and modern colors.



Flat mural paintings on plane extended surfaces have appeared in abundance in modern art, where some individual works appeared that dealt with it within the framework of the direct structural and design relationship with the extended and explicit architectural areas, such as the Mexican mural painting that appeared in the works of artists "David Alvaro Siqueiros, Diego, Riviera, and Jose Clement.

Mural Painting has emerged in modern arts linked to modern concepts, where it is an indirect method to revive the art of painting on architectural walls and has been characterized by a tendency to simplicity and abstraction in many cases, such as the murals of Picasso and Miro in the UNESCO building in Paris, and both Fernand Léger and Victor Vászrhelyi.

Technological development, like the discovery of aviation, has allowed the change and development of vision to acquire new dimensions in design theories, and the visual ability to see from the top has become a different entrance to the visual arts, where the human mind has been able to acquire new cognitive dimensions that can be seen with the same perspective of the bird's eye.

This is followed by a major change in design processes, extended spaces, areas, and colors. Vision and extended horizontal formations have become a major role in structural and design methods.

The concepts introduced by modern schools in modern painting and contemporary artistic trends have addressed the formal relationships of forms and backgrounds in the space differently from the traditional concepts of perception, and artworks have become like stretched spaces on walls.

Mural painting was not a separate movement, or independent as cubism, expressionism, or surrealism, but it is a distinctive method that requires certain design capabilities in order to fully control the total area and what it contains creative tricks to deal with the basic idea to be achieved, and it is already linked to the nature of the surfaces and the different nature of materials, techniques, and colors.

And through modern scientific discoveries that began in the eighteenth and nineteenth centuries had a direct or indirect impact on the ideology of the era through ideas and concepts that were reflected in plastic and visual art, which generated a set of plastic trends represented in artistic schools that relied on scientific theories and discoveries that can be developed, such as the impressionism and cubism, followed by the surrealism and futurism, which all created a large group of new and innovative concepts that relied on experimentation and avoiding the concepts of simulation and accuracy of imitation.

The values of contrast were based on academic classical methods related to light, perspective, and divergent sizes, confirmed by extreme contrasts in colors and shades associated with dark or light adjacent tones of the same color, in addition to black and white, which prevailed in mural paintings in the renaissance and the subsequent mannerism, baroque, rocaille and neoclassicism, and all scenes of religious and bourgeois mural paintings. In contrast to the stylistic view of the artist in light of the cultural and scientific development of society, which imposed a broader horizon of vision that was linked to the development of the concept of movement and through the realization of the plastic dimensions of different names (the second, third and fourth dimensions) in a new non-stereotypical way and changing the forms between the real and the estimated or virtual imaginary.

Modern scientific research contributed to the analysis of the secrets of nature, which resulted in the enrichment of the artistic and cultural thought of the artist; hence, relying on his thought, imagination, analysis, and creative vision, which moved away from the direct and traditional manifestations of nature, and tended to deal with its essence in its abstract forms, which was skillfully formulated through the artworks that expressed other horizons, equipped with modern aesthetic elements that played an important role in changing the design concepts.

All this has contributed in one way or another to enrich the possible design solutions for the spaces that the artist deals with, in the use and formulation of design elements in the rhythms, whether contradictory or not.

Modern technology, new raw materials, and techniques have given way to a lot of innovation and non-traditional design solutions in the design and in dealing with different surfaces.

### **Diversity of Surfaces for Mural Painting and Finding Design Solutions Accordingly**

The forms of mural painting surfaces vary depending on the form of architecture, and it was pointed out that some patterns of architectural wall surface externally or internally are related to the nature of the apparent surface. The mural painting designer had to control a such variety of surfaces, either by choosing design solutions through color variations, specific lines, or shape structures on architectural surfaces if they are floors or a two-dimensional flat, and the values of the illusory regression so that the artwork eventually is fully recognized through the values of the third dimension to change the sense of the two-dimensional flat due to the values of contrast in the forms intended by the designer in the formulation of the artwork.

The different and multiple surfaces of the mural work for most architectural styles are as follows:

flat surfaces, semi-flat surfaces, multi-level flat surfaces, flat surfaces that are divided into parts and contain spaces and openings, surfaces divided into multi-level parts with architectural progression or dimension, concave surfaces that are more internal or arched or curved domes, convex surfaces, like pillars.

Through the multiplicity and diversity of surfaces prepared for the work of art within it to achieve values on the rhythm of contradictions, the artist uses all sources available within the nature of the surface represented in the protrusions of units and flat elements from the basic work surface or recoil to the depth from the basic surface through which the opposing values are achieved through structural relations based on the architectural form and the real recoil of the surfaces in addition to the color confirmation and the use of textures and their distribution to the surfaces in the construction of the design solution, also through the use of direct light from it or reflected or direct or indirect light on the surface of the mural artwork, or through the use of the technique and the aesthetic values it adds in the employment of the artwork, are all design solutions, used by the artist according to his idea about the final desired artwork.

We find that the values of contrast in academic classical design solutions are related to light, perspective, and different sizes of the elements, whether they are far apart or within the composition of the artwork, are emphasized through the differences in the use of color and shades associated with shades of color from the dark to the adjacent light, which prevailed in paintings from the renaissance and after it in the trends of mannerism, baroque, rocaille and classicism, which include religious mural painting, and with the different style of the artist following cultural developments and theories of science and advanced societal thought, which imposed wider horizons of vision associated with the development of the concept of movement through the perception of the structural dimensions of the formation with its different names like the second, third, and fourth dimensions, which created a new creative style atypical, and a change in the nature of forms between real and virtual or imaginary.

Modern scientific research contributed to the analysis and clarification of the secrets of creation and nature, which led to new horizons and the introduction of stimuli that affected the designer's ideas and the realizations of his imagination; and analysis of nature and his creative vision of traditional directness, and dealing with the essence through its abstract forms used by some artists with great skill to express non-traditional horizons, equipped with a set of discoveries about raw materials and new techniques that played an important creative role in changing traditional solutions and were a new birth to formulate new aspects of the plastic arts in general.

The researcher presents five examples of mural paintings through which she presents the most important possible design solutions used by the artist in the design of these works carried out internally or externally and how he formulated their design elements to the rhythm of contradictions in the following examples:

- 1- Boulevard MRT Station at Kaoshan in Taiwan
- 2- Soho County Mural at London in England
- 3- Mural on Olympic Street at Rio de Janeiro in Brazil
- 4- Pharmacy 2 Restaurant at London in England
- 5- Wafi Mall at Dubai in the United Arab Emirates

**Example (1)**



Artwork Description	Boulevard MRT Station
Artwork Location	Kaoshan, Taiwan
Artwork Title	The Dome of Light
Artwork Date	2008

**The aesthetics of possible design solutions have emerged at the rhythm of contradictions as follows:**

We find here in the design solution used for the interior space of a train station, the artist chose the two pillars that mediate the space and handled their design like the skylight of the place.

The ceiling is an extension of the two pillars in the middle of the general scene. The artist used stained glass molding techniques and was able to employ lighting. We also notice the employment of the visual diffusion feature to perceive different forms based on the value, degree, and purity of color in forms and spaces.

We also notice the multiplicity of formulations of color and light contrast relationships based on the different patterns of reciprocal structural compositions between shapes, "design elements" and the existing space.

The synchronization of the rhythmic movement in the design through its scattered elements, as we notice that half of the skylight tends to be blue and the other half tends to be yellow, and we can see their reflection on the floor.

However, the color of the shape of the two pillars is different, one of them is colored in degrees of blue and the other in degrees of yellow, so the quantity and size differences vary and multiply in terms of flatness and protrusions and tends more to flatness and spatial variations associated with the contradiction of color spaces on a distinctive color rhythm.

**The researcher sees that:** The artist was successful in choosing the place as it is appropriate to establish a work of art characterized by a wide vision in the middle of the scene and includes its ceiling. The researcher believes that the choice of color distribution between blue and yellow could have been more distributed over the entire surface instead of focusing them on specific places, as well as lighting because the colors are very bright, especially hot colors. The distribution here was adding a gradual rhythm and softness less noisy than the user.

The artist agreed with the idea of linking the two pillars to the ceiling skylight in the work of a consistent design unit in the stretch of the shape of the floor to include the top of the scene. In this design solution to the scene, the values of contrast and sharp rhythm were used, especially in the choice of yellow degrees with blue degrees.  
**Example (2)**



Artwork Description	Soho County Mural, Soho
Artwork Location	London, England, United Kingdom
Artwork Title	The Spirit of Soho
Artwork Date	1991



**The aesthetics of possible design solutions have emerged at the rhythm of contradictions as follows:**

The artist chose this design solution for the rectangular wall area, so he chose to evaluate his artwork by dividing the surface into a specific division and did not deal with the entire wall.

Thus, he divided the work into a large rectangle in the middle of the place above in an arched shape, and on the right and the left of the basic rectangle, three small rectangles that connect all the divided parts of the design with a line of mosaic formation technique by the inlay method, unifying its parts.

And we find that the mural painting tells the story of this province, showing a lady who opens her arms, wearing a wide dress carrying inside it the most famous persons that lived in the province, and linking the parts of the design in a creative solution to the themes in the six rectangles on the right and left of the basic rectangle arched from the top carrying themes that have been dealt with the activities and actions carried out by the members of the district.

The mural bears in its meaning the spirit of the community in the Soho district, and we notice that the artist used many techniques in expressing the design, so he used molding techniques with inlay materials, molding techniques with embossed and deep engravings, and molding techniques with modern colors.

The artist has employed all the different techniques to serve the design and the proposed design solution, despite the multiplicity, contrast, and contradiction of the topics, but the artist has formulated them in a distinctive, disciplined, performing, and expressive design solution of the idea.

Likewise, we notice the achievement of the contradictory formal relationship based on the constructive aspect of color, the diversity and multiplicity of quantities and sizes variations in terms of solidification, flatness, and contrast associated with the contradiction of color spaces, the estimated dimensions generated by the systems of contradictory and divergent relationships between shapes to each other, the dynamism generated by the varied rhythm and what it includes of a sense of movement through the two factors of progression and regression resulting from the design organization of the elements, the aesthetic use of its contradictory values, its structure and unity of opposites, and what is associated with them with design values.

Confirming the relationship of contradiction with the rhythm in the formal coordination of the primary and complementary colors in the context of the coherent and balanced linear construction of different densities, employing the perceptual visual diffusion characteristic between the forms based on its values, meaning, degree, and purity of color in the design elements and space. The multiplicity of formulations of contradictory relationships in solving the space is based on the differences of the opposing structural overlays among the different elements.

**The researcher sees that:** The artist has succeeded in solving the wall space with an innovative solution and was able through this solution to deliver the message for which the mural painting was established, which is the expression of the most important activities and works held in Soho province and the most prominent and most influential figures in the formulation of a successful design through his use of different mural painting techniques in a successful manner and different rhythms, whether tactile or repetitive in the design emphasized the contradictory rhythm of the successful design solution.

**Example (3)**



Artwork Description	A Mural on Olympic Street
Artwork Location	Rio de Janeiro, Brazil
Artwork Title	Las Etnias (The Ethnicities)
Artwork Date	2016

**The aesthetics of possible design solutions have emerged at the rhythm of contradictions as follows:**

The design solution for the surface of the mural is on the surface of the wall of the entire building externally, and its theme is “races” which represents the main five races of the human race.

We find the achievement of contradictory design relationships based on the structural side of color, the adjacent contrast generated by dark and light color spaces, the contradiction in contrast and overlapping between hot and cold color spaces, the contradictory and antagonistic relationship between organic forms represented in faces and opposing geometric shapes and achieving the unity of opposites in both, the reliance on the characteristics of continuity in constructing the contradictory design relationships in the composition, which stems from the coordination of the contrasts of stillness and rhythmic movement in the mural painting.

The coherent and balanced linear construction of different densities, the repetitive rhythmic movement in opposite directions, and the use of the opposite color borders so that the contradiction relations are based on defining the color space with the opposite color in the overall composition or a specific part within the design where the specific edge works on the advancement and prominence of the color space or its reverberation within space.

The aesthetic use of the value of linear contradiction of various densities in the context of an extended, rhythmic building system stems from the unity of contradictions and the resulting design values of various estimated dimensions. The personality in the form of a flat rhythm contrasts the color of the background and its harmony with the color of the existing personal images of the depicted human races.

**The researcher sees that:** The mural painter, according to the choice of design elements that suit the subject, has employed the elements with the background in a consistent way, multiple forms of color contrast or design, especially background processing in different and intersecting geometric forms, stressed the emergence of the form of personal images that are placed regularly on the surface of the mural.

Each image gives a different impression, whether for a man or a woman. Here we find the colors of the portraits consistent with the background and at the same time prominent and clear within it, that there is harmony in the use of design elements, there is also a contradiction between the vertical forms through the implemented and horizontal images through the design solutions of the background.

**Example (4)**



Artwork Description	Pharmacy 2 Restaurant
Artwork Location	London, England, United Kingdom.
Artwork Title	pharmacy 2 Restaurant
Artwork Date	2013

**The aesthetics of possible design solutions have emerged at the rhythm of contradictions as follows:**

The design appears here for the interior design solution of the place, which is a restaurant. The main scene is a group of four-square spaces. Each of these spaces is designed differently. The prominence here is for the four spaces that mediate the scene and distinguish it with the contrasting colors.

As for the design, four portable panels were placed, designed, and technically treated by shaping with inlay techniques. Non-contrasting colors were used for them, tending in their colors to blue as shown in the pictures. Contrasting was also employed in the main spaces. balanced by using the circular shape and repeating it in a balanced and varied rhythmic way, colored in shades of blue, red, and white.

The aesthetic use of the values of contrast and the sense of movement includes the factors of progression and regression resulting from the formal organization of the design elements. The four main surfaces in the artwork complement and link one another despite being separate, but they are with the same design elements and colors; thus, they are connected and separate at the same time.

And we notice the adjacent contradiction generated by the hot and cold color spaces and the adjacent contrast generated by the dark and light spaces, achieving the design relationships of the circular shape and its repetition in a varied rhythm in sizes and coloring, employing the perceptual visual diffusion characteristic between the forms based on its values, tone, and color purity.

**The researcher sees that:** The designer was unsuccessful in choosing the design units to suit the function of the place so that people confuse them while entering the place if it is a restaurant or a place to sell medicines. Regardless of the design units used by the artist, we find there is a contradiction in the use of colors and design. This indicates the importance of choosing the elements that express the place and its function, as mural painting confirms the personality of the place and highlights it. Here, the recipient is confused, though the design solutions are very suitable for a place to sell medicines "pharmacy" and not for a restaurant.

**Example (5)**



Artwork Description	Wafi Shopping Mall
Artwork Location	Dubai, United Arab Emirates
Artwork Title	Wafi Mall
Artwork Date	1991



**The aesthetics of possible design solutions have emerged at the rhythm of contradictions as follows:**

Here, in this interior design solution, we find it influenced by the architectural form of the pyramids in the skylight artwork, and the building as a whole, we find it in the style of ancient Egyptian architecture and the Karnak Temple, especially in dealing with the shape of the pillars from a design point of view, so we find in the ceiling a skylight divided into four triangular surfaces assembled in a pyramidal shape.

We notice the multiplicity of formulations of contradictory relationships based on the different patterns of constructive overlays, mutually opposing forms, the employment of repetitive geometric and organic shapes on the four sides in different colors of implementation, the dynamism generated by mutual contradiction including a sense of movement through the factors of progression and regression resulting from different patterns design organization of color spaces.

In addition to employing the design elements inspired by the ancient Egyptian civilization on the four sides by formulating them as a design solution at the bottom of each triangle, the higher we go to the top, the fewer the elements, and variations of small sizes of the elements prevailed in harmony and rhythm of contrast, coherence, and balanced linear construction of different densities.

The synchronization of the rhythmic, repetitive, opposite directions, the adjacent contrast generated by the dark and light color spaces, the dependence on the continuity characteristics in the construction of the contradictory formal relationships in the formations, the coordination of the contradiction of stillness and movement, and the contrasts of the design positions between the static and the mobile, are all influencing factors.

The design units are condensed in the bases of the four triangles that make up the skylight in hot colors, and the higher we rise, the colder colors increase, and the hot colors disappear.

**The researcher sees that:** The artist was able to emulate and be influenced by ancient Egyptian art in his design attempts to solve the work as a whole in the building, especially in the pillars and in the skylight, and the design topics. The researcher believes that he used the design elements with severe confusion but tried to emphasize the values of contradiction and their rhythms in the formulation of the design and was able to use various contradictory design patterns according to the intended expressive connotations within the framework of the unit of contradictory relations resulting from the progression, uniqueness, and rhythm in the various color spaces.

### **Research Results**

Through research and study of the concepts of contradiction, and the design solutions arising from it, which relied on the concepts of contradictory relations, it was possible to conclude that the values of contradiction can be in each design, and the artist's skill is to adjust their rhythm by choosing design solutions for the provided space, to reach a design solution within the framework of places in terms of the idea and technique of implementation and the most appropriate to the place, which is determined by the structural considerations of design by choosing the appropriate elements of the subject, its function, and the nature of the place and placing them in formations with a rhythm that can be contradictory or harmonious or both together.

The more varied and harmonious the differences and contradictions, the more the artwork becomes richer in design values, provided that it can achieve unity between the rhythms used in relationships and its solutions.

The results of the research can be stated as follows:

1- The research clarified the importance of the value of contradiction in the design composition and the role played by opposing relationships of creative concepts in mural painting.

2- The research revealed the importance of achieving the contradictory design relations in the composition of the artwork, and the multiple aesthetic values throughout the course of art history.

3- The research clarified the difference between artistic movements in modern and contemporary painting in dealing with the concept of contradictory design solutions through different artworks.

4- The achievement of contradictory relations includes various expressive values related to the nature of the design elements. The contradiction has various values related to the nature of the elements. It moves towards the meaning and content, which emphasizes the idea.

5- The structural aspect of the contradictory design relations is linked to some concepts such as energy, density, compression, permeation, pressure, expansion, and dynamic and static status, as well as varies in the diversity of plastic approaches.

6- The use of symbols through different contradictory design formulations helps to have plastic approaches that enrich the aesthetic dimensions in mural painting.

7- The importance of the designer's awareness of the factors affecting the coordination of contradictory relations on the mural surface, which is the good exploitation of the data he has on the nature of the surface, the material, and the selection of the appropriate technique for implementation.

8- The diversity of design and formulations of contrasting relationships in mural painting plays a major role in enriching the aesthetic dimension in various designs.

9- The possibility of developing internal and external mural design approaches based on the values of the plastic contradiction through the diversity of formulations and treatments of those design elements used to the rhythm of contradictions.

10- The possibility of employing and developing design relationships based on the abstract method of contradiction, which in turn has a special vision that contributes to enriching the aesthetic vision of design and mural painting internally or externally or both.

11- Techniques of employing perception and innovation for structural and aesthetic design values vary according to the nature and type of contradictory relationships between elements and one another with backgrounds and spaces.

12- Design and aesthetic dimensions that address the concept of contradictory relationships in the modern and contemporary painting are one of the most important structural means of experimental approaches to design.

13- The differentiation of formal relations over the styles and artistic directions of each artist achieves that vision and combines contradictory formal relations in various forms in the production of a mural painting.

14- Formulating multiple plastic processes based on the rhythm of contradiction, enriching the aesthetic values provided in the artwork, through the formal employment of architecture and the design employment of the mural painting.

15- There are many forms of rhythm in the design formulation, it is based on the value of structural repetition in a framework of contradictory variations of the mural painting.

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