

The Style of Abstract Art and Its Impact on Contemporary Design in Architecture

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General Background: Abstract art emerged as a major transformation in modern aesthetics by shifting artistic expression from literal representation toward the exploration of line, color, space, and form as autonomous visual elements. **Specific Background:** In architecture, these principles have been adopted to reorganize mass, void, light, and material into compositions that communicate intellectual, symbolic, and cultural meanings beyond functional requirements. **Knowledge Gap:** Although abstract art is widely recognized in visual culture, its philosophical and formal contribution to contemporary architectural design, particularly in Arab and Iraqi contexts, remains insufficiently articulated. **Aims:** This study aims to identify how the style of abstract art is manifested in contemporary architectural design and to define its principal characteristics. **Results:** Using a descriptive-analytical approach and examining three architectural samples—the Sultan Qaboos Grand Mosque, the Heydar Aliyev Center, and the Mleiha Archaeological Centre—the study found that abstraction transforms architecture into an intellectual and aesthetic system characterized by geometric simplification, integration of function and beauty, symbolic use of light and color, spatial continuity, and reinterpretation of heritage through modern forms. **Novelty:** The study proposes a set of theoretical indicators that explain abstraction in architecture, including structural transformation, material reduction, spatial abstraction, elimination of direct reference, and visual dynamism. **Implications:** These findings demonstrate that abstract art provides a conceptual framework for contemporary architectural design and supports the development of culturally grounded architectural identities within a global design discourse.

Highlights:

- Abstract art redefines architecture as an intellectual and aesthetic system based on geometry and spatial order.
- Light, color, and materials function as symbolic design elements rather than decorative additions.
- Contemporary Arab architecture uses abstraction to reinterpret heritage within modern architectural language.

Keywords: Abstract Art, Contemporary Architecture, Architectural Design, Geometric Abstraction, Spatial Composition

First: Research Problem

Following the events of the First World War, a style of abstract art represented an extremely radical change in modern artistic and architectural thinking. Architecture is not only seen as a response to function or merely completing a practical need but also a visible speech and intellectual discourse with deep philosophical and aesthetic meaning. From the 1910's, abstract art become was born out of the wish to leave behind the constraints of reality. Through this, form freed itself from its identification with nature and came to rest in the essential and intrinsic nature and structure of the elementary artistic means like line, color, mass and space.

Contemporary architecture clearly reflects this transformation, as architects adopt the principles of abstraction to reformulate the space and mass of architecture. As a result, the structure of buildings started to depend on a simple or complex geometric composition with more emphasis on the visual relations of various elements rather than on the working performance. Architecture's evolution transformed it from just a "shelter" into a "plastic language" that expresses the mind and intellect of the designer, and at the same time, the identity of culture and civilization of society.

The relationship between abstract art and architecture came about not only as a formal amalgamation, but due to the occurrence of significant intellectual developments in the 20th century namely. Movements such as the Bauhaus, Cubism, and Deconstructivism all reconsidered form versus function. These movements advocated surpassing conventional ornamentation in favor of abstract structures where space has a role equal to that of mass and made geometric relations and visual rhythm basic tools for architectural composition.

Although this architecture abstraction has evolved as a visual language of contemporary architecture, the concepts have entered the complex realm of form generation and manifestation. Concepts such as dynamism, fragmentation, reconstruction, and environment are giving the contemporary designer a whole new experience. Also, contemporary technology and modern building materials now make it possible to recreate less traditional forms (intents) much more than earlier.

According to these expectations, the problem of the current research can be identified in the following question, how has the style of abstract art influenced the design of contemporary architecture? How to define its spring characteristics? The questions contained here form the main focus that the researcher intends to study in the present research.

Second: Significance of the Research

1. To find out the philosophical concepts that inform abstract art and its teaching in the evolution of contemporary architectural thought.
2. The objective is to elaborate on the influence of abstraction on the formulation of contemporary architecture's form and space and light. And to learn about the role of abstraction in balancing our architectural language which is not technical-based modernity and our identity of culture as an Arab and international architecture.

Third: Research Objective

The present research aims to identify the style of abstract art and its impact on contemporary design in architecture.

Fourth: Research Limitations

1. Subject Boundaries:
Contemporary architectural design influenced by abstract art.
2. Spatial Boundaries:
International and Arab architectural models influenced by the style of abstract art in Europe, Iraq, and the Arab world, in order to demonstrate the interaction of the abstract movement with different cultural environments.
3. Temporal Boundaries:
(2001–2016)

Fifth: Definition of Terms

1. Abstract Art

Linguistically:

In Arabic, the term for art is *fann* or *phann*. It comes from the verb *fanna* which means diversity or multiplicity and which is taken to refer to the phrase *fanna al-shay'* in Arabic. The term “abstraction” (*tajrīd*) is derived from the word “*jarada*,” which means to remove. Therefore, the term *jarada al-shay'* means removing whatever surrounds an object in order to retain its essence (Ibn Manzur, *Lisan al-Arab*, vol. 7, p. 83).

Terminologically:

Abstract Art is an artistic movement based upon freeing color and form from realistic

references and upon the orientation of aesthetic relations among line, colors, and mass, so that expression depends upon sensation and idea rather than upon visible reference. Abstraction also corresponds to an intellectual-spirit vision aimed at achieving the purity of the essences of things. Thus, the artwork used to express the absolute and the invisible through the help of the geometric and visual properties reflecting the internal order of the world (Mondrian, 1917, p. 33).

2. Design

Linguistically:

The Arabic means to be firm in something and to persist on it. The word ‘design’ (*tasmeem*) was taken from this term which means intention or decision with respect to creativity and organization. (Ibn Manzur, *Lisan al-Arab*, 27/235).

Terminologically

Architectural design is an intellectual and visual creative process by which architectural form is invented and the relationships between mass, space, light, and colour are organized with a view to balancing aesthetic and functional demands (1931: 88).

Architectural design is also a contemplative and aesthetic act by which the architect gives voice to a vision of existence, converting in thought an idea that is concretized in architecture. As a result, the architectural space is conceived as the architect’s spiritual creation in a given material (Walter Gropius, 1935, p. 74).

3. Contemporaneity

Linguistically:

The term “contemporaneity” (*mu‘āsarah*) derives from the verb “*āsara*,” meaning to live within the same era or to share a specific period of time with others. Thus, “he is contemporary with him”

means that both exist within the same time frame (*Al-Mu'jam Al-Waseet*, Arabic Language Academy, Cairo, 1985, p. 482).

Terminologically:

Contemporary architecture refers to modern architectural trends that emerged since the mid-twentieth century and rely upon technology, innovation, and experimentation in form and space in accordance with the spirit of modernity (Charles Jencks, 2002, p. 102).

Contemporary architecture represents the interaction between nature and society, as it seeks to achieve balance between technology and thought, originality and renewal, while reflecting humanity's relationship with time and place (Zaha Hadid, 2004, p. 41).

Operational Definition of Abstract Art

The formal and structural characteristics that appear in the contemporary architectural production are characterized as the style of abstract art in the present study. The features eliminate unnecessary ornament and emphasize the structure of the architectural work to simplify forms and use geometric relationships. This style goes on to utilize line, colour, space and light as independent performing agents, which have an intellectual-thematic or decorative-aesthetic significance. They will be investigated and interpreted on the samples of selected architectural models.

The modern architectural design is defined operationally as the activity of orientation and construction of the architectural form according to a modern intellectual and aesthetic vision. A set of applied indicators derived from the theoretical framework is defined to measure it. The indicators include the deconstruction of the standard form, chromatic and material abstraction, use of space as a fundamental compositional element and achieving rhythm and visual movement within architectural space.

Chapter One

Abstract Art: Concept, Origins, and Development

This chapter looks at the intellectual and aesthetic origins of abstract art, one of the major modern art transformations which represented a counter-revolution against the classical image and realistic representation concept. Between 1820 and 1832, an artistic and literary movement that originated in France gradually gained syncopated rhythms with melodramatic representations that lent themselves to musical compositions. Traditionally, painting was an attempt to imitate visible reality. The emergence of abstraction took painting in a completely different direction. It was now to express the unseen and inner values of humanity and being. Non-figurative art strives to represent an object not as it is seen by the eye but as it is thought to be through the mind and emotions. This indicates the central idea that beauty is more about essence than appearance, and more about concept than form. As a result of this effect, the abstraction was seen as a stylistic revolution that moved art from the experience of imitation to thought and philosophy. (Wassily Kandinsky, 1910, p. 47).

1. The Concept of Abstraction in Language and Aesthetic Thought

In its linguistic meaning, abstraction means removal of excess; thus, the essence is separated from appearance. It is an intellectual procedure by which he perceives the truth itself. Abstraction in aesthetic thought denotes a release from imitating nature. This form of beauty is directed toward absolutely formal values, such as line, color, rhythm, balance and geometrical order. Abstraction, then, is a visual language symbolically created by human beings that goes beyond the sensory appearance and enters the world of intellectual and spiritual meanings.

In his book *Concerning the Spiritual in Art*, Wassily Kandinsky asserted that form and colour have a spiritual life energy that evokes feelings regardless of representation. He thought of abstract art as a way of discovering the human "inner self" in pure form (Kandinsky 1910: 52).

From a contemporary perspective on beauty, the meaning of abstraction is not a negation of nature, but a recreation of it according to the artist. According to Greenberg, abstraction is the essence of modernism, as it returns the art to its “interior”, that is to say it makes painting what is essentially is, a combination of color and form, and not essentially a medium for representing the world outside (Greenberg, 1961, p. 28). As a result, abstract art came to mean freedom of creativity, since it no longer depended on natural form but rather was seen to be moving towards building an autonomous visual system that expresses thought and feeling.

2. The Emergence of Abstract Art in Europe (Kandinsky, Mondrian, and Malevich)

The origins of abstract art can be traced back to the first decade of 20th-century Europe, which was marked by major upheavals of philosophy and science. Some of the most powerful thinkers here included Albert Einstein. His theory of relativity changed forever what people perceived about time and space. Existential philosophy, on the other hand, observed the greatest triumphs of humanity. It also emphasized how people were free to perceive reality any way they wanted.

The transformations made artists conscious to find a visual language that expresses the spirit of the age and not merely a visual reproduction.

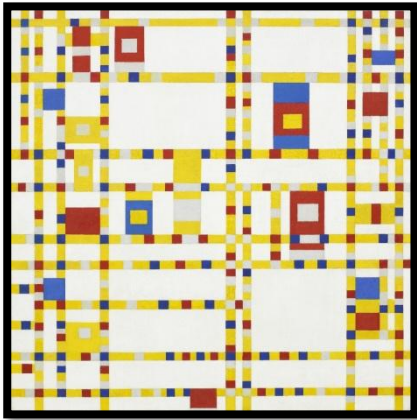
A Russian artist, Wassily Kandinsky is generally considered one of the first theorists of abstract art. He pushed for the relinquishment of realistic representation and requested color and line as the elements to evoke the “inner voice”. According to Kandinsky, the painting is a visual musical which owes its value to the relationship between its elements and not its subject matter (Kandinsky, 1910, p. 64), as shown in figure (1)

Figure (1)



The geometric dimension of abstract art is represented by Piet Mondrian. Along with other members of the De Stijl group, he set up a school enjoining the use of straight lines and primary colors (red, blue, yellow) arranged in geometric compositions aimed at achieving absolute balance. As Wijdeven (2021, p. 17) explains, Mondrain argued that beauty dwells in a universal order with harmonious principles. He also believed that through abstraction, harmony could be achieved between humanity and the universe through a precise mathematical structure (Mondrian, 1917, p. 35) (see Figure (2)).

Figure (2)



On the other hand, Kazimir Malevich, a Russian artist, chose the path of pure abstraction with Suprematism, a movement based on the total rejection of subject matter in favor of pure formal values. His idea was clearly manifested in his well-known painting *Black Square* (1915) that he considered the realization of the idea of the absolute and art, i.e. reduction of the world to the simplest and purest sign (Malevich, 1915, p. 19) shown in Figure (3).

Figure (3)



3. Schools and Trends of Abstract Art (Expressionist, Geometric, and Spiritual Abstraction)

The schools of abstract art diversified according to the intellectual backgrounds and philosophical orientations of artists. Three principal schools can be distinguished:

1. Expressionist Abstraction

The trend is emotional and expressive, which communicates subjective feelings through free use of color and line, is characterized by that. Wassily Kandinsky and Jackson Pollock were among the major pioneers of Abstract Expressionism, who used color, movement, and fluidity to capture the internal rhythm of the painting. (Pollock, 1947, p. 11).

2. Geometric Abstraction

This school works in different geometric forms such as squares, rectangles, straight lines etc. It aims to implement a balanced visual system based on proportion and repetition. This is seen in the work of Piet Mondrian and the Bauhaus. The direction was very much linked with rationalist thinking which sees beauty in orderliness. (Gropius, 1935, p. 40).

3. Spiritual Abstraction

This relation is a tendency to reflect on things, contemplative. Art with this tendency is associated with mystiques or with metaphysical theories or philosophies. This is when the form becomes an expression of the spirit. Similarly, colour becomes an expression of light, or expression of the divine light. This movement represented the philosophical aspect of the abstract and served to connect it to humanistic and universal dimensions. (Kandinsky, 1910, p. 71).

4. The Philosophical and Psychological Dimensions of Abstract Art in Expressing Essence and the Absolute

The philosophy of the abstract painting sees the visible world as mere appearance and believes that the essence of things is hidden. The artist's work is thus to reveal these through visual imagery. This philosophy, rooted in the ideas of Georg Wilhelm Friedrich Hegel, regards beauty as the manifestation of the absolute idea in its material form.

As a result, abstraction attempts to convey that which is unseen, transforming meaning into form, spirit into color and thought into visual rhythm.

From a psychological point of view, abstraction became associated with modern psychologists, for instance, Gestalt Psychology that dealt with visual perception and reiterating that human beings see the whole before the part. This principle was present in abstract painting which can provide a full composition causing a response at once - sensory and intellectual (Arnheim, 1954, p. 58). As a result, abstract art became an inner language expressing profound human emotions and experiences, beyond what is obvious.

5. The Influence of Scientific and Technological Development on the Formation of Abstract Thought

The advances of the early twentieth century in science contributed to the growing abstract thought, helped by the discoveries of physics and mathematics that altered the artist's sense of space, time and light. According to Albert Einstein's theory of relativity that space and time are not fixed but variable, artists were encouraged to de-dramatise classical perspective and replace it with a more dynamic multidimensional vision (Einstein, 1916, p. 23).

Thanks to the Industrial Revolution, the new materials that provided artists with more freedom of expression of immateriality and artistic expression were metal, glass, and plastic. At a technical level, Constructivism and Bauhaus initiated a melding of art with technology which opened the ground for architecture to be the next natural continuation of abstract art. Abstraction evolved from a mere artistic style to a philosophical undertaking from which could spring a whole universe of architectural design, sculpture, interior decoration, and aesthetic norms harmonious with the spirit of the industrial and technical age.

As you will see in this chapter, abstract art was not only a philosophical and aesthetic revolution, but also a redefining of art as an exploration of essence and meaning rather than an appearance. It provided the artists with total liberty of intellect and vision, while turning of form and color into symbols. As will be discussed in the following chapter, it subsequently influenced architecture and contemporary design. (23).

Chapter Two

The Reflection of Abstract Art on Modern and Contemporary Architecture

In this chapter, we will analyse the two-way relationship between visual arts and architecture, which highlights how the idea of abstract art aided in the reformulation of contemporary thought on architecture in terms of visual arrangement, spatial relations, and the use of light and colour as media of aesthetic value. Art and architecture are meant for the same purpose, which is the beauty and thought. However, this abstract architecture advances this dynamic spatial content to the point where space, itself, comes alive with movement and suggestion in architecture. Modern architecture often employs abstraction to create design language; whereby concept and affect may be expressed through geometrical shape, materiality, and optical effect so that buildings resemble static compositions which speak through thought as much as through form. (Charles Jencks, 2002, p. 94).

1. The Historical Relationship Between Art and Architecture in Modern Western Thought

Art and architecture have been interconnected disciplines since ancient times. However, their bond took a new turn due to modernism. In the Renaissance, architecture was controlled by aesthetic proportions which came from the arts. The twentieth century, however, witnessed a dramatic shift when modernist thought began urging us to forego ornamentation and return to structure. Architecture started to be seen at this point as a pure visual art form dependent upon line, space, and balance similarly to the approach taken by abstract artists in their painting (Walter Gropius, 1935, p. 62).

The “abstraction of architecture” might be how this intellectual transformation is termed. Buildings are not seen merely as functional structures or cultural symbols and identity tokens but as formal entities that express a certain world view. The clear, logical, and smooth forms in most modern buildings reflect function, social practices and stress human freedom. Built in 1926, the German Bauhaus school serves as the main lobby for this idea which seeks to unify fine and industrial arts in a comprehensive concept of architecture. The role of art must serve the purpose of design; every line, color and form has functional and aesthetic significance together. (*Bauhaus Manifesto*, 1919, p. 3).

2. The Mutual Influence Between Visual Artists and Architects (Kandinsky, Le Corbusier, and Bauhaus)

The relationship between visual artists and architects during the twentieth century was marked by exchange and mutual influence. Abstract artists initiated innovative approaches to form and color in architecture, while architects found in abstraction a way to build a modern visual language beyond the conventions established by the classical tradition.

Wassily Kandinsky was one of the first Bauhaus professors to suggest that lines and colours are endowed with a spiritual energy and that their relationships are similar to music in terms of the harmonic and dissonant visual effects they create (Kandinsky, 1910, p. 58). In architecture, the notion conceived a new vision of “structural rhythm,” according to which the building is perceived as a harmoniously organized geometric composition ruled by proportions and rhythms.

The modern architect Le Corbusier based his ideas on the principles of abstraction as explained in his book *Towards A New Architecture* (1923). He advocated what he described as “logical beauty,” which is based on the straight line and simple form, with no ornament of any kind which performs no genuine function. According to Le Corbusier, architecture should rest on the same elements which govern abstract painting: balance, proportion, pureness and function (Le Corbusier, 1931, p. 74).

Similarly, the Bauhaus merged art and architecture in one house (Paul Klee, Wassily Kandinsky, Walter Gropius) and emphasized that abstraction is not only a visual style but a design philosophy that seeks unity of idea and material. The concept of “architecture as a total work of art” (*Gesamtkunstwerk*) established abstraction at the heart of contemporary architectural production. (Gropius, 1935, p. 69).

3. The Transformation from Ornamentation to Structure: How Abstraction Changed the Concept of Beauty in Architecture

Abstract art marked a sea change in the notion of beauty in architecture. Previously beauty in Classical architecture was measured through the riches of ornamentation and the diversity of decorative details whereas abstract architecture creates beauty through simplicity, balance characteristics, and structural harmony.

As abstract thought maintained that true beauty lay in the internal structure of material, not on decorative excess (Clement Greenberg, 1961, p. 32), such makeover occurred in the postwar era of America and Europe.

European modernist architecture has made this principle apparent. Le Corbusier and Ludwig Mies van der Rohe both advocated a “Less is More” principle, where beauty was viewed to lie in the economy of elements relying on proportion, space, and light. Nestled within the abstract architecture, the building is a pure geometry, rooted in a clarity of thought and honesty of material expression.

The wall was perceived, no longer as a surface, but as a visual element manifesting the internal order of the building. The element of light has become as important as the wall or column within the column. It is used both to rhythm and to visualize architecture. (Jencks, 2002, p. 101).

4. Abstraction as a Tool for Simplifying Form and Reorganizing Space

The most important contribution abstraction has made to modern architecture is when space becomes the main element of design once again, because before that, it was form and mass that did the job. The aim of the abstract architecture is not to create mass from outside but to constitute space from inside according to carefully studied geometric and rhythmic relationships. Design became an intelligent act based on the analysis and order of space in a way that manages to create harmony between the man and the place.

According to the theory of the painting as a solid continuum during that time, the art work appeared as an extension of abstract painting. Within the sphere of architecture, the occupied and the unoccupied spaces became complementary ones; that is to say, each would fulfil an aesthetic and a symbolic function. Through the use of modern materials like concrete, glass, and steel, architects were enabled to free form from the constraints of traditional construction and create open spaces in harmony with light and nature which was a living representation of the abstract. (Hamid, 2010, p. 77).

5. International Architectural Models of Abstraction (Le Corbusier – Zaha Hadid – Frank Gehry)

Some of the most noteworthy works of Le Corbusier, Zaha Hadid and Frank Gehry can be said to embody the impact of abstract art in contemporary architecture.

- Le Corbusier relied on simple geometric forms such as the cube, cylinder, and sphere in shaping his architectural works. Villa Savoye (1929) for instance embodies visual purity and the unity of form and function according to Le Corbusier (1931, p. 89).

- The architect Zaha Hadid asserted greater dynamism through her abstraction. By employing a continuous use of curve lines and flowing spaces to express movement and freedom, she made the Heydar Aliyev Centre (2012). The building transforms into an organic flowing form which suggests continuity and fluidity (Hadid, 2004, p. 51).

- Frank Gehry deconstructivism abstractionism through unorthodox materials and asymmetrical forms to embody “organised chaos” as shown in the Guggenheim Museum Bilbao (1997) which is an architectural model for the unification of art and sculpture in an innovative abstract spatial

composition.

(Al-Khalidi, 2019, p. 24).



In modern architecture, simple geometric forms used by le Corbusier and Ludwig Mies van der Rohe created buildings with clear intellectual implications. The cube in their creations is not just a form, but an emblem of purity and balance, while horizontal and vertical lines exhibit the equilibrium between humanity and nature, and earth and sky (Gropius, 1935, p 65). In modern architecture, Zaha Hadid took this idea one step further by liberating the line of its rigid geometric connotation and turning it into a flexible and dynamic element that manifested intellectual flexibility and creative freedom in our digital times. (Hadid, 2004, p. 39).

3. Color and Light as Symbolic Values in Architectural Space

In abstract thought, color and light are the two essential conditions for an expression, spiritual or intellectual, that creates an illusion of space and time. These days, color is no longer seen merely as decorative. It is believed to have symbolic value that expresses the inner emotion of a place. Furthermore, light has become a tool to shape the depth and rhythm of space. Wassily Kandinsky said that “the color is a spiritual force affecting the soul as sound acts on the ear.” This means that architects could generate a specific sense and spiritual atmosphere in which to live, through the control of natural and artificial light levels within the building. (Kandinsky, 1910, p. 84)

In contemporary abstract architecture, Le Corbusier applied light as a dramatic agent that penetrates inside through various openings to reveal a building’s structure; the Notre-Dame du Haut (1955) is an example where light becomes a symbol of human purity. Unlike other architects, Zaha Hadid used light and shadow effect at her buildings to create moving spaces that give the feeling of walking in a three-dimensional abstract painting (Hadid, 2004, p 56). Therefore, in abstract architecture light became a medium of expression of time and spirit instead of an element of illumination.

4. Abstraction Between Function and Beauty in Contemporary Architecture

One of the main contributions of abstraction to architecture is the breakdown of the traditional separation of function from beauty. The notion of ornamentation serves beauty is classical. Abstract architecture, however, came to hold the belief that function itself is beautiful. Thus, the essence of beauty is in honesty or the expression of function. According to a statement by architect Ludwig Mies van der Rohe “Less is More”, which means that by reducing elements, the building’s fundamental idea is emphasized (Hamid, 2010, p. 22) (see Figure (5))

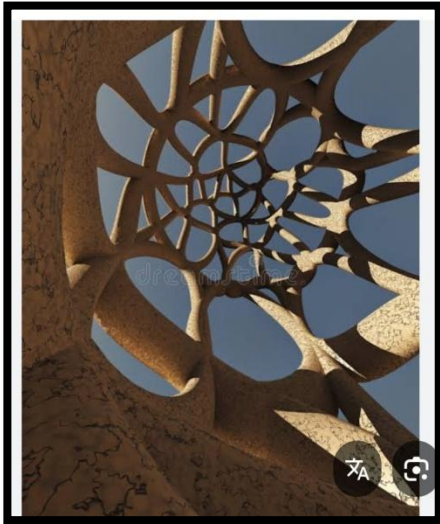


Figure (5)

Because of this concept, every angle, surface and space now came to enjoy an importance that had functional use, yet beautiful too. While it abstracted architecture, it also preserved a different form of beauty, one developed through the intellectual and technical organization of material. From this angle, abstract architecture can be understood as the meeting ground of thought and artistic imagination, balancing geometric principles with the necessities of aesthetic sensibility. (Walter Gropius, 1935, p. 72).

5. The Influence of Abstraction on Architectural Identity in the Arab World and Iraq

The development of abstract art influenced the architecture of the Arab world and Iraq in which concepts of global modernism and the cultural and spiritual particularities interacted and defined themselves. Arab architects were eager to utilize abstraction reduction, simplicity, and pure geometry but without losing local identity, and also benefiting from global aesthetic thinking.

Architectural experiences that attempted to meet heritage with abstraction and modernity arose in Iraq. For example, Rifat Chadirji used geometric forms for Islamic architecture, including arches, muqarnas and lattice windows, but the designs were contemporary using simple lines and pure compositions.

The focus of these design experiments was to create what might be called “local abstraction,” or Eastern spirit and character. (Chadirji, 1985, p. 29), as illustrated in Figure (6).

Figure (6)



The wider Arab world has looked at the project of Zaha Hadid ‘The Galaxy Centre’ in Malaysia, as embodying global abstract architecture ideas, also evokes an Arab sensibility with its fluidity of lines and harmony of forms. Through abstraction, a contemporary Arab architectural identity was formulated that achieves a balance between universality and particularity, and between geometric rationality and cultural spirit.

The argument in this chapter is that the aesthetic and intellectual foundations of abstraction do not merely appear in form. Rather, they run deep into the essence of a philosophical vision that sees architecture as a vehicle to express the spirit of humanity and the spirit of the age. Abstraction in modern architecture is not merely a style but rather a complete intellectual vision in which the building becomes a visual artifact expressing thought, identity, and beauty simultaneously as shown in the figures (7) and (8).

Figure (8)



1. Breaking Down Classic Structure:

Architectural mass could now be liberated from classical symmetry and repetition through geometric transformation, like cutting, displacement, twisting, and so on.

2. Color and Material Reduction:

Colors are used as isolated values rather than a mimicry of nature while raw materials such as concrete, glass and metal are deliberately and purposefully used in their natural state without any ornamentation in buildings.

3. Space as an Abstract Component:

Interior designs don't follow the conventional interrelationships where the wall, floor, and ceiling are assigned their conventional roles.

4. Removal of clear reference ability

The end form must not reference directly a certain function, natural object, or historical model but be viewed as an abstract construction in itself.

5. Block and Motion

Employing inconsistent repetitions of geometric shapes to generate visual dynamism, which gauges the interaction of the spectator with the façade or spatial ambience.

Figure (7)



1. Research Population:

The research population consists of a group of contemporary architectural and artistic works that embody the influence of abstract art on architectural design. This population extends across various schools and trends of modern and contemporary architecture in Europe and the Arab world.

2. Research Sample:

The research sample was intentionally selected from a number of prominent architectural works represented by three (3) samples that embody the presence of the abstract art style in contemporary architectural design.

3. Research Instrument:

The researcher relied upon the indicators derived from the theoretical framework.

4. Research Methodology:

The study adopted the descriptive method, which is considered one of the most suitable approaches for artistic and aesthetic studies, as it combines the objective description of the phenomenon with the clarification of its intellectual and formal dimensions.

Fifth: Sample Analysis

Sample (1)



- Location: Muscat – Oman
- Style: Contemporary Geometric Abstraction Inspired by Islamic Architecture

• Description and Analysis:

Initial: Visual Abstraction and geometric Form

The mosque's overall design is based on a system of geometry that makes use of axial symmetry and optical balance. The dome and minaret were designed in a simplified way, emphasizing the purity of mass rather than decoration, thereby reflecting a tendency to simplify the Islamic element to pure geometry. Architectural masses are clear and harmonious, and abstraction is straight lines and definite mathematical proportions.

Second, interior space with spatial relationships

The interior space is characterized by a sense of spaciousness and openness, with mass and void relationships created through an orderly axial organization directing visual movement toward the center. The outward stretching brings in a sense of calmness whereas the vertical rise of the dome highlights that of the spiritual dimension thus developing the equilibrium between material perception and symbol.

Thirdly, the Treatment of the Façade is Abstract.

The building's exterior is characterized by simplicity and purity of form, so much so that traditional decorative elements are regulated in favor of emphasizing horizontal and vertical lines and geometric relationships. Architectural openings are rhythmical and proportional, emphasizing its abstract character, structure before decoration.

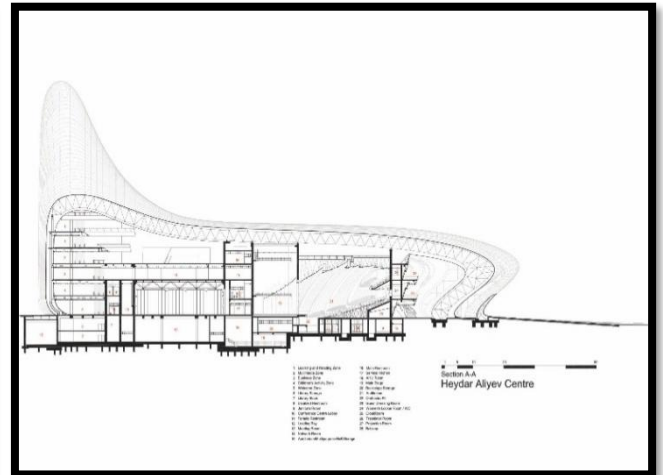
Fourth: Abstraction and Function-The Unity of Thought and Form.

The unity between thought and form is mirrored in the unity between religious function and geometric form. Architectural elements are not merely ornamental; they perform simultaneously functional and spiritual roles. The axial organization provides convenience for the praying crowd and directs attention towards the qibla and is a result of the merging of intellect and function.

Section Five: The Aesthetic Significance of the Abstract.

The artwork finding that balance between Islam and contemporary buildings using the geometric abstract shapes is what gives the design such an artistic value. Old elements were transformed into simple formal symbols which express identity with modern style and reflect the spirit of the age.

Sample (2)



Sample (2)

- Name of the Work: Heydar Aliyev Center
- Architect: Zaha Hadid
- Year of Completion: 2012
- Location: Baku, Azerbaijan
- Style: Dynamic Abstraction – Fluid Architecture
- Description and Analysis:

The Heydar Aliyev Center is considered one of the best 21st-century building projects as well as the project that firmly established Zaha Hadid as the architect who most effectively realized the idea of

dynamic abstraction in architecture. Architectural language refers to the general character of the design, either architectural or ornamental. Surfaces interact in a natural way through the continuous articulation of the walls, ceilings, and floors, making experience seem more spacious and less clearly defined.

Formulizer und abstracted Strukturkomposition.

Zaha Hadid employs flowing undulating surfaces in the design of the building which curve up from the ground and continue on upwards, following an uninterrupted movement through the air towards the sky in the manner of waves or natural folds. This embodies a philosophy based on release from definite geometric forms and the construction of a non-representative visual form that symbolizes modernity, flexibility, and cultural orientation.

The shape representation is a visual continuity and it means the building is an extension of the ground rather than a mass. This demonstrates the ideas that form cannot be reduced simply to geometry, but rather is a flow of continuity and separation, of interior and exterior.

Next: Inside Space and Sensory Experience.

The interior space of the center does not have columns. This is due to advanced technology employed in the system. This created a vast infinite space which allows visitors to enjoy a feeling of movement in a world divorced from any geometric confinement – entirely abstract. The surfaces inside a building are smooth and continuous conforming to the fluidity and flow.

Natural light penetrates through carefully designed openings and glass ceilings, producing changing luminous rhythms. Furthermore, this changing light reflects the philosophical idea behind abstract artwork that depends upon the intermingling of the form and light to generate visual meaning.

Color and light as abstract symbols.

The building is predominantly decorated in pure white, which, in abstraction, serves as a color for “absolute simplicity” and “visual purity”. This colour does not communicate mere visual emptiness. Likewise, it also transforms the architecture into a neutral background, enhancing the articulation of light’s movement and shadows of curved surfaces.

Light is one of the main elements that creates the visual image of the center. Zaha Hadid uses it to define the curves and dimensions so that the viewer’s perception of the building changes according to the angle of the light. As a result, continuous renewal is granted to the building, in line with dynamic abstraction.

Fourth: Symbolism and Intellectual Relevance.

The Heydar Aliyev Center has profound symbolic significance, as its flowing form is a reminder of Azerbaijan’s openness to modernity and world culture. It harmonizes with the philosophy of abstraction, so-called, which emphasizes “the idea” over “the form.” This reason may also be interpreted as an idea about the relationship between the past and the future. And the ability of architecture give form to human thought.

According to Zaha Hadid’s design philosophy, the building is envisaged as a monumental abstract sculpture that serves the purpose of integrated exhibition and cultural space with the help of architecture.

Fifth: Connection to the Abstract Building Movement.

Flexibility and contrasts between inside and outside, space and mass, are characteristics of abstract

architecture. These are implemented through curves and natural forms in this project:

- Liberation from rigid geometry and its replacement with formal flexibility.
- Continuous visual connection between masses and spaces.
- Transformation of space into a sensory experience based on perception, light, and movement.
- Employment of technology to eliminate traditional boundaries between form and structure.
- Expression of idea through form, which constitutes the essence of abstraction.

Sixth: The Importance of the Sample Within the Research

The Heydar Aliyev Center represents an ideal sample for studying the influence of abstract art on contemporary architecture because it:

1. Provides a direct application of the concept of dynamic abstraction.
2. Embodies the transition from pictorial abstraction (painting) to structural abstraction (architecture).
3. Demonstrates how architecture can become a visual language carrying meaning and philosophy.
4. Represents the highest level of integration between technology and artistic imagination.
5. Offers a global model possessing significant cultural and architectural presence in the twenty-first century.



Sample (3)

- Name of the Work: Mleiha Archaeological Centre
- Architect: Dabbagh Architects – Sumaya Dabbagh
- Year of Completion: 2016 (Officially inaugurated on January 24, 2016)
- Location: Mleiha – Sharjah – United Arab Emirates
- Style: Contextual Organic Abstraction
(Contemporary Abstraction Inspired by the Desert Landscape)

- Description and Analysis:

The geometric design and visual abstraction.

The bulk of the building is a circular and spiral composition that twists to the interior of a central void. Thus, the building has a symbolic character that speaks to historical continuity. Using a clearly abstract route architectural detailing was reduced to cold lines while the architectural body contained smooth undifferentiated facades. Emphasis on the total form as a symbolic idea inspired from the desert

topography and rock formation of the site is abstraction.

Interior Space and Spatial Relationships

The interior space is organized around a central circular that serves as a visual and spatial orientation point. Interior pathways are gradually connected and circular in form, which encourages an unfolding series of spaces that reproduce the archaeological concept. The Bond between mass and void is of fluidity and continuity indicative of an abstract philosophy that views movement as a basic tenet of design.

Dealing With the Facade: Abstraction.

The façade has uninterrupted curves with long, horizontal stretches forming an apparent relationship with the adjoining desert horizon. The earthy hue of the container and the overall design of the building allow it to better blend in with the natural environment while reinforcing the idea of architecture emerging from the ground. Visible architectural elements have been minimized organically in their formality, displaying a purity consistent with abstract thought of the contemporary era.

Fourth: Ideation and Operation – The Unification of Thought and Form.

The spiral represents not only an aesthetic but also a functional part, which helps the museum to facilitate the internal traffic and organize the narrative concerning the exhibits. The composition of the building embodies a principle of unity between thought and form, as it expresses the concepts of time and history without them being represented in a directly descriptive mode nor via traditional symbolism.

Fifth: The Abstract Concept's Artistic Values.

The project has significant artistic value as it translates the archaeological concept into an architectural composition that is both abstract and environmentally contextual. The building does not materially reflect the past, but its use of forms in abstraction expressively speaks about identity and place in a modern spirit. The project is thus considered to be a case of modern Arab architecture which incorporates architectural abstraction with historical and environmental aspects.

.Chapter Four

First: Results

1. The abstract art building studies are one of contemporary architectural thought foundations that resulted in the transformation of the jewelry box building from a material building to an intellectual and aesthetic space that expresses idea and meaning, as shown in the samples of the study.
2. The findings of the research showed that abstract architecture does not only concern shape. It deals with the beauty and function balance in which case, the shape will reflect the spirit of the design concept. So, this is not merely a user choice. It is not just a cover of the building. This was shown in the research samples.
3. According to the study, simple lines and geometric shapes form an essential language in abstract architecture, which expresses the order, harmony and simplicity that made them effective means of expressing contemporary thought and the visual identity of the building, as evident in the research samples.
4. The findings confirmed that light and color have become compositional elements in recent architecture. According to the research samples, they are not just used for ornamentation and lighting purposes, but for their symbolic values to underline rhythm and the spiritual purity of architectural space.

5. Based on the findings, Architects' ability to think abstractly has allowed them to move away from established patterns. In addition, design found enough leeway in its formulation and functioning. Thus, we witnessed the emergence of a number of new movements. Some of them were fluid and deconstructivism architecture, as seen in the samples studied.
6. It has become clear that Arab and Iraqi architecture abstraction acts as a bridge between modernity and local identity through the reinterpretation of heritage symbols into geometrical shapes in a modern vision of authenticity and belonging as reflected in the research samples.
7. The study proves that abstract architecture expands the sense of beauty so that beauty is no longer ornamentation or excessive form, but thought, organization, and harmony, as evidenced by the research samples.

Second: Conclusions

1. Abstraction in architecture is an intellectual and aesthetic philosophy that is not restricted to just the visual dimension. Rather, it has a much larger purpose in expressing a vision of the world and of the relationship of man with place.
2. Abstract art paved the way for a global design language of simple forms and lines to express contemporary architecture as intellectual and spiritual values.
3. The success of abstract architecture in reconciling structure and beauty ensured that no part of the construction was merely constructive but took place along with the experience.
4. Local identities can be renewed through abstraction, which is a process of simplifying heritage symbols, distilling them down to their essences and transforming them into geometric forms that express authenticity in a modernist way.
5. Through abstraction, architecture acquires a humanistic character by focusing on the visual and psychological experience of the user and transforming space into an element of interaction between human beings and place.

Third: Recommendations

1. It is essential to incorporate the ideas of abstract art into the curricula of the colleges of art and architecture that can familiarize students with the role of abstract art in contemporary design and aesthetic thought.
2. Architects should be encouraged to use abstraction deliberately and purposefully, so that it is expressive of idea and environment rather than treated merely as a style or as a mechanical copy of one of the Western schools.
3. Architects working on developing contemporary forms of Arab architecture that are informed by abstract thought to create a new visual identity that expresses the spirit of local culture and heritage in the context of modernity.
4. The expansion of the future applied studies, linking abstract thought together with the modern use of contemporary digital technologies like e.g. parametric design and 3D modeling to develop the creative potential of contemporary architecture.

Fourth: Proposals

1. The Transformation of Abstract Concepts from Painting to Contemporary Architecture: A Comparative Study.
2. The Aesthetics of Form and Mass in the Formation of Architectural Space During the Renaissance.

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