

# Comparison between modern western architettura and Islamic Arabic architecture“imitation and differences”

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## Abstract

Architecture research is the mother of all art, representing the civilization of the population in every part; it is influenced by religion, politics and economy which are the foundations of its art over the centuries. Research on the architecture of Arab-Islamic civilization should be discussed primarily through generality principles of architecture, and the values granted and realized by the human sense of existing or loaded aesthetic qualities in the form of architecture, general. Then continue to look for the champions reached by the particular civilization. The position of the research in architecture, however, serves as a jump to conclusions before appropriate extracts are reached and not submitted to a rigorous examination. The research is a comparison between Arab-Islamic civilization and other civilizations that have created values for completeness. To facilitate this comparison, the research choose the civilization closest to Arab Islamic civilization in terms of the vision of existence and its proximity to the site, which is Western civilization. • Two civilizations have had so many shared values, thanks to the cultural and architectural imitations due to the proximity and commercial exchange between the East and the West, creating a mixed architecture, since the twelfth century. Christian civilization has made many moves, including multiple versions of completeness and various aesthetic values. While the Arab Islamic civilization reached an aesthetic value in its emergency phase, in the eighth century, and stopped in the twelfth century. Since the beginning of the nineteenth century, the Islamic Arab world has been aware of the entry of Napoleon into Egypt, since it addresses aesthetic values based on the knowledge of structural and aesthetic technology that has had no role in its creation:

- 1) Since man has found the art, caves (Lascaux) and (Altmira) attest the masterpieces of art in which human Zain, and for thousands of years, Mgaith, who was based in his home, and live this, consisting of colored fees for extinct ornamental animals, skill and realism, confirm that Art is a means of communication that preceded language and literature in the human life.
- 2) When civilization progressed, the dwelling became the space absorbed the skills and talent of artists, discovered in the homes such as Valley Alntov (Palestine), or in Amartibt (Syria), which dates back to the seventh millennium BC, were decorated with colorful patterns.
- 3) The architecture by itself, soon of became the exterior appearance and its mass and its divisions, something of three-dimensional art, must be a creative work, and thought of engineering; however area that houses all the types of continuous plastic art architecture, shooting, or sculpture. This was reflected strongly in Islamic architecture, and we saw that in the Umayyad palaces, which were characterized by colorful or stained sculptures, and graphically mosaics and Altleuenah, which still freshly raised in the palaces of Heer and Mushatta Palace, and Amra bath.
- 4) If the art collages to be separated from architecture in order to solve unmovable objects, such as manuscripts, pots and accessories architecture and furniture, the methods have not changed much, they can either be simulated realistically, or be abstract decorative, the diversity of methods and interpretations has changed even today.

**Keywords:** Arab-Islamic Civilization; Modern Western Architecture; Confrontation Imitation; Arabic Architecture.

## 1. Introduction

This research will take the modern western architecture and its characteristics in particular on its forms, functions, materials, and roofs. Furthermore takes it in detail on this research on the other hand the Architecture in the Middle East with its characteristics also for the comparison between distinctions on schools of architecture.1. Western architecture, the functionalist, Le Corbusier's form follow function and the organic form, he has imitated many things from Islamic Arabic architecture, such as privacy and above all respecting nature, and building with nature, as Frank Lloyd Wright, in the Falling water house. it is very similar to Arab houses like the Cul-de-Sac, as a respect for the

environment, the human measure and the use of appropriate materials [1 - 3].



**Fig. 1:** Fallingwater, Frank Lloyd Wright, Ideal 'Integration with the Surrounding Environment.



Fig. 2: The Traditional Arabian Houses Cul-De-Sac.

## 2. Modern western architecture

### 2.1. The concept for function

Modern architecture is distinguished by the biscuit design and traditional aesthetics. We try to create home design project that home go beyond "standard" ideas and inspired by layout, location and function. Louis Sullivan mentor le Corbusier stated that "form follows function". Idea goddess of the functionalist school. This idea is expressed by the tendency of modernists to have the land or function of a project dictating much of the design ideas. For example, Wright was the organic school for building with the earth: his residential houses almost always relied on the lot to determine how the building was to be built. Wright believed that a building should be "one with the earth: and not simply knocked down on it. Modernist architecture is inspired by the project itself - if the project intends to show something, host something special, or be occupied by a particular person, the aim of modern architecture is to design for each unique situation and to inspire its purpose.

### 2.2. Simplicity in form and design

Modern architecture is generally devoid of cumbersome and useless elements. The objectives of the project are clarified at the beginning and only the required features are included in the design. Residential houses are often stripped to show the architectural design of the house - the focus is on the space itself, rather than on any furniture or detail irrelevant relevant to the general design. Homeowners who follow a modern aesthetic strongly believe in the idea of "Less is more"! According to Mies van der Rohe, Modern tastes enjoy simplicity and clarity. The houses will be clean, functional and simple. There are various degrees of modernism: some opt for the rigorous sense of design of true minimalism, while others prefer to incorporate the minimalist aesthetics of modernism in conjunction with their own personal style. The choice of custom design elements in terms of colors, textures and interesting furnishings will help to create a more exclusive Modern style.

### 2.3. Purism and clarity

Rather than hiding the nature of the home, the modern style requires the viewer to see the inner workings and the true nature of the project. The materials are shown in the natural form and are on display. Nothing is hidden or altered to look like something different. The structural elements are revealed to show the structure and the supports. Exposed beams, open floor plans and structural elements are exposed to the viewer. The idea of a sense of "truth" is present in the home, where all the materials and architectural elements are naked and honestly revealed.

### 2.4. Love for case linear

Modern architects are interesting in lines; they use many modern designs, you will find strong linear elements and bold horizontal and vertical features. Beams, posts, cutouts, windows, stairs,

chimneys, roof lines and other structural elements help the architect to create a space of linear inspiration. This focus is much more important in modern design and is less important in traditional construction styles. Modern architectural lines tend to be straight and corner rather than curved, yet organic lines can sneak into Modern home design.

### 2.5. Lines of roof in relief

Instead of opting for the traditional roof lines with a triangular base or craft, modern architecture dares to push the envelope on the design of the roof. The houses could have multiple roof lines at different levels, showing the complexity of the overall design and the unusual shape of the structure. Different lines and elongated vaulted ceilings, as well as interesting overhangs or unusual linear elements were mixed to create a more unique statement. This focus on exterior design is one of the salient features of modern designs. The house exists more than simply a house - it is an artistic and sculptural statement.

### 2.6. Windows are a design

Many mid-century homes use windows to highlight. These homes often feature floor-to-ceiling windows and many sliding doors. They can also include "clearly" windows positioned high up in the walls of a house to let in light, preserving privacy.

### 2.7. The idea of creative open space

Most include an open living/ dining / kitchen area, often accented with a fireplace as a kind of collection point. Mid-century houses played with their use of space, with floors divided on separate levels or through "sunken" spaces designed to converse or relax. Prominent features of modern architecture include open floor plans with fewer walls to provide the interior space with more elasticity.

### 2.8. Post-and-beam architecture

Instead of internal walls that serve as support walls, they are more used as room dividers or for appearance. In many homes, the "pony walls" extend from the floor to just below the ceiling, separating the rooms and allowing them to share the light.

### 2.9. The reuse of the external space

I create a continuous and human relationship between the inside and the outside, making more rooms open onto a large patio or atrium, designed to extend the surface area and to blur distinctions between the inside and the outside, using Construction materials such as glass and steel. Modern architecture almost always incorporates the topography of the land on which it is built within the design of the house. An excellent example of this is falling water. Other designs perfectly connect the interior with the exterior through the glass walls.

### 2.10. Focusing on new materials technologies

Many mid-century modern houses used to consolidate materials such as wood and bricks with new materials such as man-made floors. They also incorporated new technologies - such as radiant floor heat - and construction techniques such as building on top of the concrete foundation slabs or panels.

## 3. Architecture in the middle east

Islamic architecture includes a wide range of both secular and religious styles from the beginning of Islam to the present day. What is known today as Islamic architecture, owes its origin to similar structures already existing in the Roman, Byzantine and

Persian lands that the Muslims conquered in the 7th and 8th century. [4], [5] Further to the east, it was also influenced by Chinese and Indian architecture as Islam spread to Southeast Asia, the main types of Islamic architecture are: the Mosque, the Tomb, the Palace and the Fort. From these four types, the vocabulary of Islamic architecture were derived and used for other buildings such as public baths, fountains and domestic architecture. Many of the buildings mentioned in this article are listed as world heritage sites because of their beauty.



Fig. 3: Arab Architecture - Modern - Cul-De-Sac.

### 3.1. Repeating of previous traditions

Compared to the French of Western Europe, the Islamic architecture of the era has retained to a greater extent the architectural traditions of its previous cultures. From the Eighth to the Eleventh Century, Islamic architectural styles were influenced by two different ancient traditions:

### 3.2. The influence of western tradition

In particular, the regions of the recently conquered Byzantine Empire (South-Western Anatolia, Syria, Egypt and Maghreb) provided architects, masons, mosaics and other craftsmen to the new Islamic rulers. These artisans were trained in Byzantine architecture and decorative arts, and continued to build and decorate in Byzantine style, which had developed from Hellenistic architecture and ancient Roman architecture.

### 3.3. The influence of eastern tradition

Mesopotamia and Persia, despite adopting elements of Hellenistic and Roman representative style, maintained their independent architectural traditions, which derive from the Sassanid architecture and its predecessors.

### 3.4. The transition process between late antiquity

Or Post-Classical And Islamic Architecture: is exemplified by archaeological findings in Northern Syria and Palestine, by the Bilad al-Sham of the Umayyad and Abbasid dynasties. In this region, late ancient or Christian architectural traditions merged with the Arab pre-Islamic heritage of the conquerors. Recent research on the history of art and Islamic architecture has reviewed a number of colonialist ideas. Specifically, the following questions are currently being discussed in the light of recent discoveries and new concepts of cultural history:

#### 3.4.1. The existence of a linear development within Islamic architecture

#### 3.4.2. The existence of an inter- and intercultural hierarchy of styles

#### 3.4.3. Questions of cultural authenticity and its delineation

Compared to previous research, the assimilation and transformation of pre-existing architectural traditions are investigated under the aspect of the intercultural interchange of

ideas, technologies and styles, as well as of artists, architects and materials. In the area of art and architecture, the Rise of Islam is seen as a process of continuous transformation that goes from late antiquity to the Islamic period. Early research in the field regarded the early Islamic architecture as simply a break with the past, from which a distorted and less expressive art form has been emerged, or a degenerate imitation of postclassical architectural forms. Modern concepts tend to consider the transition between cultures rather as a selective process of informed appropriation and transformation. The Umayyad's played a crucial role in this process of transformation and therefore enriching the existing architectural traditions or, in a more general sense, of the visual culture of the nascent Islamic society.



Fig. 4: Traditional Arabic, Urban Morphology - Cul-De-Sac.

### 2.5. Garden of paradise

Gardens and water have for many centuries played an essential role in Islamic culture and are often compared to the garden of paradise. The comparison originates from the Achei Empire. In his "Economics" dialogue, Xenophon has Socrates who tells the story of the visit of the Spartan general Lysander to the Persian prince Cyrus the young, who shows his "Paradise in Sardinia" to the Greek. The classical form of the garden of the Persian Paradise, or Charbagh, includes a rectangular irrigation space with elevated paths that divide the garden into four sections of equal size. One of the distinctive features of Persian gardens is the four-part garden with axial paths intersecting the center of the garden. This highly structured geometric scheme, called chaharbagh, became a powerful metaphor for the organization and the domestication of the landscape, itself a symbol of political territory. A zabaione from Achei's time has been identified in the archaeological excavations of Pasargadae. The gardens of ChehelSotoun (Isfahan), Fin Garden (Kashan), Eram Garden (Shiraz), Shazdeh Garden (Mahan), Dowlatabad Garden (Yazd), Abbasabad Garden (Abbasabad), Akbarieh Garden (South Khorasan Province), Pahlevanpour Garden, everything in Iran, is part of the UNESCO world heritage. [30] Large, heavenly gardens are also found at TajMahal (Agra) and Humayun's Tomb (New Delhi), India; the Shalimar gardens (Lahore, Pakistan) or the Alhambra and the general life in Granada, Spain [8 - 10].

### 3.6. Courtyard (sahen)

The traditional Islamic courtyard, a sah (Arabic: Sahen), is located in secular and religious structures [11]

#### 3.6.1. When inside a residence or other secular building there a private courtyard and enclosed garden

It is used for: the aesthetics of plants, water, architectural elements and natural light; for the coolest space with fountains and shade, and a source of breeze in the structure, during the summer heat; and a protected and forbidden place where housewives are not supposed to be covered with the traditionally necessary hijab clothing in public.

### 3.6.2. A courtyard of (Sahen) is inside almost all mosques of Islamic architecture

The courtyards are open to the sky and surrounded from sides by structures with rooms, and often a shady semi-open porch. Sahens usually has a ritual cleaning pool located centrally under an open-dome and called the (Howsh). While the courtyard of the mosque is used to perform ablutions and a "patio" for resting or gathering [12].



**Fig. 5:** The Internal Courtyard of Traditional Arab Houses for Thermal Equilibrium and Privacy.

### 3.7. Hypostyle hall: a hypostyle

I.E. an open room supported by columns combined with a reception room the right angles to the main hall, is considered derived from the architectural traditions of the Persian assembly halls of the Achaemenid period ("apadana"). This type of building came from the Roman-style basilica with an adjacent courtyard surrounded by colonnades, such as the Forum of Trajan in Rome. The type of Roman building developed from the Greek agora. In Islamic architecture, the hypostyle hall is the main feature of the hypostyle mosque. One of the oldest hypostyle mosques is the Tarikhaneh mosque, dating back to the 8th century.

### 3.8. The vault: in Islamic buildings the vault follows two distinct architectural styles

While the Umayyad architecture continued the Syrian traditions of the Sixth and Seventh Centuries, Eastern Islamic architecture was mainly influenced by Sasanian styles and forms.

### 3.9. The arches. Diaphragm arches and barrel vaults in the Umayyad architecture

In their vaulted structures, the buildings of the Umayyad period show a mixture of ancient Roman and Persian architectural traditions. Diaphragm arches with ceilings with wooden architrave or stone beams or, alternatively, with barrel vaults, were known in the Levant since the classical and Nabataean period. They were mainly used to cover houses and cisterns, the architectural form of covering the arches of the diaphragm with the barrel vaults, however, was probably recently introduced by Iranian architecture, since the similar time was not known to Bilad al-Sham before the arrival of the Umayyads. This form was well known in Iran since the early days of Partica, as exemplified in the Parthian buildings of Aššur. The first known example of barrel vaults resting on diaphragm arches of Umayyad architecture is Qasr Haran in Syria. During the first period, the arches of the diaphragm were constructed from roughly cut limestone slabs without the use of false supporting works, which were connected by plaster mortar. The vaults of the following period were erected using gypsum-shaped preformed side ribs, which served as a temporal formwork to guide and center the vault. These ribs, which were left in the structure later, carry no load. The ribs were thrown in advance on strips of fabric today's represent and similar structures are known from the Sassanid architecture, for example from the Firuzabad palaces. The Umayyad era vaults of this type

were found Amman citadel in which today represent impression and still visible in the ribs [13], [14].

## 4. Conclusion

Architettura is a pot of art and culture, and as a result the arts in general are considered a universal language of dialogue and communication between different cultures, as through artistic architectural styles to reach the level of interaction and harmony and influence between the arts and cultures with the emergence of the phenomenon of globalization and the evolution of life in various domains have attracted westernization, it has become artistic and Islamic architectural styles, including the arts of the characters are threatened with extinction, so unless there is the tendency to revive them, these artistic and architectural styles will be transformed into apartments and the material extracted from their components, and vicious content during the course of life that lasted fifteen centuries. The best proof of interfaces on the cultural transformation of local architectural thought, which became the theater of the application of schools of foreign architecture of thought, as well as offering the attempts of architecture in order to achieve the contemporary concept. The traditional Arab architecture had a homogeneous development respecting the surrounding environment, using various environmental architectural elements such as the court, the internal fountain, the natural air purifier (Malgaf) to create thermal balance, and the dome to the roof to reduce the energetic essence. But modern Arab architectures have imitated the West, without taking into account the environmental impact and local culture. If the skyscrapers in America and Europe symbolize the high scientific capacity and the challenge of human space, this can go to Arab countries, there is the BurjKhalifa in United Arab Emirates and the tower of the towering clock in Mecca and many others towers, do not express the splendor and the importance of skyscrapers in the Occident, the reason the diversity of culture and the warm climate in the Arab countries. In my opinion, the vertical construction must take into account the environmental impact, the local culture, because the Arab social life has always been an organic environmental life from the tent to the mud houses. If we try to discover the secret architecture in the Arab region and we have found it close to human consciousness and trying to glorify its role in life and after death, in a look at the three pyramids we realize how deep the idea of the ancient Egyptians is in the celebration of human beings after death. In modern times the architect Hassan Fathy in his village project (the Qurona) tried to reach the Palace slogans for the poor do not rise but give light and shade and security. Fathy was able to establish a model villages for the poor in Egypt with houses built with appropriate materials at low cost to improve the human life of the peasants who can exercise their happiness and creativity. Islamic Arab architecture was able to switch from a speculator in the countryside to the huts in the villages, and then to the buildings and monuments in the city, vector authentic elements, consistent with human needs with traditions, and the environment, is characterized from Islamic art that there is a general unity, collectively so that it can distinguish between every piece produced under Islamic civilization in any country of the Muslim world, and, perhaps, the secret of the secrets of Islamic civilization and its art products artistic dye in all countries. The characteristics of Islamic Arabic architecture have been linked to the physical aspects addressing some meanings and contents, as follows:

- 1) Focus and opening to the inside (content) not to the outside.
- 2) Flexibility, adaptability and horizontal extension.
- 3) human-scale, human architecture.
- 4) Resolved content with changes in shape.
- 5) Rhythmic and engineering.
- 6) Abstraction and symbolism.
- 7) Unity and diversity.

In Islamic architecture unity is formed and in diversity, unity without diversity leads to monotony and diversity without unity

leads to chaos. Arabic modern architecture, Arabic is combined with heritage and tradition, offers us a living example of a rich and distinctive architecture that shows urban civilization since ancient times in form and content. For example, the functional aspect or the division of internal functional space. Modern architecture of a traditional nature crystallizes and embodied many aspects of social and economic life and customs. And the Arab and Islamic traditions were divided into architectural spaces to be an extension of the previous architecture, which was based on different principles, including complete isolation of the emptiness of the guests, for example in residential buildings. The housing is divided into three main spaces varying in the scope of the relationships between these spaces direct and indirect relations or axis.

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