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Mahdi Alivari¹

1. Department of Architecture, Islamic Azad University, Shabestar Branch, Shabestar, Iran.

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ABSTRACT

Islamic architecture is a profound journey of cultural adaptation and spiritual expression that has evolved over centuries. It began with the Kaaba in Mecca, serving as a foundational inspiration for builders and architects across various regions. Characterized by elements like domes, minarets, arches, porticos, and mugarnas, Islamic architecture reflects a blend of grandeur and functionality. This art form isn't merely relegated to museums; it thrives dynamically, incorporating contemporary elements remaining rooted in tradition. This paper delves into Islamic architecture within Iran and other Islamic nations, highlighting its key features. It is structured into several sections: (1) The Essence of Islamic Architecture; (2) Major Building Types within this architectural style; (3) Identifiable Characteristics that mark Islamic structures; (4) The Global Influence of Islamic Architecture; and (5) Significant Examples of these architectural marvels. This article concludes that Islamic architecture is one that encompasses the message of Islam, facilitating the realization of its principles and goals on earth for Muslims while also promoting a lifestyle derived from such philosophy and principles. It is a living art form that continues to inspire and influence modern architecture around the world. The enduring legacy of Islamic architecture is a testament to its ability to adapt and thrive across different cultures and eras, making it a truly global phenomenon.

Introduction

Islamic architecture can be viewed from various perspectives, leading to different definitions. From a material and aesthetic standpoint, Islamic architecture refers to buildings that feature domes and minarets, composed of elements such as arches, porticoes, vestibules, muqarnas, and similar components. Historically, it is the type of architecture that emerged following the rise and spread of Islam in parts of Asia, Africa, and Europe, influenced by the religion and its associated needs. From a spiritual perspective, Islamic architecture embodies an inward and symbolic approach, aiming to lift the veils of ignorance from human sight and to realize divine knowledge and spirituality in the heart of humanity.

In one definition, Islamic architecture is an art that has established itself over ethnic and geographic traditions, transforming them and creating a unique coexistence between pan-Islamic artistic expressions and local styles. "Those works of art that are specifically created for Muslims can rightly be considered part of Islamic art" (Grabar, 2000). Another, more common interpretation of Islamic architecture suggests that the term "Islamic" refers to a culture or civilization where the majority of people, or at least the ruling elements within that culture, adhere to Islam. Thus, Islamic architecture is distinct from Chinese or Spanish styles, as there is no land or nation that is entirely Islamic, a fact that also involves regions where the communities are predominantly Muslim.

Dr. Nasr, in John Hog's definition, describes Islamic architecture as a composition of structural elements and the forms created, its historical background, and how and from where it draws inspiration. Two artistic waves have played a fundamental role in the emergence and establishment of Islamic architecture: one is the Greek style particular to Syria, and the other is the artistic style of Iran during the Sassanian era. "Islamic art has a dimension of imagination and creativity that can be seen in many architectural works" (Hog, 2007). With the embellishments displayed in its works, Islamic architecture enhances the material aspect while achieving an ideal state in which one can sense the manifestation of spirituality. Martin asserts that "the Arabs did not have a specific architecture or artistic background, but they succeeded, with the help of elements derived from foreign art and architecture, especially that of Iran, in creating a unique style that is unparalleled in the history of art" (Haeri, 1988). Islamic architecture is not an art that arose independently; rather, it is the result of the blend of Eastern art and the art of the conquered lands.

Architecture is an art aimed at organizing space, and Islamic architecture identifies its primary goal as presenting humanity before the Lord by sanctifying and beautifying the space it creates and organizes through various architectural techniques.

In general, Islamic architecture encompasses a wide range of architectural styles and types of buildings that developed in regions where Islam was the dominant religion and culture. The territories conquered by the Islamic empire were influenced by Roman, Byzantine, Persian, Mesopotamian, Chinese, and Indian architecture as Islam spread across the world. These structures include those built between the seventh century, when Islam first emerged, and the present day. Iranian-Islamic architecture reached its zenith during the Safavid period (Rabbat, 2012).

The expansion of the Islamic empire encountered other cultures, traditions, architectural styles, and ideas. When Muslims entered a city, their architectural approach was to build upon what existed, draw inspiration from it, and innovate within it. This is fundamentally why this style is the result of centuries of cultural integration and architectural techniques, like a mosaic that binds different architectural styles into a cohesive entity.

Islamic architecture represents a significant journey of cultural adaptation and spiritual expression. Beginning humbly with the Kaaba in Mecca, Islamic builders and architects transformed architectural styles across three continents. From the early Umayyad mosques to the grand Ottoman structures, each period introduced new elements that enhanced the beauty and functionality of Islamic spaces. This article examines Islamic architecture in Iran and Islamic countries.

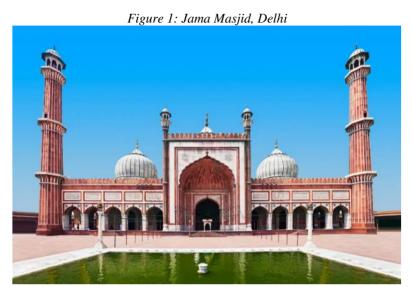
Important Types of Buildings in Islamic Architecture:

In Iranian-Islamic architecture, buildings are designed to harmonize with the climatic conditions of the region. Additionally, one of the characteristic features of this type of architecture is the abundant and intricately detailed decorations, which architects utilize in the design and construction of buildings for their aesthetic appeal.

Islamic architecture has had a significant impact on architectural styles worldwide, particularly in the Middle East, North Africa, and parts of Asia and Europe. Furthermore, Islamic architecture has also influenced the

development of Gothic architecture in Europe (Mohammed, 2015). Important types of buildings in Islamic architecture include the following:

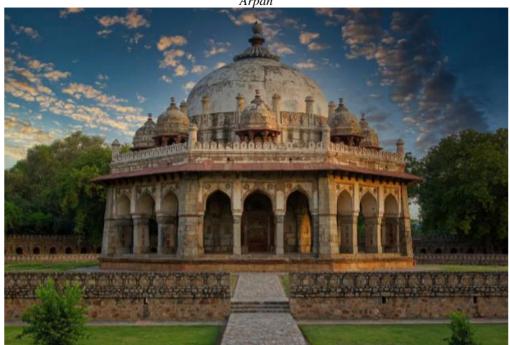
Mosques: Mosques are one of the most important types of buildings in Islamic architecture. They are used for congregational prayers and typically include a prayer hall, a courtyard, and a minaret for the call to prayer (Figure 1).



(https://www.arrivalguides.com/en/Travelguide/Newdelhi/doandsee/jama-masjid-14547)

- Madrasas: Madrasas are Islamic schools that have traditionally been important centers for studying law, theology, and Islamic sciences. They often include a courtyard, lecture halls, and student dormitories.
- **Palaces**: Palaces were often built by Islamic rulers as symbols of their power and prestige, usually consisting of large reception halls, private rooms, and gardens.
- **Caravanserais**: Caravanserais are inns built along trade routes to provide shelter and protection for merchants and their goods. They typically include a courtyard, stables, and a mosque.
- **Tombs and Mausoleums**: Tombs and mausoleums are important types of buildings in Islamic architecture, as they are used to commemorate and honor significant figures in Islamic history. They often include a dome, a prayer hall, and a courtyard (Figure 2).

Figure 2: Islamic Architectural Tomb in Lodi Gardens against a Dramatic Sunset, located in New Delhi, India by Arpan



(https://fineartamerica.com)

- **Bathhouses**: Bathhouses are public baths that have been a traditional part of Islamic architecture for centuries. They are often found in cities and towns and feature a distinct architectural style with multiple rooms for various functions such as washing, saunas, and relaxation.
- **Fortifications**: Fortifications, such as city walls, gates, and towers, are also important types of buildings in Islamic architecture, as they were often used to protect cities and towns from invaders and to mark entry points or barriers (Harvey, 1968).

Regarding the various parts of Iranian-Islamic buildings, it can be said that architects utilize elements such as halls, courtyards, towers, wells, gardens, bathhouses, and interior decorations in the design of these structures. Some of the most famous Iranian-Islamic buildings include the Alighapoo Garden in Tabriz and the shrine of one of the Imams in Shiraz, among others. In general, Iranian-Islamic architecture holds a special place in the realm of art and architecture, reflecting Islamic culture and art. Next, we will discuss examples of this architecture in the world and Iran.

The Prism of Divine Light Diffuses

One of the key elements in Islamic architecture that shares religious roots with Zoroastrian, Jewish, and Christian traditions is light and the use of architectural elements to highlight the sacred significance of light for the inhabitants of a particular building or structure. In Iran, unlike anywhere else in the Middle East, this is particularly manifested in the technique of Iranian stained glass, as attested by numerous mosques and old traditional houses throughout the country. The most notable example is Nasir al-Mulk Mosque, also known as the Pink Mosque. The light that streams through the colored windows of the mosque's winter prayer hall (the western iwan) is soft and gentle, serving as a manifestation of divine presence and mercy. It soothes the eye and creates a unique spiritual atmosphere of tranquility and calm (Figure 3).

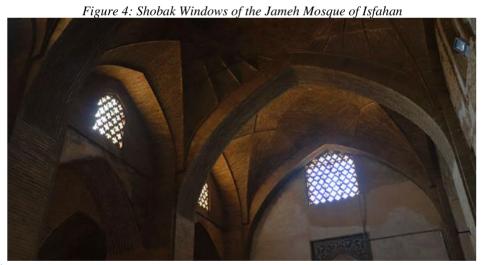


Figure 3: Dance of Light from Stained Glass in Nasir al-Mulk Mosque

(Amin Karimi)

In Islamic architecture, the window plays a significant role not only for illumination but also for social purposes. Social norms in Islamic societies dictate gender separation and emphasize the need to maintain family privacy, especially for women.

Shobak windows, or more locally, mushabak, were often adorned with blue tile glazes to prevent visitors from looking into private spaces (interior quarters), while allowing those inside to observe strangers during their leisure time without revealing their identities. This created a comfortable and well-practiced way for women to evaluate potential suitors from within a private space. There are many examples of shobak windows throughout Iran; however, one of the finest is located in Isfahan, within the historic Mohsen al-Molk House near Naqsh-e Jahan Square, which is listed as a UNESCO World Heritage site (Figure 4).



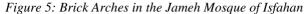
(Amin Karimi)

Islamic tradition has had a significant impact on the architectural layout of private Iranian residences. After the seventh century, homes in Iran were divided into two sections: the inner quarters for family members and the outer (or guest) quarters for visitors. Each unit traditionally consists of several rooms arranged around a cozy courtyard featuring a small pond or basin; this small pond, abundant in Iran, is not merely a decorative element but a remnant of the layout of the ancient Persian garden. Although Islamic architectural style has seen many changes, including variations in style and building materials, many structures, especially in rural areas of Iran, have largely maintained the inner and outer layout.

Safety Under the Cross-Vaulted Walls

In the true mosques of Iran, where Islamic architecture has undergone distinctly transformative changes, the

typical plan features a four-iwan layout (in Persian, "Talār-ye Chahārtāqi") with a central courtyard prominently positioned at its heart. While most Iranian places of worship, unlike their counterparts in other parts of the Islamic Middle East, feature a four-iwan plan, one of the best examples of this architectural tradition is the Jameh Mosque of Isfahan, which is a UNESCO World Heritage site (Figure 5).





The roots of this quadruple layout can be traced back to the original design of the Persian garden, known in Persian as "Chahār Bāgh" (meaning "four gardens"). The symmetrical and defined layout of the four gardens has been so popular over the centuries that many classical gardens in India and other parts of the region have followed this design. From the four gardens to one of the finest examples of Islamic architecture—the four-iwan plan—and to the small ponds, visitors to Iran are never ceases to be amazed by the architectural designs surrounding them (Figure 6).

Figure 6: Four-Iwan Plan of the Khaju Bridge Terrace



(Amin Karimi)

• Islamic architecture is characterized by several distinct features:

Geometric Patterns: Islamic architecture is well-known for its use of intricate geometric patterns found in tile work, stucco, and woodwork. These patterns are based on mathematical principles and are designed to create a sense of harmony and balance.

Arabesques: Decorative designs that feature interwoven patterns of foliage and script. These embellishments are often used to cover the surfaces of buildings.

Calligraphy: Calligraphy, or the art of beautiful writing, is an important aspect of Islamic architecture. Calligraphic inscriptions can be seen on walls and facades of buildings, often used to decorate the interiors

of mosques and convey messages to the public.

Domes and Arches: Used to create a sense of grandeur and spaciousness. Domes can be found atop buildings, while arches are often employed to create entrances and passageways. Domes create large, impressive spaces and are frequently decorated with intricate geometric patterns and colorful tile work. The use of multiple domes arranged in succession has become a common feature in Islamic architecture.

Minarets: Minarets are tall, slender towers typically found alongside mosques. They are used for the call to prayer (adhan) and often serve as a visual marker for the presence of a mosque in a neighborhood or city. **Courtyards and Gardens**: Islamic architecture often includes courtyards and gardens with water features as part of the design, creating a sense of tranquility and tranquility. The courtyard is a key feature in many Islamic traditional buildings and homes. It serves as a focal point for the building, providing a space for socializing, relaxation, and access to natural light and ventilation. Courtyards are often surrounded by covered walkways or passages, known as porticos.

These elements create a harmonious balance between indoor and outdoor spaces, offering both functionality and aesthetic beauty. (Rahman, 2015).

Global Influence of Islamic Architecture

The influence of Islamic architecture extended beyond its borders, especially during the Islamic Golden Age (8th to 13th centuries). One of the lesser-known impacts is seen in Gothic architecture in medieval Europe. This is quite logical, as Gothic architecture emerged with the aim of finding ways to connect more deeply with the divine and allow for more light. This led to the use of pointed arches to create taller, more stable structures and soaring churches like Notre-Dame de Paris and the Chartres Cathedral, which feature massive arches and complex roofs. The decorative elements of Islamic architecture, with their arabesques and geometric patterns, also inspired the Gothic style.

Architects such as Hassan Fathy revived traditional Islamic elements, particularly the mashrabiya, incorporating them into modern architectural applications that resonate with contemporary needs. This paved the way for the emergence of perforated facades in architecture and their adoption by various Western architects. Abstract decorations, the use of light, spatial arrangements, and geometry continue to inspire contemporary architecture in projects such as the Institut du Monde Arabe in Paris and the Louvre Abu Dhabi in the United Arab Emirates, both designed by Jean Nouvel (Omer, 2011).

Examples of Architectural Marvels Around the World

The Süleymaniye Mosque, designed by Sinan in Istanbul, is regarded as one of the most impressive examples of Ottoman and Islamic architecture. Built for the magnificent Sultan Suleiman, it blends Byzantine and Islamic styles. The central feature of the mosque is its vast dome, reaching a height of 53 meters, symbolizing the grandeur of heaven.

The interior is adorned with exquisite Iznik tiles, intricate calligraphy, and colorful stained glass windows that create a serene and luminous atmosphere. The brilliance of Sinan's architecture is evident in the balance of proportions and structural innovations of the mosque, such as the use of semi-domes to support the main dome. The complex surrounding the mosque includes schools, baths, and a hospital, embodying the Ottoman concept of a mosque complex serving the community.

Figure 7: Süleymaniye Mosque



(Construction Year: 1550–1557; Architect: Mimar Sinan)

Conclusion

The goal of contemporary Islamic architecture often reflects and expresses the cultural identity of Islamic communities. This may include the use of traditional motifs and symbols, as well as a combination of local materials and architectural styles. Islamic architects were among the first to employ pointed arches and ribbed vaults in their constructions, which later became key elements of Gothic architecture in Europe. Traditional Islamic architectural principles, such as the use of courtyards and gardens, as well as the integration of passive solar design, have been adapted into modern sustainable design practices.

Islamic architecture reflects the culture, beliefs, and values of Islamic societies and provides insights into their history and way of life. The results of this study indicate that Islamic architecture has had a significant impact on architectural styles worldwide, particularly in the Middle East, North Africa, and parts of Asia and Europe. Additionally, Islamic architecture has also influenced the development of Gothic architecture in Europe. While much more could be said about the influence of Islamic art and architecture on Western art, and further documentation could be explored, we have only referred to one of the most prominent and well-known of these influences to avoid prolonging the discussion.

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