CONTEMPORANEITY OF ISLAMIC ARCHITECTURE AND ITS CHALLENGES

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Abstract
Islamic architecture is a broad subject. It encompasses both the realm of ideas and values as well as the world of functionality and utility. The goal of this study is to assist architects and architectural students in developing a thorough grasp of Islamic architectural precedents and effective application to building design. Today's issues with Islamic architecture are mostly related to Muslim issues with concepts and values, which are at the heart of Islamic architecture. External manifestation issues are of secondary relevance. This study examines the process of assimilation and synthesis of many forms and elements, as well as how a more refined Islamic architecture and its parts, a distinct shape and rich style entirely established by Muslims, contributed to global architecture. The study claims that architects must understand not only the hidden values of historical elements but also how these values interact and are interwoven into these elements. As a result, the architect will be able to notice and read these elements accurately, allowing him or her to successfully incorporate those elements into their design. The study presents a conceptual approach for assessing and interpreting architectural-historical vocabulary as well as applying it to contemporary building design. Islamic architecture, is a microcosm of Muslims' cultural and civilizational understanding and growth. It reflects the notion of unity in diversity to preserve its everlasting appeal: the unity of the Islamic worldview, purpose, and values, as well as the diversity of changing methods, procedures, and styles.

Key Terms - Islamic Architecture, Vocabulary, identity, built values, creativity.

INTRODUCTION
Islamic architecture, particularly its utilitarian aspects, is inspired by Islamic principles. It is founded on the religious teachings of Islam. Its fundamental virtue is that it assists Muslims in conducting religious rites, such as worship, also known as "Ibadah," which encompasses all the activities of Muslims throughout their lives. The concept of One Allah (God), man, nature, life, death, and life after death underpins Islamic architecture. All these religious ideas take physical embodiment in the form of Architecture. As a result, we may say that Islamic architecture is the translated representation
of Islam into reality at the request of Muslims, signifying culture, and civilization (Adel & Kamal, 2010). Buildings are used to illustrate architecture. To comprehend the relevance of any building, we must locate it within the greater context of the cultural and contextual setting. Its true meaning cannot be deduced without any contextual connection (Abdelmonem & Selim, 2003). Any building's form and physical manifestation can be assessed, however for an in-depth comprehension; cultural context and knowledge of the original concepts underlying its functioning are required.

**ISLAMIC ARCHITECTURE AS A CULTURAL MEDIUM**

Muslims, Islam, and Islamic architecture are inextricably linked. Islam and Islamic architecture both emerged on the global stage at the same time. Islamic architecture did not exist before Islam. It is impossible to understand it without first studying Islam in depth. It derives its origins, history, ideology, beliefs, practices, and other elements from Islam. If one relates its inception and formation with Islamic principles, faith, and religion, one can grasp even its minute details very comprehensively in any period.

Space and mass are the building blocks of form. However, when we discuss architecture from an Islamic perspective, it is primarily focused on how Muslims would be affected by Divine dimensions, setting it apart from other structures. The building serves as a sanctuary for its occupants from the elements outside, whilst the artwork represents religion in a materialistic way. Therefore, these are the key concepts for creating architecture that meets all human requirements, both immediate and long-term.

The concepts that serve as both structural and functional cornerstones of a building must be closely related. Additionally, it must engage with the users. Any departure from either of these components would result in a psychologically significant disagreement among building occupants.

When talking about Islamic architecture, there are multiple levels of conceptions. The masjid serves as the principal representative of this idealistic identity. A masjid is a building where the five daily congregational prayers are offered. In addition to its primary role as a place of worship, the mosque also serves as a hub for the community's educational, and adhan-calling activities. If we follow the masjid's development throughout the history of Islamic civilization, we will first notice that there is no precedence for how it began, developed, and flourished. Additionally, it has called for a thorough examination of the masjid's architectural development. Islamic architecture is a rewarding area of study and simultaneously has the taste in ideas, values, practices, and functions. The compatibility of the fusion of the two worlds determines the worth and quality of Islamic architecture.

**Masjid as an Example:**

The Masjid is the focal point of Muslim life. It is an integral part of their existence in both their individual and collective lives. It represents religious and cultural identity of Muslims. When discussing the consciousness, mission, and vision of Muslims, it is simple to comprehend each component while studying either one (Adel & Kamal, 2010).

Since the meaning, significance, and dominance of the masjid transcend the boundaries of the variations of the physical world, it is known as Baitullah, or The House of God. Given the name, it is implied that every other house should reflect Baitullah's character. It provides a foundation of legitimacy for all other houses, structures, businesses, and institutions. The Masjid is a location for bowing before God and doing worship. It is here that Man performs the most respectable act in front of God by prostrating before Allah, an act that makes success and happiness in both worlds possible thanks to the Masjid's establishment. The Masjid has been dubbed by our beloved Prophet (SAW) as Allah's favorite place on earth. So long as they are connected to their masjids, one might claim that these are the places where people are safe and on the right path.

One of the outstanding examples of Islamic architecture is Masjid Nabawi (Ali, Ifikhar; Shah, Mir, 2019). If its functional element is to be examined; it served as a government, educational, medical, detention and rehabilitation, charity and welfare, and some lawful leisure and amusement institution. It will always serve as the hub of daily operations. The Prophet’s Mosque in Madina hosted the most important historical events of all time, including revolutionary ones.

If the constructed environment and tangible objects are not described, the logical explanation of a civilization will be weak (Gharipour, 2011). The physical environments, which reflect how people live, serve as a showcase for the highs and lows of each society. The built environment and society are so intricately connected that the lines between causes and effects are blurred, and their chain of development rises, prospers, declines, and falls together.

The design of Masjid-e-Nabawi is the best illustration of the most basic and precise response to people's needs while also being in line with what its users perceive to be their way of life, beliefs, and values. If the evolution of the masjid is examined, it was initially constructed as a simple, roofless enclosure to meet the basic requirements of the users. As need arises, the masjid's structure becomes more complex, a roofed section with three arcades, and entrances, one of which has pavements, a minbar, a dakka for communication purposes, for lighting the masjid lamps, multiple portions, and various facilities required to perform different functions in a masjid, as well as people to clean the entire complex.

The architecture's form was largely dictated by its primary functions. The historical consensus among historians, however, is that Islamic architecture not only faithfully reflects Islamic principles but also results from physical and environmental

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factors, which in turn influence how the built environment is shaped and formed.

THE CHALLENGE

The basic idea of Islamic architecture is to consider both the users’ utilitarian needs as well as their cultural, environmental, and religious values when planning and constructing buildings. Due to the industrial revolutions of the 20th century, Islamic values of unity, harmony, and continuity were disregarded in the building’s design (Awawda, 2014). If we look at the three categories that Martin suggests we can use it to classify three main trends in Islamic architecture.

The trend that disregarded the majestic Islamic soul's interaction with ordinary culture and simply adhered to western influence architecture is one component. They believe that the past may be forgiven. The second trend shows a superficial break with earlier Islamic architectural styles. They think it would be best to include arches and domes in contemporary high-rise structures to create a hybrid style of architecture. The third strategy entails comprehending fundamental elements of earlier Islamic architecture and using contemporary technology to express those concepts.

The third idea holds that because current building materials and production methods are readily available, architects have more creative licenses. By incorporating and manipulating opportunities of the machine era more skillfully than artisans of the past have achieved for the geometric shapes and arabesque, they can be more diverse in their enrichment of Islamic architectural style. The resulting forms may be a true depiction of Islamic architecture's core features, infused with regional and contextual uniqueness, stylistic development, and relevance to Islam's core beliefs. In Islamic architecture, decoration is an important element. More abstract art forms that stress embellishment is used. These are typically used on the exteriors of structural components like domes and minarets. Most ornamental patterns are made of vegetal and floral elements. The abstract vegetal design used in Islamic architectural embellishment is a representation of the Islamic civilization's contributions to art and architecture (Gharipour, 2011). It is being reduced from a groundbreaking design by Muslim architects to merely imitational art (Hamouche, 2012). Inappropriate incorporation of these principles particularly concerning the dates, style, and formal aspect of proportions, colors, and main elements in the conservation, restoration, and even new project designs inspired by historic styles has been caused by a lack of research, practicality, and practice.

HUMAN NEEDS

Islam has highlighted several fundamental human needs and emphasized preserving and safeguarding them. These include religion, life, property, intellect, and prosperity. Some scholars think that these requirements should be prioritized in the following order: prosperity, intellect, and property, or intellect, posterity, and property. There are many methods for defining human needs, including humanistic and psychological ones. One of the scholars who proposed a pyramid of human needs is Abraham Maslow (Bouzenita & Boulanoar, 2016). These requirements are founded on both humanistic and scientific theories. However, the Islamic perspective on this is entirely different. Islam acknowledges all human needs, but it demands that all those needs be met by following the values of Islamic teachings.

Islam advises all people to use their human needs as a channel for adhering to the Islamic laws, for their own or other worldly gains as well as the benefit of society. Maintaining a balance between worldly and spiritual requirements in times of abundance or need, stability or change, wellness or disease, pleasure, or suffering, is the fundamental tenet of this approach.

PERCEPTION OF INTELLECTUAL DIMENSIONS

According to Islamic doctrine, humans were endowed with the capacity for perception, inspiration, and intellect as fundamental characteristics. It has been given the ability to understand metaphysics and the power to communicate absolute reality. Thus, using this knowledge, Muslim architects created Islamic architecture that is harmonious with nature and has a sacred spiritual component. This architecture is also strongly connected to higher planes of reality. Islamic architecture reflects a rich intellectual vision (Akkach, 2012). It is considerably higher than reason and is founded on intuition, which expresses the unchanging realities of eternity (Nasrollahi, 2015).

The expression of a contented being who nurtures the complete balance of spirit, imagination, mind, heart, and hand is classic Islamic architecture. When an architect succeeds in his unique function as a Muslim craftsman, his genuine character and individuality are revealed and may be seen. His expression becomes true whenever he draws inspiration from the Islamic principles and, more importantly, the oneness that guides all elements of an architect's life, which satisfies his intellectual and spiritual needs.

ISLAMIC ARCHITECTURE

Islamic architecture serves as a vehicle for conveying political ideology, social and economic structure, and religious values, in addition to a global tradition's aesthetic sense (Sidawi, 2013). It's been argued that traditional Islamic architecture was created by incorporating several fundamental elements typical of a particular geographic region, such as climatology, human needs, available building materials, construction methods, social and economic conditions, and regional architectural traditions existing before the rise of Islam (Nasser, 2012). The following are the primary governing factors to keep in mind when planning the built environment according to Islamic principles.

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- **No Harm principle:** The no harm principle states that users must prevent and cease any acts they have started that are against the interests of others upon request from those who are being harmed.

- **Opening and projections:** If there is no harm done to the public, someone may project the upper portion of the floors to the streets. The projected part could be a cantilever or a Masharabiya (vernacular balcony). If it doesn't harm the nearby neighbors on the main road, they could install the doors and windows.

- **Right of the appropriateness of open spaces and finas:** This clause emphasizes that inhabitants are free to use the open spaces and finas (the fina is a physical space corresponding to the approximately 1-meter-wide public space alongside buildings) in their communities for a variety of purposes, including social and economic ones, without the interference of other entities.

- **Rights of Easement:** A right of easement, also known as servitude, is a special advantage that one piece of property has over another that is adjacent to it and is owned by a different party. Unless this advantage has been given up through a traditional transaction, it belongs to the initial property even if its owner changes.

- **Rights of pre-emption:** The right of pre-emption is the ability of a neighbor or business partner to purchase an adjacent building or property when it is put up for sale by another neighbor or business partner.

When creating Islamic architecture, four elements are used. They are explained in the following.

1. Allah's (SWT) and His Beloved Prophet's (SAW) divine knowledge (i.e., pattern),
2. Technologies and methods of sustainability that are suitable for the site (i.e., pattern and form),
3. The principles of sacred geometry (i.e., form),
4. Environmental concerns, aesthetic inclinations, material preferences, and historical impacts on residents are all examples of regional sensibility (i.e., adaptability).

**How these elements correspond to Design:**

The following is how these principles are included in the design:

- When installing doors, windows, bending entrances, and window screens, the privacy of the residents is safeguarded.
- Walking is encouraged throughout the neighborhood.
- The public areas, including masjids, homes, schools, and markets, are accessible and within walking distance.
- Facilities for recycling trash and water have been installed, including composting ones.
- To save energy, design considerations such as site orientation, usage of local building materials, and natural site features are considered.
- By utilizing sacred geometry, the buildings are made to maintain a human scale.
- The overall design process considers the cultural norms and aesthetics of the local area.

**SYSTEM OF EDUCATION**

The Islamic worldview and its value system in the Muslim world must be integrated into our modern professional education system. The Islamic characters should be incorporated throughout the entire educational system. However, one could consider architecture to be a significant area that should be covered by Islamic teachings. Long-term goals could include professional education in the built environment industry. However, considerable efforts and research projects in higher education are required to work on many parts of the integration process. The process may involve significant efforts such as research, consensus-building symposiums, expert seminars for debating the significance and importance, and finally actual steps to incorporate the knowledge into curricula and schemes. If the general populace is persuaded of its importance and urgency, the incorporation of these profound lessons and ideals into the educational system can produce the finest outcomes.

The professional training for architects must affect the trainees' souls as well as their ability to coordinate their hands, eyes, and minds. It does not provide the architect with a rationale for their inspirations, but it should provide some insight into the consistency of how particular principles are applied in the creation of architectural expressions. Compared to the current architecture education system, this educational model is different. It is founded on the universal premise of architects' imaginations rather than the idea that architecture is the creation of a single person. It's also important to concentrate on the word imagination. Since a professional architect's creativity is not limited by the simple dimensional constraints of length, width, and height, it may be the laypersons. But the imagination of an architect goes beyond this. The Muslim architects had to be conscious of the architectural form's much higher reality, drawing constantly from the world of divine ideal for inspiration and infusing it with a sense of everlasting beauty. The resulting building has the power to arouse feelings of beauty based on the sacred universality of the soul's symbolic language.

**FUTURE MEASURES**

When designing masjids, homes, commercial structures, or any other type of construction, the true essence of Islamic

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architecture must be considered along with the needs and goals of the intended users. Its construction uses technology as a tool, thus the choice made must be appropriate and should consider local climate. Instead of copying or expressing the historical style literally, it needed to be sought after considering honest response (Omer, 2011). Additionally, it must maintain its diversity while adhering to the spirit of Islam.

The fundamental point of these lines is to demonstrate how social, psychological, religious, and environmental restrictions all played a role in the creation of the historic structures that we see today. Here it is stated that to properly understand, comprehend, and situate the influences when examining these Islamic architectural heritage structures. It was necessary to examine the historical elements' physical features. The study required to be linked with the historical site and archive, as well as the locals' perspectives on the significance of those components. A thorough investigation will show the motivations for using spatial arrangements, residents' social interactions, the population's economic situation, and particular material use elucidating the how and why it was employed. With the help of this method of research, prospective experts in the field of architecture will be better able to comprehend traditional Islamic elements and will be more prepared to successfully incorporate them into ongoing and upcoming architectural design projects in the Islamic world.

At first, architecture has a symbolic insight into a greater reality that goes beyond aesthetic expression or spatial experience (Elwazani, 1995). Islamic architecture combines the sacred traditions of the divine in the best way possible, with a sense of harmony and order in the physical world that emanates from the built environment and expresses metaphysical order. Furthermore, it made use of local cultural, socioeconomic, and climatic variables responsively, retaining consistency across the range of its most famous examples. Islamic architecture is known for successfully incorporating and assimilating a broad range of typologies, phenotypic traits, forms, and technologies with various sets of philosophies, ideologies, and open minds, embracing the physical, social, and cultural characteristics of a site in the process.

Notably, if the Muslim architects adhered to a few fundamental guidelines, the process of revival and nourishment would proceed. It requires being aware of general Islamic laws and teachings about the construction industry. The constraints and expectations of their time, as well as the concerns of certain geographical areas, also required to be properly understood. They must not rely solely on reenacting past figures. Since technology is evolving quickly today and different regions use it differently based on their own needs, technological incorporation is required to be carefully considered. And last, since it is likewise constantly in flux as time and place pass, it is important to study human psychology. Without considering the environmental and socio-cultural constraints, an architectural solution that is appropriate for one building typology in one place and at one time cannot be applied in other places, at different times, or at the same time in another place. Parachuting such solutions would imply that one is not honoring Islam's core principles and common sense. Islam rejects imitation that is illiterate and blind.

To gain an understanding of the past's wisdom, reason, and practical applications, it must be studied. Modern Muslim architects need to have a distinct vision, be free-spirited and have a creative urge. They need to be incredibly committed, have confidence in themselves, and strive for excellence if they want to revive Islamic architecture. Because our difficulties are tied to the conditions in which we operate and not to the obstacles that our forebears faced, architects like us must be particularly careful when deciding how to draw from history and the limitations of imitating our predecessors. So, their solutions can't be exclusively ours. The remedies provided will undoubtedly differ from one area to another, someplace more and somewhere less. The same worldview and religious spirit and foundation that underpin the presence of Muslims and bind all Muslim peoples regardless of their various geographical locations, cultures, and historical appearances, however, ensure that the essence of all feasible designs, including those adopted as the best solutions in history, will remain one. Any thought and form that is ultimately given to such a building qualify it for the "Islamic" label.

Modern Muslim architects must continue their research of architecture about people's needs and the applicability of Islamic architecture to those requirements. Art cannot exist for the sole sake of existing. For the sake of life, it must account. Islamic architecture must therefore serve the needs of Islam's underprivileged people rather than existing just for its reason. It should effectively combine the functional requirements of users with the aesthetic requirements of the architecture while authentically portraying Islamic history and culture.

CONCLUSIONS
Following are the main conclusion to be drawn from above discussion and analysis.
There is a need to understand the basic religious and civilizations concepts and ideas and its relevance to each other.

- It was necessary to create a thorough code of conduct for Muslim architects based on fundamental Islamic principles and ethics.
- A thorough investigation, explanation, and refutation of the myths and inaccuracies surrounding many aspects of Islamic architecture. This requires critical thinking and a thorough analysis of underlying issues.
- It was necessary to critically review and evaluate Islamic history and design. It had to be used as a tool for bettering the present and predicting a better future.
Based on the reliable sources of the Quran and Sunnah, an architectural theory is required to be regenerated in relevance with contemporary developments (Nu’Man, 2016).

There should be comparisons between Islamic architecture and other architectural systems, theories, and practices. It is important to clearly outline and carefully consider areas of resemblance and difference.

It was important to research the Muslim masters of Islamic architecture to better understand their priceless contributions. They should be treated with the respect and gratitude they deserve for the roles they played, their reputations, and the contributions they made to society on a local, regional, and global scale.

Development, oversight, and facilitation of high-caliber study on Islamic architecture in connection to considerations that need to be taken. The issues revolve around a lack of quality but not quality and are cognitive and intellectual.

The decision-makers must create performance indicators and design measures and mechanisms for implementing Islamic architectural features in practice in Public buildings and residential architecture.

**DISCUSSION AND RECOMMENDATIONS**

Contemporary academic discourse particularly in the regions that inherit architecture of the Muslim epoch should more persistently investigate the methods that resulted in an architectural legacy that is still mesmerizing the world after centuries of its creation. A holistic exploratory process would uncover not only the Historic significance and Symbolic implications ascribed to a visual representation of Islamic traditions but also the logical systems of manufacturing architectural designs of the era. Theoretical research to correlate the Islamic set of models and ideas with its Architectural manifestation will establish a valuable academic debate, which will give rise to the regeneration of Islamic Architecture as a system that possesses an exclusive character. The uniqueness of Muslim character in architecture design will not only be limited to visual vocabulary but will also involve authentic methods to solve diverse architecture design problems. It is predominantly an untapped potential that must share a lot with contemporary design thinking, which essentially is of great value to the global web of knowledge, as it will lead to alternate design development processes and mechanisms. A broad classification of different windows that feed into architecture design decisions can further be worked out to conduct a comprehensive study of Islamic Architecture. Few of the possible research avenues to investigate the origins and the development path that Islamic Architecture has gone through are discussed.

**Cultural Significance:** Muslim high culture was encompassing most of the equatorial, tropical, and subtropical regions of the globe apart from the Americas. Diverse ethnicities, cultures; cultural associations, and cultural knowledge were naturally contributed as tributaries to further hone mainstream Muslim character. Like today’s global society, where different sets and subsets of cultures and traditions play as feeders to enliven mainstream trends and tendencies. It is interesting and a very scientific investigation to decipher these cultural tributaries that influenced and played a role in morphing an overall visual character that was later labeled as Muslim or Islamic Architecture.

**Mythology or Religious Symbolism:** Religion is a set of belief systems that explains the basic idea of life. Religious ideals form the stimulus for its followers to get aligned with fellow followers for the achievement of something greater than life. The material manifestation of these spiritual ideas and ideals is the lifeline of Artistic expressionism. Architecture as a giant piece of art has always been used as a great piece of symbolic expression in almost every religion. The hidden layers and muted geometric progressions that are often linked with a posthumous state of recompense are altogether a very intricate mathematical system that generates an infinite set of heavenly arrangements. Scientific exploration of these logical systems to design vocabulary is extremely rich and has tons of intact design outcomes.

**Functional aspect:** In most of the scientific discoveries principal *Rationale* for creation shoots out of ‘Need’. Functionality is the most vital feature of human pursuits. The operational aspect of architecture design is usually very methodical to address a range of performative issues that devise an essential dimension of design response. Functionality has always been of great importance behind the obvious visual layers. The scientific study of Islamic Architectural design solutions to interpret the functional logic behind *Programmatic* and *architectonic* compositions will open new research opportunities.

**Technological constraints:** Technology is the art of ‘Making’ and is also the craft of creatively using known methods of handling materiality as well as exploring more possibilities of blending natural / derived materials. Every period in recorded human history has a distinctive canvas of technological solutions that are applied to fulfill a human need on a mass scale. Technology as one of the principal Design instructors guides Architectural solutions. A detailed study and analysis of the technological options that were available at the time of its creation and the role that specific technology played towards the emergence of
Architectural design elements during the high time of Muslim history is another very exciting avenue.

**Climatic conditions:** To overcome environmental challenges and attain climatic comfort has been one of the eternal concerns that human beings are tirelessly pursuing. Identifying approaches and design features that are exclusively shaping Architectural components as focused responses to certain climatic conditions will formulate a very valuable base of knowledge for contemporary climate-responsive design solutions. The broad geographical canvas of the Muslim era stretched from Central Asia to Africa to European areas; every region having distinct climatic conditions, compelling a variety of mitigatory approaches in Architecture design processes. Research studies that comprehend climatic mitigation strategies employed in Islamic Architectural design solutions, will prove to be a very valuable and practical aspect of information.

The intellectual disconnect with Muslim systems and methods of architectural discovery and its material manifestation is a great loss of data and information that is not only the heritage of Muslims as a community or identity but is a mute science that is collective human wisdom.

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