Islamic Architecture and Its Challenges

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Abstract—Today architecture has become as a powerful media for introducing cultures to the world, which in turn brings about a change in the global insight, power gaining, investment, and development. Islamic architecture is based on the language of Koran and shows the depth and richness of Islam through the spiritual soul. This is in a way that belief in monotheism and faith in Islamic teachings are manifested as Islam's aesthetic thought in Islamic architecture. Unfortunately, Islamic architecture has been damaged a lot due to the lack of the necessary information, and also successive wars that have overtaken the Moslems as well as the dominance of colonizing counties.

Islamic architecture is rooted in the history, culture and civilization of Moslems, but its deficiencies and shortcomings should be removed through systematizing the Islamic architecture researchers. Islamic countries should act in a way that the art of Islamic architecture shows its true place in different architecture eras and makes everybody aware that Islamic architecture has a historical root and is connected eternally to the genuineness, religious art, and Moslems' culture and civilization.

Keywords—Art, culture and civilization, Islamic architecture, Moslems

I. INTRODUCTION

ISLAMIC architecture is a part of the architecture that, as a social, cultural, political, and religious phenomenon, has been emanated from Islam. The relation of architecture with Islam is indicative of the belief in monotheism, faith, and practicing Islam's teachings. The monotheistic thought based on the belief in the one and only God, was the style used in most of the Islamic arts as an original subject.

According to the Encarta:

"Islamic art is developed from many sources: Roman, Early Christian, and Byzantine styles were taken over in early Islamic architecture; the influence of Sassanian art—the architecture and decorative art of pre-Islamic Persia was of paramount significance; Central Asian styles were brought in with various nomadic incursions; and Chinese influences had an important effect on Islamic painting, pottery, and textiles" [3].

There are repeating elements in Islamic art, such as the use of geometrical floral or vegetal designs in a repetition known as the arabesque. The arabesque in Islamic art is often used to symbolize the transcendent, indivisible and infinite nature of Allah [4]. Mistakes in repetitions may be intentionally introduced as a show of humility by artists who believe only Allah can produce perfection although this theory is disputed [5], [6]

Perhaps the most important expression of Islamic art is

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architecture, particularly that of the mosque (four-Iwan and hypostyle). Through the edifices, the effect of varying cultures within Islamic civilization can be illustrated. The North African and Spanish Islamic architecture, for example, has Roman-Byzantine elements, as seen in the Alhambra palace at Granada, or in the Great Mosque of Cordoba. The role of domes in Islamic architecture has been considerable. Domes have been used in Islamic architecture for centuries. The earliest surviving dome is part of the Dome of the Rock mosque, built in 691 CE. Another prominent dome was added to the Taj Mahal, constructed in the 17th century with the Taj Mahal. Moreover, as late as the 19th century, Islamic domes were incorporated into Western architecture.

II. ISLAMIC ARCHITECTURE: PHILOSOPHY AND DEVELOPMENT

Islamic architecture extended from the 7th to the 19th century. Muslims intelligently communicated with other cultures by maintaining rather than erasing them. They steered those cultures to serve Islam and cope with the mainstream in the Islamic World. For example, statues and pictures were forbidden in the architecture of mosques, so Muslim engineers alternatively mastered columns, mosaic, foliage and engineering decorations. They also paid particular attention to architectural and aesthetic designs that revolutionized Islamic architecture. Today, architecture is considered a reflection of civilization and an open book in which the history of a nation is recorded.

Islamic architecture has innovated special ornamentations, colors and engineering units which can be adopted anywhere. The triangle, square and circle, for instance, are facts because they comply with mental concepts. A new concept of unity has emerged in Islamic architecture. It calls for unity as a base for life cycle [7]. This was reflected in intellectual aspects, art, and architecture. Unity in Islamic architecture is not only determined by the engineering frequency pivot, but also by the vacuum at a particular point such as the Kaaba or the fountain in the mosque nave. Here, the dynamic power unifies parts and maintains their sovereignty to incorporate with the whole. The principle of unity in Islamic architecture is applicable on horizontal projections as well as on radial star-shaped decorations and walls which surround the high gateway whose doors can be rectangular, pointed or circular [8], [9].

III. HUMILITY IN THE HOUSE: AVOIDANCE OF SELF-ADVOCATING AND WEALTH WASTING

Humility is not only applicable to the personal behavior of the individual Muslim, but also to his house. Shari'ah forbids self-aggrandizement and extravagance in all matters of living. A hadith states:

'Abu Huraira reported that Allah's Messenger said that

there was a person who used to walk with pride because of his thick hair [or appearance] and fine mental [or intelligence]. He was made to sink into the earth, and he would go on sinking into the earth until the Last Hour would come.'

Also, the Prophet said:

'Verily Allah likes three things for you and He disapproves three things for you. He is pleased with you that you worship Him and associate not anything with Him, that you hold fast the rope of Allah and be not scattered, and He disapproves of your irrelevant talk, persistent questioning and the wasting of wealth.'

Indeed, the Prophet pointed to the prohibition of exaggeration and squandering even in the building of a mosque. He stated, 'I was not commanded to build high mosques.' and, 'One of the signs of the Last Hour will be that people will vie with one another about mosques.' On a different occasion the Prophet said, 'Every spending is for the sake of Allah, except spending on building, there is no good [or reward] in it.' Abdul Aziz Aba Al-Khail, a well-known and religiously informed Saudi architectural theorist, explains this hadith in his study of the interpretation of Islamic architecture in accordance with the Qur'an and sunnah by saying that spending on building is not rewarded if the building is unnecessarily built or exceeds the need of its owner [10].

The Islamic prohibition of self-advocating or conceit via exaggerated spending on the house is also driven from the Islamic point of view on the purpose of housing. To Islam, the house is to provide shelter from the climate and to secure the necessary privacy and safety [11].

IV. ISLAMIC ARCHITECTURE IN EUROPE

Integrity and diversity are the most salient features of Islamic architecture. This integrity is considered as the main factor in the development of Islamic architecture identity; in a way that the Islamic architecture methods have been different in each Islamic country but their integrity is quite observable.

In religious buildings which were built with the Islamic architecture method in Paris, London, Munich and other European cities, the Islamic identity is quite obvious and indicates that Islam has developed in Europe and that Moslems especially Moslem architects have had the greatest role in offering Islamic identity and civilization; thus can be remembered as the most effective publicizing media at that time.

An illustrated examination of the rise and early development of Muslim architecture in such centers as Jerusalem, Damascus, Cairo, Isfahan, Samarkand, among others. Following a journey in North Africa and Sicily in 1890, during which he observed Muslim architecture, the French writer Guy de Maupassant wrote, "A race of nomads scarcely able to build walls, coming to a land covered with ruins left by their predecessors, picked up here and there whatever seemed most beautiful to them, and in their turn, with these debris all of one style and one order, raised, under the guidance of heaven, a dwelling for their God, made of pieces torn from crumbling towns, but as perfect as the purest

conceptions of the greatest workers in stone."

Architecture and decoration of the mosque and the utilization of calligraphy, color and design, act as a main visible unifying expression of Islam throughout those parts of the world that have come under its sway since the seventh century of our era. The diversity of regional and epochal characteristics is balanced by the unity of the central theme of the faith and its expression in architecture. We will have a glimpse into this treasure trove [12].

V.ISLAMIC ARCHITECTURE AND GLOBALIZATION

The first characteristic of modern societies, or better to say, modern architecture, is the equation of modernizing with technological mutations. This equation in non-modern countries has appeared as modernizing equated with West-strickenness and these two with importing technology. Experiences have proved that this leads to the destruction of powerful civilizations and values of non-modern countries.

VI. THE PLACE OF MOSQUE IN ISLAMIC ARCHITECTURE

The identity of Islamic architecture is the same all over the world despite the diversity of languages and civilizations, and these diversities can be seen from China to the Atlantic Ocean despite the varieties of cultures. Although the Romans and also the others had their architecture, the Islamic architecture had its special feature. Of other specialties of Islamic architecture is decoration, the feature of Al-Nabi Mosque as the first Islamic construction having Islamic architecture. Though the roof of this mosque, at the time of Prophet Mohammad, had been built by palm branches, it was decorated with beautiful colorful tiles.

The Koran verses were mostly used in Islamic architecture as the most outstanding innovations of Islamic art. The ceilings, walls, and pillars were decorated with Koran verses. One of the oldest and most significant of these decorations is seen in the Al-Sakhrah Dome on which the verses are written with Kufic writing on the tiles.

In the history of art, no art has been as controversial ant the same time lofty and wonderful as Islamic art. Relying on Koran principles and also on geometry and arithmetic, the Islamic artists with their sophistic and intuitive perspective have created magnificent works.

Islamic architecture starts with mosque not because mosque has been the first construction built by Moslems in Medina and by the guidance of the Prophet, but because the fact that it has gathered all of the architecture functions in itself. Mosque has been not only a place for praying but also a center for managing all the affairs that had a direct or indirect relationship with religion. Moreover, it has been a place for teaching and also a place for the passengers' taking a rest.

The passage and evolution of time and days has caused some differences in the style and function of other constructions such as schools, tombs, caravanserais, and palace. However, mosque, due to the religious necessities, has been considered as the most significant construction all through the Islamic geography. This necessity is not only due

to the particular function of the mosque (being a place for worshiping God) but also due what has been mentioned in Koran [13] which has identified a strong and sacred link between architecture and mosque thus making mosque architecture one of the oldest works of Moslems.



Fig. 1 The feature of Al-Nabi Mosque as the first Islamic construction

We should make it clear that Islamic architecture had originated and then its features were inferred accordingly. However, the religious aspect is the most distinctive feature to which Islamic architecture is indebted. It is represented in the Islamic aesthetic mentality.



Fig. 2 The internal feature of Al-Nabi Mosque

Mosque has been the first house to be built on the basis of piety. Muslims congregate there under one dome yielding to and fearing of Allah. Consequently, architects have set a number of criteria that mosques should meet since the early age of Islam. These criteria include:

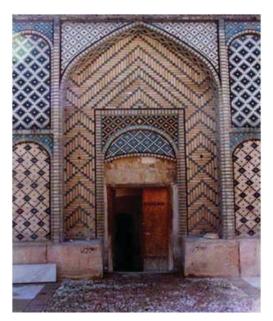
- > communication among prayers
- having no columns in the mosque nave
- having no direct entrance into the nave
- having several openings for illumination.

VII. THE PLACE OF BATHS IN ISLAMIC ARCHITECTURE

Since long ago and in old civilizations, bath has been a place for getting clean and having a tie with religious life. however, with emergence of Islam and its emphasis on cleanness, bath has taken a particular place in a way that much attention has been attached to its architecture and as the main core of Islamic cities, it has made a strong relation with Islamic history and civilization and Islam promotion.

Bath as a place for cleanness existed before Islam in old civilizations among Romans, Persians, Greeks, Indians and Chinese who used little pools to get clean and prevent the diseases. Therefore, from long ago, bathe has had a relation with religious life and cleaning affairs, especially in Egypt at the time of Pharaohs, constructing baths in temples has been common. The Romans also had some baths beside which existed some halls for playing and giving speeches and some libraries. After Islam, regarding its attention to cleanness, the baths changed and found a new aspect with decorations in Islamic architecture.

Regarding the main and fundamental role of baths in the Islamic era, they were built near bazaars, schools and mosques considered as the main core of the city establishment. Generally, baths have been regarded as the most important service constructions in Islamic cities, having a strong relationship with Islamic history, for it is related to cleanness in Islam and has a particular place in Islamic prayers. Thus, it can be said that baths have had a great role in Moslems' social life in different occasions such as happiness, marriage and festivals and their decoration and beauty have been a significant factor in attracting people.



(a)



Fig. 3 The feature of Vakil's bath Shiraz, Iran

VIII. THE ROLE OF UNIVERSITY IN REVIVING ISLAMIC ARCHITECTURE

Absolute imitation of past architecture and urbanization designs does not work today due to being old. These designs should be used as the background of modern designs appropriate with Islamic culture. It is not right to copy the old architecture designs and necessary conditions for innovation in architecture and urbanization should be made through training and establishing specialized societies. Designing architecture and urbanization in Islamic countries has not been a unique tradition throughout the history, but a diversity of traditions which should be incorporated into the modern elements to have new designs for urbanization.

One of the basic challenges of architecture and urbanization has been the lack of rich theoretical sources which has led to the significant part of the architectures' weakness.

Islamic architecture needs the combining of practical training and theoretical training in universities in a way that the art and skill of the architects be used along with the educated. This causes the elevation of people's artistic taste as well as supporting Islamic architecture and paving the way for the activities of architects of the Islamic world. The fault with the academic and training in general and teaching Islamic architecture particularly is the lack of executive operations along with theoretical training that make this specialty incomplete. Therefore, there is a great need for vast research and training. In fact improving Islamic architecture though seems difficult, the theoretical method alone is not sufficient, and the flaws remain.

IX. CONCLUSION

The difference between architecture and the art of architecture makes Islamic architecture have different characteristics that distinguish it from the styles of other constructions. These features include scientific geometry and innovative arts emanating from spiritual thoughts of the individual and this is the innovation that the architecture makes use of and an unprecedented method in the art of architecture. This is due to the religious characteristics of the aesthetic thought of Islam which is manifested in the Islamic art of architecture.

Architecture is the most tangible kind of art in social life and the most beautiful means of expressing the identity of a nation. The absolute imitation from the Islamic architecture designs at present because of being old-fashioned is not responding and these designs and patterns should be used as the background of modern designing proper to Islamic culture; that is, using the contemporary technology and relying on the traditional features of Islamic culture.

Islamic architecture demands combining practical training and theoretical teachings at universities so that the educated people can use the art and skill of architects. This causes the elevation of people's artistic taste as well as supporting Islamic architecture heritage and paving the way for the activities of architects of the Islamic world. Therefore, it is totally significant to explain Islamic architecture culture in schools, present its characteristics, express the masterpieces of Islamic architecture in mass media, and hold different conferences and also exhibitions that introduce this art widely. That will be an important step toward presenting Islamic architecture and Moslems' culture and civilization.

It is quite important to explain Islamic architecture culture in society, offer its features, express its masterpieces in mass media, and hold different conferences and exhibitions that introduce this architecture to the world. It is a basic step in offering Islamic culture and Moslems' civilization.

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