

Mosque Architecture in the Islamic Civilization in Libya

Soaad ALATRASH

Near East University, Department of Interior Architecture, TRNC
soaad.alatrash@neu.edu.tr

Assist. Prof. Dr. Huriye GÜRDALLI

Near East University, Faculty of Architecture, TRNC
huriye.gurdalli@neu.edu.tr, narhanim6@gmail.com

Abstract

It is imperative to note that every culture around the world today develops a distinct building type borrowing from cultures of the pasts to help build in its own way. It is not far fetch that Islamic architecture has been subjected to influences from the western world and as a result the influences from these foreign architectures are reflected in Islamic architecture of today. It is ideal to point out that the Madrassa (school), the Mausoleum (tomb), the Palace, Khan (rent house), and most importantly the Mosque are the major architectural types of Islamic architecture. Since the Mosque architecture makes up the largest percentages of Islamic architecture, most examples and building types would be related to the mosque. This paper would discuss logically ideas behind the concept and idea behind Islamic architecture and the area of cognizance, location around the world, trace the developmental stages of Islamic architecture while briefly looking at each era of Islamic architecture from the historical background to styles of Islamic architecture then elements of Islamic architecture and its advancement from what its original concept was and how it has been influenced to what we currently have now (modern architecture). The case studies to be examined for this paper would be focusing on some mosque buildings in Libya.

Keywords: Islamic architecture, Mosque, Islamic civilization, Culture, Libya

Libya'daki Cami Mimarisini Etkileyen Unsurlar

Özet

Dünyadaki her kültürün, kendi bina türlerini geliştirirken geçmişten gelen kültürlerden etkilendiği ve farklı mimari elemanları biraraya getirerek kendi bina tipini geliştirdiği söylenebilir. İslam mimarisi, günümüze gelene dek teknolojik ilerlemeler ve medeniyetlerdeki dönüşümler sonucu olarak olarak dikkate değer bir gelişme kaydetti. Bu teknolojik gelişme ve inovasyonun çoğunun doğduğu batı dünyasının özellikle İslam dünyasının bazı alanlarında İslam mimarisini etkilediği görülmektedir. İslam mimarisinin batı dünyasının etkilerine doğrudan maruz kaldığı çok açık değildir ancak batı fikirleri ve uygulamalarının İslam mimarisinin temel değerlerinin bir kısmını etkilemiş bu da İslam mimarisine yansımıştır. Bugün Medrese, Türbe, Saray, Han ve en önemlisi Cami İslam mimarisinin en önemli mimari tipleridir. İslam medeniyetinin yer bulunduğu ülkelerde Cami mimarisinin diğer tiplere göre daha fazla örnekleri bulunduğundan bu makale kapsamında yapılan analizde yapı tipi olarak cami seçilmiştir. Bu çalışmada cami mimarisinden yola çıkarak İslam medeniyetinin farklı ülkelerinde gelişen İslam mimarisi analiz edilecektir. Tarihsel sürece, İslam mimarisindeki elemanların etüdüne ve süreç içinde oluşan farklı tarzlara göre İslam mimarisinin gelişim ve dönüşüm safhalarının izi sürülecektir. İslam mimarisini

etkileyen unsurları ve orijinal konseptinin anlaşılması bugünü anlamağa yardımcı olacak ve bundan sonraki gelişime ışık tutacaktır. Libya İslam mimarisinin farklı tarzlarının ve batı düşüncesinden etkilenişinin örneklenebileceği bir ülkedir. Bu makale Libya'daki cami mimarisi üzerinden bir okuma alanı yaratmayı amaçlamaktadır.

Anahtar Kelimeler: İslam mimarisi, cami mimarisi, dönüşüm, kültürel etmenler, Libya

Introduction

“The task of Architecture: The timeless task of architecture is to create embodied existential metaphors that concretize and structure man's being in the world. Images of architecture reflect and externalize ideas and images of life: architecture materializes our images of ideal life. Buildings and towns enable us to structure, understand, and remember the shapeless flow of reality and, ultimately, to recognize and remember who we are. Architecture enables us to place ourselves in the continuum of culture” (Holl, Pallasmaa, and Perez Gomez, 1994:28).

The emergence of Islam can be traced back to the culture related to the people of Arabia called Arabs thus opening the door for cultural ties between the Arabs and other Muslim societies. Evidently most cultures have tried as much as possible to preserve its cultural identity in form of distinguishing characteristics. Islamic civilization has been reported through written records stressing that the value of education has been the bedrock for its civilization.

According to Bassiouni, the centres of knowledge and scientific developments also served as great centres for religious learning. He further explained that between 750-1258 AD which fell in the Abbasid period initiated these formal centres as a result establishing thousands of mosque schools where thousands of students were educated (Bassiouni, 2012:1).

It was obvious that the real development which took place as a result of Islamic civilization only began after the Egyptians, Persians, Iraqis and other who happened to be the people of ancient civilization began to convert to Islam making religion a source of excellence.

Faith is the foundation of any great Islamic building and the earliest major work associated to Islamic architecture was first created during the lifetime of the Prophet Muhammad when he rebuild the sanctuary of the Ka'aba at Mecca. Ever since, we have observed that Islamic architecture has grown to create a distinctive design conceptualization, styles and forms which have continued to exist till this present day. Islamic architecture has been attested to be a functional but limited concept that was created by art historians of the 19th century to categorized and evaluate materials that were first produced under the Islamic population that emerged from Arabia in the 17th century. It “surrounds a wide range of both secular and religious styles from the very beginning and foundation of the Islamic faith to this present day. They further reiterated that the influences of the Persians, Romans, Byzantines and all the other lands which were conquered by the Muslims in the 7th and 8th century led to what we now know as of today to be Islamic Architecture”(Krautheimer, 1965:285).

The connectivity between time and places varies within the architecture that is created in those countries and as such it is regulated by the surrounding environment's climatic nature, cultural and architectural heritage. The distinguishing factor bears features which are consistent with the rights, traditional and environmental habitation which they live in thus making it possible to identify any

piece of art or architecture produced under the Islamic civilization in any country of the Islamic world because of the general characteristics in the Islamic art and architecture associated with that region.

The post-enlightenment European project was major reason behind the study of architecture of the Islamic world. In his article “*what is Islamic architecture anyway*”, he explained that Islamic architecture started with architects, draughtsmen and artists who travelled to the Orient following the very first involvement of the Europeans there in search of adventure, employment and fantasy connected with the mysterious land (Rabbat, 2012:3). They visited some cities and sites mainly in Spain, Turkey, the Holy Land, Egypt not forgetting India where they took measurements of buildings and illustrating them and later went on to publish exceptional catalogues that started introducing Europe to that rich architectural heritage that was previously completely unknown (Jones and Goury, 1952:23).

According to Rabbat who affirmed that the time frame is the most contentious issue when defining Islamic architecture. Islamic architecture was regarded over two generations ago by intellectuals as erstwhile traditions which absolutely do not depict any form of creativity anymore with the advent of colonialism and its typically affiliated phenomena; westernization and modernization during the late eighteenth and nineteenth centuries (Rabbat, 2004:20).

In a brief but influential essay by Ernst Grube in the late twentieth century where he attempted in defining Islamic architecture as that which depicts and exhibits a set of architectural and spatial features, such as introspection, that are characteristic attribute in Islamic cultural phenomenon (Grube, 1978:8). Consequently some other scholars choose a definition that was rather more précised and analytical. Oleg Grabar maintained that Islamic architecture is that type of architecture that was built by Muslims and for Muslims, in an Islamic region or in domain where Muslims have the opportunity of expressing their cultural independence (Grabar, 1963:12).

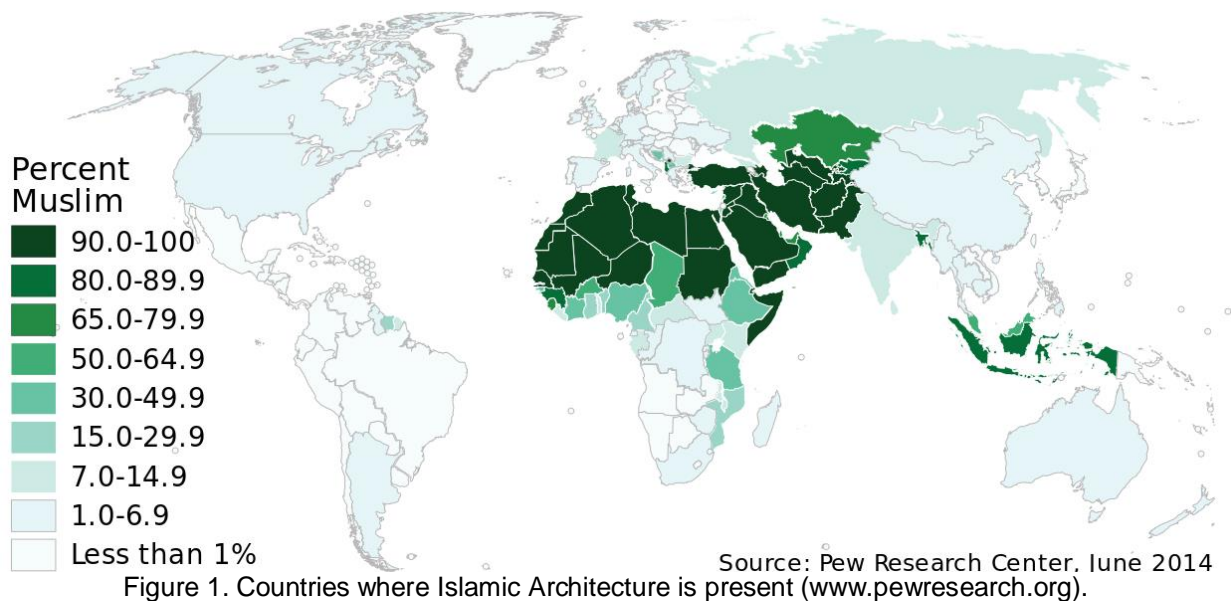
There are different definitions for the term Islamic architecture but in general “the concept of Islamic architecture refers to the characteristic of building used by Muslims to serve as their identity” (Bouayad, 2007:43). But this all inclusive definition was distinctly not religious regardless of its acceptance of the designation ‘Islamic architecture’. It actually tried evading religion as a classificatory measure and instead sought unity in ethically shared approaches to aesthetics and spatial sensitivities (which may or may not have had their origins in religious injunctions) that crossed all denominational, ethnic, and national boundaries within the greater Islamic world and resulted in similar architectural expressions (Rabbat, 2012:4). Islamic architecture exceedingly became the architecture of an extensive region, which as of present encompasses approximately more than fifty Muslim majority countries which is or was home Muslims and it stretches periods of Islamic dominance between the late seventh and early eighteenth century.

The study aims at critically examining how modernization and rapid civilization has affected Islamic architecture in terms of building components present, building elements and material used and how it is seen around the globe. While examining Islamic Architecture, how it originated and its background, examining the different eras of Islamic architecture, examining the building features of Islamic architecture with reference to mosque architecture, examining the influences of the western world, modernization and civilization on Islamic and Mosque Architecture thus identifying the changes. Islam isn’t just a religion but a way of life to some people which fostered the development of a distinctive culture with its own unique languages that is

reflected in Islamic architecture, hence, the study will help us understand the initial concept of Islamic Architecture thus shedding more lights on how westernization and civilization has affected Islamic architecture. The scope of this study would be restricted to the Mosque buildings in Libya during the earliest and the latest timeline of Libya's architecture history. The differences between the mosques built during different eras in Libya would be examined and discussed. Due to the limitations of time required to carry out the study, the author will rely on the works of other researchers through the review of published and unpublished materials to establish pre-existing and existing conditions of Islamic architecture. Due to limited resources available at the disposal of the researcher, this paper will limit itself to case studies of mosques building in one or two cities in Libya.

Architecture in the Islamic Civilization

As earlier mentioned the Islamic world stretches over more than fifty Muslim countries around the globe in the near East and west of Asia down to Northern Africa and Sub-Saharan Africa and finally Southeast Asia. In modern world, Islam basically exists in Africa, Asia and part of Europe; however there are also some emergences of Islamic culture in countries where Muslim population are seen as a minority (Figure 1).



The curtailment of the architecture that developed during the period of the Islamic civilization in a simple phrase clearly shows that civilization and cultural achievement produced by the Islamic civilization is being underrated and underestimated (Yassin and Utaberta, 2012:57). A complete and total divergence from the ethnic insight which the Islamic civilization provides is highly necessary and it remains the only decoration and adornment configuration available whatsoever. As a result of the different regions belonging to the Muslims, it is also important to understand that there is bound to be geographical and temporal differences between the architectural models to help reach a more comprehensive and analytical point in the architecture of the Islamic world. The numerous experiences from ancient civilization which precedes Islamic architecture have greatly rubbed off on it as such making them have their own type of building and methods of construction which apparently distinguishes them.

Elements of Islamic Architecture

Islamic architecture can simply be identified with some elements in its design which are tagged as being very important. They were inherited from the first mosque built in the Holy city of Medina by the Prophet Muhammad. It also adopted some features from churches as well as synagogues. They include;

- Large domes
- Minarets
- Mihrab inside a mosque to help indicate the direction of Mecca
- Arches
- Arabesque (the use of repetitive art and geometric shapes)
- Hypostyle hall
- Use of symmetry and ablution fountains
- Large courtyards often merged with a central praying hall
- Calligraphy
- Use of bright colours (Wazer, 1998:18).

Influences on Islamic Architecture around the World

One of most important buildings associated with Islamic architecture according to Avner, is the Dome of the Rock built in Jerusalem in 691 (Figure 2a) and its pattern is closely similar to that of the Church of the Holy Sepulchre which was nearby (Avner, 2010:27). The elaborate mosaic has a golden background which appears on it and was created by some Byzantine Christian artists. The features of the Dome of the Rock include a circular dome, vaulted interior spaces and the use of repetitive Arabesque patterns which were also used in desert palaces in Jordan and Syria to promote luxury. The horseshoe arch which was another influence of Muslim structures (Figure 2b) was adopted from Visigoths in Spain and went on to become a popular part of Islamic architecture. The horseshoe arch might have been adopted from Syria and Persia where it was used as early as the fifth century by the Byzantines. The form was later taken up by the Umayyads after the Moorish invasion of Spain in 711 AD (Hubert, 2014:1).



Figure 2a. The Dome of the Rock in Jerusalem Figure 2b. Horseshoe Arch at Visigoth Basilica de San Juan Bautista in Spain (www.alamy.com)
(www.thousandwonders.net)

The Great Mosque of Damascus is another structure that had a strong influence on Islamic architecture (Figure 3a); it was completed in 715 by Calip Al-Wlid 1 (Hillenbrand, 1999:199). It was built after the Islamic invasion of Damascus on the same site as the Basilica of John the Baptist and still looks like the Christian Basilicas of the sixth and seventh century. The Abbasid dynasty which was between 750 AD – 1258 was another influence of Islamic architecture. Examples include the Mosque of

Ibn Tulun in Cairo, Egypt, Abu Dalaf in Iraq and the Great Mosque of Tunis which is considered the ancestors of all western Islamic world mosques having some elements of Roman form (Figure 3b), (Graham, 1908:52).

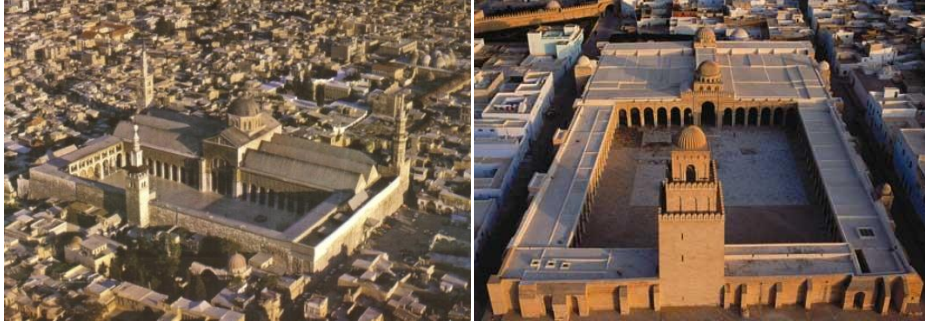


Figure 3a. The Great Mosque of Damascus Umayyad Dynasty, (www.theredlist.com) Figure 3b. The Great Mosque of Kairouan (Tunis) Abbasid Dynasty, (www.theredlist.com)

After the city of Istanbul was captured by the Ottomans from the Byzantines, the Basilica was converted into a mosque between 1453 and 1931, a structure which went on to be known as the Hagia Sofia (now a museum) incorporating some Byzantine elements in the structure (Figure 4).



Figure 4. The Hagia Sofia in Istanbul (Turkey) (www.istanbulvision.com)

Styles of Islamic Architecture

Basically, there are some major and famous styles that had great impact and influence on the Islamic architecture era and they are spread through different periods and regions. These are the four predominant styles of Islamic Architecture (Serageldin, 1994:73).

- **Persian architecture** is basically the architecture of Iran and some parts of western and central Asia which dates back as far as 5,000 BC displaying a great amount of aesthetics and structural forms (Figure 5a, Figure 5b).



Figure 5a. The Jāmeḥ (Friday Mosque of Nāṯn Iran), (<https://tr.khanacademy.org>)



Figure 5b. The Sheikh Lotfollah Mosque Isfahan Province, Iran, (www.alamy.com)

• **Moorish architecture** is named after the people of the North African region who conquered the Iberian Peninsula in early 700, they are known as the Moors and it has many repeated patterns and motifs. The most common building type of the Moorish architecture is the mosque and was influenced by Islamic architecture of the Middle East (Figure 6a, Figure 6b). It later spread beyond North Africa to other regions like Spain and Portugal.



Figure 6a. The Koutounia Mosque Morocco, (www.memphistours.com)



Figure 6b. The Great Mosque of Cordoba, Spain, (<https://tr.khanacademy.org>)

• **Ottoman architecture** which originated from the Ottoman Empire sprang up from Edirne (Figure 7a) and Bursa (Figure 7b) during the fourteenth and fifteenth centuries. Basically it was influenced by the Byzantine, Armenian (Figure 7c) and Iranian architecture. The eras which are the Bursa Period (1299-1437), Classical Period (1437-1703), Modernization Period, Tulip Period (1703-1757), Baroque Period (1757-1808), Empire Period (1808-1876) and the Late Period (1876-1922)



Figure 7a. The Selimiye Mosque, Edirne Turkey (www.edirnevdb.gov.tr)



Figure 7b. The Grand Mosque of Bursa, Turkey (www.bursakulturturizm.gov.tr)



Figure 7c. The Ishak Pasha Palace, Turkey, (www.fwallpapers.com)

• **Turkistan (Timurid) architecture** actually happens to be the peak of Islamic art and architecture in central Asia. It was the influence which the school of art in India the Ilkhanid had on it that gave rise the much appreciated Mughal or Indo-Islamic architecture (Figures 8a and 8b).



Figure 8a. The Bibi-Khanym Mosque, Uzbekistan, (www.uztravelguide.com)



Figure 8b. The Shia Dar Madrasa, Samarkand Uzbekistan, (www.archnet.com)

- **Indo-Islamic (Mughal) architecture** this virtually shaped the architecture of most part of the subcontinent of India and surrounded by many styles obtained from various backgrounds around the seventh century. It imprints were left on architecture of Pakistan, Bangladesh and most importantly India (Figures 9a and 9b).



Figure 9a. The Humayun Tomb, Delhi, India (www.indovacation.net)



Figure 9b. The Taj Mahal, Agra, India, (www.tajmahal.org.uk)

Islamic Architecture in Libya

Libya is located in the Northern part of Africa, having a land mass which extends nearly almost 1.76 million square kilometres (Figure 10a). Its capital is Tripoli which happens to be the largest city and one of its urban centres together with Bengazi. It is surrounded by Egypt on the east, by Algeria and Tunisia on the west, the Mediterranean Sea on the north, by Chad on the north, by Sudan on the southeast and by Niger on the southwest. The majority of the land is covered by the Sahara desert. The climatic condition in Libya (Figure 10b) is mostly arid and hot having a cool and wet winter and a mild coastal climatic condition (Buhlfaia, 2006).

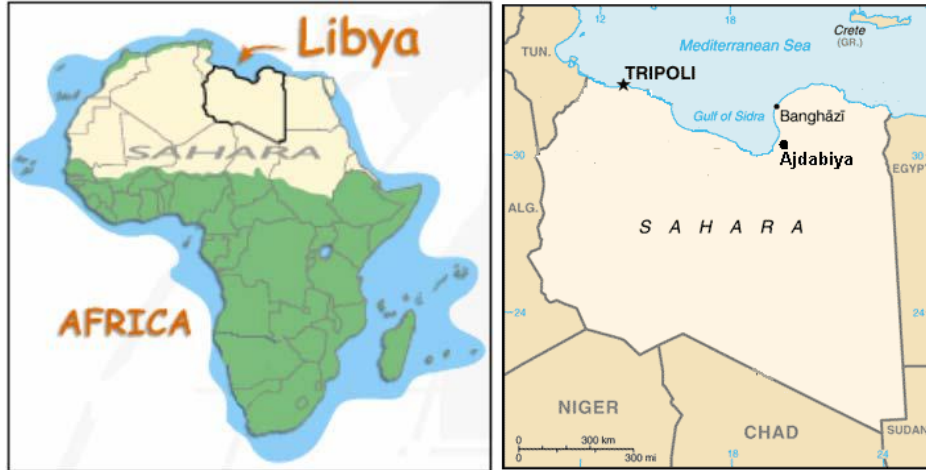


Figure 10a. Location of Libya
(www.worldatlas.com)

Figure 10b. Libya and the surrounding countries
(www.worldatlas.com)

Libya's architectural history can be divided into six main eras, periods or timelines. The most significant of the mosques that were built during the earliest and the latest of the timeline would be examined and one mosque from each timeline would be used as case studies. Mosques in Libya have different upper structures (roof construction) ranging from flat roofs to vaulting roofs and from mosques with central domes to mosques with multiple domes.

The Early Islamic conquest Era which lasted between 642-1510 AD is the earliest era of mosques in Libya. The designs' simplicity and reliance completely on local materials, knowledge and technology characterized this era. Most of the mosques of this era have fallen into ruin with the remaining to have been modified, changed or extended over the years. The best known examples of mosques in this era are the Sahnoun mosque in the city of Ajdabiya and the Al-Naga mosque in Tripoli (Buhlfaia, 2006:86).

Influences on Mosque Architecture in Islamic Civilization in Libya

- **The Sahnoun Mosque** also called the Fatimid Mosque was built by Abu al-Qasim between 934 and 946 A.D. The mosque which exhibits a rectangular plan with courtyard is surrounded by a Riwaq and Sahn (Figure 11a). The measurement of building is about 31 meters on both its length and breadth. The main entrance into the mosque is positioned at the centre of the wall located at the northwest corner. The features of the mosque include;

- A Mihrab which was decorated with a semi-circular niche and a horseshoe arch.

- A Minaret which is octagonal in shape with each side measuring approximately 1.5m and rests on a square base. The minaret is located at the northern side of the mosque.

- Flat roof with multiple domes (Bash-Imam, 2006:5)

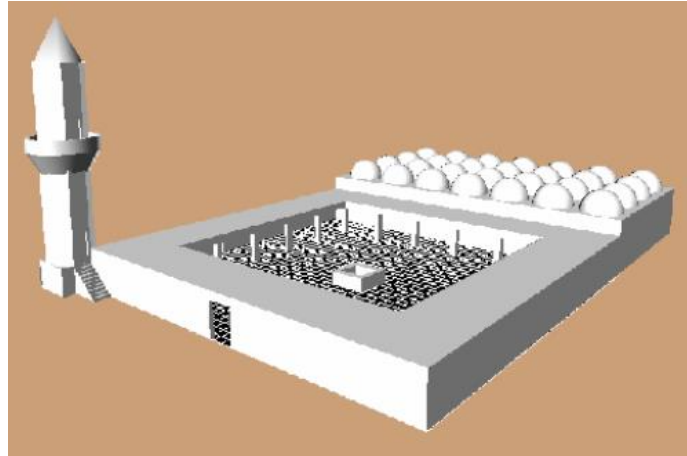


Figure 11. The Sahnoun Mosque or Fatimid Mosque (Buhlfaia, 2006: 67)

- **Ghorgi Mosque** is another example of the mosques built during the civilization in Libya in the fourth era known as the Qaramanli Era between 1711 and 1835. Most mosques in this era had the combination of various styles such as the Ottomans, Europeans and also indigenous style. This period gave way to the use of ornamentation where ceramic and marbles were used in the decoration and beautification of Minbar, Minarets and Columns (Figures 12a and 12b). This period enjoyed a great deal of calmness and political stability.

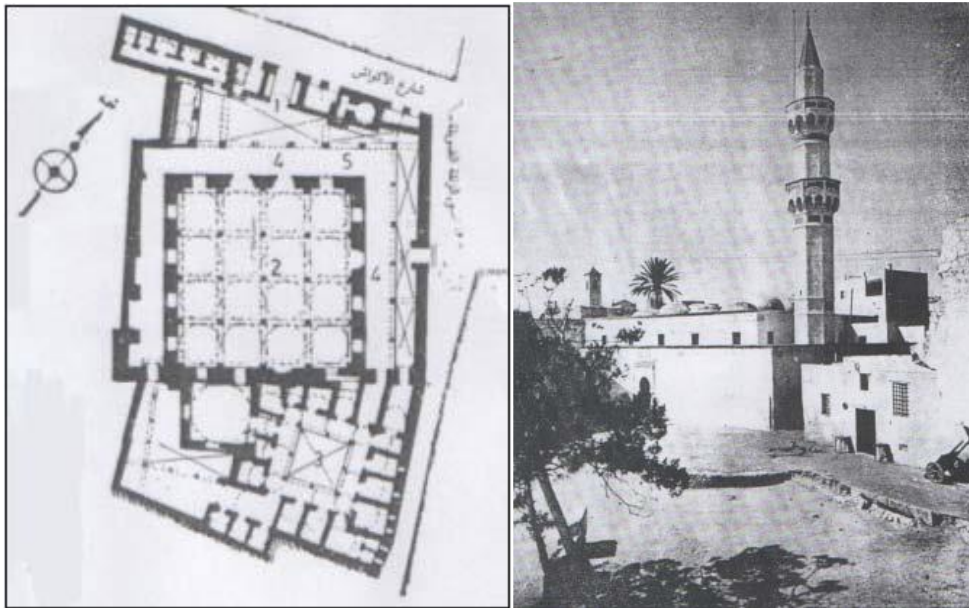


Figure 12a. Ghorgi Mosque, Ground Plan, Figure 12b. Ghorgi mosque (Messana, 1981)
Tripoli (Messana, 1981)

- **The Italian Period** is the sixth era and it is a period during the Italian colonization of Libya which was between 1911 and 1943. Many mosques were destroyed at the very beginning of this period by the Italians who later contribute to the building of mosques with excellent architecture characteristics. Most of the mosques built during this era had a flat roof with a central dome as seen in Figures 13a and 13b (Buhlfaia, 2006:92).



Figure 13a. Mosque built during the Italian Period (Buhlfaia, 2006)



Figure 13b. Mosque built during the Italian Period (Buhlfaia, 2006)

Conclusion

From the study it can be gathered that Islamic architecture in Libya was indeed transformed over time due to the civilization which took place over several timelines that swept through the region. The Islamic devotion which was injected into the community is reflected on its building forms and styles. It is shown that political and cultural stability over time had a huge impact on the spread of civilization in Islamic architecture in Libya. The features from mosques from different timelines varies from era to era, some having a flat roof, others having a flat roof and a dome, some having a central dome while others have multiple domes at their upper structures. It was also noticed that prior to the Italia period in Libya, the upper structure of most of the mosques had multiple domes. Despite the long rule of the Ottomans in Libya, most of the mosque built weren't in the Ottoman-style which of course carries the large central dome except the Al-Atique mosque that was built in the city of Bengazi which brought about the end of the Ottoman period. It can also be gathered from the study that the height of the mosques roofs built during the eras before the Italian period shows it was low compared to those built during and after the Italian period.

Despite the Muslims adopting concepts from various cultures in making a distinct building type of their own they never for once try to deviate from the core values of Islam thus paying huge respect to the norms of all people as far as it doesn't pose a risk to the principles in which the religion of Islam is built upon.

The mosque architecture is very vital when studying the cultural expression of the Muslims because it carries and portrays the symbol of the religion (Islam). Traditionally, when speaking about the organizing of spaces in the society in most Islamic environments, it is highly important to acknowledge the mosque as playing the central role. The Mosque elucidates the Islamic society and makes available a reference point to the citizens of that society and passers-by due to it stronger cultural heritage. The domes, minaret, mihrab and gateway are some elements that are vital to mosque architecture and as such they convey a message to all Muslims and non-Muslims with such powerful symbols that surpasses space and time. Therefore it cannot be over emphasized that it is the Mosque that uniquely symbolizes the architectural expression of the Muslim's cultural heritage and it can be seen how they greatly and uniquely identify with it.

References

- Avner, R. (2010), *The Dome of the Rock in Light of the Development of Concentric Martyria in Jerusalem: Architecture and Architectural Iconography*, Muqarnas, vol.27, pp.31-50.
- Bash-Imam, H. (2006), *The History of Mosques Architecture in Libya*, A conference on the architecture of mosques in Libya between the past and present, Engineers Scientific Association, Tripoli, Libya.
- Bassiouni, C. M. (2012), *Islamic Civilization*, January, p.1. Retrieved from <http://www.mei.edu/content/islamic-civilization>
- Bouayad, A. H. (2007), *The Reference Architecture, We Have a Reference Text*, Aharrov Magazine. Rabat, p.1.
- Buhlfaia, S. A. (2006), *Historical Background of Libyan Mosque Architecture: Assessment and Criticism of Mosques in Ajdabiya City*, A Thesis submitted to the Graduate School of Natural and Applied Sciences, Middle East Technical University.
- Grabar, O. (1963), *Teaching of Islamic Architecture*, The Yale Architectural Magazine, 1, pp.8-14.
- Graham, P. (1908), **Tunis, Kairouan & Carthage**, London: W. Heinemann Publications.
- Grube, E. J. (1978), *What is Islamic Architecture?*, George Michell, ed., *Architecture of the Islamic World: Its History and Social Meaning*, London: Thames & Hudson, pp.4-10.
- Hillenbrand, R. (1999), **Islamic Art and Architecture**, London: Thames & Hudson World of Art series.
- Holl, S., Pallasmaa, J. & Pérez-Gómez A. (1994), *Questions of Perception Phenomenology of Architecture*, *Architecture and Urbanism*, July, Special Issue, pp:1-120.
- <http://www.alluringworld.com>, accessed on May 2017.
- <http://www.bursakultururizm.gov.tr>, accessed on April 2017.
- <http://www.edirnevdb.gov.tr>, accessed on April 2017.
- <http://www.fwallpapers.com>, accessed on April 2017.
- <http://www.indovacation.net>, accessed on April 2017.
- <http://www.istanbulvision.com>, accessed on June 2017.
- <http://www.memphistours.com>, accessed on June 2017.
- <http://www.pewresearch.org>, accessed on June 2017.
- <http://www.tajmahal.org.uk>, accessed on April 2017.
- <http://www.theredlist.com>, accessed on May 2017.
- <http://www.thousandwonders.net>, accessed on May 2017.
- <https://tr.khanacademy.org>, accessed on April 2017.
- <http://www.uztravelguide.com>, accessed on April 2017.
- <http://www.worldatlas.com>, accessed on May 2017.
- Hubert, P. (2014), *The Development of the Horseshoe Arch in Christian Spain*, July, p.1. Retrieved from http://www.green-man-of-cercles.org/articles/the_horseshoe_arch.pdf
- Jones, O. & Goury, J. (1842), **Plans, Elevations, Sections and Details of the Alhambra** from Drawings taken on the Spot in 1834 & 1837, London: published by Owen Jones, 1852; Prissed'Avennes, L'artarabed'après les monuments du Kaire depuis le VIIe siècle jusqu'à la fin du XVIIIe, Paris: A. Morel, 1877. Retrieved from <https://archive.org/details/Planselevations1Gour>

- Krautheimer, R. (1965), **Early Christian and Byzantine Architecture**, Yale: Yale University Press Pelican History of Art, Penguin Books Ltd.
- Messana, G. (1981), **Islamic Architecture in Libya** (L'Architettura Muslumana della Libia, 1972), Translated from the Italian to Arabic by Ali S. Hassanain
- Rabbat, N. (2004), *Islamic Architecture as a Field of Historical Inquiry*, A.D., Architectural Design (special issue Islam+Architecture), 74(6), pp.18-23.
- Rabbat, N. (2012), *What is Islamic Architecture Anyway?*, Journal of Art Histography, 6, pp. 1-4.
- Ruskin, J. (1989), **The Seven Lamps of Architecture**, Dover Publications p.1.
- Serageldin, I. (1994), *Introduction: Regionalism* in Ed. Frishman, M. and Khan, H. **The Mosques: History, Architectural Development and Regional Diversity**, London: Thames and Hudson, pp. 72-76.
- Wazeri, Y. (1998), *Encyclopedia of Islamic Architectural Elements*, Madbouli, Cairo (Arabic)
- Yassin, A. A. & Utaberta, N. (2012), *Architecture in the Islamic Civilization: Muslim Building or Islamic Architecture*, Journal of Islamic Architecture Volume 2 Issue 2, pp.52-60.