

ISLAMIC RELIGIOUS ARCHITECTURE IN HISTORICAL CONTEXT IN JORDAN

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Abstract

Jordanian people consider mosques a major architectural feature, as well as socio- religious centers, this reality return to the beginning of Islam, when Jordan became part of the Islamic world. Its importance comes from its location on pilgrimage road, and from being enclosing Al Harem Al Qudosi (Al Aqsa Mosque).

Significance of the problem

Recently an obvious demand of mosque construction in Jordan was noticed, because of the great religious encouragement by The Holy Quran [1]. In addition to the presence of different religious architecture shrines in Jordan.

Aim of the study

The major concern here is to study and analyze religious buildings; by following a historical and modern order, thus, to achieve improved understanding of Jordanian architects who are developing genuine mosque architecture; as well as adapting specific Islamic architecture. The goal of this research is to discuss development of religious architecture (mosques) in Jordan focusing on traditional. The research analyzes various examples that explain range of design and construction of mosques. This has been done for mosques built in Jordan since the spread of Islam 1400 years ago; since these designs still influence the design of mosques. Major emphasis was on Amman mosques in the 20th century: in particular, the years between 1980 and 2000.

Area of the study

The area of the study is Amman, the capital of Jordan, of central importance among Arab capitals. In this city, different mosques are studied and analyzed, concentrating on those built during the last twenty years of the twentieth century.

The paper synthesizes selected modern mosques designed by Jordanian architects (for example, Masjed Dar AlEiman and Masjed al Ansari; both designed by Arch. Ayman Zoaiter, Masjed al Norein designed by arch. Bilal Hammad, Masjed Al Kaloti, designed by Architects Tahan and Boshnaq. These mosques have a distinguished architectural values and design approaches. Also, this paper tries to understand how these visions can be realized and restored in the mosque building in the Jordanian cities in the future.

Methodology

The methods used for conducting this study are as follows:

- Reviewing literature about the historical background of mosques.
- Studying different historical mosques in Jordan.
- Tracing the impact on those recently built mosques.
- Analyzing some newly built mosques in Amman, to trace the traditional architecture.

Keywords: Mosques, Amman Mosques, Religious buildings, Historical Mosques

ИСЛАМСКАЯ РЕЛИГИОЗНАЯ АРХИТЕКТУРА ИОРДАНИИ В ИСТОРИЧЕСКОМ КОНТЕКСТЕ

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Аннотация

Иорданцы считают мечеть важной архитектурной особенностью и социально-религиозным центром, что возвращает их к истокам ислама, когда Иордания стала частью исламского мира. Целью данной статьи является исследование развития религиозной архитектуры, в частности мечетей Иордании, с упором на традиции. Областью исследования является город Амман, столица Иордании, занимающий центральное место среди арабских столиц. Изучаются разные мечети этого города, при этом уделяется особое внимание тем, которые были построены в последние двадцать лет XX века. Как сами мечети, так и подходы к проектированию являются выдающимися архитектурными ценностями. Авторы статьи пытаются выяснить, как эти представления могут быть восстановлены и реализованы в проектировании и строительстве мечетей в иорданских городах в будущем.

Ключевые слова: мечеть, мечети Аммана, религиозные здания, исторические мечети

Historical Mosques in Jordan

Since the beginning of Islamic eras in Jordan, religious buildings spread throughout the country, many of these mosques and places worsened during episodes of weak central government, especially the *Memluk* and *Ottoman* eras. The decline in mosque buildings took the form of destruction.

Authorities restored some of these buildings, such as the mosques of Desert Umayyad Castles, like *Al Mushatta* Castle mosque found near to the main gate; it is (28 * 14.4 m.), it has a circular aps [2].

They restored many other mosques like *Khan Al Zabeeb* mosque near *Al Qatranah*, it belongs also to the Umayyad era, with a hollow apse [3].

Another example of the historical mosques is *Um AlWaleed* mosque near *Zizia*, with a vaulted roof, similar to those of *Khan Al Zabeeb* mosque [4]. The fourth example is *Qasr al Haer Al Sharqi* mosque which is located in the south west corner of the castle; it is (23 * 33m.) Its outer courtyard (*Al Sahn*) form major part of its morphology, characterized by aisles (*Riwaqs*) and arches around it. It dates to the Umayyad era [5].

Qasr Al Halabat is an Umayyad mosque found in the corner of the castle, it is rectangular in shape (11.8 * 10.7 m); it has a hollow apse, barrel vault *Muqarnas* and domes; its ruins still exist [6].

An example of small-scale old mosques is *Hammam al Sarah* mosque, near *Al Halabat* castle. The mosque is located in the northwest corner of the castle, it is (9*8.45 m), it has a hollow apse like those of Umayyad mosques in Jordan [7]. Ruins of *Apella* mosque show four walls and other remains in the middle. There were different opinions about its period of construction, whether Umayyad or *Memluk* [8], its stones were taken from the Roman building [9] join

mosque is another example, it still exists, it consists of the prayer hall, the rectangular court (Al *Sahn*), and the eastern entrance; historians refer that it belongs to the *Ayyubi* era in 1247 A.D, with an extra minaret in the same era of Al Sultan Al *Thaher* in 1263; Sultan Al *Naser* Mohammad bin *Qlawoon* restored mosque in 1328.

The oldest mosque in *Irbid* is the western mosque, which dated to the *Memluk* era. It consist of a prayer hall, a minaret and a courtyard (Al *sahn*) [10].

The Umayyad mosque of *Jarash* is rectangular in shape; it consists of a courtyard (Al *sahn*) and a stone apse, Its builders used the Roman columns and stones in to build the building [11].

Another mosque of the oldest mosques in *Jerash* is al *Hamidi* mosque, it was built in 1879, and renovated in 1945 [12].

In al *Karak*, there are several old mosques: *Burchardt*, the famous traveler mentioned the following in his book: "there is a mosque, which is fine in appearance, it was built by the king Al *Thaher* but now is in ruins". Also one could refer to al *Hamidi* mosque in al *qasaba*, which was built in 1894 in the era of the Ottoman ruler Abd al Hameed. Al *Hamidi* mosque was enlarged in 1899; it has a minaret of 30 meters height, and a sheltered aisles (*Riwaqs*) [13].

Al *Omari* mosque which was renovated and restored in 1902 has a square shape (43 *43 m), with a conical form minaret with 41 meters height. Al *Omari* mosque has three entrances and a rectangular shape courtyard (*Sahn*).

In *Madaba* al *Khatabia* mosque is noticed; most historians referred it to the *Memluk* period [14].



Fig. 1. Al Omari Mosque / Karak

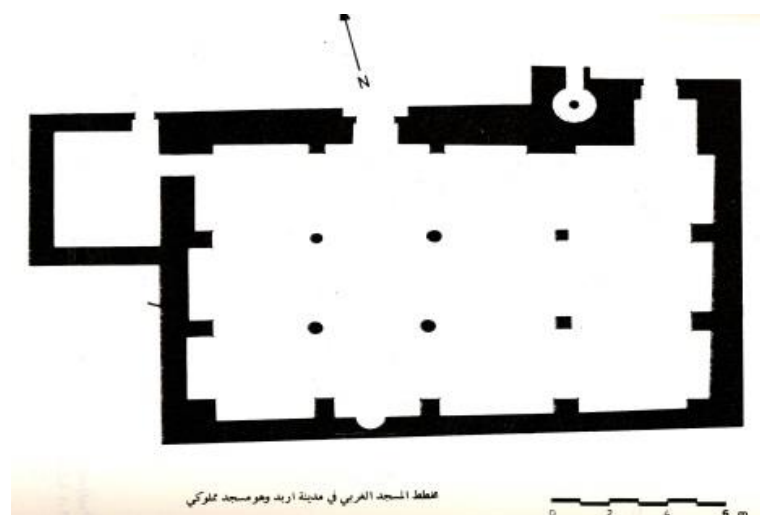


Fig. 2. Almasjed Al Kabeer / Irbid

In *salt*, one of its distinguished mosques is the great mosque (Almasjed Al *Kabeer*), unfortunately it damaged several years ago. Burkhart mentioned it in his book: "in the town (Al *Salt*) an old mosque and its considered the only trace of it" [15]. Moreover, there is another one, that is the prophet *Yusha* mosque which is located on the northwest side of Salt; it was built 400 years ago [16].

In *Tubnah* there exists al *Zeidani* mosque built by al sheikh Ahmad al *Zeidani* the ruler of *Ajlun* between the years 1728-1775. Moreover, the building material was limestone; its columns and apse still survive, while the roof and the dome were damaged [17].

In *Tafilah* south of Jordan; different books mentioned building a beautiful mosque in 1899 with 6 domes [18].

Historical Mosques in Amman

Historical background

Amman is a modern city, although its history dates back 9000 years. Since the Paleolithic period prehistoric man lived in Amman during Neolithic ages (7000-4000 B.C). Besides, from the Early Bronze age (3200-2100 B.C.E), Amman began to flourish through the Late Bronze age (1500-1200 B.C.E); while, The Canaanites, Ammonites, Amorites, Moabites and *Edomites* settled near Amman during the Early and Middle Bronze Ages.

At the Iron Age (1200-500 B.C.E) Amman became the capital of the Ammonite Kingdom [19]. Whereas, in the late fourth century B.C.E Alexander the Great invaded the region and Greek civilization appeared in Amman. Hence, during the Hellenistic period Ptolemy II *Philadelphus*, the Hellenic ruler of Egypt (258-246 B.C.) renamed it Philadelphia.

Nabataeans established a great civilization in Petra, in the south of Jordan; from here, Amman became part of the Nabataean kingdom until the Romans came in 63 B.C, who turned Amman to a member of the Decapolis. Further, during the Byzantine period, Amman was the seat of a bishopric, who built a church at the citadel of Amman. Further, in the middle of the 7th century C.E. Amman became part of the Islamic World.

The political conditions of the region influenced the growth of Amman [20]. However, in 1878 a group of Circassians settled in Amman from the Turkish Empire, where the first settlement occurred at the end of the 19th century [21]. In 1922 Amman became the capital of the Emirate of Transjordan, and later the Hashemite Kingdom of Jordan. Its total area was only five square kilometers. Further, in 1925 two small settlements existed near each other; these continued to grow until 1939, where the population reached 20 thousand [Greater Amman Municipality, 1987].

A huge number of refugees from Palestine settled in Amman in 1948. The official number of refugees was 108,955 [22], although, the number is much higher. Thus, the total population of Amman increased to about 225 thousand, officially with an area of around 42 square kilometers. Amman has continued to grow afterwards in spontaneous areas with two refugees' camps, one near the central district, at Jabal Al-Hussein and the other at the eastern section of the city in Al-Wihdat. Amman urban planning during this era suffered from the inefficient use of land and services due mainly to its low-density houses and inhabitants. This caused inadequate cost recovery for services.

Design of districts in Amman followed the Garden City, but the result was not according to that. Because, there is a mix in the land use plan, the boundaries between various districts are missing, there is no greenbelt or buffer zone between neighborhoods, the planning did not use open internal layouts, or dead-end or curved roads. However, one cannot distinguish between different neighborhoods because of the missing boundaries. They do not have a maximum capacity, and there is no center for neighborhoods in Amman.

In 1955 the first law for building rules in Jordanian cities was introduced. Thus, the municipality of Amman introduced the first comprehensive plan for Amman's future extension. The plan separated private from public space based on ownership and land use. In that plan the total area of Amman reached 120 square kilometers with a population of over 350 thousand. Besides, the first law for building rules specifically for Amman was in the year 1965. While, the second law for regulating construction in Jordanian cities "number 79" was in 1966 [23]. Despite, Amman suffered from lack of open spaces, recreational areas, parks, green area and public parking at this stage.

In 1967, a great number of refugees arrived in Amman because of the Arab-Israeli war. The official number of extra refugees reached 108,214 most of whom settled in camps around Amman [24]. Only one new camp built east of Amman named Marka. By 1976, the total inhabitants of Amman reached over 550 thousand and the area of Amman increased to 160 square kilometers. However, this phase formed an irregular layout because of the large number of refugees in need of housing. A mixture of land use began to spread throughout the city because of the outdated comprehensive plan of 1955, and privacy became a rarity.

An incredible expansion of Amman soon accompanied this phase and the need for a comprehensive plan for Amman became urgent. Amman's main street network in the city center is almost radial and concentric. At this stage, the main focal point of Amman was the city center; because, for moving from one hill to another, cars must pass through the city center. This leads to heavy congestion in the city center. Besides, the topography of Amman led to creating an irregular street network, and an expansion based on administrative decisions only.

Between 1976 and 1987, the total population reached 960 thousand, and the area of Amman reached 350 square kilometers. The city spread out in all directions, especially over the western and northern sections of the city. In 1977 a committee was created to lay down a comprehensive metropolitan plan for Amman, followed by the second set of building rules for Amman in 1979. This law was later revised in 1984 and again in 1993 [25]. About 300 thousand arrived in Amman, returning from working abroad in the Gulf region and Iraq because of the Iran-Iraq War between 1980 and 1988. These marked establishing Greater Municipality of Amman in the year 1987, consisting of 20 districts.

In 1989, the total number of inhabitants exceeded one million. In 2002, the total area of Amman reached 677 square kilometers and the total population reached 1.8 million [26]. A sudden increase in the population also accompanied the Gulf War of 1991, where about 400 thousand came from Iraq and Kuwait. However, this puts pressure on Amman's infrastructure and increased the value of lands, putting pressure on the middle and low income housing projects.

The third Iraqi war in 2003 did not produce a huge influx of people returning to Jordan. Afterwards the official estimated number of Iraqis arriving in Jordan reached 750 thousand of which two thirds of them have settled in Amman in 2003 and 2006 [27]. Here, each square meter reached the value of US \$500 for residential use. For commercial use, the number is twice that figure. The lack of coordination between the municipalities' various departments and other organization is another serious problem. Even agencies managed by private organizations such as electricity, telecommunication, and water do not coordinate with one another. Therefore, there is a need for cooperation between all bodies [28]. [Investment Unit Institute, 2006]. Also, different organizations must revise rules [29].

Greater Amman legislations started by the Ottoman rules and regulations during the 19th century; then, the British administration during the colonial era; and finally, the legislation associated with post World War 2 modernization and the problems created by urbanization [30].

In the year 2006 the population reached 2.5 million with an increase in land values in all parts of the city [31]. GAM suffers from the absence of car parking in almost all sections of Amman. There are some parking garages in the city center, but nothing elsewhere. The convenience of travel within Amman City by public means of transport is inconvenient. Further, there is no

underground or “metro”, and the existing public buses are not enough and inconvenient. There are about 500 public buses in Amman, but they carry only 16% of all passengers, while about 12,000 taxis and white cabs (called service) accounts for 20% of all passengers.

The remaining 64% use private cars that account for more than 500,000 cars in Amman alone [32]. The planning commission of GAM spread residential and commercial users mainly into about half the area of GAM and left all major land uses intact. Most of planning neighborhoods followed the topography when laying down streets or dividing land. There is no clear distinction between wide boulevards and other smaller street widths inside the neighborhood. This results in unclear boundaries between neighborhoods inside GAM.

Early Mosques of Amman

There are many mosques built at Amman in the last centuries. Thus, there are different examples which show this concern and in particular in Al *Qalaa* district of Amman. Many of these mosques vanished during the decline periods that Amman faced; like in the *Mamluk* era. Many historians and travelers described the remained traces of such religious buildings through their visits to the city of Amman. “Captain Cloud” is one example of such travelers; in his book: “Moab and the Hittite countries”; he mentioned his visit to Amman in 1881, he described the old mosque with a moderate height minaret, close to a spring.

This research concentrates on mosques which are still surviving and persist till the present days, whether renovated or enlarged, or those built in the beginnings of the 20th century. Further, this paper discusses them on the basis of importance and elderly; it, also, explains their architectural values. Some of these mosques are as follows:

Al Hussein mosque

Historically known as al *Jamei al Omari* [33], it is also known as the *Kabartai* mosque [34]. The latest name mentioned in *Salnama* in Syria in 1888 was the new mosque [35], the mosque is the oldest still surviving mosque in Amman. It was built by al Rashideen Caliphs [36], it was mentioned also by al *Maqdesi* in his book (*Ahsan al Taqaseem fee Marefat al Aqaleem*) written in the 10th century: “it has a mosque found at the edge of the market (*Suq*), its court (*AlSahn*) is full of mosaics, and is identical with *Makka*” [37]. Further, *Yaqoot al Hamawi* in his book the dictionary of places (*Mojamal Buldan*) mentioned the mosque [38].

It was also mentioned by Captain Conder, he wrote: “We approach the northern facade and I saw in its details the features of the Arab tribes which were in touch with Amman, and each tribe has special features. The façade of the mosque shows three gates; the middle gate is 10 feet wide, each of the other two is seven feet wide, each one covers a lintel, with an arch above it. On the facade one can notice four small windows covered by arches, and that was the only wall that stands in front of the mosque.

We passed the door to an open courtyard which is 135 feet length and 120 feet width, and then we entered the covered mosque which is 120 feet long and 37 feet width. The roof stands on vaults which arise from the building sides, on the Qibla wall exist an apse of 12 feet wide and within it another apse. The minaret of the mosque rises to 33.5 meters height, and its located on the western side of the mosque, the minaret contains 33 steps, above it a triangle which supports a dome of 8 feet height. The stairs rise inside the minaret and decorated with Arabic Writings where its description is: “There is no God but Allah, Mohammad is his Prophet [39].

The current form of Al *Husseini* mosque was built in the same old location in the downtown of Amman; it is attached to King Faisal square, just hundreds of meters from the Roman Amphitheatre. The construction took place in the era of Prince Abdullah 1st. In 1923 [40]; at that time the Lady Stewart Arskin visited Amman, and mentioned in her book (The Trans Jordan, Some Impressions) in 1924: “At the middle of town two roads meet, near that a spring exists, and a new *Jamea* was under construction, “AL *Husseini* Mosque” [41].



Fig. 3. Al Hussein mosque (recently)



Fig. 4. Al Hussein mosque (destroyed)

The mosque was one of the first urban projects in modern Jordan. Moreover, the building material used for erecting the mosque were concrete and stone, it was the first time of using concrete in building mosques. The eastern minaret was built with the stone after 1927, another minaret was built in the western part. Besides, some destroyed parts of its dome were restored later; and the courtyard (al *Sahn*) was enlarged [42].

Throughout the last years, authorities made different restoration works and enlargement projects for the mosque. The mosque is distinguished by its front elevation and the main gate with its pointed arch. It has two minarets with a height of 70 meters for the western one, and 35 meters for the other.

Ahl Alkahf Al Olwi Mosque

It is located in al *Rajeeb* village, 10 km southeast Amman, its importance is related to (*Ahl al Kahf*): people mentioned in the Holy Koran. The mosque was square in shape; it was built over

the ruins of a Byzantine Catacomb. However, the main parts were three *Riwaqs*, four columns which created this division and still survive till today [43]. The old mosque is Umayyad that dated back to the *Abdel Malik bin Marwan* era [44]. It was developed and enlarged in the *Tolonian* era. Finally, in 1970, a new mosque was erected and named *Al Kahf* Mosque under supervision of Ministry of Endowment (*Al Waqf*).



Fig. 5. Ahi Al Kaht Mosque

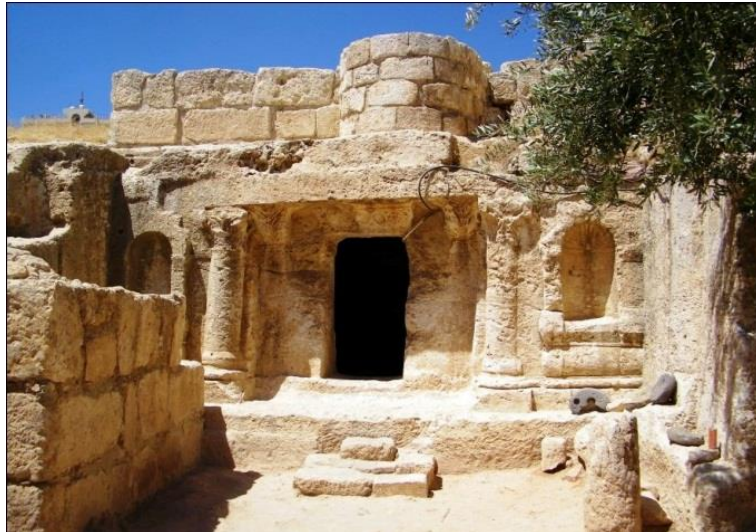


Fig. 6. Historical site of Al Kahf

Al Shareea College Mosque

Found in *Jabal al Weibdeh*; one of the oldest and most distinctive areas of Amman. It was designed in 1958, with a pointed dome of 15 meters height, and 35 meters the height of the minaret; there are (132) pointed arch openings that distinguish its facades.



Fig. 7. Al Shareea college mosque

Abu Darweesh Mosque

It is located in the upper part of *Jabal al Ashrafiah* District, it was built by Mustafa *Hasan al Jerkasi* (Abu *Darweesh*) in 1961. White and black stones were used to build the mosque; the facade contains 48 courses of al (*Ablaq*) stone arrangement (one white course then two black courses). The mosque is square (29*29 meters), with the upper part for women. Thirteen marble columns exist inside the mosque, and there is a dome and a minaret also [45].



Fig. 8. Abu Darweesh mosque

This paper discussed a group of mosques existing in Amman since the beginnings of Islam up the mid. 20th century. Most of these mosques have some remains with limited heights, some of them were renovated, and others were enlarged or replaced by new structures like al *Husseini* Mosque. However, the similarity in vocabularies and elements distinguish these mosques. They are also distinguished by uses and material applications. However, people had to wait until the last 20 years of the twentieth century to see a new generation of architects, who reflect a genuine and distinct design approaches of religious buildings. And most of those designers were local architects.

Other Early Mosques

There are many other mosques built in the same period, among them: *Ahl Al Kahf al Sofli*. It is rectangular in shape; four meters long and two and a half meters wide, it is located in the southern part of the cave (*Kahf*), its walls are currently four meters in height. The *Qibla* wall has a centralized hollowed apse; to the right of *Qibla* there is a stone (Minbar) with four steps height. Its stones were part of a Byzantine Church which existed in the same site [46].

Rajm al Korsi is another Mosque. It is located in the western part of Amman, east of *Wadi Essir* district. It belongs to the Umayyad Period [47]. It is rectangular in shape, with a hollow semicircular apse; its floors are of mosaics. It has regular stones walls. It has one entrance.

Furthermore, there is *Al Fath* Mosque which was designed by a British architect. It is located in *al Mahatta* neighborhood in downtown Amman near *Al Fath* School. The mosque has a major cubic mass, covered with a massive circular dome. It has two minarets, as well as vaulted openings (*Hadwat al Faras*) [48]. The mosque was enlarged, and other buildings were added in the 1980's and 1990's. Currently, there is a garden surrounding the mosque.

In addition to the above mentioned mosques, there is *Al Shabsogh* Mosque, which is located in downtown, near the old Municipal building. Also, *Rozeiq* Mosque and *Al Oqeilat Mosque* in the district of *Ras al Ein* [49].

Newly Built Mosques In Amman

This paper referred here to mosques designed after 1980 in Amman and its suburbs. A new architectural language was and still is developing variety of designs, techniques and approaches. Starting that approach was the design competition for the King Abdullah mosque in *Al Abdali*; many designers took part, most were locals, and some in collaboration with foreign architects who were working in Jordanian firms. The result was the first award was given to a joint team, the construction and supervision took by a local architectural firms. Further, this event forms a new definition of present-day mosque designs in Amman in the modern age; what enriches this notion is the mosque represents the formal state mosque architectural style of Jordan.

Some of these newly built mosques are:

King Abdullah 1st. Mosque

It is located in *Al Abdali* District, near downtown and on the north side of it, attached to the Parliament Building, a joint effort of arch. *Rebhi Soboh* firm, *Hasan al Nori* firm, and *Yan Shika* architect won the competition. The implementation began in 1982, it was opened to public in Ramadan 1989 [50]. The built up area of the mosque is 17000 square meters, it consists of the main prayer hall, prayer hall for women, royal hall and the imam house. Its basement contains the major conference hall, the Islamic Museum, the library, administrative offices, and parking area.

The mosque planning adapted a genuine Islamic shape, the octagon for the major prayer hall; it was inspired by the massive dome form, of the holy Sanctuary at Jerusalem, with five rather than four entrances. The outer *Riwaq* areas are connected with the mosque in a way that suits the planning needs limits; these aisles (*Riwaqs*) are parallel to the prayer hall. The area of the prayer hall is 1600 square meters, it can hold 300 people; it is covered with a centralized dome of 32 meters height and 38 meters in diameter, and built on a neck of 64 openings.

The building material is local stone with concrete; while the builders used wood was in the interior spaces.

The design approach for the whole complex concentrates on exposing the architectural mass of the mosque as a monument, while the dome and the two minarets emphasize this meaning.



Fig. 9. King Abdullah 1st. mosque

Al Ansari Mosque

It is located in *Abdoun*, a recent suburb of Amman which became a major part of greater Amman development. The mosque was built in 1996; its area is 1200 square meters. Further, it was designed by architect *Ayman Zoaiter*, and financed by Madam *Baheea al Kurdi*.

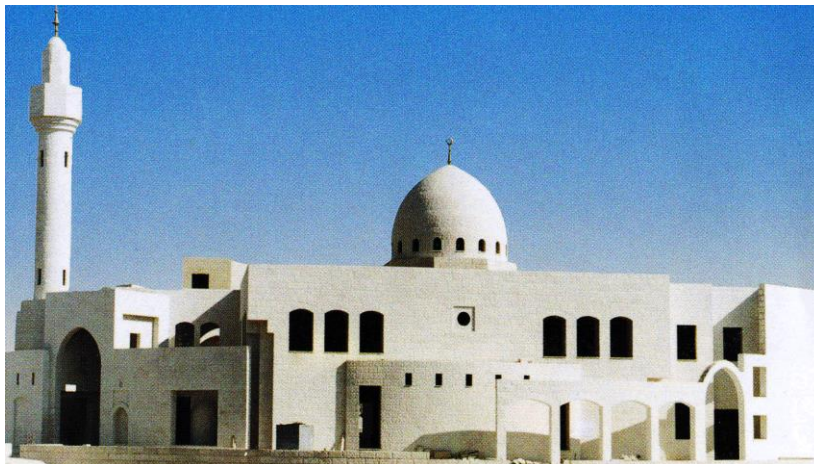


Fig. 10. Al Ansari mosque

The design of *Al Ansari* mosque reflected interaction between the building with the site forces and religious force through a delicate mass. It strengthened the urban space and the visual dialogue between the visitor and user. The major *Iwan* forms a transition from the street to the mosque through a series of open and sheltered spaces; thus It leads to a courtyard and to prayer hall, to provide privacy and quietness.

Al Noorin Mosque

Designed by architect *Bilal Hammad* in 1998; it is located at *Ras al Ein*, its area is 200 square meters. The mosque was a replacement of a previous small mosque which was demolished to enlarge *Omer Mattar street*. Builders used special stones and wooden *Riwaq* to create an

intimate environment in the external parts; while the skylight enriched the place inside; this was achieved by colored ceramics of the *Qibla* wall, (*Minber*) and the nich (*Mihrab*) which suit the place aesthetically.



Fig. 11. Al Noorin mosque

Alkaloti Mosque

Designed by the architectural firm of *Tahan and Bushnaq* in 1999; it is located in al *Rabia* District of Amman, a new area of special characteristics. The financial support was by Mr. *Anwar al Kaloti*. The area is 1500 square meters. The design reflects the modernization and modern era of Amman with special care to the local conditions and constraints; building materials, vocabulary and architectural communication with people.

The design concept concentrates on the prayer rows parallel to the *Qibla*, this design idea represented the symbolic stone walls which are parallel to one another, and they form the overall morphology of the project.



Fig. 12. Al kaloti mosque



Fig. 13. King Hussein mosque

King Hussein mosque

It is located in the King Hussein gardens in *Dabouq* district of Amman. It is the kingdom's official mosque (*Almasjed Aljamea*); a symbolic monument in Amman. Mosque area is 8000 square meters, rectangle in shape, consist of 4 gates, male prayer hall can hold 2500 people, while the capacity of the female hall is 300 women; there is an outer prayer area of 2500 capacity. The mosque contains cultural and education spaces to support the purpose of the praying; like outer plaza's, garden and administrative. It has four minarets creating a fine balance of the mosque design. A set of barrel vaults and domes dominate the whole space of the mosque, it is obvious and visible from inside, with the dome over the apse.

The designer was the Egyptian Architect (*Khaled Azzam*). He followed a genuine and artistic approach relying on the spirit of local Islamic style. In different parts of the mosque a geometric decoration built on arabesque geometry and analysis were obvious. Further, in the final design he presented natural lighting in the prayer hall, and an interior lighting with a well spread fixtures that enrich overall design.

Conclusions

The research explores and analyzes approaches of mosque design and development in Jordan. It focuses on visual and functional needs related to the religion of Islam. Besides, it concentrates on spread of mosque buildings in Jordan. Finally, the study got a group of results, those are as follows:

Varieties of shapes form plans of these mosques: Rectangular, Squares and Octagonal. This reflects limits of sites and major role of the mosque in the area, as well as the conceptual approach.

- Octagonal shape was implemented in king Abdullah mosque; it reflects ties of Jordan with The Hashemite Kingdom.
- Role with Jerusalem.
- Variety of trends are obvious in the recent mosque design; some of which are the following:

1 - The traditional approach,

2 - The modern approach,

3 - The regional approach.

All the previous trends were adapted in mosque designs in Jordan all over since the last 50 years, the following witnesses that:

The variety of building materials used; Al *Kaloti* mosque and king Abdullah mosque show this in their different parts:

- The role of ornamentation was obvious in many mosque designs; the previous examples show the basic role of decoration in the design approach.
- The use of colors in mosques is a major design feature to reflect spiritual and functional needs.
- The strong symbolic objects in the design concept; for example: The relation of the Hashemite royal family to the dome of the rock was expressed in king Abdullah 1st. Mosque.
- The diversity of minarets design; this was obvious in using circular, squared, and ribbed minarets forms.
- Finally, the absence of complete relation between masses of mosque and proper spaces in the city, which are essential and has major concern in the Islamic mosques. Because, it is important to develop this relation in modern mosques to create a sense of gatherings.

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