

THE SECOND MOSQUE ON EARTH THAT ISLAMIC JERUSALEM FORGOT REVEALING THE ANCIENT AL-AQSA MOSQUE

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ABSTRACT: *In examining the historical development of al-Aqsa Mosque and its history, Muslim researchers usually view it through the establishment of the Umayyad Islamic buildings within the walls of the al-Aqsa Mosque enclave; however, earlier times are deliberately avoided. The reason for this ignorance is due to their intention not to address the issue of the Jewish Temple or as a result of the scarcity and unreliable solid information on the ancient times of al-Aqsa Mosque. This paper is part of an earlier study for the researcher aimed at identifying the history of the al-Aqsa Mosque and its planning origin. It investigates the archaeological remains of the al-Aqsa Mosque that existed at the beginning of the 7th century CE; a period which is contemporary with the mention of al-Aqsa Mosque in the Holy Qur'an. The later Islamic urban development of al-Aqsa Mosque does not merely form a major part of this debate. The importance of this paper is due to the fact that it will shed light on a number of crucial problems and dilemmas arising from the distant ancient history and architectural development of the al-Aqsa Mosque. It also provides some material evidence that may in turn help researchers to develop a better understanding on the establishment of al-Aqsa Mosque and its actual identity. The paper uses interdisciplinary and multidisciplinary approaches based on new archaeological discoveries and academic studies on al-Aqsa Mosque.*

KEYWORDS: *Al-Aqsa Mosque, the Sacred Mosque, Islamic archaeology, Biblical archaeology, Jewish Temple.*

Introduction

Al-Aqsa Mosque is meant to refer to the enclave surrounded by the present area walls. This enclave consists of famous Muslim buildings such as al-Jami' al-Aqsa (the congregational Mosque), Qubbat al-Sakhrah (Dome of the Rock) and Bāb al-Rahmah (the

Mercy or Golden Gate). Revealing the historical architecture of al-Aqsa Mosque is indeed very problematic. Its contradictory and overlapped historical, architectural, archaeological and religious information present more hindrances to achieving a good understanding of al-Aqsa Mosque. Tackling such a task requires confining the investigations of al-Aqsa Mosque to the following points:

- Al-Aqsa Mosque in Islamicjerusalem and its plan.
- The establishment of the al-Aqsa Mosque enclave and its dilemmas.
- Al-Aqsa Mosque in the *Hoby Qur'an*.
- Al-Aqsa Mosque and the establishment of other prophetic temples.
- The boundaries of the al-Aqsa Mosque in terms of its geometrical similarities with the Ka'bah
- Al-Aqsa Mosque enclave in the 7th century CE.
- The direction and orientation of the al-Aqsa Mosque.
- Conclusion.

Al-Aqsa Mosque in Islamicjerusalem and its Plan

Al-Aqsa Mosque is located in the eastern part of the city of Islamicjerusalem. Four walls currently determine its area: the length of the eastern wall is 466 metres, the western is 488 metres, the northern is 314 metres and the southern is 281 metres. The eastern wall meets the northern one at a right angle; this is similar to the meeting angle of the southern wall with the western one. The southern wall and eastern wall meet each other at an angle of 92.30 degrees, while meet the northern wall meets the western wall at an angle of 85 degrees. Accordingly, these determine the shape of the al-Aqsa Mosque enclave which can be described as a quadrilateral of unequal sides, almost directing north-south, with an estimated area of 142.000 square metres (figure 1).

The shape of the al-Aqsa Mosque enclave is certainly unique; so far excavations carried out in Palestine and in the surrounding countries have not revealed a plan to a site similar in shape with that of the enclave of al-Aqsa Mosque.

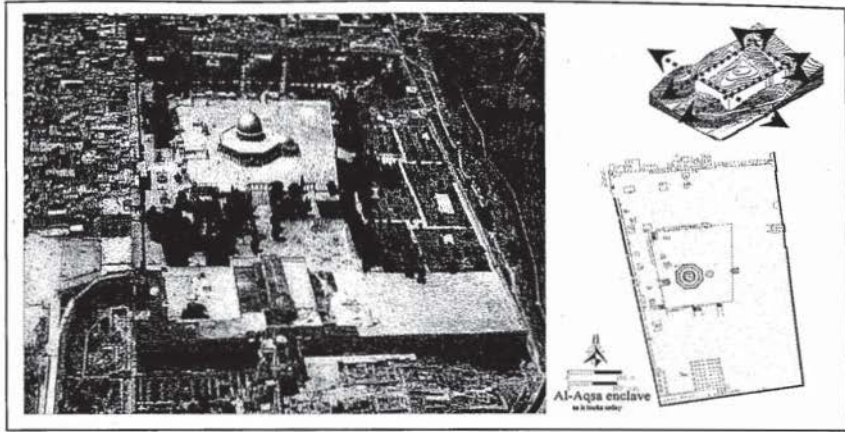


Fig. 1: Al-Aqsa mosque in Islamic Jerusalem as it appears at the present time. The picture on the right represents a plan and Isometric for the area of the al-Aqsa mosque; the picture on the left is an aerial view for the al-Aqsa mosque enclave looking northwards.

Source: Al-Ratrout (2005, 15)

Hence, several questions on this topic can be raised:

- Why al-Aqsa Mosque enclave had been planned in this shape and form?
- Why opposite walls of al-Aqsa's enclave are not parallel with each other?
- Was this shape of al-Aqsa Mosque enclave intentional or random?
- Why does the direction of al-Aqsa Mosque enclave deviate from the four cardinal points?
- Has the one to first establish al-Aqsa Mosque's enclave not mastered the art of building, or lacks in the ability to control the building's orientation?
- Are the present boundaries of al-Aqsa Mosque enclave actually representing the same borders that existed during the life of Muslims' Prophet Muhammad? If not, who has determined the current shape and area of the al-Aqsa Mosque enclave?
- What is the origin of this plan?

All these questions and others remain a challenge for researching the historical architectural development of the al-Aqsa Mosque enclave and its archaeological remains.

The Establishment of the Al-Aqsa Mosque Enclave:

It is interesting that the issue of the prophetic temples, particularly al-Aqsa Mosque, at the time of the Muslims' conquest of Islamic Jerusalem, is one of the most sensitive issues between non-Muslim and Muslim scholars. Those who based their interpretations on the Bible do not recognise the existence of the al-Aqsa Mosque before the first Muslim conquest of the city. These Biblical scholars believe that the "enclave" of the al-Aqsa Mosque had been delineated in its present form in the Roman period. Perhaps, the most remarkable claim on the origin of the foundation remains of the al-Aqsa Mosque is that they represent the remains of the walls of the urban compound of the Jewish temple, founded by Herod the Great at the beginning of the 1st century C.E., and which was destroyed by the Roman commander, Titus, in 70 C.E. Ernest Martin opposes this biblical interpretation, and argues in his study "Temples That Jerusalem Forgot", that the existing ancient wall foundation remains of the al-Aqsa Mosque does not represent the planning of the Jewish temple, but these are the remains of the Antonia fortress that is also built by Herod the Great (Martin 2000, 460). This is in contrast to the suggestion of the Israeli architect, Tuvia Sagiv, who accredited the planning of the al-Aqsa enclave to someone else. He argues in his study "The Temples of Mount Moriah" that foundations of al -Aqsa Mosque enclave must be dating back to the Roman Emperor Hadrian and not to Herod the Great (Sagiv nd, 1-36).

Al-Aqsa Mosque was mentioned in the Holy Qur'an in the 1st half of the 7th century C.E, when saying (Qur'an, 17:1):

﴿سُبْحَانَ الَّذِي أَسْرَى بِعَبْدِهِ لَيْلًا مِّنَ الْمَسْجِدِ الْحَرَامِ إِلَى الْمَسْجِدِ الْأَقْصَى الَّذِي بَارَكْنَا حَوْلَهُ لِنُرِيَهُ مِنْ آيَاتِنَا إِنَّهُ هُوَ السَّمِيعُ الْبَصِيرُ﴾

Glory to He Who did take His worshipper for a journey by night from Al-Harām Mosque to al-Aqsa Mosque, which we have surrounded with Barakah, in order that We might show him some of Our Signs: for He is the All-hearing All-Seeing.

This verse was revealed after the occasion of the Night Journey, where the Muslim's Prophet Muhammad was translocated from

Makkah to al-Aqsa Mosque for his prayers (Ibn Kathīr 1994, 5). Hence, questions can be rehearsed: Is it true that the al-Aqsa Mosque was actually a Mosque even before the Muslim conquest of Islamic Jerusalem? If yes, what is the supporting evidence?

Drawing a conclusion on the identity of al-Aqsa Mosque from an archaeological point of view, requires identifying the nature of the enclave before the Muslim conquest of the city. It is evident that the al-Aqsa Mosque was a built-up area in the Roman period (Kenyon 1974, 205-236). At the same time, archaeology has not provided any physical evidence confirming that it was Romans who established the al-Aqsa enclave. Romans, for example, would build on existing borders, regardless of the nature of these borders before the Roman period. Moreover, archaeology did not assure that the planning of the al-Aqsa enclave is actually representing a Jewish temple, and not reflecting a pagan Roman temple, or even an Islamic Mosque.

It may be the most remarkable archaeological discovery is that achieved by the excavation carried out in the nineties of the last century under the supervision of Mier Ben-Dov and Dan Bahat. They dug a tunnel alongside the western wall of the al-Aqsa Mosque and found that the Roman work at the northern area of the present the al-Aqsa Mosque enclave was not completed in the 2nd half of the 1st century C.E. This result does indeed not agree with the biblical scholars' belief that the current area of the al-Aqsa Mosque represents the Jewish temple. This, according to the Bible, was completed before its destruction in the 1st century C.E. Despite the many complications on researching this subject, since a lot of explanations on the identity of the al-Aqsa Mosque enclave have been developed on the basis of political agendas, the attempt to identify the al-Aqsa Mosque based on information provided by the Holy Qur'an may help to provide an explanation of the establishment and the planning of the al-Aqsa Mosque enclave.

Al-Aqsa Mosque in the Holy Qur'an:

The Qur'an has used a specific term which is "the Mosque" when it refers to the al-Aqsa enclave (Ibn Kathīr 1994, 5; al-Nasfī 1995,

614; Qutub 1979 v4, 2210). Semantically, the word *masjid* (Mosque) was generated from the Arabic language root of *sajada*, which means to submit. The religious meaning of *sajada* is to put the forehead on the ground by prostrating oneself (in worship). *Al-masjid* (the Mosque) is referred to the place of prostration and it is the place of worship (al-Jawharī nd, 482; al-Fayrūz-Abadī v1, 300; Ibn Manzūr nd. v2; 98; al-Zubaidī nd. v2; 371). Idiomatically, the Mosque refers to the place that is dedicated for all rites of worship associated with oneness (al-Huwaimel 1998, 241). It is that the Qur'anic link between the al-Aqsa Mosque and the term "Mosque" had not been used incidentally. Regardless of the later architectural development the al-Aqsa Mosque enclave and various building alterations that took place subsequently, the Qur'an, at this very time, considers the al-Aqsa Mosque enclave to still preserve its original religious identity. Consequently, the Qur'an does not regard the Muslims' Prophet Muhammad as the first one in history to set up Mosques, but he simply revives the idea of building Mosques, initiated earlier by the precedent prophets. Evidently, the Qur'an does not agree with the Orientalists claim that the idea of the Mosque was initiated in the 7th century C.E. The question arises: what are the planning features of the al-Aqsa Mosque acquired since the time of establishment? To answer this question, it is extremely important to discuss the first Mosque established on earth.

Al-Aqsa Mosque and the establishment of other Prophetic Temples

The Bible does not have any reference to earlier temples established by early prophets such as Adam. Instead, it elaborates on the historical construction of Solomon and Herod Temples. According to Burckhardt, the reason behind this ignorance of the early temples is that "the Bible has spoken on the sacred buildings associated with the geographical region of the people of Israel, and there is no reason makes the Bible referring to any temple located outside this geographical area" (Burckhardt 1976, 4).

On the contrary, the Holy Qur'an explicitly mentions the first sacred building established on earth for the people when stating (Qur'an, 3:96):

﴿إِنَّ أَوَّلَ بَيْتٍ وُضِعَ لِلنَّاسِ لَلَّذِي بِبَكَّةَ مُبَارَكًا وَهُدًى لِّلْعَالَمِينَ﴾

The first House [of worship] established for mankind was that at Makkah - blessed and guidance for the worlds.

According to the Holy Qur'an, the first place of worship was established and built for people was that in Makkah in the Arabian Peninsula (Ibn Kathir 1994, 509), whereas the al-Aqsa Mosque must have been founded and built for people after. In other words, the establishment of al-Aqsa Mosque is historically linked with the establishment of the first place of worship (Mosque) in Makkah.

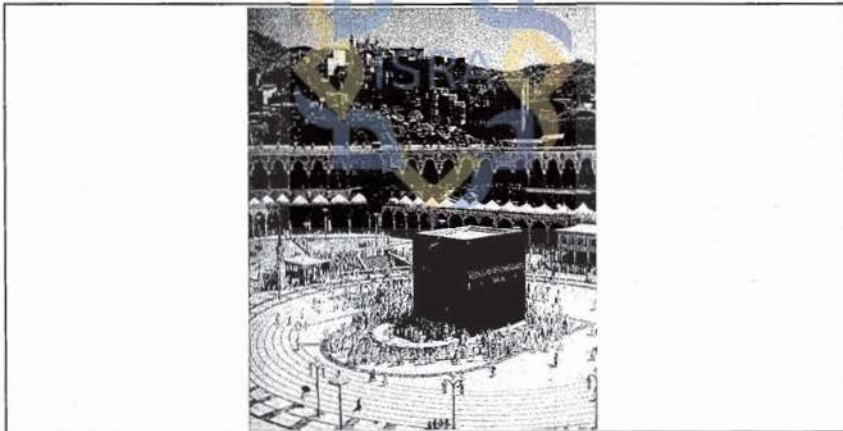


Fig. 2: Makkah in the Arabian Peninsula. The Ka'bah - the first house of prayer built for people - as it appears in the present time.

Source: Frishman and Khan (1994, 133)

The Holy Qur'an considers the Ka'bah as the first house of worship where people exercise their rituals associated with the oneness of God (figure 2). According to Muslim scholars, the history of the establishment of the Ka'bah is likely associated with Adam (Abu Halabiyyah, 1998, 64). They also believe that the Ka'bah was still functioning until the time of Noah when the flood took place. The Ka'bah was submerged under water, demolished

and consequently disappeared (Al-Azraqī, 1969, 1:51). The place of the Ka'bah continued to be abandoned until it was identified by Ibrāhīm (Qur'an, 22:26). According to Ibn Kathīr in his *Tafsīr* (exegesis) of the Qur'anic verse (Qur'an, 2:127):

﴿وَإِذْ يَرْفَعُ إِبْرَاهِيمُ الْقَوَاعِدَ مِنَ الْبَيْتِ وَإِسْمَاعِيلُ رَبَّنَا تَقَبَّلْ مِنَّا إِنَّكَ أَنْتَ السَّمِيعُ الْعَلِيمُ﴾

And remember Abraham and Ismā'īl raised the foundations of the House (with this prayer): "Our Lord! Accept (this service) from us: for thou art the all-hearing, the all-knowing."

The historical building of the Ka'bah by Ibrāhīm had been carried out on the same foundations and boundaries of the original plan that was established by Adam (Al-Azraqī, 1969, 1:37), and without change (Ibn Kathīr 1994; 244). Therefore, the holy place which Adam established is not merely more than defining a certain specific place allocated for exercising the various rituals of worship associated with the oneness. Al-Azraqī (d. 222 AH), in his manuscript *The history of Makkah*, was the first historian who reported a technical description of what was built by Ibrāhīm in Makkah. He stated: "He (Ibrāhīm) built the house and makes its high nine cubits and its length thirty-two cubits from the black corner to the *shāmī* corner ... and makes the width between the *shāmī* corner to the *gharbī* (western) corner ... twenty-two cubits, and makes the width of *yamānī* side twentieth cubit ... and this is similar as the basis of Adam's building. He created a door opening..., and Ibrāhīm did not put a roof for the Ka'bah" (Al-Azraqī, 1969, 1:64-66). This historical description reveals that the first sacred House built for people on earth had been planned as a quadrilateral shape with irregular sides. Based on this historical description, and following the consequent stages of architectural development of the Ka'bah including the various later changes (Al-Azraqī, 1969, 1:64; al-'Abed, 1992, 97), it is possible to reveal the original floor-plan of the Ka'bah as it was at the time of Ibrāhīm. This also helps to generate a reconstruction plan to the building, illustrating the form of this sacred House at that time (figure 3).

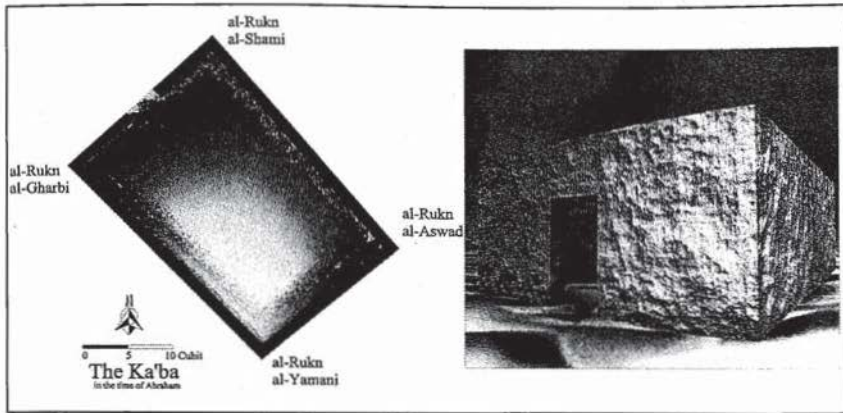


Fig. 3: The Ka'bah as it was at the time of Ibrāhīm. The plan and Isometric reconstructions are based on al-Azraqi's description (d. 222 AH) and his mentioned dimensions.

Source: Al-Ratrouf (2005, 17)

It is clear, from al-Azraqi's description of the Ka'bah, that the form of the early prophetic temple was not more than a simple form in terms of architecture, having a quadrilateral floor-plan; its boundaries have been defined by building a wall around the sacred place. It seems that building this wall was a practical solution to Ibrāhīm to define the limits of the sacred¹.

The relationship between the planning of al-Aqsa Mosque and the Ka'bah

A simple comparison between the present floor plan of the al-Aqsa Mosque and that of the Ka'bah floor plan as it was at the time of Ibrāhīm (figure 4) leads to surprising results:

1. All resultant angles between the adjacent sides in the plan of al-Aqsa Mosque enclave are similar with all those angles in the plan of the Ka'bah.
2. As a result, all the opposite sides in the plan of al-Aqsa Mosque enclave deviate from each other in the same way as those sides in the plan of the Ka'bah.
3. It can be concluded that the planning of the al-Aqsa Mosque enclave resemble the planning of the Ka'bah.

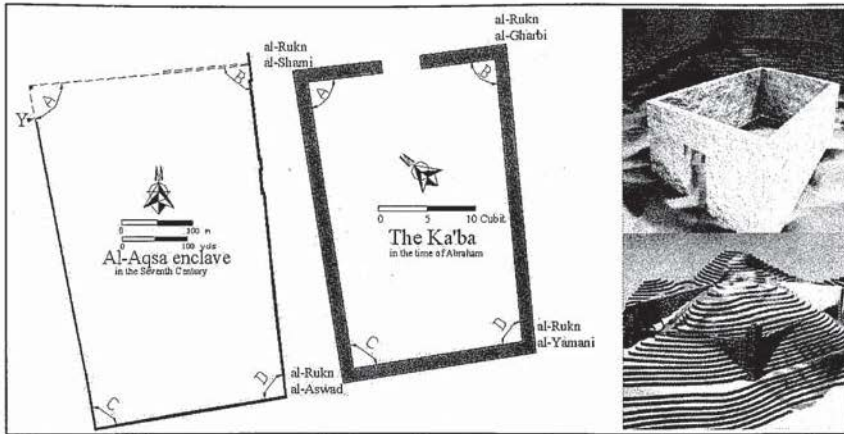


Fig. 4: The Ka'bah at the time of Ibrāhīm and al-Aqsa mosque at the beginning of the 7th century CE. The two pictures on the right represent three-dimensional computer reconstruction of the Ka'bah and al-Aqsa mosque. Pictures on the left are the plan of the Ka'bah and the plan of the al-Aqsa mosque where similarity between the two can be seen.

Source: Al-Ratrout (2005, 18)

To reach further results on the identification of al-Aqsa Mosque; when the plan of the al-Aqsa Mosque has been drawn over the plan of the Ka'bah as it was at the time of Ibrāhīm, and regardless of the difference in the physical size between these plans, it is clear that both plans correspond to each other and are similar, except the northern area of the present al-Aqsa Mosque, where it expanded a little to the north (figure 5). Indeed, such coincidence of similarities rehearses the following question: *Is it true that the present boundaries of the al-Aqsa Mosque enclave are similar to those that existed at the beginning of the 7th century CE and have not been changed?*

Al-Aqsa Mosque enclave in the 7th century CE

Seldom can the reader in the recent studies on Islamic Jerusalem find information on the issue of the historical limits or boundaries of the al-Aqsa Mosque in the 7th century CE. It seems that the reason behind this scarcity of information is due to the fact that the literary sources, that relatively close to the 7th century CE, had spoken on this subject in general, and their texts are very brief. This is simply because the al-Aqsa Mosque had lost its importance

after its severe Roman destruction in the 1st century CE, and the subsequent time became an encouraging factor for its dereliction. Although the vast majority of al-Aqsa Mosque's scholars are dealing with the present boundaries of the al-Aqsa Mosque as being the same as those borders that existed in earlier periods. Hence, exploring the ancient boundaries of the al-Aqsa Mosque in light of the latest results of archaeological excavations must be of the best scientific deductive methods for identification.

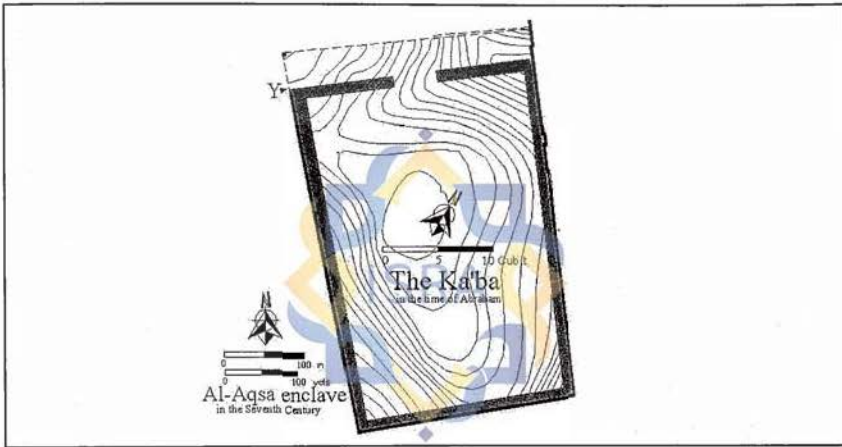


Fig. 5: Architectural comparisons between the plan of the Ka'bah in the time of Ibrāhīm and the plan of al-Aqsa mosque in the beginning of the 7th century. The two plans are similar except the northern area of the present plan of al-Aqsa mosque which has little extension towards north.

Source: Al-Ratrout (2005, 19)

The eastern boundary of al-Aqsa Mosque forms part of the present city wall (figure 6). It consists of two main rows of stone-types: the first; small-sized stones which are found in the upper parts of the wall, while the second are large stones which exist in the wall's foundation, dating to various historical periods. The dating of some parts in the foundation of this wall is still controversial among archaeologists, but they, nevertheless, tend to date the bulk of the wall's foundation to the 1st century CE, that is, to the Roman period (Kenyon, 1974, 111).

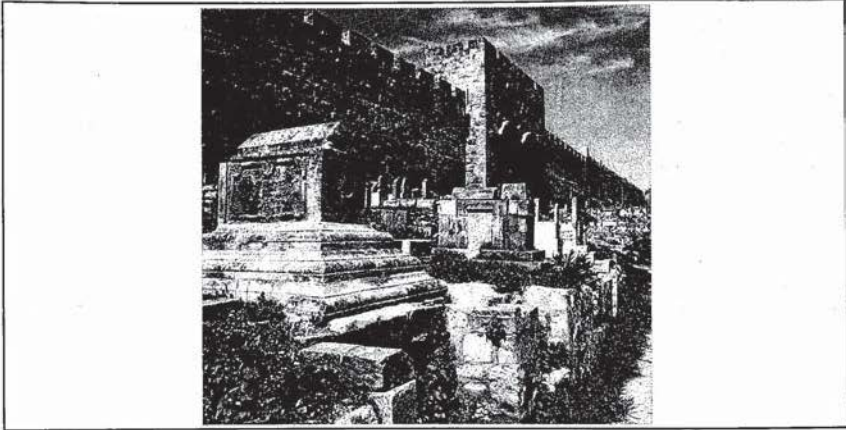


Figure 6 The eastern wall for the al-Aqsa mosque as it appears at present.
Source Al-Ratrout (2005, 20)

The western wall of al-Aqsa Mosque represents the eastern limit of the houses in the city of Islamic Jerusalem. Charles Warren is the first to carry out an excavation at this wall in 1867 CE. He made some deep trenches down to the foundations alongside this wall. His results attest that the foundations of the wall consist of huge stones dating back to the Roman period (figure 7) (Warren, 1970, 188).

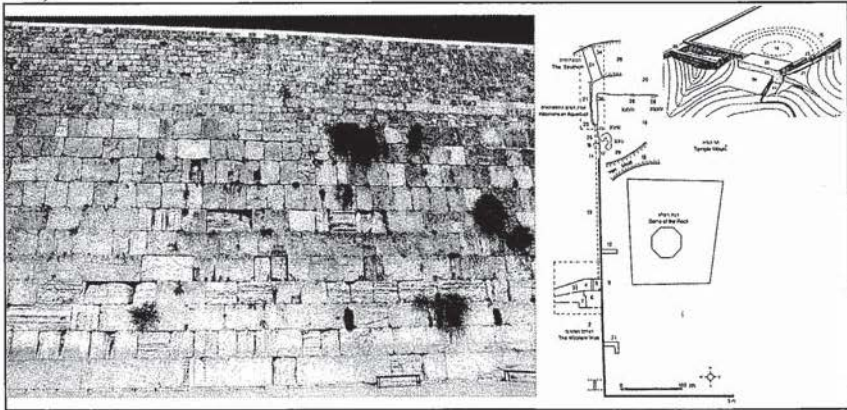


Fig. 7: The western wall of the al-Aqsa mosque as it appears at present. The picture on the right represents a plan for this wall and isometric to its northwestern corner, based on archaeological excavations. The picture on the left represents the lower part of the west wall as it appears at present, known as the Wailing Wall.

Source: Al-Ratrout (2005, 21)

This result of Warren has corresponded with the conclusion of a scientific excavation conducted by the Israeli archaeologist B. Mazar in 1968 CE. He discovered that part of this wall's foundation consists of huge Roman stones. These are located at the wall's southern end. A few years after this excavation, it was possible for Meir Ben-Dov and Dan Bahat to explore all the foundations of this wall with the help of a tunnel dug under the Islamic buildings adjacent to the western wall of the al-Aqsa Mosque. The results of Mazar and Ben-Dov's excavation confirm that the work in the Roman foundation located at the northern end of this wall, as well as that street adjacent to this foundation, which all dated back to the 1st century CE, was not finished for some reason. The result also showed that the material culture and the architectural features associated with this foundation, dating back to the 1st century CE, had completely disappeared. This was observed after a distance of about 448 metres to the north of the south-western corner of the al-Aqsa Mosque. Based on these unexpected archaeological discoveries, Dan Bahat concluded that the western wall of the al-Aqsa Mosque did not extend northward in the 1st century CE after this length (figure 8) (Bahat, 1994, 189;

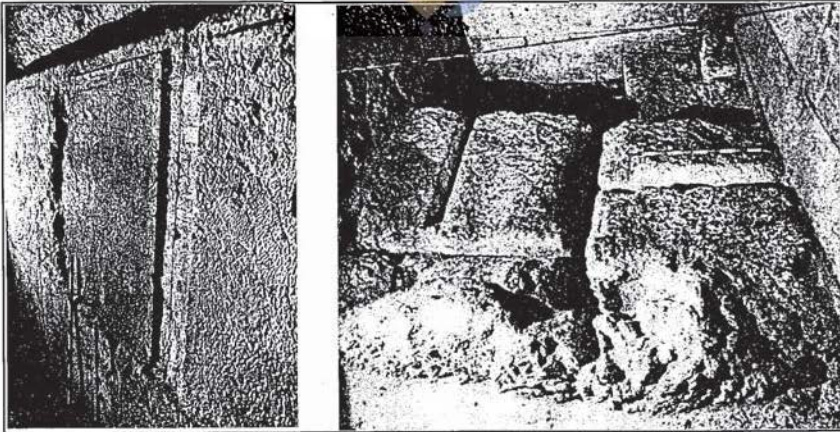


Fig. 8: The western wall of the al-Aqsa mosque as it appears at present. The picture of the left represents some of the huge stones were discovered recently near the north-western corner of the al-Aqsa mosque. It can be observed heterogeneity between these stones. The picture of the right shows the place from where the stones used in building the foundation walls of the mosque have been cut.

Source: Bahat (1994, 189)

Geva, 1994, 15). This indicates, that the area of al-Aqsa Mosque in the 1st century CE was less than its present area. The southern wall of the al-Aqsa Mosque represents a part of the present city wall. The excavations of Charles Warren at al-Aqsa Mosque and that of the Israeli archaeologist B. Mazar revealed the stone courses in the foundations of this wall, which both of them dated it to the 1st century CE (Mazar, 1969, 8).

The northern wall of the al-Aqsa enclave is considered to be a separating line between the city of Islamic Jerusalem and the al-Aqsa Mosque from the north. The eastern part of this wall forms the southern boundary of what so-called the *Birkat Isrā'el* "Israel pool". The western edge of this wall is seven metres higher than the normal level of the al-Aqsa Mosque; due to the contour lines of the site. Because of this elevated area level in comparison to the normal level of the al-Aqsa Mosque, there was a need to cut the rock vertically so as this rock-cut is consequently become part of the western edge of the northern wall (figure 9). The date of the rock-scrap is not confirmed yet, but Kenyon believes "it could be that it was cut in Roman or Muslim times" (Kenyon, 1974, 188). The French scholar Clermont-Ganneau, however, suggested the Crusades' date for these changes carried out at this northern area of the al-Aqsa Mosque (Clermont-Ganneau, 1899, 1:137).

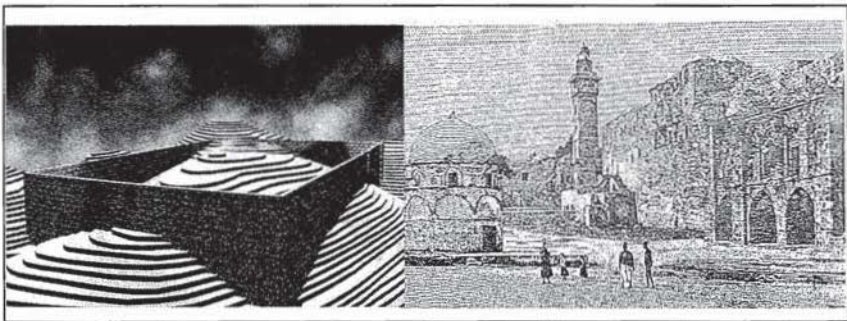


Fig. 9: Al-Aqsa mosque in the early Islamic period. The picture of the right represents the rock-scrap at the present northern wall of the al-Aqsa mosque. The picture on the left represents a computer three-dimensional reconstruction to al-Aqsa mosque and its topography as it was in the 7th century CE.

Source: Al-Ratrouf (2005, 23); <http://templmount.org/graphics/Fig9.html>

The results of the Charles Warren's excavations including his various observations indicating that the stone courses in the foundations of this wall does not look like those massive stone foundations of the eastern ,western and southern walls of the al-Aqsa Mosque (Warren, 1970 , 123 & 128). This observation of Charles Warren is followed by another observation of Konder to this wall. He argues that the existing water cisterns adjacent to the northern wall of the al-Aqsa Mosque, and those near it, were built in a later period. Based on these observations, Konder concluded that the northern wall of present al-Aqsa Mosque enclave is not contemporary with other surrounding walls of the al-Aqsa Mosque (Konder, 1909, 119). Archaeologically, this means that the northern wall of the Aqsa Mosque did not exist in its present location in the 1st century CE. Accordingly, questions can be raised on the original location of this wall, as well as on the identity of whom is responsible for this change?

It seems difficult to develop a definitive scientific answer to the first question compared with the second one, especially in the absence of a scientific excavation at the northern area of the al-Aqsa Mosque. Nevertheless, the information provided from the excavation that was conducted alongside the western wall of the al-Aqsa Mosque previously is very important.

The boundaries of the al-Aqsa Mosque in terms of its geometrical similarities with the Ka'bah

The northern wall of al-Aqsa Mosque at the time of establishment must meet with its western wall at a certain point (Y) (figure 10). Since the planning of the present al-Aqsa Mosque looks like the planning of the Ka'bah at the time of establishment, perhaps their proportional relationship between length and width is also similar (figure 10). When examining this relationship mathematically - considering the existence and the accuracy of this proportional relationship- the point (Y), which represents the meeting point of the northern limit of the al-Aqsa Mosque at the time of establishment with its western limit, can be determined. In so doing, the proportional relationship between the length (y) and width (x) of the two places is exemplified as following:

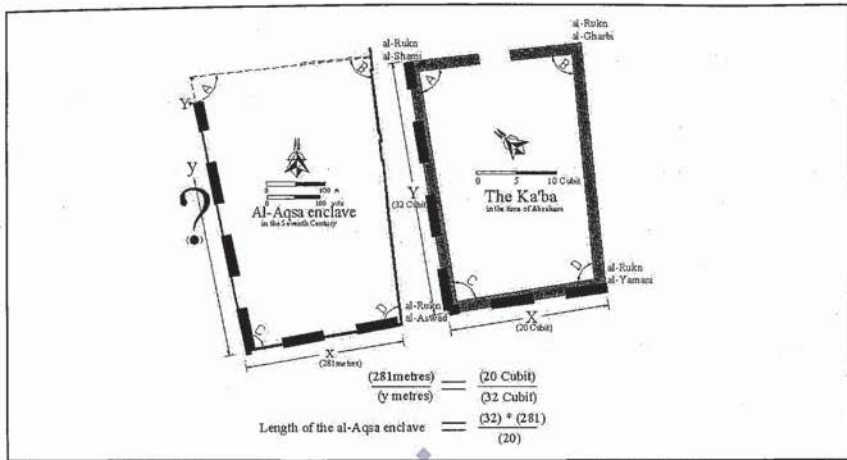


Fig. 10: Plan of the Ka'bah at the time of Ibrāhīm and al-Aqsa mosque in the 7th century C.E. The comparison illustrates the similarities and proportional relationship between them, so that they appear to be almost identical.

Source: Al-Ratrout (2005, 24)

$$\frac{\text{Width of the Ka'bah}}{\text{Length of the Ka'bah}} = \frac{\text{Width of the al-Aqsa Mosque}}{\text{Length of the al-Aqsa Mosque}}$$

$$\frac{x \text{ of the Ka'bah}}{y \text{ of the Ka'bah}} = \frac{x \text{ of the al-Aqsa Mosque}}{y \text{ of the al-Aqsa Mosque}}$$

$$\frac{20 \text{ cubits}}{32 \text{ cubits}} = \frac{281 \text{ meters}}{y \text{ meters}}$$

On the basis of this proportional relationship, the length of the western wall of the al-Aqsa Mosque at the time of establishment must equal 449.6 metres. Comparing this value 449.6 metres, resulting from the previous proportional relationship comparison, with the value 448 metres obtained from Ben-Dov and Bahat's archaeological excavation alongside the western wall of the al-Aqsa Mosque, it clear that these two values are very close to each other. Accordingly, this supports the idea that the estimated distance of length 448 metres on the western wall of the al-Aqsa Mosque, resulting from Ben-Dov and Bahat's excavation, would represent the actual original length of the western wall of the al-Aqsa

Mosque. All the material culture associated with the Roman foundation of the wall, including its adjacent ancient street, contemporary with this material culture must disappear after this length. This would be a good explanation for the reason behind the disappearance of the material culture to the north of this length, i.e. this cultural change at point Y mentioned before could represent the north-western corner of the al-Aqsa Mosque in the 1st century C.E.

Al-Aqsa Mosque in the 7th century CE

Regarding the second question raised earlier on the identity of who planned the present northern limit of the al-Aqsa Mosque and made its northward expansion? The answer must be associated with the work carried out at this northern area of the al-Aqsa enclave after the 1st century C.E. The historical and geographical description introduced by the Christian pilgrimages, who visited Islamic Jerusalem and the al-Aqsa Mosque since the beginning of the 4th century C.E up to the end of the 6th century C.E, are extremely important. Bordeaux, Usebius, Eucherius and Theodorus (Warren, 1970, 14-22), the famous historical eyewitnesses at that period, did not refer in their statements to any contemporary urban planning activities that took place in the al-Aqsa Mosque. Indeed, there is nothing in their writings that mentions a mega-work of rock-cutting at the northwestern corner of the al-Aqsa Mosque as it looks today, not even for any topographical changes there. On the contrary, all visitors confirm that the al-Aqsa Mosque has continued to be a derelict site since the Roman destruction of the city of Islamic Jerusalem by Titus in 70 C.E (figure 11, 12). Around the year 670 C.E, the Christian pilgrim Arculf visited Islamic Jerusalem, during the reign of the Umayyad caliph Mu'awiyah ibn Abū Sufyān (41 -61 AH / 661-680 CE). He described the city of Islamic Jerusalem and its distinct religious places and monuments. This Christian pilgrim is considered to be the first one who referred to the resumption of construction activity in the al-Aqsa Mosque after it was stopped for several centuries. The architectural development of al-Aqsa Mosque at that time was quite limited and was confined to a modest Muslim building for prayer (Wright, nd., 2).

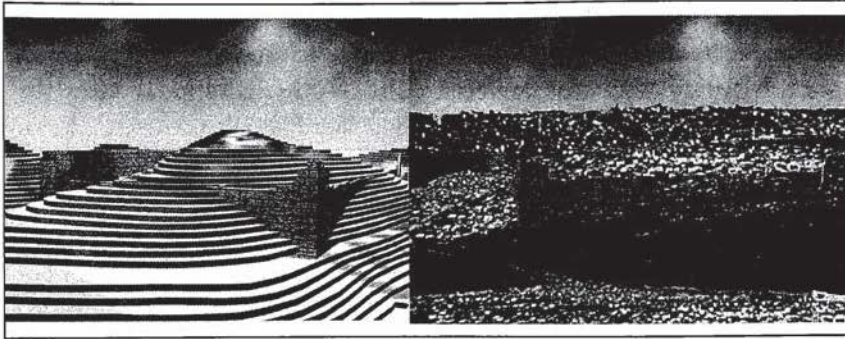


Fig. 11: The al-Aqsa mosque in the 7th century CE. The pictures on the left and right represent a computer three dimensional reconstruction of the site of the al-Aqsa mosque and its topography as it appears in the 7th century CE. This reconstruction based on the literary sources and archaeological excavations.

Source: Al-Ratrout (2005, 25)



Fig. 12: The al-Aqsa Mosque in the 7th century CE. The pictures on the left and right represent a computer three dimensional reconstruction of the south-eastern corner of the al-Aqsa mosque as it appears in the 7th century CE. This reconstruction based on the literary sources and archaeological excavations.

Source: Al-Ratrout (2005, 25)

In fact, Arculf's historical description to the al-Aqsa Mosque coincides with the historical statements of the early Islamic sources such as *Futūḥ al-Sham* (the conquest of al-Sham) for al-Waqidī and the book of *al-Ammāl* (the money) for Abū 'Ubaid. These two sources agreed that it was Muslims who revitalised the al-Aqsa Mosque and confirmed its religious sanctity after the 1st Muslim conquest of Islamic Jerusalem in 17 AH / 638 C.E (Al-Wāqidī, nd., 1:315-316; Abu 'Ubaid, 1986, 168). In a few years, this site

recovery was followed by a large-scale urban development for the al-Aqsa Mosque. According to Hamilton (Hamilton, 1949, 68), Van-Berchem (Van-Berchem, 1969, 1:200-372) and Rosen-Ayalon's studies (Rozen-Ayalon, 1989, 1) and others to the al-Aqsa Mosque, it was the Umayyad caliph 'Abd al-Malik ibn Marwān who initiated a comprehensive urban and architectural development of the al-Aqsa Mosque by adopting a large-scale building project. This conclusion is supported by Mazar (Mazar, 1969, 19), Ben-Dov (Ben-Dov, 1985, 293) and Dan Bahat's archaeological excavations (Bahat, 1994, 177-190), all of which confirms that the rebuilding the walls in the al-Aqsa Mosque, as well as the restoration of the entrances leading to it, the organisation and the design of the site and the establishment of various buildings, have been carried out during the Umayyad period.

It is perhaps that these Umayyad building activities necessitated the urban expansion of the al-Aqsa Mosque northwards up to the present site of the *al-Ghawanmah* minaret. It is also possible that one of the reasons behind the construction of this minaret (Mujir al-Dīn, 1995, 1:281&2:27-36) was to make the visual perception of the northern limit of the al-Aqsa Mosque after this expansion very clear. This conclusion on the urban expansion of the al-Aqsa Mosque corresponds with Konder's results, while exploring the al-Aqsa Mosque, based on his various scientific observations on the place. These indicate that there is a 1/6 of the original area of al-Aqsa Mosque as existed in the 1st century C.E has been added later (Conder, 1909, 119). Considering the accuracy of the conclusion that the Umayyads were carried out this expansion; the important question remains: Why the Umayyad building project necessitated the increase in the area of the al-Aqsa Mosque northwards?

The answer to this question seems to be difficult, especially, in light of the scarcity of literary information on the urban and architectural planning of the al-Aqsa Mosque as well as building or rebuilding its walls and gates in the early Islamic period. Nevertheless, to address this earlier question; there is a need to investigate the urban planning of the al-Aqsa Mosque and its

monuments' setting and coordination in that period. This would present a good evidence leads to an appropriate answer. When analysing the overall plan of the al-Aqsa Mosque as it was in the Umayyad period (figure 13) it can be noticed that the location of *Qubbet al-Sakhrab* (the Dome of the Rock) on top of the rock, dating back to the Umayyad period, has been linked to the planning position of *al-Jami' al-Aqsa* (al-Aqsa congregational Mosque) in the south, which dated also back to the same period. According to the plan of the al-Aqsa Mosque, both buildings are located on the same longitudinal axis directed nearly towards north – south, piercing the present southern wall of the al-Aqsa Mosque perpendicularly and directing towards the Ka'bah (the *Qiblah*). At the same time, there is a transversal axis runs through the centre of the Dome of the Rock, directing east – west, so that it parallels with the southern wall of the al-Aqsa Mosque and passes exactly through the midpoint of the present western wall of the al-Aqsa Mosque. Accordingly, it is difficult to accept that the determination of location of the Dome of the Rock, its relationship with various buildings of the al-Aqsa Mosque, had resulted by chance; and what possible chance can create such an elaborated relationship and coordination?

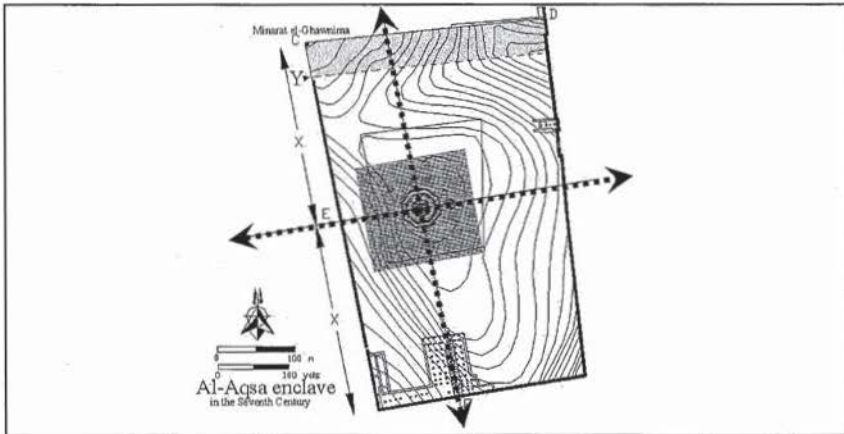


Fig. 13: The geographical location of Makkah and Islamic Jerusalem. The picture shows that the southern wall of the al-Aqsa Mosque is perpendicular to the direction of the Ka'bah and the area of the al-Aqsa enclave is oriented towards the direction of Makkah.

Source: Al-Ratrout (2005, 27)

Therefore it appears that there is an attempt to make the location of the Dome of the Rock in the centre of the al-Aqsa Mosque. This design is aiming at highlighting the importance of this element; namely the Rock from the outside and inside the building. This Rock is on which al-Aqsa Mosque itself had been established. This can be seen clearly from inside the Dome of the Rock, where the architect of the building kept the top of the Rock that extends below the al-Aqsa Mosque, exposed in the centre of the building. It is important to note that this designer was simply able to raise the level of Dome of the Rock so that the rock-summit will be covered completely. Indeed, achieving such geometrical coordination and relationships necessitated the expansion of the al-Aqsa Mosque northward.

In short, all these architectural and urban planning relationships mentioned before, that are existing in the Umayyad large-scale project of the enclave of the al-Aqsa Mosque, raise the idea that architects of that period had planned their buildings taking into account the hill or the Rock as a reference. This is on which the al-Aqsa Mosque, as a whole, was established. Indeed, the topography of the Rock was considered to be an important element to them in the urban planning of the al-Aqsa Mosque. Hence, the al-Aqsa Mosque is established on the Rock, due to the fact that the top of the hill-rock that appears inside the Dome of the Rock is a natural extension of the rock below the al-Aqsa Mosque.

The Direction and Orientation of the al-Aqsa Mosque

To reach a better understanding on the al-Aqsa Mosque, aiming at discovering the planning features and principles of the al-Aqsa Mosque as well as its typology, there is a need to address an issue associated with the three monotheistic religions, and has a strong impact in planning their religious buildings. The direction of the prayer—*Qiblah*—is considered to be the key element manifested in the planning of most religious buildings of the three religions: Judaism, Christianity and Islam. The direction or orientation in the planning of religious buildings is also important in archaeology to differentiate between buildings of these religions and identify their identity. Jews' synagogue did not take a definite direction in its

planning in the early times, while Christian churches must have taken the east direction in their planning, so the main axis of the Christian churches is always east - west. Despite the fact that Islamic Jerusalem has been for a while Muslims' *Qiblah* (Ibn Kathīr, 1994, 1:264), the Ka'bah is now the definite direction for Muslim prayers, which Muslim is not allowed to exercise prayer without directing oneself towards the Ka'bah. Such incessant of *Qiblah* change took place after God orders his prophet Muhammad to do so, as stated in the Quran (Qur'an, 2:144):

﴿ قَدْ نَرَى تَقَلُّبَ وَجْهِكَ فِي السَّمَاءِ فَلَنُوَلِّيَنَّكَ قِبْلَةً تَرْضَاهَا فَوَلِّ وَجْهَكَ شَطْرَ الْمَسْجِدِ الْحَرَامِ وَحَيْثُ مَا كُنْتُمْ فَوَلُّوا وُجُوهَكُمْ شَطْرَهُ وَإِنَّ الَّذِينَ أُوتُوا الْكِتَابَ لَيَعْلَمُونَ أَنَّهُ الْحَقُّ مِنْ رَبِّهِمْ وَمَا اللَّهُ بِغَافِلٍ عَمَّا يَعْمَلُونَ. ﴾

We see the turning of thy face (for guidance) to the heavens: now shall we turn thee to a *Qiblah* that shall please thee. Turn then thy face in the direction of the Sacred Mosque: wherever ye are, turn your faces in that direction. The people of the book know well that that is thae truth from their Lord, nor is Allah unmindful of what they do.

After the revelation of this verse, all Mosques on the earth had been designed so that the front wall of the building (*Qiblah* wall) must be perpendicular to the direction of Makkah. Indeed, from the Islamic point of view, the Ka'bah is the first *Qiblah* to have been appointed by God to his prophets and apostles. According to Shihāb al-Dīn al-Hamwī (end of the 11th century AH / 17th century AD), in his manuscript *Tuhfat al-Akyās Fī Tafsīr Qulih Ta'ālā Aen Awal Bayt Wudīa' lil-Nās* (the masterpiece of scholars for interpreting God's speech): {The first house established for the people} (Qur'an, 3: 96), the existence of the *Qiblah* for the prophets' ritual worship did not begin with the construction or the reconstruction of the Ka'bah by Ibrāhīm. He argues that all the prophets and apostles who preceded Ibrāhīm require *Qiblah* to perform their religious rites completely. Since the existence of the House (Ka'bah) has been established for the people due to their religious function, it must be that the Ka'bah or its place may well appoint to the prophets earlier (Al-Abed, 1992, 94; Al-Hamawī, nd., 1). In all cases, the fact is that the history of the Ka'bah, as

stated in the Qur'an, represents the absolute beginning of establishing religious buildings for people and the prophets (Al-Tabari, 1983, 1:223-430, 4:6-8). This means that the **historical Mosques of the prophets, which were established before changing the *Qiblah* to Islamicjerusalem, must be consequently directed to the Ka'bah.**

When examining the direction and orientation in planning the ancient and the earliest archaeological remains existing in the present walls of the al-Aqsa Mosque (figure 14), it is clear that the alignment of its ancient foundations were not directed exactly toward north-south direction, but the planning of the al-Aqsa Mosque was deviated towards the direction of south-east.

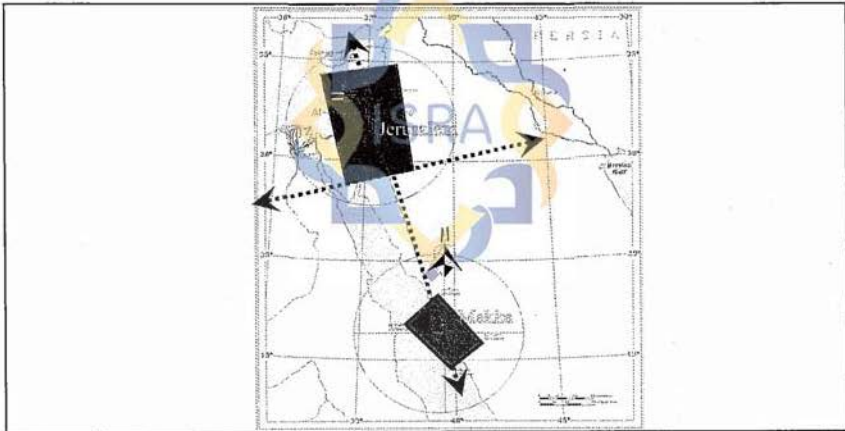


Fig. 14: The geographical location of Makkah and Islamicjerusalem. The picture shows that the southern wall of al-Aqsa Mosque is perpendicular to the direction of the Ka'bah and the area of the al-Aqsa enclave is oriented towards the direction of Makkah.

Source: Al-Ratrout (2005, 28)

The southern wall of the al-Aqsa Mosque was also deviated from the direction of east-west. It is clear, when reviewing the geographical location of both Makkah and Islamicjerusalem, that the southern wall of the al-Aqsa Mosque had been established perpendicular to the direction line of the *Qiblah* – i.e. a connecting line between Makkah and Islamicjerusalem² with some very little differences that cannot be avoided by the founder of the al-Aqsa Mosque, especially in the absence of accurate measuring devices³.

Hence, the question arises: why is al-Aqsa Mosque oriented towards Makkah and not elsewhere? Why is the southern wall of the al-Aqsa enclave planned to be perpendicular to the direction of Makkah? Does Makkah mean something to Judaism or Christianity in the Roman period? Why is al-Aqsa Mosque not directed to another direction, when it was established; such as east-west as in Christianity? Or even to respect the main cardinal points? Why to Makkah in particular? Hence, the orientation of the al-Aqsa Mosque, including the direction of its southern wall, is confirming the physical link between Makkah and Islamic Jerusalem even before the birth of the Muslims' Prophet Muhammad. This will lead, in no doubt, to accept that the one who established al-Aqsa Mosque was interested in the direction of the first *Qiblah* of the prophets which was at that time towards Makkah. Consequently, this strongly suggests that the physical and historical connection between the time of establishing the al-Aqsa Mosque and the time that precedes the change of *Qiblah* from Makkah to Islamic Jerusalem during the life of Moses (Abu 'Ubaid, 1986, 168). This is well consistent with the planning basics for all established Islamic Mosques (Frishman, 1994, 33). That is, the front wall of the Mosque, which is known as the *Qiblah* wall, must be perpendicular to the direction of Makkah. When the Muslims' Prophet Muhammad revitalised building Mosques by building his Mosque in Madinah, the choice of its location place, as indicated by the writers of *Hadith* (Muhammad tradition), was by God's order. Setting the *Qiblah* wall and determining the direction of the Ka'bah were his first priorities. The *Qiblah* wall is always attached with the covered area at the forefront of all Mosques; this is called *mughattah*, as is the case in the Prophet's Mosque in Madinah. Since the *Qiblah* wall of the al-Aqsa Mosque had already existed at the time of the first Muslim conquest of Islamic Jerusalem, so the Muslim's Caliph Umar Ibn al-Khattāb has selected the area adjacent to the southern wall to be used for Muslims place of prayer. His refusal to set up this place of prayer in the middle of the Mosque, as reported by most historical accounts, was a logical result and conventional one in the planning of the Muslims' religious building; Umar Ibn al-Khattāb says "the best location in the Mosques is their front" (Abu 'Ubaid, 1986, 168).

Hence, the planning features of the al-Aqsa Mosque, which are based on physical evidence that were reviewed and discussed in this paper, lead to several key points:

1. It appears that the Ka'bah or its place has affected the direction and orientation of the al-Aqsa Mosque when it had been established.
2. The full similarity between the planning of the al-Aqsa Mosque and the planning of the Ka'bah at the time of establishment. This observation leads to the conclusion that the plan of each is a model of the other.
3. Similarities in the planning of both suggest a historical and chronological link between the establishments of the al-Aqsa Mosque in Islamic Jerusalem and the establishment of the Ka'bah in Makkah.
4. It can be deduced from the existing direction and orientation in the plan of each of the two places that the establishment of the Ka'bah was carried out before the establishment of the al-Aqsa Mosque; this is due to the fact that the al-Aqsa Mosque is oriented towards Makkah and not vice versa. Such orientation of the al-Aqsa enclave also suggests that it had been established before the change of the prophets' *Qiblah* towards Islamic Jerusalem during the time of Moses.
5. The founder of the al-Aqsa Mosque was familiar with that which was found in Makkah in the Arabian Peninsula. Perhaps this person has lived in Makkah for some time. It is possible also that the establishment of each of the al-Aqsa Mosque and the Ka'bah had been carried out by the same person.

Conclusion

All the scientific evidence from the archaeological remains of the al-Aqsa Mosque, which was briefly discussed in this paper, confirm that the planning principles that dominated its establishment are consistent with the planning principles for all Islamic Mosques. These design basics of Mosques verify that the Ka'bah in Makkah in the Arabian Peninsula forms the main source on which the founder of the al-Aqsa Mosque drew his architectural concept. Thus it provides physical evidence that confirms the historical

architectural development of the al-Aqsa Mosque throughout history did not eliminate or change the Islamic identity of this place since establishment. It also leads to the conclusion that the history of the establishment of the al-Aqsa Mosque agrees with what has been reported from the *Hadīth* (Tradition) of Prophet Muhammad, quoted by Abu Dhar al-Ghafārī said (Al-Bukhārī 2000 v.2, 661-676; Muslim 2000 v.1, 209-210):

عن أبي ذر الغفاري رضي الله عنه أن رسول الله صلى الله عليه وسلم قال "يَا رَسُولَ اللَّهِ أَيُّ مَسْجِدٍ وُضِعَ فِي الْأَرْضِ أَوَّلَ قَالَ الْمَسْجِدُ الْحَرَامُ قَالَ قُلْتُ ثُمَّ أَيُّ قَالَ الْمَسْجِدُ الْأَقْصَى قُلْتُ كَمْ كَانَ بَيْنَهُمَا قَالَ أَرْبَعُونَ سَنَةً ثُمَّ أَيْنَمَا أَذْرَسْتُكَ الصَّلَاةُ بَعْدَ فَصَلَّهَ فَإِنَّ الْفَضْلَ فِيهِ".

Abu Dhar Al-Ghafārī – May God be pleased with him- Said: “O Messenger of Allah: Which Mosque was established first on earth? He said: Al-Masjid Al-Harām [in Makkah]. I said: Then which one? He said: Al-Masjid Al-Aqsā [in Islamicjerusalem]. I said: How much time was between them?” He said: Forty years, and when it is time for prayer, wherever you are, pray, for that is where the merit is.”

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- 1 It is important noting that this historical description to the Ka'bah corresponds with the reconstruction plan of the Ka'bah that had been published by Creswell in his book *Early Muslim Architecture* in 1932. However, he confused al-Azraqi's description of the Ka'bah at the time of Ibrāhīm with building the Ka'bah on the hands of Quraysh during the life of the Muslims' prophet Muhammad. Not taking into account the Ka'bah's successive architectural changes. See; Creswell, 1969, 1:1.
- 2 The Ka'bah is located at a distance of 781 miles from Islamic Jerusalem which is estimated to be about a 1258 km. Its location has a bearing of N157 ° , 20 'E from the site of the al-Aqsa mosque.
- 3 It cannot be expected the angle between by the southern wall of the al-Aqsa mosque and the direction of the *Qiblah* to be equal exactly 90 degrees without having any small errors or differences in measurement, especially, the one who established the al-Aqsa mosque and Muslims in the early Islamic period do not have the instrument of absolute accuracy for measuring as in the present time.
- 4 The correlation between the al Aqsa mosque and the Ka'bah was not confined only to the period of establishment of the place; Karen Armstrong believes that the Ka'bah formed a major source of architectural ideas that were used in the development of the al-Aqsa mosque in the early Islamic period. See: Armstrong, Karen (1997). "Sacred Space: The Holiness of Islamic Jerusalem". From the *Journal of Islamic Jerusalem Studies*. Vol.1, no.1, (winter) p.16.