

## **The Aesthetical Aspects for Monumentality of Mamluk Architecture Reasons and Analysis. Study Case : Sultan Hassan Complex in Cairo**

**Dr. Fayrouz Mohamed Mahmoud**

Lecturer at the department of Decoration Faculty of Applied Arts – Damietta University

### **Introduction:**

The Mamluk dynasty controlled over Egypt, Palestine, Levant, and parts of Al-Hijaz. It lasted the Ottoman invasion in early sixteenth century. The two battles e Battle of Marj Dabiq in 1516, followed by Ridaniya in 1517, ended with the destruction of the Mamluk dynasty that had ruled with the support of the puppet Abbasid caliphs. Comparing to their predecessors, the Mamluks had patronized art and architecture in the vast territories under their control. Rulers in the earlier dynasty of Ayyubids, were mainly concerned with military style architecture, since their time was characterized by warfare.

The Mamluk Dynasty was one of the greatest empires that used art and architecture as a means to manifest their power over their territories. The current paper will discuss Mamluk grand scale architecture in terms of how it represented the sovereignty of the rulers.

Ibn Khaldūn in “Al-Muqaddimah” (Ibn Khaldūn 1967: 61) justified the relationship between power and architecture, stating that the size of the erected monuments by dynasties are proportional to their power.

This paper attempts to bring clarity to the manifestations of monumentality of Mamluk architecture and discuss the reasons and factors behind such monumentality.

Since the pre-Islamic period, most of the regions that had been dominated by Muslims, had significant monumental architecture that expressed their glory. These kinds of structures characterized the identity of each dynasty.

Egypt, in particular, developed a captivating architectural style that represented a challenge to any power that ruled it.

In Muslim imperial history, there is significant evidence to prove that Muslims responded to such architecture with a desire to surpass the earlier achievements.

### **Historical background:**

Mamluk history is divided into two periods based on different dynastic lines. The Bahri Mamluks (1250–1382) were of Qipchaq Turkic origin from southern Russia. They are named after the location of their barracks on the Nile “*al-bahr*”, literally “the sea, The Burji Mamluks (1382–1517) were of Caucasian Circassian origin, who were quartered in the citadel “*al-burj*,” literally “the tower” (Abouseif, 2007).

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The Mamluks were not local rulers, and were newly converted to Islam.

Consequently, they needed the legitimization from the Muslim population.

To win support and to prove their eligibility and dedication to the faith they urbanized Cairo with their monuments and, in particular, religious architecture.

The Mamluk period is marked with progression and a growing interest in their architectural, historical, and sociocultural qualities (Rabbat, 2002).

#### **Cairo, Mamluks and Piety:**

Mamluks were keen to promote themselves and their Cairo in a certain pious image. To do this they wished to implement the concept of *taqwa*, meaning faithfulness and piety, in the form of the city and the quality of the architecture. "One way of engaging with this idea is to suggest extensions of the concept into architecture and urban design" (Khatami, 2015).

Erecting religious structures was a way to physically manifesting an internal desire to appear devout.

One might borrow the term "Naked architecture" (Mosco, 2012, p. 8) from Valerio Paolo Mosco who discussed the nudity in architecture, in the Mamluk case, they were very keen to cloth their architecture with their selected theme of *taqwa*.

Interestingly, Egypt, under the Mamluks witnessed times of violent political upheaval, as well as economic and social changes that are in contradiction to the image of piety and religious devotion shown in their architecture.

#### **Urbanization of Cairo**

Burckhardt (Burckhardt, 1992) attempts to identify the key design attributes for the Islamic city. He argues that humility defines a truthful relationship in scale between Allah "the creator" and people "the created".

In urban architecture of the Islamic city this means none of the individual buildings should take prominence, they all should contribute equally to each other. However, as one observes in most of the historical Islamic cities, capitals in particular, grand architecture exists to represent the imperial patronage and elite domination.

Architectural Communication Theory (Smith, 2010) proposes that architects and planners design cities and buildings in order to communicate specific social and political messages related to identity, power and wealth. These are mainly embodied in monumentality architecture. This is notably seen in the Mamluk architecture in Cairo, where the concept of the scale of the architecture is materialized in the scale of their power and piety. The urbanism and architectural development in Cairo incited Ibn Khaldun to report that Cairo is the center of Islam and the epitome of *Imran* (Ibn Khaldūn 1960,74).

A large expansion in building structures, starting in mid-14th and early 15<sup>th</sup> centuries was as a result of the interlacing of many factors. Economics was the driving force in that the prosperity

from the economic architectural endowments acted as a backbone in reforming the image of many Mamluk cities, especially Cairo.

### **Mamluk economy and prosperity**

In order to erect eternal architecture which glorified the Mamluk dynasty, they needed a prosperous economy. The Mamluks dominated two of the most important and richest regions of the time, Egypt and Levant (Bilad al- Sham). Mamluk territories had a strategic position on the spice route from the East to Europe. This was in addition to the abundant economic resources such as agricultural and manufactured goods, in particular, the textile and sugar industries. (O'kane, 1996). Mamluk prosperity was also supported by a system of monopoly or oligarchy in controlling trade.

Mamluks prevented families from becoming economically significant through a system of fines, expropriation of property and controlling access to markets.

### **Sultan Hassan:**

Mamluk Sultan Hassan was one of eight sons of Sultan Al-Nasir Muhammad Ibn Qalwuon. He reigned twice, firstly at the age of 13 in 748/1347 when the Mamluk Emirs were in full control the state. The powerful Emirs controlled the helpless Sultan. In 1350 Sultan Hassan imprisoned them which lead to a coup in which he himself became imprisoned in 1351 for over three years. He returned to the throne motivated to build a lavish city because of the deprivation he had suffered in his earlier reign (Abouseif 2007, 205). He built a palace in the Citadel, a madrasa in Jerusalem, shrines in Mecca and and Medina were extensively restored. He built a mausoleum for his wife and another for his mother then he erected his most iconic complex in 1356. The Sultan Hassan Mosque immortalized his name rather than his ruling period and is the most remarkable monumental example of Mamluk architecture.

### **Madrasa and the Mausoleum Complex of Sultan Hassan (1356-61)**

The Sultan Hassan complex is considered to be a pioneering innovation in the history of Islamic art and architecture (Fig.1). Khalil Al Zahiri, the Mamluk historian, reported that "Sultan Hassan asked the architects which is the highest building in the world? He was told: Iwan Kisra, Sasanian palace in Ctesiphone. So he ordered that his madrasa should be 10 cubits higher". Maqrizi demonstrated the great influence of the Sasanian inspiration on the construction of the mosque, he claimed that the Qibla Iwan (Fig.2) was 5 cubits wider than the vault of the "Iwan Kisra"<sup>1</sup> (Maqrizi 2002, 634)<sup>1</sup>, he estimated the Qibla Iwan expenses to be 100,000 silver dirhams, he calculated the daily expenses to be 20,000 dirhams. This continued for three years, without a day being missed. (O'kane, 1996). Al- Zahiri stated that the endowment for the madrasa exceeded the economy for a huge kingdom. (Zahiri, 1893, p. 31) Yet Rabbat argues that some historians may have exaggerated

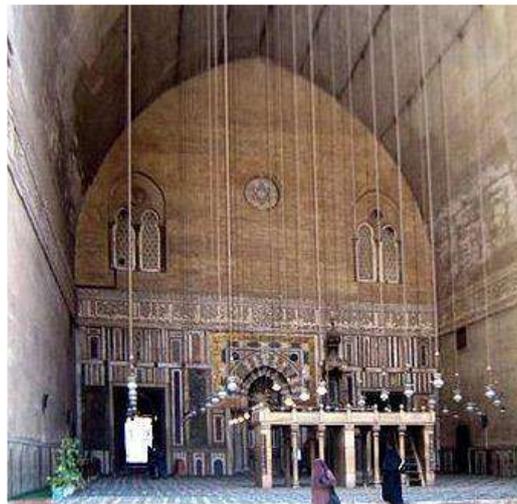
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<sup>1</sup> In fact, it is much smaller than the Iwan Kisra, measuring some 26.5x21.25. the comparison with the Iwan Kisra can be seen in many historians in this period.

the amount of the expenditure order to overstate the Sultan's power and generosity (Rabbat, 2002). After the Sultan's death, Ibn Kathir, the contemporary Syrian historian, blamed him for squandering public funds and people wages to achieve his own desires on unneeded monuments (Abouseif, 2007, p. 201). However, the Sultan found another recourse for funding the pious building, as he endowed agricultural lands in both Egypt and Syria and half of city Antakia.



(Fig.1)



(Fig.2)

### **Orthodoxy practices**

The mosque acted as a state mosque, and was ahead of its time in many respects. It was the only mosque to have two preachers(khatibs), and the number of the students exceeded other Mamluk madrasas, moreover the mosque had forty-eight Mu'zzins to work in two shifts, whereas the royal mosque of al-Nasir Muhammed in the Citadel had only eighteen.

### **The construction**

The construction of the Sultan Hassan complex faced two challenges in regard to funding and supply of labour. Devastation was caused by the black death in the labor market. According to Maqrizi all urban and rural crafts almost came to halt due decimation of the population (Abouseif, 2007). According to the Awqaf documents, the construction started in

1356 and it proceeded from the inside to the outside (Abouseif, 2007).

Many parts of the mosque were completed after the Sultan's death. This was documented with the inscriptions on the wooden Qubba in the central courtyard and on the entrances of the four Madrasas, and mentioned by Sultan by (Shahid / Martyr) in 1362. The madrasa occupies 8000 square meters. The complex established new mores or codes that were followed in other Mamluk mosques. The madrasa building had a small primary school attached which provided education for two hundred students. In addition a waterwheel was connected to a rectangular pool and latrines and an ablution place. Khalil al-Zahiri stated that two minarets survived in his time, he claimed the minarets can be seen from a long distance on a clear day. He also described the building as one of the wonders in the world with its four Iwans, of a thickness of 18 Egyptian cubits (Zahiri, 1893). The main Iwan was dedicated to the Shafi'e madhab, while the western Iwan was dedicated to the Hanafis, and the northern Iwan for Malikies and the southern Iwan for Hanbalis. (Abouseif, 2007, p. 204).

#### **The influences of different craftsmen:**

The construction of the mosque attracted many craftsmen from the various Mamluk territories and from Anatolian provinces. Consequently, the Anatolian influence is clearly seen in the decoration of the mosque. This added to the unique and diverse aesthetics and design work in the building making it distinctive among other Mamluk architecture.

#### **The location:**

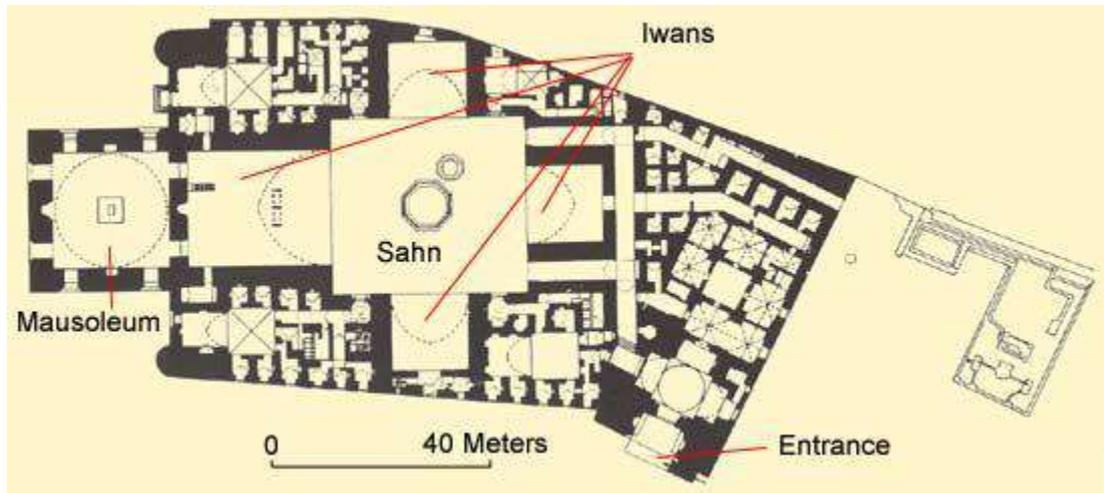
Sultan Hassan chose a strategic location for his iconic structure away from the Fatimid Cairo and the Qasba street, where most of the emirs erected their buildings. Sultan Hassan selected a site close to the Cairo Citadel. In order to accomplish the building, he demolished a palace of Yalbugha al- Yahawi, which was built by his late father Sultan al-Nasir at huge cost of twenty-one million dinars (Abouseif, 2007). One can argue that Sultan Hassan probably had a political agenda to use this iconic building to outshine other Sultans and the Citadel itself and show himself to be powerful. After his death the Mosque was used as a fort to attack the Sultan in the Citadel (Abouseif 2007,207). Over time many attempts have been made to destroy the Mosque but all have failed due to its robust construction.

#### **The position of the Mausoleum**

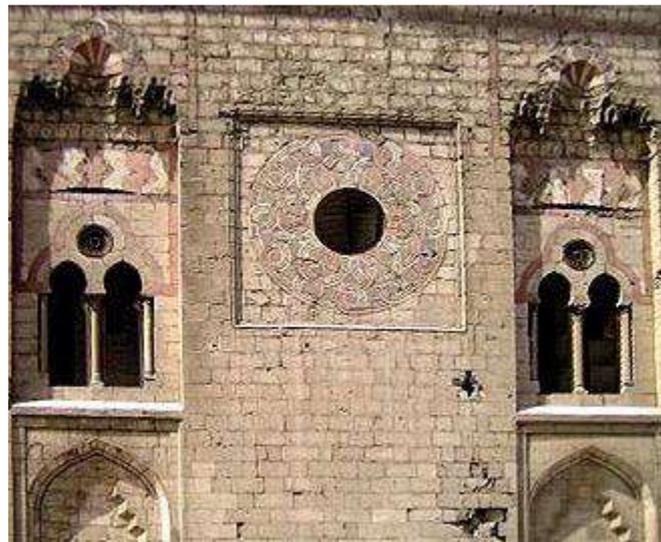
Although Qibla Iwan is usually designed to be the most dominant feature in the majority of mosques, however, The Sultan's domed mausoleum is situated directly behind the Qibla Iwan (Fig.3), projecting from the structure of the mosque, facing the great Citadel of Cairo. With the exception of the Emir Husayn mausoleum built in 1319 (Abouseif, 2007), no other Mamluk mausoleum was located behind Qibla Iwan.

The Emir Husayn mausoleum is much smaller and not directly behind the mihrab. This is also seen in the Rashid al-Din's tomb in the Ilkhanid era, that lays directly behind the south iwan on the qibla's axis (Blair, 1984). The Sultan's domed mausoleum chamber is considered one of the Islamic world's biggest domed chambers (O'kane, 1996). It

can be argued that a domed chamber behind an Iwan, reminds us of Sasanian architectural style where the Iwan is always accompanied by a domed chamber. One interesting feature is the limitation of light in the mausoleum. Although there was an opportunity to allow light through large windows on the three sides, he chose to only create small windows. This has the effect of creating an atmosphere of veneration (Fig.4).



(Fig.3)



(Fig.4)

#### **The exterior architectural innovations**

The dome of the Sultan Hassan Mosque is unusual because of its shape and the materials it is made from. The original wooden dome collapsed in 1671\1082 and was replaced with the current one. The original was the largest wooden dome ever seen in Cairo with an inner diameter 21 m (Abouseif 207,208), and covered with lead. The original dome resembled the shape of an egg, which calls to mind the domes of Syltaniya (1350's) (Fig. 5) and is a clear influence of Seljuk style. It was also only the second dome to be covered with lead in the Mamluk period.



(Fig. 5)

The mosque had four minarets. Two of them are located in the southern side and the other two flank the portal. This was another innovation that was not seen in Mamluk Cairo, yet the two minarets of the portal were not completed since the collapse of the northern minaret had been considered as a bad sign since it caused the death of children in the primary school in 1361.

Moreover, Ibn Kathir reported that the original northern minaret was doubled headed, a feature that was repeated in the later architecture in many mosques such as Al-Azhar, and the southern minaret was the highest one in the Mamluk period with a height of 84m.



(Fig. 6)

#### **The Aesthetics in the Façade and the portal:**

The façade of the mosque is mostly of stone interlaced with marble in parts, particularly in the portal. The skyline of the mosque was decorated with a cornice of carved muqarnas, that projected by 1.5 meters manifesting the proficiency of the masonry like no other building in Cairo.

In order to increase the prominence of the mausoleum, the designer

asserted uniqueness by carving a different beautiful decoration in the summit of its structure. In addition, the pyramid like recesses of the windows in the facade were covered by geometric ceramic pointing to the Anatolian influences (Abouseif 2007, 209).

Both facades , the southern and the northern, have extraordinary number of windows in six recesses, each with eight windows, this pattern had not been shown in contemporary architecture and accounted as another magnificent attribute in the architecture of Sultan Hassan mosque. (Fig. 7)



(Fig. 7)

#### **The portal:**

The portal solely is considered a master piece of Islamic art unlike any seen in any contemporary or latter architectural in around dynasties. With 38m height and shifting 17 degrees from the façade. Its majesty and grandeur can be seen from the Citadel of Cairo. (Fig. 8)

The Seljuk influence is notably observed. The portal contains a stone arabesque which is carved with geometrical parterres, interlocking framing floral bands with Chinese influence that had not been shown in any previous Mamluk architecture(Fig 9 ) (Abouseif, 2007). The carved marble is seen in the portal resembling the Seljuk Anatolian decoration style in both sides of the portal, marble niches with muqarnas carrying the Anatolian scent are located (Fig 10).



(Fig. 8)



(Fig. 9)

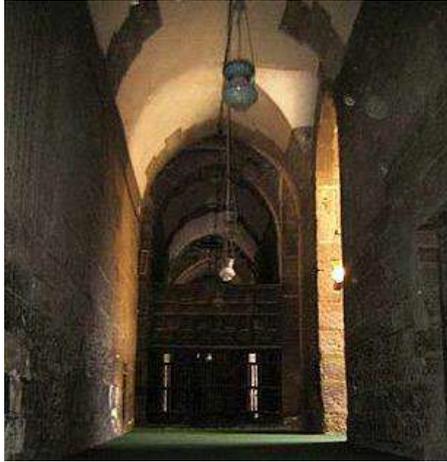


(Fig 10)

### **Analysing the interior architectural Attributes**

Visitors enter the courtyard through a bent entrance that goes beneath the madrasa wing, it has dark and limited light resources. This leads the visitors to an unexpected courtyard with the impressive four Iwans, in a dramatic impression (Fig.11,12). There are no residents units overlooking the passage in contrast with other madrasas, this separation between the academic community and the public was due to the dual functions of the complex (Abouseif, 2007). One argues that the architect had a respected point of view , that having one main entrance with no access from residents units above, and the madrasas wings had no direct communication between each other, only through the courtyard, so one may assume that it could be a way to politically control the hundreds of residents students.

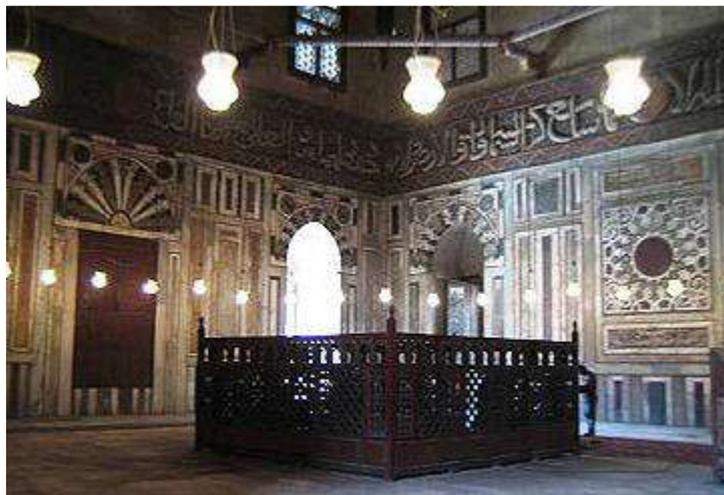
The Qibla wall is heavily decorated by inlaid marble patterns, and Quranic stucco inscriptions banding the upper part. The significant feature is the Kufic style used at a time when the Naskhi style was dominating writing, particularly since the Ayyubid era. In addition, there is parallel of use of the magnificent floral Chinese motifs within the Kufic inscriptions, while in the mausoleum chamber the designer used wood in inscribed with Quran verses in the Naskhi style(Fig.13)



(Fig.11)



(Fig.12)



(Fig 13)

### Conclusion:

Mamluk architecture supported their political approach. It was an important tool to prove their eligibility for rolling the vast Muslims territories in Egypt and Levant. The Mamluk architecture in Egypt surpassed any other contemporary architecture. They urbanized Cairo with their monuments and, in particular, religious architecture. Mamluk were interested to cloth their architecture with taqwa and faith. They erected Grand scale architecture which still memorizing their period. Complex of the Mamluk Sultan Hassan in Cairo, is one of the iconic Islamic structures in the whole Muslim medieval world. The current paper represented many of innovations and architectural attributes that distinguished the complex unlike any Mamluk building. The paper explored these innovations, starting from selecting the location of the mosque until the aesthetics details in the interior complex. The paper followed the descriptive and the analysing methods to investigate all the initial and approaches, in particular, the political perspective beyond the architectural and design.

Finally, the complex of the Mamluk Sultan Hassan is signifying the Mamluk architecture in a crucial historical period in the Muslims world. Where the glory of the imperial Mamluk dynasty is notably seen in the grand structure and global influences and innovations .

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