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MOSQUE ARCHITECTURE IN DELHI : CONTINUITY AND CHANGE IN ITS MORPHOLOGY

*Asif Ali**

ABSTRACT

This paper presents the summary of a recently completed dissertation by the author keeping in view the objectives viz.

- 1) to study and identify the essential elements of the mosque, their meanings and their functions,
- 2) to study the evolution of the mosque architecture in Delhi from early Islamic period to present time and
- 3) to identify and establish the continuity and the change in the morphology of the mosque in Delhi and the factors which influenced its development through time.

To answer the research question and to accomplish the objectives mentioned above, following methodologies were adopted.

In order to view the continuity and changes in the mosque architecture in Delhi, it seemed essential to study their historical enquiry. It was not only the survey of the historical mosque but the approach was to understand the future of mosque architecture through their past. This enquiry allowed us to observe the evolution of the mosque architecture and the study of its different elements.

Almost 28 representative mosques were studied, beginning from the very first mosque built in Delhi up to the present-day mosques. The mosques were selected on the basis of their chronology, at least one from each dynasty of Muslim rule in Delhi or representing a particular typology. Contemporary mosques were selected from several clusters of Muslim population in East, West and South Delhi. The selection criteria of a contemporary mosque were based on a public survey of each region. The people were asked to mention the name

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of the attractive mosque or the name of the most comfortable mosque they think in the region. The elements of mosques were studied under the headings viz. 1) Spatial elements: Ablution area, Courtyard, Verandah, Prayer Hall, Mihrab and Minber, 2) Decorative and Symbolic Elements: Domes, Minarets, Arches, Calligraphy, Geometric and Arabesque Pattern, 3) Structural Elements: Arcuated, Trabeated, Load Bearing and Framed Structure and 4) Finishing Materials: Quartz, Red Sandstone, Marble, Lime Surkhi and Cement Sand Plaster.

Finally, a chart of different elements of mosques in Delhi was prepared in chronological order so that the pattern of changes and continuity may be observed and appreciated in the course of time of study.

INTRODUCTION

With the arrival of Muslims in India, the amalgamation of regional and immigrated technologies evolved a newer architectural style. North India, being a first confronter and centre of Muslim rule, experienced the major impact of imported technology. The fusion of two different architectural approaches also affected the construction of houses of worship for the new religion in the country. Despite of some unusual structures in the beginning of their rule, the personal interest of rulers and their eclectic approach refined the architecture of the mosques up to the highest levels of aesthetics. With the declination of Muslim rule in India, the design of the mosques became an architectural expression of common people. Most of the mosques during British period were built by locally influential people in which the late Mughal style was followed. After independence, two kinds of developments in this field may well be observed i.e. mosques were generally constructed by the people requiring a place of worship in their locality and very few mosques were designed by formally trained architects or engineers. It is observed that these contemporary mosques also express the continuity in their architecture from past and some changes in their morphology due to change in technology and scarcity of land in an urban area like Delhi.

Delhi had been an administrative centre of India throughout the history with minor shifts at times. The capital and its surrounding cities, being the first confronter and epicenter of Muslim rule, experienced the

major impact of political changes which consequently affected the architecture of the region. Hence, this study of mosque architecture is confined to the city of Delhi only.

TRADITIONAL TYPOLOGY OF MOSQUES AROUND THE WORLD

There are six recognized major traditional typologies (Holod & Khan, 1997, pp. 12-14) of mosques around the world such as Arabian, Turkish, Iranian, Indian, Chinese and South East Asian as described in the following paragraphs.

1) Arabian Type

The prophet's (SAW) mosque was constructed with flat roof of leaves of date trees supported by date palm trunks. It had a rectangular prayer hall facing towards Qibla while a covered platform was located near the entrance on the opposite side, called Suffa. The poor companions of the prophet (SAW) used to spend their nights on this platform. The adjacent structures to prayer hall were the rooms for prophet's (SAW) wives. The prayer hall with many palm trunks was similar to the hypostyle hall. The mosque became a model for the later period in Arab, Africa and Spain (Fig.1). Most of the times, the courtyard was the part of the plan of the mosque. Mihrab and Minaret were not included in the early mosques.

2) Turkish Type

This type of mosques are mainly characterised by prominent use of domes and minarets with slender proportion. These mosques were mostly built during Ottomon period (Fig.2) . The plan is having usually courtyard which was an integrated part of the plan. The prayer hall was covered with hemispherical dome in the center and half domes on each side.



Fig.1. Arabian Type Hypostyle Mosque



Fig.2. Turkish Type Mosque

3) Iranian Type

Four massive Iwan gateways around a courtyard is the main feature of this typology (Fig.3). The prayer hall is covered with pointed domes. The bulbous domes are more vertical at the apex as they turn sharply towards the centre. Pointed arches are used for the openings.

4) Indian Type

The Indian mosques were modeled on the basis of Iranian four Iwan type with intensive courtyard and onion shaped domes (Fig.4). The materials like red sandstone and marble, distinguishes the Indian mosques to the Iranians.



Fig.3. Iranian Type Mosque



Fig.4. Indian Type Mosque

5) Chinese Type

The Chinese mosque typology is characterized by the series of courtyards intertwined with gable roof timber structures (Fig.5). The precedents for the form of a Chinese mosque are the house, temples and palaces of the region.



Fig.5. Chinese Type Mosque



Fig.6. South East Asia Type Mosque

6) South East Asian Type

The South East Asian type mosque is very similar to the Chinese one but it has pyramidal two tiered or three tiered roof (Fig.6). Later, the minarets were added to the plan of the mosques.

ARCHITECTURAL ELEMENTS OF A MOSQUE

1) Qibla (Kaaba in Makkah)

The Muslim worshippers throughout the world face towards the kaaba in Makkah while performing their prayers. Quran says, “We see the turning of thy face (for guidance to the heavens) now shall We turn thee to a Qibla that shall please thee. Turn then thy face in the direction of the sacred Mosque: Wherever ye are, turn your faces in that direction” (Quran 2:144). Thus, it is must that all the mosques in the world should be oriented towards Qibla.



Fig.7. Mihrab and Mimeter

2) Mihrab (Niche)

It is a niche placed generally in the centre of the Qibla wall of the main prayer hall. The early mosques and even prophet's (SAW) mosque did not have Mihrab. It was introduced by the Caliph Al-Walid I in the Prophet's (SAW) mosque later (Peterson, 2002, p. 186). The Mihrab was always an ornamental element and sometimes multiple Mihrabs were also included. Mihrab points toward the Qibla (Fig.7).

3) Mimber (Pulpit)

Mimber, a raised platform, placed right of the Mihrab, is used to deliver sermon on special occasions (Fig.7). It has few steps generally of wood, stone or brick. In some cases, the Mimber is surmounted by dome and has a door also. The Prophet (SAW) mosque had a Mimber which he used to preach to the people. In India, mostly Mimbers are finely carved and are built of stone.

4) Geometric and Arabesque Pattern

Decoration through geometric and arabesque pattern is an important element in the mosques. Due to prohibition of figurative representation in Islam, the artists of Islamic world developed complex geometric designs with the mathematical precision. Intricate patterns on walls, ceilings, floors and furniture were developed by using symmetry and repetition. Mostly polygons of various sizes and colors are used to create intricate patterns of mosaics (Fig.8). Arabesque patterns are decorative motifs of plants, flowers and creepers (Fig.9). These motifs symbolize gardens of paradise mentioned in the Quran. They cover walls and borders of calligraphic panels and arches and follow the principles of geometry.

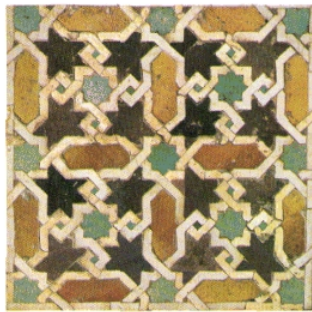


Fig.8.Geometric Pattern



Fig.9. Arabesque Patten

5) Calligraphy

Calligraphy is also a significant decorative element in the mosques because of the prohibition of figurative presentation. Apart from their aesthetic value these, sacred Qu'ranic writings have their symbolic meaning too.

6) Ablution Area

It is obligatory to wash the hands, feet and face for a Muslim before prayer which is called ablution (Wudu). In historical mosques, a water tank (Haud) generally was provided in the centre of the courtyard. In modern times, water taps in the ablution area are provided for the same purpose.

7) Court Yard

Courtyard is not only a climatic element but a spill out space of prayer hall in the traditional mosques required during Fridays and Eid Prayers. Courtyard of the mosque, as a social element, also provides a gathering space for the community.

8) Minarets

It is a tall tower built inside the mosque campus (Fig.10). Earlier, perhaps it was built for the Muezzin (a person who calls for the prayers) to call the devotees to the prayers. Located generally at the corner of the mosque, the minarets may be one, two or many in numbers. The minaret is the top most point of the mosque so that the mosque can easily be recognized in a locality. However, the early Arab mosques did not have any minarets.

9) Arches

An arch is a curved structure to support the superstructure and generally to have an opening underneath (Ching, 1995, pp. 12-14). The topmost block is called keystone and placed in the last. Since prehistoric times, the arches have been used by the ancient Egyptians, Babylonians and Greeks. Muslim architects modified the Roman arch and developed pointed and horseshoe arches (Fig.11). These arches were frequently used for the construction of mosques. In India, the earlier arches were corbelled in nature, influenced by Hindu Architecture, later pointed arches were used during Sultanate period and a four centered arches were frequently used by Mughals.

10) Domes

The domes, primarily are roofing solution and generally placed directly above the main prayer hall of the mosques, symbolize heaven and the sky. The Mughals built the onion-shaped double domes,

inspired from contemporary Iranian architecture. Sometimes, there were multiple domes in the mosques, often a few smaller with a larger dome in the centre of prayer hall.



Fig.10.Minaret



Fig.11. Arches

HISTORICAL CONTEXT AND CONTEMPORARY MOSQUE ARCHITECTURE IN DELHI

Although the stylistic development of mosque architecture in the history does not correspond to the beginning and the termination of dynasties but the discerning morphological changes in architecture of mosques in Delhi shall be studied in their chronological order.

1) Mamluk's Period

Quwwatul Islam mosque is the first survived mosque in Delhi. Qutubuddin Aibak conquered the fortress and laid the foundation of Quwwatul Islam mosque (Warrach, 2008, p. 165). There is a four aisled deep prayer hall on the west and the verandahs on three sides around a courtyard. To add Islamic character to the building, a wall with arched gateways was constructed in 1999 on the western Hindu style sanctuary (A. & Desai, 1979). The prayer hall and verandah's corbelled shallow domes are supported on Hindu pillars due to no familiarity of the local craftsman to the technology of new rulers. The verses from Quran were engraved in relief work. A mosque with the same features was constructed at Ajmer in 1200 AD (Brown, 1956), but with some improved features. The isolated minarets are as victory towers rather than symbolic elements of the mosque. Although, it was an era of conflict between two

technologies in the beginning and the immigrated technology was accepted only after almost a century.

2) Khilji's Period

Ala-al-Din added new space to the Quwwatul Islam Mosque. He also started to construct a minaret almost double to the size of Qutub Minar which could never be completed. However, the one of the four gateways to the extended plan of Quwwatul Islam mosque shows the refinement of the beginning of the mosque architecture in medieval India. Tohfewala Gumbad at Shahpur Jat is also the mosque of Khilji's period, only central part with dome is survived on date (Fig.12). Jamat Khana mosque at Nizamuddin in Delhi has a rectangular plan and three arches on the façade, resembles the Alai Darwaza, later two wings were added by Mubarak Khilji (Alfieri, 2000, p. 33). A migration of many artists from Persia during Mongol's devastation influenced the contemporary Indian Architecture.



Fig.12.Tohfewala Gumbad at Shahpur Jat

3) Tughlak's period

During this period, grey sandstone was replaced to red sand stone and mosques were having less ornamentation (Chandra, 2012). Begumpuri mosque based the Iranian model has a prayer hall on the western side of the courtyard and domed arcades on rest of the three sides with an entrance at the centre (Fig.13). The prayer hall consists of a projected Iwan with tapering turrets and flanked by two domed aisles. Khirki mosque and Kalan Mosque at Hazrat Nizamuddin have

cruciform plan and both are raised by one storey. The domed arcades divide the courtyard into four parts. The unusual plan of these mosques are having split courtyard approachable through entrances flanking by sharply tapering turrets. One storey high Tughlaq mosques generally have basement which probably was used as living rooms for mosque attendants and pilgrims, however, it improved the elevation of courtyard by necessitating the flights of steps leading to the entrance (Grover, 2006).

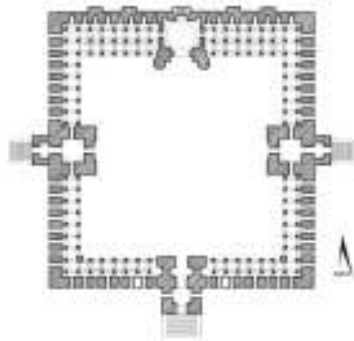


Fig.13.Plan of Begumpuri Mosque

4) Lodi's Period

A single nave prayer hall was evolved during Lodi's period. It was a departure from the previous hypostyle prayer hall type mosque. Bara Gumbud Mosque is the one of the earliest models of these kinds of mosques. This characteristic was continued till the late Mughal period and the reason was advancement in the development of an unusual type of arch which was evolved during late Tughlaq's period. Moth ki Masjid has a similar plan as that of Sikander Lodi's mosque but has a façade with better proportions.

5) Mughal's Period

Jamali Kamali Mosque built by Sheikh Fazal al Allah in 1528-29 AD is one of the most beautiful mosques of Babur's period. The early mosques of Mughal's period are single domed, two aisles on both the sides with projected Pishtaq from the wings and fluted small circular towers are framing the central Pishtaq having calligraphic inscription of Qur'an. Sometimes, the mosques have a separate entrance for royal family members but the architectural characteristics of these

early mosques of Mughal's period are more of Lodi's style (Fig.14). The dominance of Lodi's style in the design of the mosques was continued till the Humayun's tomb came into being as the first significant building of Mughal's architecture. Later, the transition of red sand stone to white marble added another milestone to the Mughal's architecture. During Shahjahan's period, the mosque architecture in Delhi reached at its zenith and Jama Masjid in the city of Shahajahanabad was constructed.



Fig.14. Mosque at Old Fort



Fig.15. Moti Masjid, Qutub Enclave

Jami Masjid Delhi was constructed on a raised platform with extensive courtyard approachable through pyramids of steps on its three sides. On the other hand, Moti Masjid in Red Fort is an example of private worship place for the emperor, Aurangzeb. The white marble structure has three bulbous domed prayer hall with small courtyard having ablution tank in the centre. The whole building is enclosed by high walls to enhance the sense of separation and seclusion from physical world. The front of the prayer hall is headed with curved Bengali cornice. Prominent sinuous lines are used on the surface for decoration which became a significant feature for later buildings. The parapet is decorated with small minarets. The mosque has its prototype in the Red Fort, Agra, Nagina Masjid built by Shahjahan. This structure remained as an inspiration for the late Mughal rulers for next centuries and a mosque with the same name was built with similar material and architectural features but without sinuous lines (Fig.15).

6) British's Period

After the declination of Mughal's empire in Delhi, mosque patronization was shifted from rulers to rich people of the society. Thus, deterioration in the quality of materials used in the construction of mosques is clearly

visible during this period. The British influence rose in the south and eastern part of India while the northern region was not influenced much during early colonial period. Later, when Delhi became the new capital of British rule, a little impact over mosques architecture can be observed. Any innovative design was not observed during this period. However, the style of later Mughal's period, the three domed structure with projected pishtaq and turrets was continued. One of the examples of this period is the Lal Masjid (Fig.16). The mosque is finished with red sandstone, has a mezzanine floor over verandah. The projected double storey pishtaq is flanked by three cusped arches. Two minarets at the end of façade are not well proportioned with the central mass.



Fig.16.Lal Masjid

7) Post Independence Period

In 1947, with the independence, India was divided into two countries, India and Pakistan. Many influential Muslims migrated to Pakistan which further led the mosques architecture to poor condition. Today, the most of the mosques are erected by common people and the funds for construction are contributed by the commoners even for the construction of a small mosque without any proper technical support. This resulted into the deterioration of the architectural features and morphology of mosques in India. In 1997, Renata Holod and Hasan-Uddin Khan compiled a survey of mosques worldwide built during 1950s and 1990s, no mosque of India found an architecturally significant place (Holod & Khan, 1997). Only few mosques were designed by formally trained architects for instance Markaz Mosque,

Okhla (Fig.17). In Delhi, the vertical expansion has become the necessity of time due to scarcity of land. The multi storey mosques are mere boxes with some unattractive arches on the façade surmounted by domes and minarets. The reason behind is the noninvolvement of technical skills and availability of funds in stages and installments. Jami Masjid Karol Bagh is a four storey mosque erected on framed structure with arches and minarets as identifiable elements though not proportioned with the rest of the building (Fig.18).



Fig.17. Markaz Mosque, Okhla



Fig.18.Jami Masjid, Karol Bagh

CONCLUSION

The author observed the following salient findings of the dissertation.

- 1) In Delhi, the glory of mosque architecture reached at its zenith under the sovereignty of Mughals during medieval period. With the declination of Mughals, the patronage of mosques passed on from the rulers to the influential people of the society.
- 2) During British period, the artisans continued the architectural style of later Mughal period. However, they seemed to be experimenting with comparatively smaller mosques built in inexpensive materials.
- 3) In modern time, the mosque architecture has been developed generally by common people without involvement of formally trained architects and technical advisors. The haphazard construction due to lack of funding and absence of supervision led the mosque architecture into a poor state in the region with few exceptions. The mere act of applying arches on the façade which even are sometimes not well proportioned with the whole structure has been a

typical characteristic of the mosques in modern India.

Though even the mosque architecture in Delhi in present time has reached to a very sympathetic stage in comparison to the earlier centuries but the elements studied here found repetitive in their morphology. Apart from the most essential spatial elements like, ablution area, prayer hall mihrab and minber, the decorative and symbolic elements like, arches, calligraphy, domes and minarets are found repetitive in high percentage. The interesting finding of this research is that, the arches are the part of each and every mosque from the beginning to the end, whether true or false, proportionate or disproportionate. The reason might be its symbolic and identifiable character. The structural as well as finishing materials are majorly changing elements with the change in conventional technology.

Table-1 reflects the overall changing pattern of the morphology of the mosque in Delhi. Though the study was limited to the 28 representative mosques from different periods in a single city but it was enough to suggest a pattern of change and continuity in their morphology. The author suggests the study on the same pattern in different cities so that an overall development of mosque architecture may be recognized and this will help the designers to establish the guidelines for designing mosques in the contemporary world with regional accent.

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