Chapter# 5
HISTORY OF ARCHITECTURE IN PAKISTAN

This chapter gives historical perspective of architectural monuments in Pakistan. It presents an understanding of architecture and how this field can be appreciated and recognized as an art work effectively. It explains some examples from the ancient past to the present historical buildings.

The architectural monuments constructed within the geographical boundaries of Pakistan are studied under the history of Pakistani architecture. It can be categorized into two distinct periods: "the earlier as pre-Islamic and the later as Islamic period"[5]. Pre-Islamic architecture comprises of the structures constructed before the advent of Islam in the region, most prominently including the structures of Indus Valley Civilization and Buddhist monuments. Whereas the architecture of the Islamic period encompasses the structures built after the advent of Islam, the most famous of which are those erected during the Mughal Empire and afterwards.

Indus valley civilization is one of the oldest civilizations of the world, dated back to 7000 to 5000 BC.[6] *Mehrgarh, Harappa* and *Mohenjodaro* are considered one of the oldest cities of this civilization. The remains of these cities present several examples of its architecture and artifacts.

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5.1. Great Bath at *Mohenjodaro*

The Indus Valley Civilization is famous for the well planned towns consisting of the citadel and the lower town. The citadel was a raised artificial platform on which important public, religious and administrative buildings were constructed to avoid damages from flood. Whereas the lower town consisted of the dwelling houses. The structures excavated at the citadel of *Mohenjodaro* include the Great Bath, Granary, *Darsgah* (College Building) and Assembly Chamber.

Great Bath, is a building of great significance for the Indus Valley Civilization. It was discovered by the archaeologist Sir John Marshal in 1926. The tank of the Great Bath measures 39 by 23 feet and 8 feet deep. There are two staircases, one on the north and other on the south side, which provide access to the floor of the Great Bath. To avoid slipperiness the bath is made of unglazed bricks. The top of the tank is surrounded by paved passage. The floor of the bath was made water-tight by setting the bricks in gypsum mortar. On the south-western corner of the bath is a brick drain where the water is led by the slopping floor. The water then flows through the tunnel with arched drain.

[5] Architecture in Pakistan: A Historical Overview, https://pakistaniat.com/2009/02/02/pakistan-architecture-history/ (Accessed December 15, 2019).

[6] Jonathan Mark Kenoyer, https://www.harappa.com/answers/when-did-indus-valley-civilization-start, (accessed on December 29, 2019)

Figure 5.1 Great Bath, https://www.harappa.com/slide/great-bath-mohenjo-daro-0

Surrounding the bath on three sides are the verandas, at the back of which are the rooms. In one of the rooms, there is a well through which water was supplied to the bath. The excavated staircases in the rooms provide the evidence that this structure was originally double storied which has been ruined. There are a group of bathrooms on the northern side of the structure. Each of the bathrooms had an individual drainage system linked with the main drain. The floors of the rooms were well paved. The privacy was ensured by placing the doorways in a way that prevent opening one opposite the other.

It is believed that the Great Bath was meant for the combined ritual bath, after which they used to have individual baths, thus suggesting their awareness about the hygiene. After the bath, the used water was drained in the sewerage.

5.2. Julian Monastery

Julian is an important Buddhist site located in Haripur, Taxila. The ruins of the Julian Monastery lie on a low hill with steps. It is considered to have been a university. The site consists of a monastery and a stupa. The monastery has a court which is faced by the surrounding rooms of varying sizes. These rooms were double storied evident from the staircases found here.

Figure 5.2 Julian Monastery Haripur, Texila, KPK,
https://ipfs.io/ipfs/QmXoypizjW3WknFiJnKLwHCnL72vedxjQkDDP1mXWo6uco/wiki/List_of_cultural_heritage_sites_in_Khyber_Pakhtunkhwa.html

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The Julian monastery belongs to the second-century and is situated on the west of the main stupa. On the left side entrance there are wooden doors, behind which are five plaster sculptures arranged in the form of group. These sculptures depict a meditating Buddha flanked by a standing Buddha and other figures at the back.

"The monastery court is surrounded by twenty-eight monk cells. Originally there was a second floor with another twenty-eight cells reached by the stone staircase in the cell of the northwestern corner. The balcony post holes and the charred wood found in the excavations indicate that a carved wooden balcony, supported on wooden pillars, ran all the way round the inside of the court to give access to the upper cells. A low wooden door led into each cell. The doorways look much larger today than they actually were because the wooden door frame and lintel and the wall above the door, made of mud and small stones, have fallen down. High up in each cell is a small sloping window and a niche for the monks lamp. In the fifth century all the walls were plastered and painted and statues of Buddha and scenes from his life decorated the courtyard."[7]

The rainwater from the wooden roof was collected in the shallow water tank which lies in the middle of the court. This tank was also used by the monks for bathing rituals. On the western side of the court there are assembly hall, kitchen, store room, mess hall and latrine. In 455 AD, this monastery was put to ashes by the White Huns and left un-conserved.

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Figure 5.3 Another view of Julian Monastery Haripur, Texila, KPK,
https://ipfs.io/ipfs/QmXoypizjW3WknFiJnKLwHCnL72vedxjQkDDP1mXWo6uco/wiki/
List_of_cultural_heritage_sites_in_Khyber_Pakhtunkhwa.html

The central stupa has surface decoration in stucco depicting Buddha in seated postures. Surrounding this main stupa are several votive stupas with the similar decorations. The court housing the stupas are shadowed by a wooden roof, now damaged.

[7]Buddhist Travel, Jaulian Buddhist Stupa and Monastery,
http://www.buddhistravel.com/index.php?id=61,268,0,0,1,0 (Accessed October 6, 2018)

Figure 5.4 Stupa

Figure 5.5 Seated Buddha

Figure 5.7 Relief depicting seated Buddha,
http://www.buddhistravel.com/index.php?id=61,268,0,0,1,0

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5.3. Lahore Fort in Mughal Era

Among the palace fortresses built by the Mughal Emperor Akbar, the Lahore fort (Shahi Qila) is of great significance, the other fortresses being the Agra Fort and one at Allahabad. "After the Mughal emperor Akbar moved his court from Fatehpur Sikri to Lahore for strategic reasons, this city served as a third Mughal capital after Agra and Delhi. Akbar had the outer walls of the old Lahore Fort massively fortified to enclose an area of some 30 acres. In this space are the pavilions, palaces, courtyards and gardens commenced by Akbar, continued by Jahangir and completed by Shah Jahan."

[8]Farida M. Said, "Mural Extraordinaire," Dawn, May 29, 2016, https://www.dawn.com/news/1260991 (Accessed October 2, 2018).

Lahore Fort is situated in the walled city of Lahore with Hazuri Bagh and then Badshahi Mosque on its west. This Fort is a vast complex housing many public and private architectural structures of the Mughals. It is a parallelogram of 1200 by 1050 feet enclosed within high bastioned wall. The structures within the fort have somewhat symmetrical placement.[9]

Figure 5.7 An aerial view of Alamgiri Gate and adjacent area of Hazuri Bagh, Lahore Fort, https://www.pinterest.com/pin/225180050091903560/?lp=true

The main entrance is provided by the Alamgiri gate on the west, while Akbari gate is on the eastern side. The important architectural structures within the fort complex (according to their beginning of construction) are:

Akbar's Period

1. *Doulat Khana-e-Khas-o-Aam*
2. Akbari Gate also known as *Maseeti Gate* (Punjabi word for Gate of Masjid)
3. Jahangir's Quadrangle

Jahangir's Period

1. The Picture Wall on the north
2. *Daulat Khana-e-Jahangir* also known as *Maktab Khana* or Clerk's Quarters
3. *Kala Burj* (Black Pavilion)
4. *Lal Burj*
5. *Bari Khwabgah*

Shahjahan's Period

1. *Diwan-e-Aam* Quadrangle
2. *Shah Burj,* a quadrangle consisting of *Shish Mahal* (Mirror Palace), *Naulakha* Pavilion and *Shah Burj Darwaza*

[9] Percy Brown, Indian *Architecture: The Islamic Period* (Bombay: Taraporevala Sons, 1943), 100.

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1. *Hamam* (Royal Bath)
2. *Khilwat Khana* (Retiring Room)
3. *Moti Masjid* (Pearl Mosque).
4. *Shahjahan's* Quadrangle consisting of *Diwan-e-Khaas* (Hall of Special Audience) and *Khawabgah* of Shahjahan (a dream place or sleeping area).
5. *Hathi Pol* (Elephant Gate)
6. *Hathi Paer* (Elephant Stairs)
7. *Shahi Bawarchi Khana* (Imperial Kitchen)

Aurangzaib's Period

1. *Alamgiri Gate*

The structures built during Akbar's reign have similar constructional style as those at Agra Fort. Red sandstone is the chief building material in these structures and employ beam and bracket system. The ornamental brackets and stone carving is of exceptional character.

The Picture Wall

The exterior wall on the north side has its importance because it is considered to be "the longest mural wall in the world, decorated by exquisite glazed-tile mosaic work and depicting various figurative scenes of the Mughal era."[11]This picture wall was commissioned by Emperor Jahangir in 1624 and completed in the reign of Shah Jahan in 1631.[12] It spans form the *Hathi Pol* (Elephant Gate) to the eastern tower of Jahangir's quadrangle and measures 480 yards length-wise and 17 yards height-wise.[13] The wall is divided into various rectangular and arched sunk panels arranged symmetrically. The subjects depicted in these panels include elephant combats, games of polo, hunting scenes, figural compositions of animals and humans, and floral motifs.[14]

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Figure 5.8 Picture wall Lahore Fort,
https://www.flickriver.com/photos/sarfrazh/2642987488/

[10] Brown, Indian Architecture, 100.
[11] Http://walledcitylahore.gop.pk/picture-wall-lahore-fort/ (Accessed October 2, 2018)
[12] Farida M. Said, "Mural Extraordinaire," *Dawn*, May 29, 2016, https://www.dawn.com/news/1260991 (accessed October 2, 2018)
[13] Brown, *Indian Architecture*, 100
[14] Brown, *Indian Architecture*, 100

Figure 5.9 Details of some frescos and tile work on Picture Wall,
https://www.dawn.com/news/1260991

Shish Mahal

Shish Mahal is a pavilion on the north side within the Shah Burj, which was built by Shah Jahan for his empress. It is an exuberantly ornamented chamber. The façade consists of five cusped (multi-foliated) marble arches. The interior is adorned with highly ornate ayina kari (glass mosaic).

Figure 5.10 Front arches of Shish Mahal,
https://www.tripadvisor.com/LocationPhotoDirectLink-g295413-d3162536-i286640306-Lahore_Fort-Lahore_Punjab_Province.html

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Figure 5.11 The first veranda of Shish Mahal with mirror mosaics,
https://commons.wikimedia.org/wiki/File:Sheesh_Mahal,_Shahi_Qila.jpg

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Naulakha Pavilion

On the western side within the *Shah Burj* is the rectangular pavilion known as *Naulakha* Pavilion (named so because its construction costed nine lac) commissioned by Shahjahan.
"It is built entirely of marble, and is remarkable for its deeply curving roof in the Bengali tradition… Mosaics of glazed tile decorate the spandrels of the arched openings with images of angels, jinn, and solomonic symbols. The pietra dura ornamentation in the pavilion is considered among the finest in the world."[16]

Figure 5.12 *Naulakha* pavilion, https://www.dawn.com/news/1195182

Moti Masjid is also known as Pearl Mosque because of its appearance which is brightened with white marble. It functioned as the private mosque for the Emperor and his closed ones. It is located on the western side of Lahore Fort corresponding to the direction of the Holy *Ka'aba* in Makkah.

Figure 5.13 *Moti Masjid,* https://pakistan360degrees.com/tag/moti-masjid/

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5.4 Badshahi Mosque (1673 - 74)

The Indian sub-continent is famous for the reign of the Mughals and the art and architecture that reached the climax during their reign. One of the last momentous architectural structures of the Mughal Era is the Badshahi Mosque at Lahore which was commissioned by King Aurangzaib Alamgir (1658-1707). The location of the mosque adds to its importance. It is situated within the walled city of Lahore near the river Ravi and opposite the Alamgiri gate of the Lahore Fort. The mosque is accessed through a garden known as Hazuri Bagh which lies between the Lahore Fort and Badshahi Mosque.

Figure 5.14 An aerial view of Badshahi Mosque Lahore, Photograph from iStock by Getty Images https://www.istockphoto.com/photo/emperors-mosque-in-lahore-pakistan-gm873111454-243843779

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The mosque is built on a high platform and has a square plan. It has a monumental gateway on the eastern side with a flight of stairs. The enclosure wall has a large tapering minaret on each of its four corners. The gateway leads to a large open courtyard with an ablution tank in the center, made of sang-e-abri. The courtyard is surrounded by *hujras* (rooms) on all the sides except on the west. These *hujras* functioned as madrasa at that time. On the western side of the courtyard is a rectangular prayer hall known as sanctuary. It has three white marble bulbous domes, of which the central one is the larger and higher. The domes are topped by a finial. The sanctuary and courtyard are separated by a screen of arches forming the façade. There is a huge projecting central arch known as Iwan, which is flanked by five arches on its either side. All the arches are multi-foliated. The façade is ornamented with the panels of carved reliefs and marble inlay work. Each corner of the sanctuary has a turret which is smaller than the minarets at the corners of the enclosure wall. All the minarets and turrets are octagonal in plan and crowned by a kiosk which is surmounted by marble cupola with a finial.

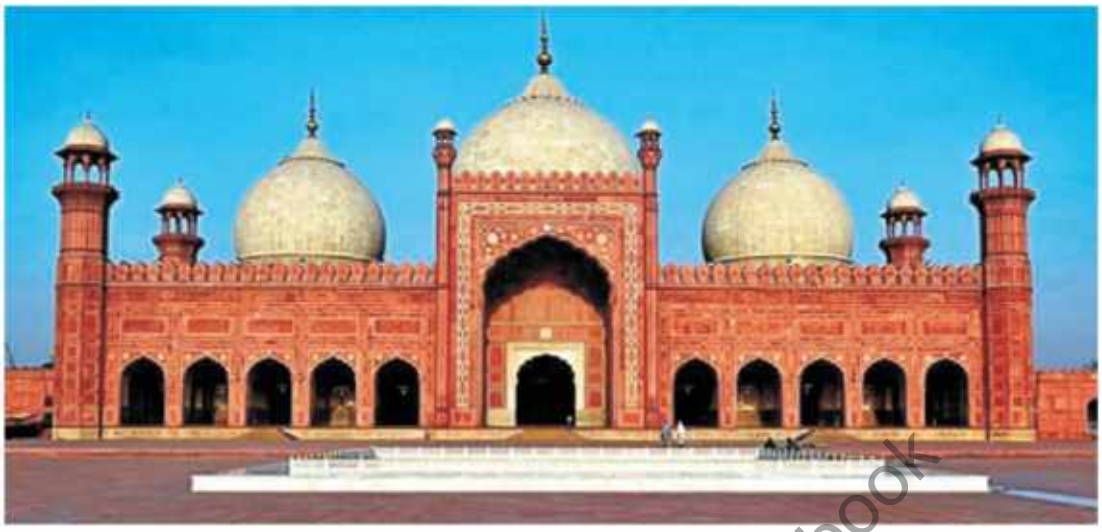

Figure 5.15 *Badshahi* Mosque, https://www.thegreats.info/tag/badshahi-masjid-facts/

Red sandstone is the chief material used for the surface decoration which is accentuated by the use of white marble. Besides marble inlay the decorative techniques used on the surface are stucco reliefs, stone carving and fresco painting. The walls are divided into rectangular panels consisting of the carved arched motifs and cartouches. Floral motifs and still-lifes with fruits are used in fresco paintings.

Despite the delicately carved stone reliefs and colourful fresco paintings, *Badshahi* Mosque has a bold and imposing character. This mosque is an inspirational source for the mosque architecture till today.

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Figure 5.16 Interior of *Badshahi* Mosque, Photograph by author

5.5 Mausoleum of Muhammad Ali Jinnah (رحمۃ اللہ علیہ)

The mausoleum of Muhammad Ali Jinnah(رحمۃ اللہ علیہ) , the founder of Pakistan, is also called the National Mausoleum of Pakistan because it is the prestigious tomb of the founder of this country. It is situated in considerably a calm location of the metropolitan of the city Karachi in the area of Jamshed Quarters near Gulshan-e-Iqbal. It has become an iconic symbol for this city nationally and internationally. Muhammad Ali Jinnah (رحمۃ اللہ علیہ)died in 1948 right after one year of the inception of Pakistan but after 12 year of his death in 1960 president of Pakistan Muhammad Ayub Khan laid the foundation of his mausoleum. "The government of Azad Kashmir provided the wood for construction of this mausoleum. In the foundations of the mausoleum, copies of biography of Jinnah, some old coins and copy of Pakistan Resolution were also preserved."

The architectural design of this mausoleum was developed by an Indian architect Mr. Yahya Merchant. It is built on a square plan with a round neck simple dome, on an elevated platform of 54 square meters wide and 13 feet high. This platform is surrounded by a copper fence. The interior and exterior of the architecture is embellished with simple white marble with curved Moorish arches on four sides. The four walls in each side are slightly tapering having an entrance of large Moorish narrow curved arch. The central structure of this mausoleum is constructed inside a large park. This park has fifteen successive fountains on the facing passage way which leads towards the main entrance of the mausoleum. Other three sides of the park also divided into terraced avenues. The exterior structure of this building reflects an influence from the Iranian Samanid tomb architecture.

The interior of this mausoleum has five graves. Three graves are in a row from north to south direction. The northern side grave is of the first Prime Minister of Pakistan Liaqat Ali Khan and the second central grave is of Nurul Amin who was the vice president of Pakistan and the third one at south side is of Sardar Abdur Rab Nishtar the first Governor of the Punjab after British Governor Raj. In the extreme north there is the grave of Miss Fatima Jinnah the dear sister of Muhammad Ali Jinnah (رحمۃ اللہ علیہ) . The cenotaph of the grave of Muhammad Ali Jinnah(رحمۃ اللہ علیہ) is situated in the center of this hall which is surrounded by a decorative aluminum fence. The cenotaph of Fatima Jinnah's grave is decorated with a series of black floral design at the base and the other three are made of simple Italian white marble.

The sarcophagus of Muhammad Ali Jinnah(رحمۃ اللہ علیہ) is placed on a triple base, embellished with Arabic calligraphic inscriptions and large Corinthian decorative leaf patterns carved in projected form on white marble. The structure of the cenotaph is slightly diverging outside.

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[17]Mazar-e-quaid Location, https://www.pakpedia.pk/mazar-e-quaid#ref-link-dt-2 (Accessed on October 6, 2018).

The interior walls of this mausoleum are decorated with geometrical pattern of diamond shape, achieved by the colour gradation of marble tiles. The dome neck has a set of three roundhead arches on each of the four sides. The apex of the dome reflects a plain blue colour and is also adorned by hanging of a beautiful crystal chandelier, just above the sarcophagus of Muhammad Ali Jinnah (رحمۃ اللہ علیہ) This chandelier was gifted by the People's Republic of China. The big Moorish arches are covered with the geometric pattern wooden Jali from the above side leaving the area of doors on downside. The floor is covered with square-shape pattern of white and black marble.

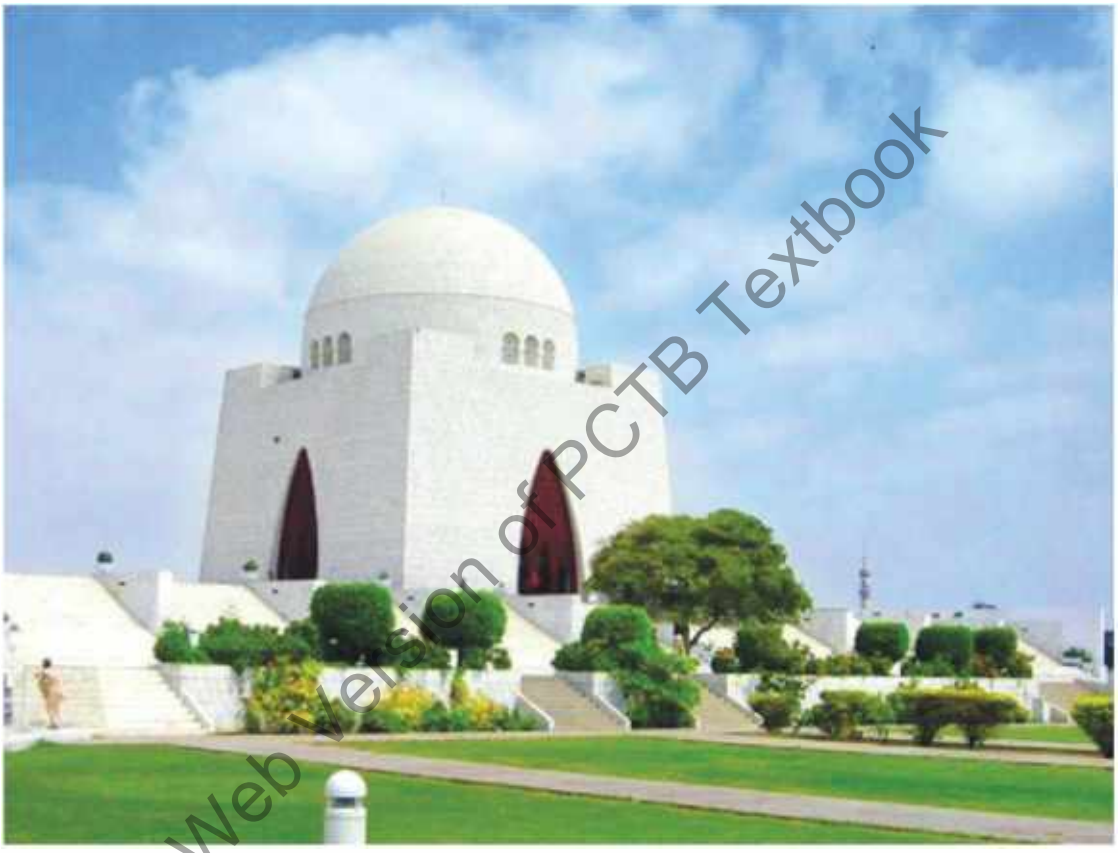

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Figure 5.17 Mausoleum of Muhammad Ali Jinnah (رحمۃ اللہ علیہ)

The premises of this mausoleum are peaceful and serene and provide an attraction for the visitors and tourist from the hustle and bustle of the metropolitan city of Karachi. People come to visit this place and enjoy the serenity of the place during days and at night they can see a marvelous glowing building lit with lights from four sides. Several official ceremonies are taken place here on Pakistan day 23rd March, 14th August Independence Day, at birthday Death anniversary of Mr. Jinnah (رحمۃ اللہ علیہ).

Whenever the dignitaries and significant people from other countries arrive in Karachi they visit this mausoleum to pay their gesture of respect to the founder of Pakistan, Muhammad Ali Jinnah (رحمۃ اللہ علیہ)

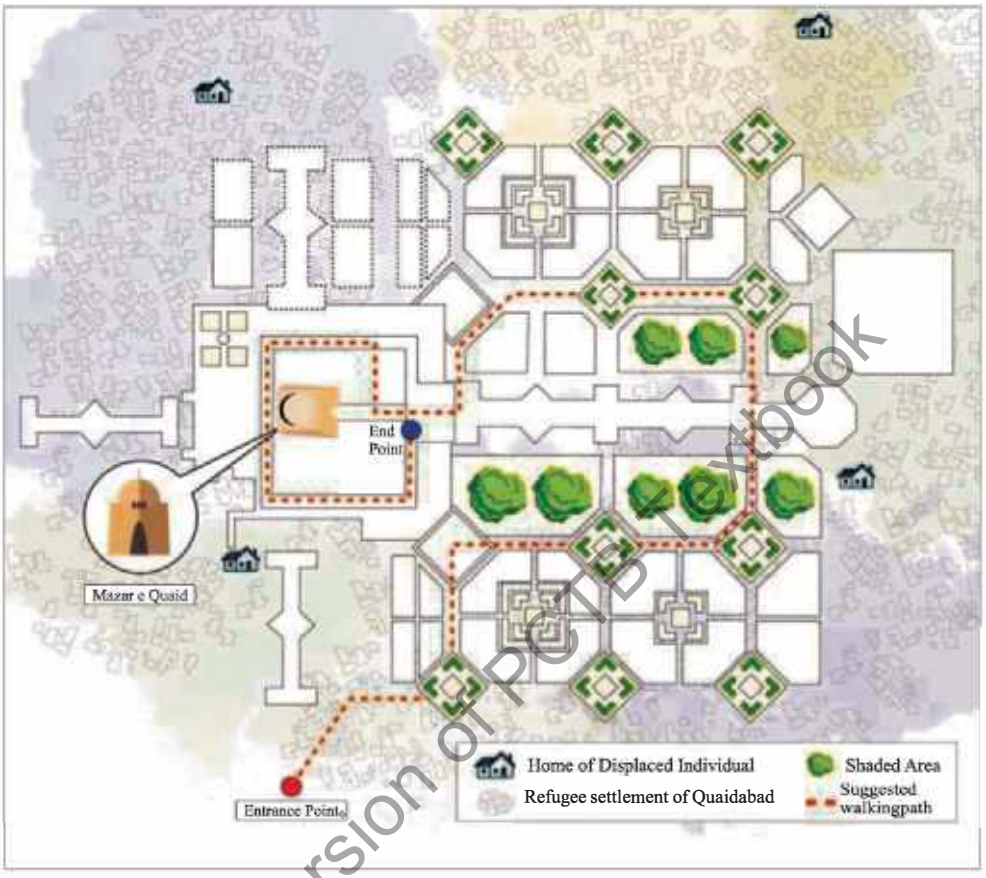

Figure 5.18 Plan of the Mausoleum of Muhammad Ali Jinnah (رحمۃ اللہ علیہ)

Figure 5.19 Calligraphy and floral pattern marble carvings on the cenotaph of Muhammad Ali Jinnah (رحمۃ اللہ علیہ)

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Figure 5.20 Fence around Muhammad Ali Jinnah's (رحمۃ اللہ علیہ) grave

Figure 5.21 Grave of Fatima Jinnah, Sister of Muhammad Ali Jinnah (رحمۃ اللہ علیہ)

Figure 5.22 Embellishment of the interior walls of the Mausoleum

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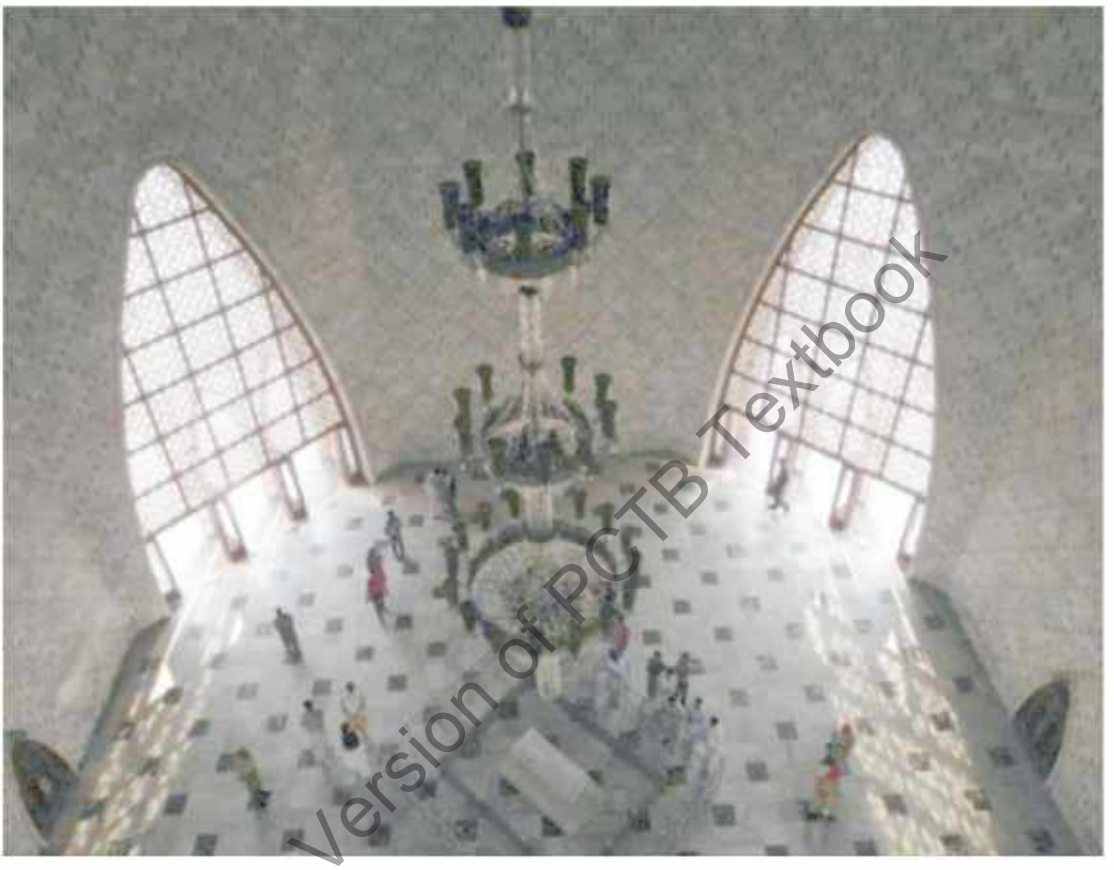

Figure 5.23 Large Moorish arched covered with wooden *Jali* from inside of the Mausoleum

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5.6 Minar-e-Pakistan

Minar-e- Pakistan is a unique tower or minaret which was built to commemorate the day of 23rd march 1940 when All India Muslim League passed the Lahore Resolution. This minaret is situated in the same location which was known as Manto Park where that historical incident was happened. Its design and architecture is a beautiful blend of Mughal and contemporary architecture. This minaret faces the grand Badshahi Mosque of Mughal dynasty.

Minar-e-Pakistan was built in 1960 to 1968 by the architect Nasiruddin Maurat Khan, the structural engineer A. Rahman Niazi and Mian Abdul Khaliq's contract company at the demand of Akhter Hussain the Governor of West Pakistan at those times.

This minaret is standing on 26.24 feet high round shaped platform. This platform has more circular division, shaping a form of a crescent and star in the center. Right over the center of star shape the petals like base of the minaret starts and the above structure of the tower is total 230 feet high from the ground level.

"The base comprises four platforms. To symbolize the humble beginning of the freedom struggle, first platform is built with uncut stones from Taxila, second platform is made of hammer-dressed stones, whereas third platform is of chiseled stones. Polished white marble at the fourth and final platform depicts the success of the Pakistan Movement."[18]

The petals-like round base has an airy arch ways of completely modern structure leading towards the central stair case and elevator area. This central place is enclosed within a circular wall having rectangular wooden doors and marble exterior elaborated with marble and inscription in Urdu, Bengali and English language. The written inscriptions are 99 names of Allah, the text of Lahore Resolution, National Anthem, speech of Muhammad Ali Jinnah (رحمۃ اللہ علیہ) and several verses from the Holy Quran.

From the interior, the upper side of this petals-like base structure provides a very elaborated and decorative diamond and square shape patterns. This design is a unique mixture of brown and gray tiles embedded within a white marble grid and the use of glass. The brown tiles have four petals geometrical design and the gray tiles are embellished with a stylized motif of modern nature. The floor is covered with dark gray marble having a linear white marble lines and floral patterns. The petals-like base symbolize the bloom of Muslim unity and success to get a separate home land.

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[18] Minar-e-Pakistan: An Architecture Marvel and Symbol of Freedom, http://www.ameradnan.com/blog/minar-e-pakistan-an-architecture-marvel-and-symbol-of-freedom/ (Accessed on September 15, 2018).

Figure 5.24 *Minar-e- Pakistan* Lahore,
http://www.pakistantoursguide.com/minar-e-pakistan.html

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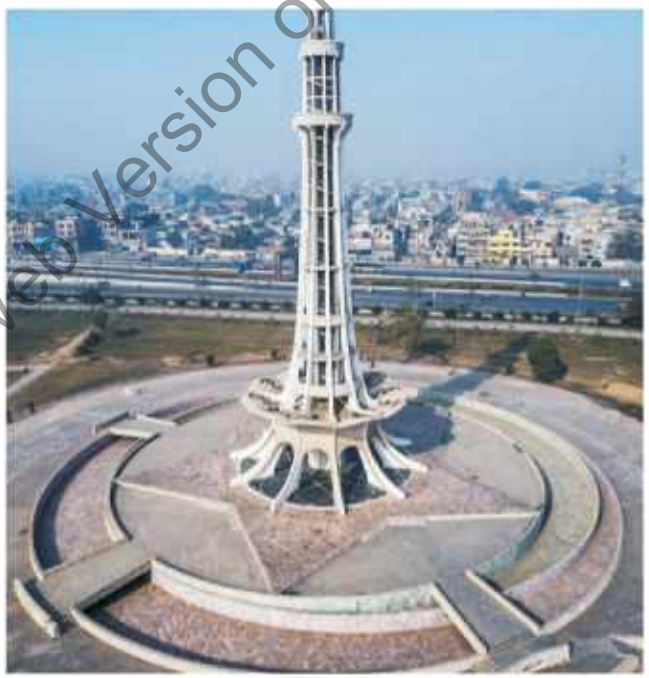

Figure 5.25 Elevation of *Minar-e-Pakistan* on four steps of round Platform having a crescent and star shape at the center

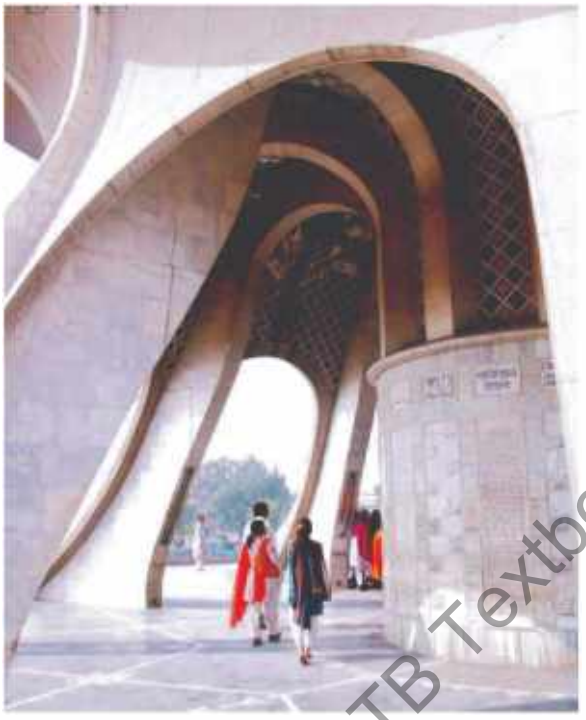

Figure 5.26 The interior of the petals like base, some details of inscription in different language on the round wall and ceiling part with brown and gray tiles, Photograph by author.

Figure 5.27 Details of the tile pattern and the use of glass, Photograph by author.

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Figure: 5.28.The details of floor, inscriptions on the walls in different languages, and wooden door, Photograph by author.

Figure 5.29 Details of the ceiling part of the base

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