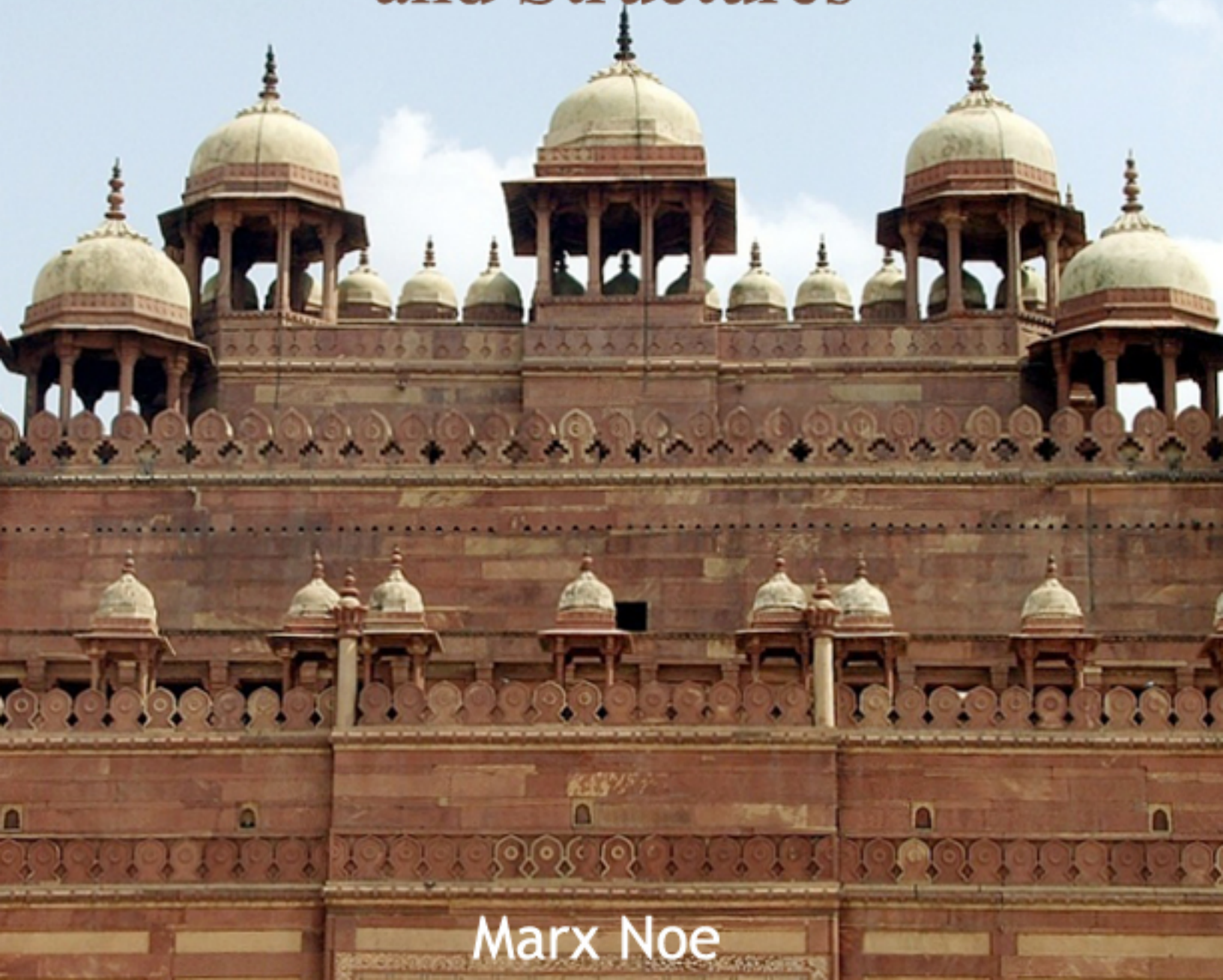


All About Mughal Architecture and Structures



Marx Noe

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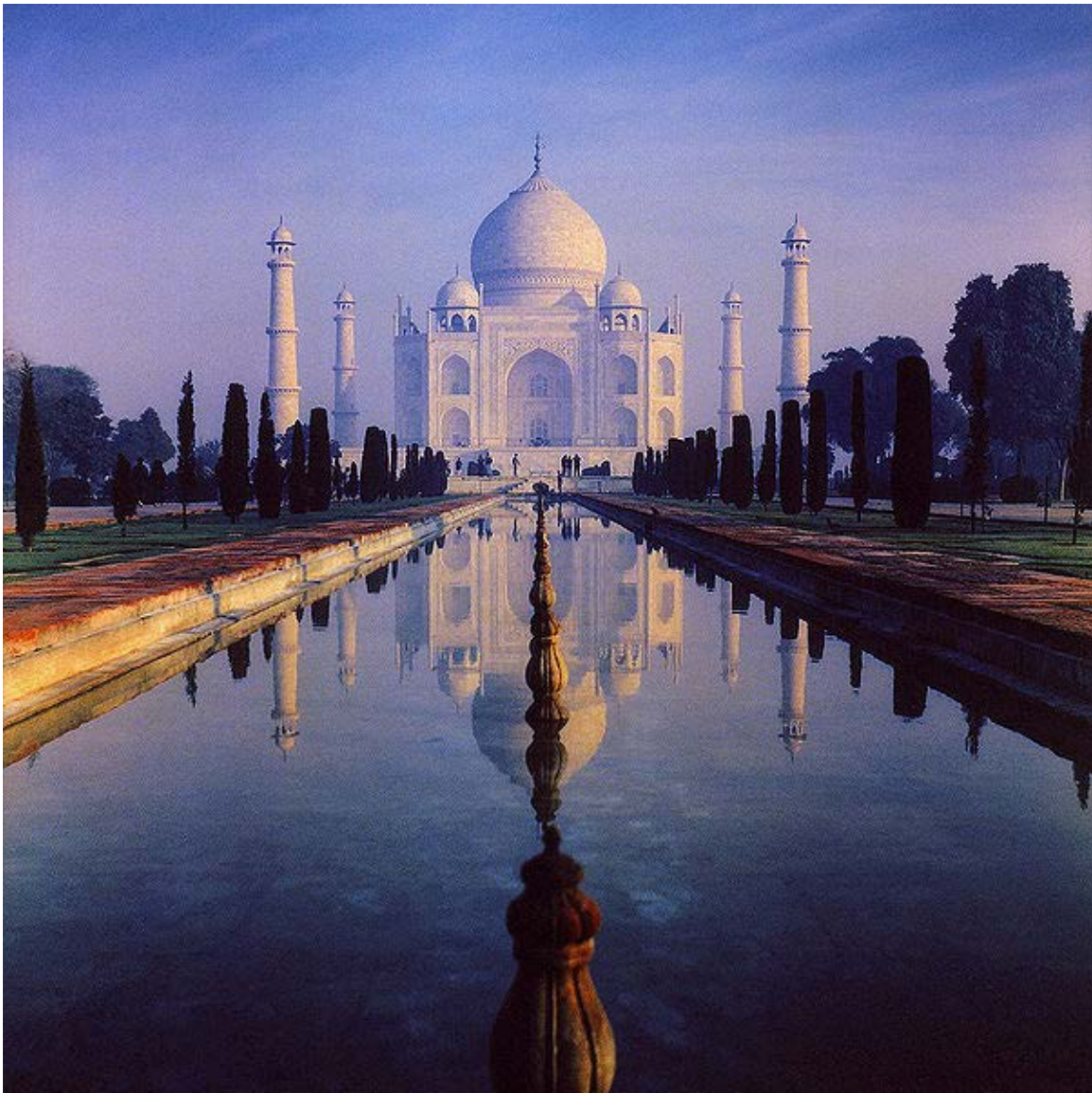
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Chapter- 1

Mughal Architecture

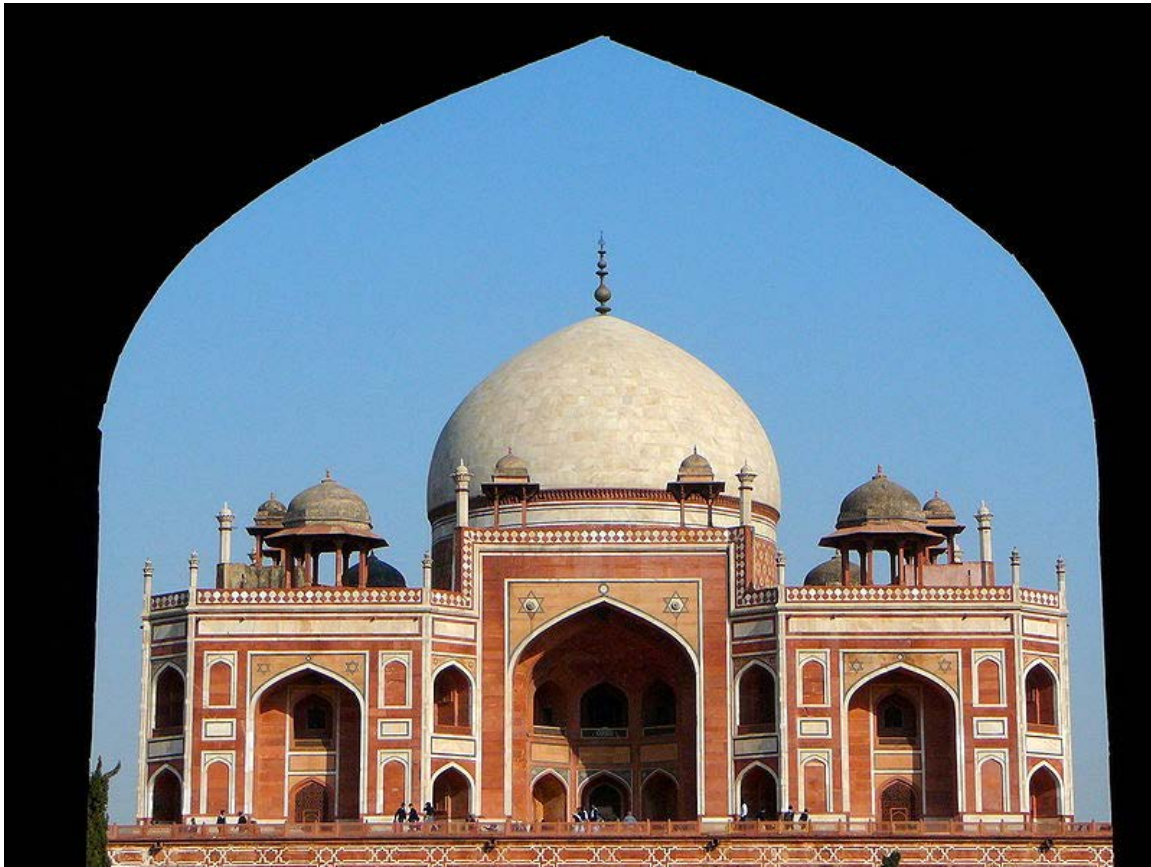


Taj Mahal at Agra, the epitome of Mughal Architecture

Mughal architecture, an amalgam of Islamic, Persian and Indian architecture, is the distinctive style developed by the Mughals in the 16th and 17th centuries in what is now India, Pakistan, and Bangladesh. It is symmetrical and decorative in style.

Some of the first and most characteristic examples that remain of early Mughal architecture were built in the short reign (1540–1545) of emperor Sher Shah Suri, who was not a Mughal; they include a mosque known as the Qila-i-Kuhna mosque (1541) at Purana Quila, Delhi, and the military architecture of the Old Fort in Delhi, the Lalbagh Fort in Bangladesh, and Rohtas Fort, near Jhelum in Pakistan. His mausoleum, octagonal in plan and set upon a plinth in the middle of an artificial lake, is in Sasaram, and was completed by his son and successor Islam Shah Suri (1545AD-1553AD).

Akbar



Humayun's Tomb, Delhi built during the reign of Akbar.

The emperor Akbar (1556–1605) built largely, and the style developed vigorously during his reign. As in the Gujarat and other styles, there is a combination of Muslim and Hindu features in his works. Akbar constructed the royal city of Fatehpur Sikri, located 26 miles (42 km) west of Agra, in the late 16th century. The numerous structures at Fatehpur Sikri best illustrate the style of his works, and the great mosque there is scarcely matched in elegance and architectural effect; the south gateway which is known as Buland Darwaza,

from its size and structure excels any similar entrance in India. The Mughals built impressive tombs, which include the fine tomb of Akbar's father Humayun, and Akbar's tomb at Sikandra, near Agra, which is a unique structure of the kind and of great merit.



Tomb of Itimad-ud-Daula, Agra

Under Jahangir (1605–1627) the Hindu features vanished from the style; his great mosque at Lahore is in the Persian style, covered with enamelled tiles. At Agra, the tomb of Itmad-ud-Daula completed in 1628, built entirely of white marble and covered wholly by pietra dura mosaic, is one of the most splendid examples of that class of ornamentation anywhere to be found. Jahangir also built the Shalimar Gardens and its accompanying pavilions on the shore of Dal Lake in Kashmir. He also built a monument to his pet deer, Hiran Minar in Sheikhpura, Pakistan and due to his great love for his wife, after his death she went on to build his mausoleum in Lahore.



Architectural Panel, Mughal dynasty, late 17th century, India. This panel either hung in the doorway of a palace or lined a nobleman's tent.

Shah Jahan



Jama Masjid, Delhi.

The force and originality of the style gave way under Shah Jahan (1627–1658) to a delicate elegance and refinement of detail, illustrated in the magnificent palaces erected in his reign at Agra and Delhi, the latter one the most exquisitely beautiful in India. The most splendid of the Mogul tombs, and the most renowned building in India, is the Taj Mahal at Agra, the tomb of Mumtaz Mahal, the wife of Shah Jahan. The Moti Masjid (Pearl Mosque) in the Agra Fort and The Jama Masjid at Delhi are imposing buildings, and their position and architecture have been carefully considered so as to produce a pleasing effect and feeling of spacious elegance and well-balanced proportion of parts. In his works Shah Jahan presents himself as the most magnificent builder of Indian sovereigns. He also built the mausoleum and sections of the huge Lahore Fort that include the impressive Moti Masjid, Sheesh Mahal, and Naulakha pavilion which are all enclosed in the fort. He also built a mosque after himself in Thatta called Shahjahan Mosque. Another mosque was built during his tenure in Lahore called Wazir Khan Mosque, by Shaikh Ilm-ud-din Ansari who was the court physician to the emperor.

Taj Mahal

The Taj Mahal, the "teardrop on the cheek of eternity" (Rabindranath Tagore), was completed in 1648 by the emperor Shah Jahan in memory of his wife Mumtaz Mahal. Its longest plane of symmetry runs through the entire complex except for the sarcophagus of Shah Jahan, which is placed off center in the crypt room below the main floor. This symmetry extended to the building of an entire mirror mosque in red sandstone, to complement the Mecca-facing mosque place to the west of the main structure.

The Taj Mahal (1630–1648) in Agra, India and the Shalimar Garden (1641–1642) in Lahore, Pakistan, are two sites which are on the world heritage list of UNESCO. One can see the architectural similarities and the love for water that the Mughals expressed in many of their buildings.

The Taj is considered to be one of the most beautiful monuments of love and is one of the Seven Wonders of the World, when it comes to tourism.

Aurangzeb and later Mughal architecture



A view of a pavilion in Shalimar Garden, Lahore, Pakistan



Lalbagh Fort, constructed in the mid-17th century in Dhaka during the reign of Aurangzeb

In Aurangzeb's reign (1658–1707) squared stone and marble gave way to brick or rubble with stucco ornament. Srirangapatna and Lucknow have examples of later Indo-Muslim architecture. He also added his mark to the Lahore Fort. He also built one of the thirteen gates, and it was later named after him, Alamgir. The most impressive building of Aurangzeb's reign, is the Badshahi Mosque which was constructed in 1674 under the supervision of **Fida'i Koka**. This mosque is adjacent to the Lahore Fort. Badshahi Mosque is the last in the series of great congregational mosques in red sandstone and is closely modeled on the one Shah Jahan built at Shahjahanabad. The red sandstone of the walls contrasts with the white marble of the domes and the subtle intarsia decoration. The materials depart from the local tradition of tile revetment that is seen in the Wazir Khan Mosque. According to Blair and Bloom, the cusped arches and arabesque floral patterns inlaid in white marble give the building, despite its vast proportions, a lighter appearance than its prototype. Additional monuments from this period are associated with women from Aurangzeb's imperial family. The construction of the elegant **Zinat al-Masjid** in Daryaganij was overseen by Aurangzeb's second daughter Zinat al-Nisa. The delicate brick and plaster mausoleum in the Roshan-Ara-Bagh in Sabzimabnkivh ,kiog,lhuoIndi was for Aurangzeb's sister Roshan-Ara who died in 1671. Unfortunately, the tomb of Roshanara Begum and the beautiful garden surrounding it were neglected for a long time and are now in an advanced state of decay. Bibi Ka Maqbara a mausoleum was built by Prince Azam Shah, son of Emperor Aurangzeb, in the late 17th century as a loving tribute

to his mother, **Dilras Bano Begam** in Aurangabad, Maharashtra. The Alamgiri Gate, built in 1673 A.D., is the main entrance to the Lahore Fort in present day Lahore, Pakistan. It was constructed to face west towards the Badshahi Mosque in the days of the Mughal Emperor Aurangzeb. The monumental gateway is an imposing vestibule flanked by two semi-circular bastions that have boldly fluted shafts and lotus petalled bases and are crowned with domed pavilions.

Another construction of Mughal era is the Lalbagh Fort (also known as "Fort Aurangabad"), a Mughal palace fortress at the Buriganga River in the southwestern part of Dhaka, Bangladesh, whose construction started in 1678 during the reign of Aurangzeb.

Mughal gardens



Palace of Nawab Asaf-Ud-Dowlah.

Mughal gardens are a group of gardens built by the Mughals in the Islamic style of architecture. This style was influenced by Persian gardens and Timurid gardens. Significant use of rectilinear layouts are made within the walled enclosures. Some of the typical features include pools, fountains and canals inside the gardens. The famous gardens are the Char Bagh gardens at Taj Mahal, Shalimar Gardens of Lahore, Delhi and Kashmir as well as Pinjore Garden in Haryana.

Chapter- 2

Taj Mahal


Taj Mahal

Native name:

Hindi: **ताज महल**



Southern view of the Taj Mahal

| | |
|--------------------------------|--|
| Location: | Agra, India |
| Coordinates: |  27°10'29"N 78°02'32"E / 27.174799°N 78.042111°E |
| Elevation: | 171 m (561 ft) |
| Built: | 1632 - 1653 |
| Architect: | Ustad Ahmad Lahauri |
| Architectural style(s): | Mughal |
| Visitation: | More than 3 million (in 2003) |

UNESCO World Heritage Site

| | |
|---------------------|---|
| Type: | Cultural |
| Criteria: | i |
| Designated: | 1983 (7th session) |
| Reference #: | 252 |
| State Party: |  India |

Region: Asia-Pacific

The **Taj Mahal** is a mausoleum located in Agra, India. It is one of the most recognizable structures in the world. It was built by Mughal emperor Shah Jahan in memory of his third wife, Mumtaz Mahal. It is widely considered as one of the most beautiful buildings in the world and stands as a symbol of eternal love.

Taj Mahal is the finest example of Mughal architecture, a style that combines elements from Persian, Islamic and Indian architectural styles.

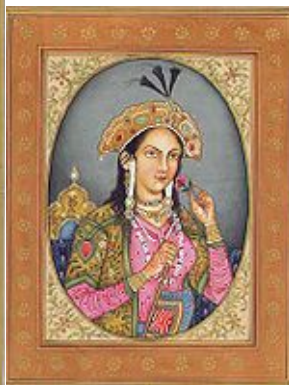
In 1983, the Taj Mahal became a UNESCO World Heritage Site. While the white domed marble mausoleum is the most familiar component of the Taj Mahal, it is actually an integrated complex of structures. The construction began around 1632 and was completed around 1653, employing thousands of artisans and craftsmen. The construction of the Taj Mahal was entrusted to a board of architects under imperial supervision, including Abd ul-Karim Ma'mur Khan, Makramat Khan, and Ustad Ahmad Lahauri. Lahauri is generally considered to be the principal designer.

Origin and inspiration

In 1631, Shah Jahan, emperor during the Mughal empire's period of greatest prosperity, was grief-stricken when his third wife, Mumtaz Mahal, died during the birth of their 14th child, Gauhara Begum. Construction of the Taj Mahal began in 1632, one year after her death. The court chronicles of Shah Jahan's grief illustrate the love story traditionally held as an inspiration for Taj Mahal. The principal mausoleum was completed in 1648 and the surrounding buildings and garden were finished five years later. Emperor Shah Jahan himself described the Taj in these words:



Shah Jahan, who commissioned the Taj Mahal - "Shah jahan on a globe" from the Smithsonian Institution



Artistic depiction of Mumtaz Mahal

Should guilty seek asylum here,
Like one pardoned, he becomes free from sin.
Should a sinner make his way to this mansion,
All his past sins are to be washed away.
The sight of this mansion creates sorrowing sighs;
And the sun and the moon shed tears from their eyes.
In this world this edifice has been made;
To display thereby the creator's glory.

The Taj Mahal incorporates and expands on design traditions of Persian architecture and earlier Mughal architecture. Specific inspiration came from successful Timurid and Mughal buildings including; the Gur-e Amir (the tomb of Timur, progenitor of the Mughal dynasty, in Samarkand), Humayun's Tomb, Itmad-Ud-Daulah's Tomb (sometimes called the *Baby Taj*), and Shah Jahan's own Jama Masjid in Delhi. While earlier Mughal buildings were primarily constructed of red sandstone, Shah Jahan promoted the use of white marble inlaid with semi-precious stones, and buildings under his patronage reached new levels of refinement.

Architecture

The tomb

The tomb is the central focus of the entire complex of the Taj Mahal. This large, white marble structure stands on a square plinth and consists of a symmetrical building with an iwan (an arch-shaped doorway) topped by a large dome and finial. Like most Mughal tombs, the basic elements are Persian in origin.



The Taj Mahal seen from the banks of river Yamuna

The base structure is essentially a large, multi-chambered cube with chamfered corners, forming an unequal octagon that is approximately 55 metres (180 ft) on each of the four long sides. On each of these sides, a huge *pishtaq*, or vaulted archway, frames the iwan with two similarly shaped, arched balconies stacked on either side. This motif of stacked pishtaqs is replicated on the chamfered corner areas, making the design completely symmetrical on all sides of the building. Four minarets frame the tomb, one at each corner of the plinth facing the chamfered corners. The main chamber houses the false sarcophagi of Mumtaz Mahal and Shah Jahan; the actual graves are at a lower level.



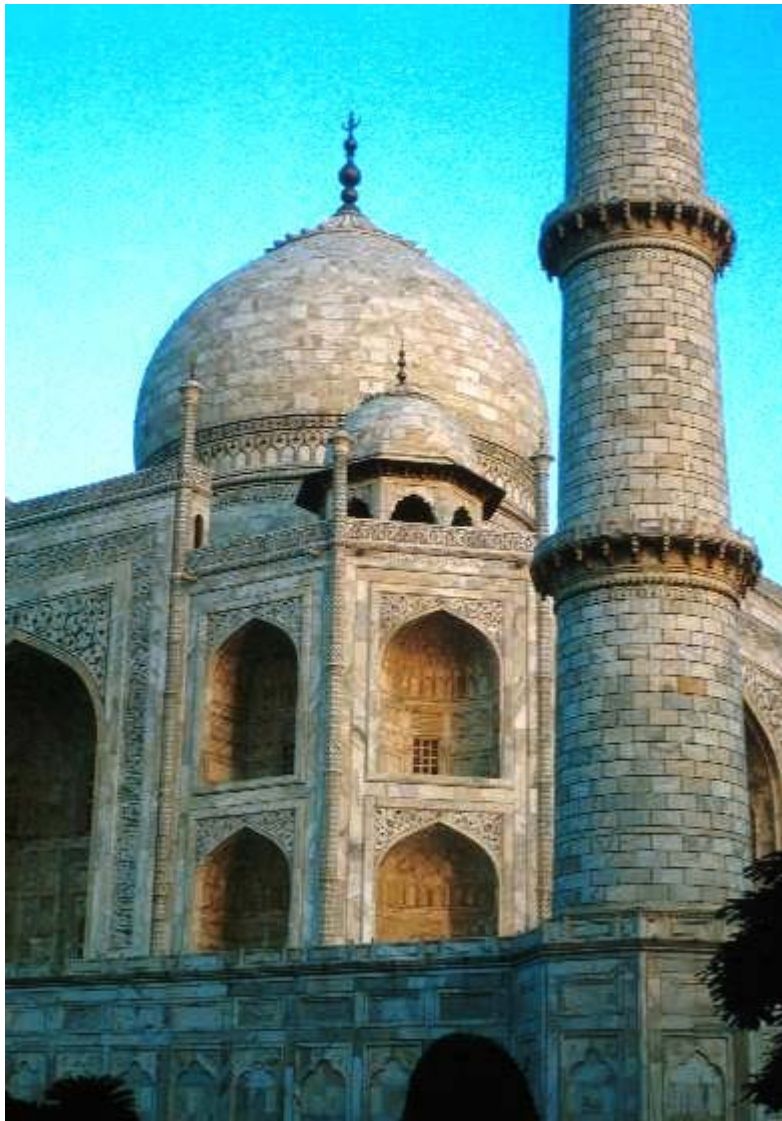
Viewed from the east

The marble dome that surmounts the tomb is the most spectacular feature. Its height of around 35 metres (115 ft) is about the same as the length of the base, and is accentuated as it sits on a cylindrical "drum" which is roughly 7 metres (23 ft) high. Because of its shape, the dome is often called an onion dome or *amrud* (guava dome). The top is decorated with a lotus design, which also serves to accentuate its height. The shape of the dome is emphasised by four smaller domed *chattris* (kiosks) placed at its corners, which replicate the onion shape of the main dome. Their columned bases open through the roof of the tomb and provide light to the interior. Tall decorative spires (*guldastas*) extend from edges of base walls, and provide visual emphasis to the height of the dome. The lotus motif is repeated on both the chattris and guldastas. The dome and chattris are topped by a gilded finial, which mixes traditional Persian and Hindustani decorative elements.

The main finial was originally made of gold but was replaced by a copy made of gilded bronze in the early 19th century. This feature provides a clear example of integration of traditional Persian and Hindu decorative elements. The finial is topped by a moon, a typical Islamic motif whose horns point heavenward. Because of its placement on the

main spire, the horns of the moon and the finial point combine to create a trident shape, reminiscent of traditional Hindu symbols of Shiva.

The minarets, which are each more than 40 metres (130 ft) tall, display the designer's penchant for symmetry. They were designed as working minarets — a traditional element of mosques, used by the muezzin to call the Islamic faithful to prayer. Each minaret is effectively divided into three equal parts by two working balconies that ring the tower. At the top of the tower is a final balcony surmounted by a chattri that mirrors the design of those on the tomb. The chattris all share the same decorative elements of a lotus design topped by a gilded finial. The minarets were constructed slightly outside of the plinth so that, in the event of collapse, (a typical occurrence with many tall constructions of the period) the material from the towers would tend to fall away from the tomb.



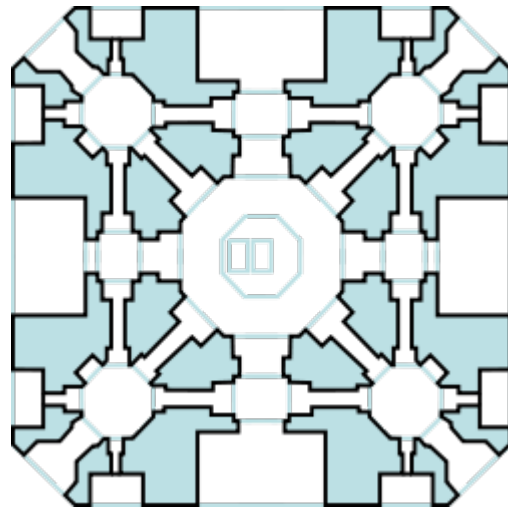
Base, dome, and minaret



Finial



Main iwan and side pishtaqs



Simplified diagram of the Taj Mahal floor plan

Exterior decoration



Calligraphy on large pishtaq

The exterior decorations of the Taj Mahal are among the finest in Mughal architecture. As the surface area changes the decorations are refined proportionally. The decorative elements were created by applying paint, stucco, stone inlays, or carvings. In line with the Islamic prohibition against the use of anthropomorphic forms, the decorative elements can be grouped into either calligraphy, abstract forms or vegetative motifs.

Throughout the complex, passages from the Qur'an are used as decorative elements. Recent scholarship suggests that the passages were chosen by Amanat Khan. The texts refer to themes of judgment and include:

- Surah 91 – The Sun
- Surah 112 – The Purity of Faith
- Surah 89 – Daybreak
- Surah 93 – Morning Light
- Surah 95 – The Fig
- Surah 94 – The Solace
- Surah 36 – Ya Sin
- Surah 81 – The Folding Up
- Surah 82 – The Cleaving Asunder
- Surah 84 – The Rending Asunder

Surah 98 – The Evidence
Surah 67 – Dominion
Surah 48 – Victory
Surah 77 – Those Sent Forth
Surah 39 – The Crowds

The calligraphy on the Great Gate reads *"O Soul, thou art at rest. Return to the Lord at peace with Him, and He at peace with you."*

The calligraphy was created by a calligrapher named Abd ul-Haq, in 1609. Shah Jahan conferred the title of "Amanat Khan" upon him as a reward for his "dazzling virtuosity". Near the lines from the Qur'an at the base of the interior dome is the inscription, "Written by the insignificant being, Amanat Khan Shirazi." Much of the calligraphy is composed of florid thuluth script, made of jasper or black marble, inlaid in white marble panels. Higher panels are written in slightly larger script to reduce the skewing effect when viewed from below. The calligraphy found on the marble cenotaphs in the tomb is particularly detailed and delicate.

Abstract forms are used throughout, especially in the plinth, minarets, gateway, mosque, jawab and, to a lesser extent, on the surfaces of the tomb. The domes and vaults of the sandstone buildings are worked with tracery of incised painting to create elaborate geometric forms. Herringbone inlays define the space between many of the adjoining elements. White inlays are used in sandstone buildings, and dark or black inlays on the white marbles. Mortared areas of the marble buildings have been stained or painted in a contrasting colour, creating geometric patterns of considerable complexity. Floors and walkways use contrasting tiles or blocks in tessellation patterns.

On the lower walls of the tomb there are white marble dados that have been sculpted with realistic bas relief depictions of flowers and vines. The marble has been polished to emphasise the exquisite detailing of the carvings and the dado frames and archway spandrels have been decorated with pietra dura inlays of highly stylised, almost geometric vines, flowers and fruits. The inlay stones are of yellow marble, jasper and jade, polished and leveled to the surface of the walls.



Herringbone



Plant motifs



Spandrel detail



Incised painting



Reflective tiles normal exposure



Reflective tiles under exposed

Interior decoration



Jali screen surrounding the cenotaphs



Tombs of Shah Jahan and Mumtaz Mahal



Cenotaphs, interior of Taj Mahal

The interior chamber of the Taj Mahal steps far beyond traditional decorative elements. Here, the inlay work is not *pietra dura*, but a lapidary of precious and semiprecious gemstones. The inner chamber is an octagon with the design allowing for entry from each face, although only the door facing the garden to the south is used.

The interior walls are about 25 metres (82 ft) high and are topped by a "false" interior dome decorated with a sun motif. Eight pishtaq arches define the space at ground level and, as with the exterior, each lower pishtaq is crowned by a second pishtaq about midway up the wall. The four central upper arches form balconies or viewing areas, and each balcony's exterior window has an intricate screen or *jali* cut from marble. In addition to the light from the balcony screens, light enters through roof openings covered by chattris at the corners. Each chamber wall has been highly decorated with dado bas-relief, intricate lapidary inlay and refined calligraphy panels, reflecting in miniature detail the design elements seen throughout the exterior of the complex.

The octagonal marble screen or *jali* which borders the cenotaphs is made from eight marble panels which have been carved through with intricate pierce work. The remaining surfaces have been inlaid in extremely delicate detail with semi-precious stones forming twining vines, fruits and flowers.

Muslim tradition forbids elaborate decoration of graves. Hence, the bodies of Mumtaz and Shah Jahan were put in a relatively plain crypt beneath the inner chamber with their faces turned right and towards Mecca. Mumtaz Mahal's cenotaph is placed at the precise center of the inner chamber on a rectangular marble base of 1.5 metres (4 ft 11 in) by 2.5 metres (8 ft 2 in).

Both the base and casket are elaborately inlaid with precious and semiprecious gems. Calligraphic inscriptions on the casket identify and praise Mumtaz. On the lid of the casket is a raised rectangular lozenge meant to suggest a writing tablet. Shah Jahan's cenotaph is beside Mumtaz's to the western side, and is the only visible asymmetric element in the entire complex. His cenotaph is bigger than his wife's, but reflects the same elements: a larger casket on a slightly taller base, again decorated with astonishing precision with lapidary and calligraphy that identifies him. On the lid of this casket is a traditional sculpture of a small pen box.

The pen box and writing tablet were traditional Mughal funerary icons decorating the caskets of men and women respectively. The Ninety Nine Names of God are found as calligraphic inscriptions on the sides of the actual tomb of Mumtaz Mahal, in the crypt including "*O Noble, O Magnificent, O Majestic, O Unique, O Eternal, O Glorious...*". The tomb of Shah Jahan bears a calligraphic inscription that reads; "*He traveled from this world to the banquet-hall of Eternity on the night of the twenty-sixth of the month of Rajab, in the year 1076 Hijri.*"



Arch of Jali



Delicate pierce work



Detail of Jali



Detail of Pietra dura jali inlay

The garden



Walkways beside reflecting pool

The complex is set around a large 300-metre (980 ft) square *charbagh* or Mughal garden. The garden uses raised pathways that divide each of the four quarters of the garden into 16 sunken parterres or flowerbeds. A raised marble water tank at the center of the garden, halfway between the tomb and gateway with a reflecting pool on a north-south axis, reflects the image of the mausoleum. The raised marble water tank is called *al Hawd al-Kawthar*, in reference to the "Tank of Abundance" promised to Muhammad. Elsewhere, the garden is laid out with avenues of trees and fountains. The charbagh garden, a design inspired by Persian gardens, was introduced to India by the first Mughal emperor, Babur. It symbolizes the four flowing rivers of Jannah (Paradise) and reflects the Paradise garden derived from the Persian *paridæza*, meaning 'walled garden'. In mystic Islamic texts of Mughal period, Paradise is described as an ideal garden of abundance with four rivers flowing from a central spring or mountain, separating the garden into north, west, south and east.

Most Mughal charbaghs are rectangular with a tomb or pavilion in the center. The Taj Mahal garden is unusual in that the main element, the tomb, is located at the end of the garden. With the discovery of Mahtab Bagh or "Moonlight Garden" on the other side of the Yamuna, the interpretation of the Archaeological Survey of India is that the Yamuna river itself was incorporated into the garden's design and was meant to be seen as one of the rivers of Paradise. The similarity in layout of the garden and its architectural features with the Shalimar Gardens suggest that they may have been designed by the same architect, Ali Mardan. Early accounts of the garden describe its profusion of vegetation, including abundant roses, daffodils, and fruit trees. As the Mughal Empire declined, the tending of the garden also declined, and when the British took over the management of Taj Mahal during the time of the British Empire, they changed the landscaping to resemble that of lawns of London.

Outlying buildings



The Great gate (Darwaza-i rauza)—gateway to the Taj Mahal

The Taj Mahal complex is bounded on three sides by crenellated red sandstone walls, with the river-facing side left open. Outside the walls are several additional mausoleums, including those of Shah Jahan's other wives, and a larger tomb for Mumtaz's favorite servant. These structures, composed primarily of red sandstone, are typical of the smaller Mughal tombs of the era. The garden-facing inner sides of the wall are fronted by columned arcades, a feature typical of Hindu temples which was later incorporated into Mughal mosques. The wall is interspersed with domed *chattris*, and small buildings that may have been viewing areas or watch towers like the *Music House*, which is now used as a museum.



Interior of the Taj Mahal mosque

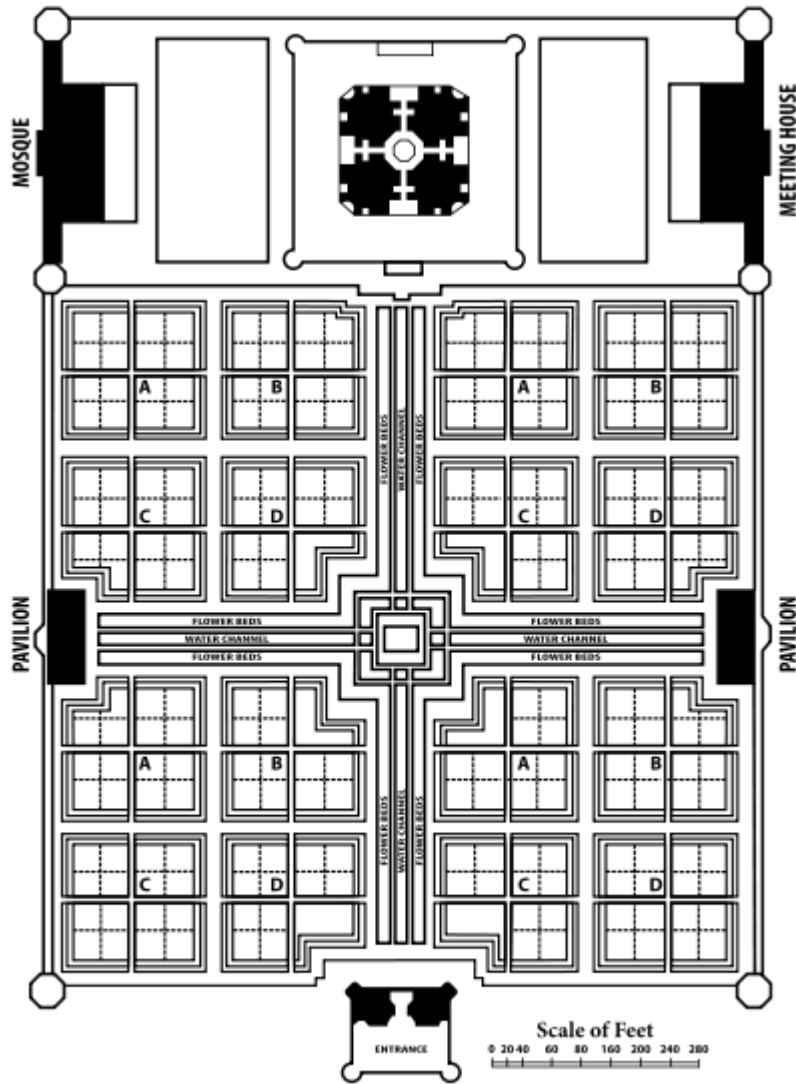
The main gateway (*darwaza*) is a monumental structure built primarily of marble which is reminiscent of Mughal architecture of earlier emperors. Its archways mirror the shape of tomb's archways, and its *pishtaq* arches incorporate the calligraphy that decorates the tomb. It utilizes bas-relief and pietra dura inlaid decorations with floral motifs. The vaulted ceilings and walls have elaborate geometric designs, like those found in the other sandstone buildings of the complex.



Taj Mahal mosque or *masjid*

At the far end of the complex, there are two grand red sandstone buildings that are open to the sides of the tomb. Their backs parallel the western and eastern walls, and the two buildings are precise mirror images of each other. The western building is a mosque and the other is the *jawab* (answer), whose primary purpose was architectural balance, although it may have been used as a guesthouse. The distinctions between these two buildings include the lack of *mihrab* (a niche in a mosque's wall facing Mecca) in the *jawab* and that the floors of *jawab* have a geometric design, while the mosque floor was laid with outlines of 569 prayer rugs in black marble. The mosque's basic design of a long hall surmounted by three domes is similar to others built by Shah Jahan, particularly to his *Masjid-Jahan Numa*, or Jama Masjid, Delhi. The Mughal mosques of this period divide the sanctuary hall into three areas, with a main sanctuary and slightly smaller sanctuaries on either side. At the Taj Mahal, each sanctuary opens onto an enormous vaulting dome. These outlying buildings were completed in 1643.

Construction



TAJ GARDEN
(Colonel Hodgson's Plan.)

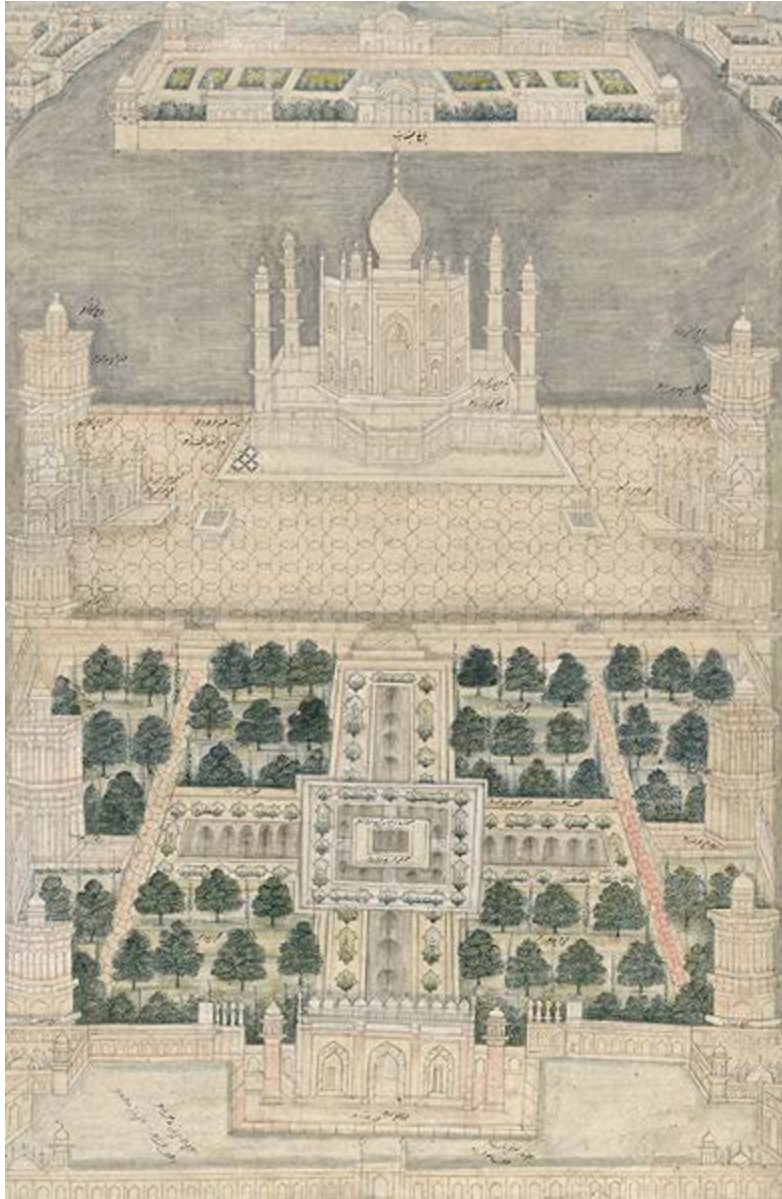
Ground layout of the Taj Mahal

The Taj Mahal was built on a parcel of land to the south of the walled city of Agra. Shah Jahan presented Maharajah Jai Singh with a large palace in the center of Agra in exchange for the land. An area of roughly three acres was excavated, filled with dirt to reduce seepage, and leveled at 50 metres (160 ft) above riverbank. In the tomb area, wells were dug and filled with stone and rubble to form the footings of the tomb. Instead of lashed bamboo, workmen constructed a colossal brick scaffold that mirrored the tomb. The scaffold was so enormous that foremen estimated it would take years to dismantle. According to the legend, Shah Jahan decreed that anyone could keep the bricks taken from the scaffold, and thus it was dismantled by peasants overnight. A fifteen kilometer

(9.3 mi) tamped-earth ramp was built to transport marble and materials to the construction site and teams of twenty or thirty oxen pulled the blocks on specially constructed wagons. An elaborate post-and-beam pulley system was used to raise the blocks into desired position. Water was drawn from the river by a series of *purs*, an animal-powered rope and bucket mechanism, into a large storage tank and raised to a large distribution tank. It was passed into three subsidiary tanks, from which it was piped to the complex.

The plinth and tomb took roughly 12 years to complete. The remaining parts of the complex took an additional 10 years and were completed in order of minarets, mosque and jawab, and gateway. Since the complex was built in stages, discrepancies exist in completion dates due to differing opinions on "completion". For example, the mausoleum itself was essentially complete by 1643, but work continued on the rest of the complex. Estimates of the cost of construction vary due to difficulties in estimating costs across time. The total cost has been estimated to be about 32 million Rupees at that time.

The Taj Mahal was constructed using materials from all over India and Asia and over 1,000 elephants were used to transport building materials. The translucent white marble was brought from Makrana, Rajasthan, the jasper from Punjab, jade and crystal from China. The turquoise was from Tibet and the Lapis lazuli from Afghanistan, while the sapphire came from Sri Lanka and the carnelian from Arabia. In all, twenty eight types of precious and semi-precious stones were inlaid into the white marble.



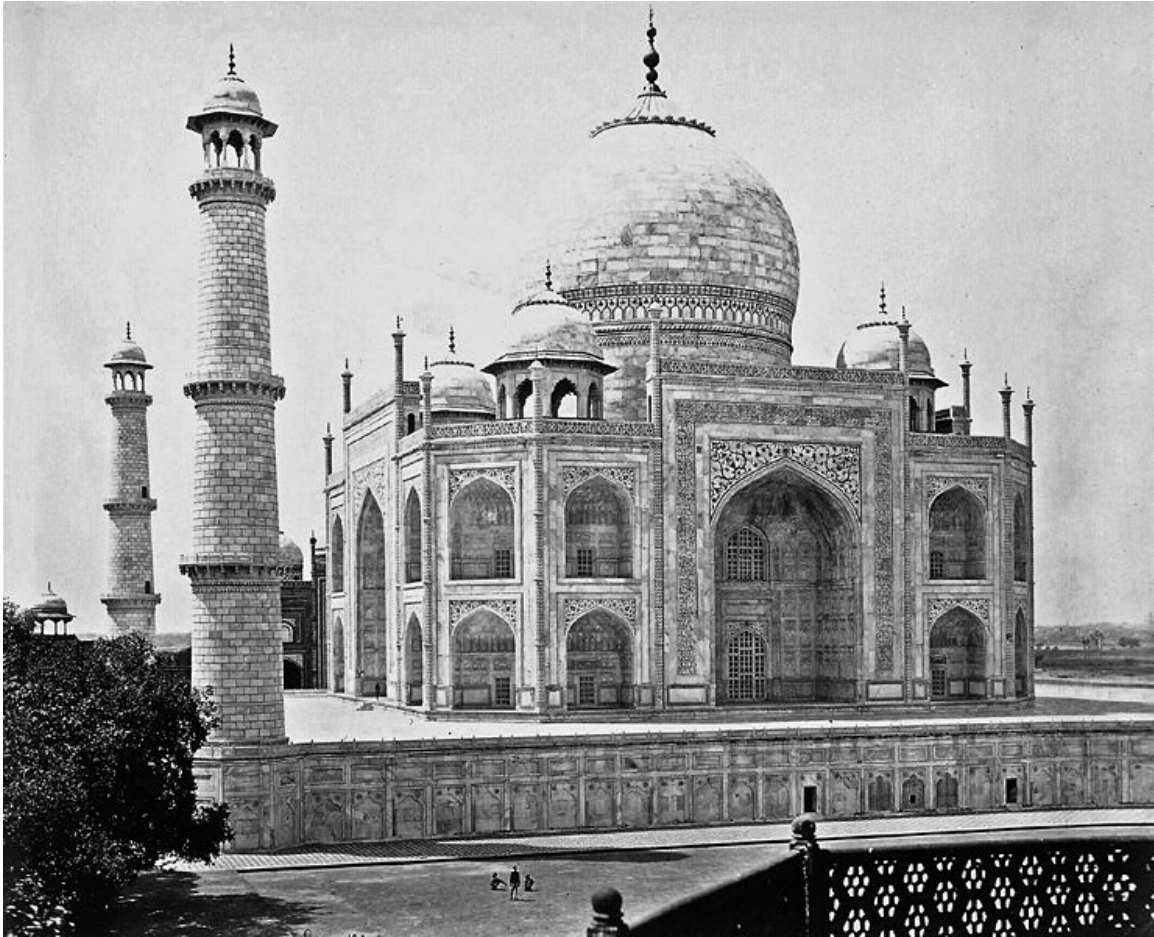
Artist's impression of the Taj Mahal, from the Smithsonian Institution

A labour force of twenty thousand workers was recruited across northern India. Sculptors from Bukhara, calligraphers from Syria and Persia, inlayers from southern India, stonecutters from Baluchistan, a specialist in building turrets, another who carved only marble flowers were part of the thirty-seven men who formed the creative unit. Some of the builders involved in construction of Taj Mahal are:

- Ismail Afandi (a.k.a. Ismail Khan) of the Ottoman Empire — designer of the main dome.
- Ustad Isa and Isa Muhammad Effendi of Persia — trained by Koca Mimar Sinan Agha of the Ottoman Empire and frequently credited with a key role in the architectural design.
- 'Puru' from Benarus, Persia — has been mentioned as a supervising architect.

- Qazim Khan, a native of Lahore - cast the solid gold finial.
- Chiranjilal, a lapidary from Delhi — the chief sculptor and mosaicist.
- Amanat Khan from Shiraz, Iran — the chief calligrapher.
- Muhammad Hanif — a supervisor of masons.
- Mir Abdul Karim and Mukkarimat Khan of Shiraz — handled finances and management of daily production.

History



Taj Mahal by Samuel Bourne, 1860.



Taj Mahal - View from Agra Fort

Soon after the Taj Mahal's completion, Shah Jahan was deposed by his son Aurangzeb and put under house arrest at nearby Agra Fort. Upon Shah Jahan's death, Aurangzeb buried him in the mausoleum next to his wife.

By the late 19th century, parts of the buildings had fallen badly into disrepair. During the time of the Indian rebellion of 1857, the Taj Mahal was defaced by British soldiers and government officials, who chiseled out precious stones and lapis lazuli from its walls. At the end of the 19th century, British viceroy Lord Curzon ordered a sweeping restoration project, which was completed in 1908. He also commissioned the large lamp in the interior chamber, modeled after one in a Cairo mosque. During this time the garden was remodeled with British-style lawns that are still in place today.

Threats



Protective wartime scaffolding

In 1942, the government erected a scaffolding in anticipation of an air attack by German Luftwaffe and later by Japanese Air Force. During the India-Pakistan wars of 1965 and 1971, scaffoldings were again erected to mislead bomber pilots.

More recent threats have come from environmental pollution on the banks of Yamuna River including acid rain due to the Mathura Oil Refinery, which was opposed by Supreme Court of India directives. The pollution has been turning the Taj Mahal yellow. To help control the pollution, the Indian government has set up the Taj Trapezium Zone (TTZ), a 10,400 square kilometer (4,015 square mile) area around the monument where strict emissions standards are in place.

Tourism

The Taj Mahal attracts between 2 million and 4 million visitors annually, including more than 200,000 from overseas. A dual- pricing system is in place, with a significantly lower entrance fee for Indian citizens than for foreigners. Most tourists visit in the cooler months of October, November and February. Polluting traffic is not allowed near the complex and tourists must either walk from parking lots or catch an electric bus. The Khawasspuras (northern courtyards) are currently being restored for use as a new visitor center.

The small town to the south of the Taj, known as Taj Ganji or Mumtazabad, was originally constructed with caravanserais, bazaars and markets to serve the needs of visitors and workmen. Lists of recommended travel destinations often feature the Taj Mahal, which also appears in several listings of seven wonders of the modern world, including the recently announced New Seven Wonders of the World, a recent poll with 100 million votes.

The grounds are open from 6 a.m. to 7 p.m. weekdays, except for Friday when the complex is open for prayers at the mosque between 12 p.m. and 2 p.m. The complex is open for night viewing on the day of the full moon and two days before and after, excluding Fridays and the month of Ramadan. For security reasons only five items—water in transparent bottles, small video cameras, still cameras, mobile phones and small ladies' purses—are allowed inside the Taj Mahal.

Controversies

Ever since its construction, the building has been the source of an admiration transcending culture and geography, and so personal and emotional responses have consistently eclipsed scholastic appraisals of the monument.



Jean-Baptiste Tavernier, one of the first European visitors to the Taj Mahal

A longstanding myth holds that Shah Jahan planned a mausoleum to be built in black marble across the Yamuna river. The idea originates from fanciful writings of Jean-Baptiste Tavernier, a European traveller who visited Agra in 1665. It was suggested that Shah Jahan was overthrown by his son Aurangzeb before it could be built. Ruins of blackened marble across the river in *Moonlight Garden*, Mahtab Bagh, seemed to support this legend. However, excavations carried out in the 1990s found that they were discolored white stones that had turned black. A more credible theory for the origins of the black mausoleum was demonstrated in 2006 by archeologists who reconstructed part of the pool in the Moonlight Garden. A dark reflection of the white mausoleum could clearly be seen, befitting Shah Jahan's obsession with symmetry and the positioning of the pool itself.

No evidence exists for claims that describe, often in horrific detail, the deaths, dismemberments and mutilations which Shah Jahan supposedly inflicted on various architects and craftsmen associated with the tomb. Some stories claim that those involved in construction signed contracts committing themselves to have no part in any similar design. Similar claims are made for many famous buildings. No evidence exists for claims that Lord William Bentinck, governor-general of India in the 1830s, supposedly planned to demolish the Taj Mahal and auction off the marble. Bentinck's biographer John Rosselli says that the story arose from Bentinck's fund-raising sale of discarded marble from Agra Fort.

Another myth suggests that beating the silhouette of the finial will cause water to come forth. To this day, officials find broken bangles surrounding the silhouette.

In 2000, India's Supreme Court dismissed P. N. Oak's petition to declare that a Hindu king built the Taj Mahal. Oak claimed that origins of the Taj, together with other historic structures in the country currently ascribed to Muslim sultans pre-date Muslim rule of India and thus, have a Hindu origin.

A more poetic story relates that once a year, during the rainy season, a single drop of water falls on the cenotaph, as inspired by Rabindranath Tagore's description of the tomb as "*one tear-drop...upon the cheek of time*".

Replicas

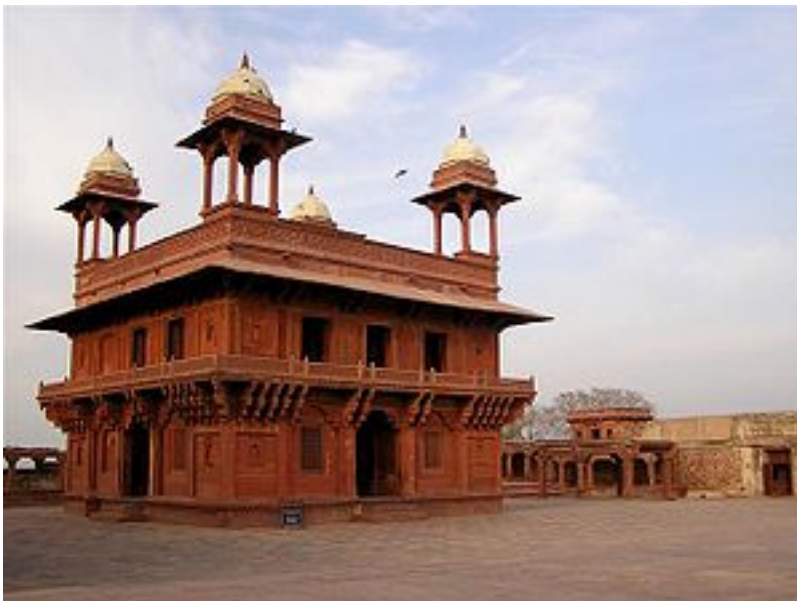
Among the buildings modeled on the Taj Mahal are the Taj Mahal Bangladesh, the Bibi Ka Maqbara in Aurangabad, Maharashtra, the Trump Taj Mahal in Atlantic City, NJ and the Tripoli Shrine Temple in Milwaukee, Wisconsin.

Chapter- 3


Fatehpur Sikri

Fatehpur Sikri*

UNESCO World Heritage Site



Diwan-i-Khas – Hall of Private Audience

| | |
|--------------------|---|
| State Party |  India |
| Type | Cultural |
| Criteria | ii, iii, iv |
| Reference | 255 |
| Region** | Asia-Pacific |

Inscription history

* Name as inscribed on World Heritage List.

** Region as classified by UNESCO.

Fatehpur Sikri


— city —



Fatehpur Sikri

Location of Fatehpur Sikri

in Uttar Pradesh and India

 27.094663°N 77.662783°E / 27.09466°N

Coordinates 77.66278°E  27.094663°N
77.662783°E / 27.09466°N 77.66278°E

Country India

State Uttar Pradesh

District(s) Agra

Population 28,754 (2001)

Time zone IST (UTC+5:30)

Area

• **Elevation** • 194 metres (636 ft)

Codes

• Pincode • 283110

•
Telephone • +05613

Fatehpur Sikri (Hindi: फ़तेहपुर सीकरी, Urdu: فیرکیس روپحتف) is a city and a municipal board in Agra district in the state of Uttar Pradesh, India. Built near the much older Sikri, the historical city of Fatehabad, as it was first named, was constructed by Mughal emperor Akbar beginning in 1570, in honour of Sufi saint Shaikh Salim Chisti, who lived in a cavern on the ridge at Sikri, and foretold the birth of his son, who was named Prince Salim after him, and later succeeded Akbar to the throne of the Mughal Empire, as Jahangir. Fatehabad later acquired the name Fatehpur, and gave rise to present name Fatehpur Sikri. It was the first planned city of the Mughals and also first one in Mughal architecture, an amalgamation of Indian architecture, Persian and Islamic architecture, and served as the Mughal Empire's capital from 1571 until 1585. Though the court took 15 years to build, it was abandoned after only 14 years because the water supply was unable to sustain the growing population. and unrest in the North-West. Today, the complex of buildings, including the extant royal palaces, courts and the Jama Masjid is a popular tourist attraction, and was declared a UNESCO World Heritage Site in 1986. The site itself is a ghost town, though the city has a population of 28804 as per 2001 census.

History

Sikri is built upon a rocky ridge, an extension of the upper Vindhya ranges, which are older rounded mountains and hills. It is situated on the bank of a large natural lake, now mostly dried, and abundance of water, forest and raw material, made it suitable for habitation, in the pre-historic period, evident by the existence of rock shelters with paintings found on the periphery of the lake. Stone age tools have been found in this area, apart from pottery and other items suggesting the habitation of the Ochre Coloured Pottery culture, dating c. 2nd millennium B.C. and the Painted Grey Ware culture, Iron Age culture of the Indo-Gangetic Plain, dating around 1200-800 B.C.

It is mentioned in the epic *Mahabharat* as *Saik*, defined in the lexicons as a region surrounded by water. After an archaeological excavation in December 1999, at the *Bir Chhabili ki teela*, a mound about 200 metres from the Fatehpur Sikri complex, further suggestions of continuous habitation in the region after the prehistoric period were found. Remains amongst of an ancient Jain temple was a 'Jain Saraswati' stone sculpture, dated 1067 *Vikram Samvat* i.e. 1010 AD, with an inscription mentioning the place as *Sekrikya*, which has a similar meaning to one mentioned in the Mahabharat. Plus, most of the Jain tirthankara icons also found in the same pit were dated 977 - 1044 AD.

During the Mughal era, the founder of Mughal Empire, Babur in his memoir *Baburnama* mentioned it as 'Sikri', when he visited it on the eve of Battle of Khanwa on March 16, 1527, at Khanwa a few miles away. After he defeated Rana Sanga of Mewar in the battle, which gave him control of North India, he subsequently built a garden, a *Jal-*

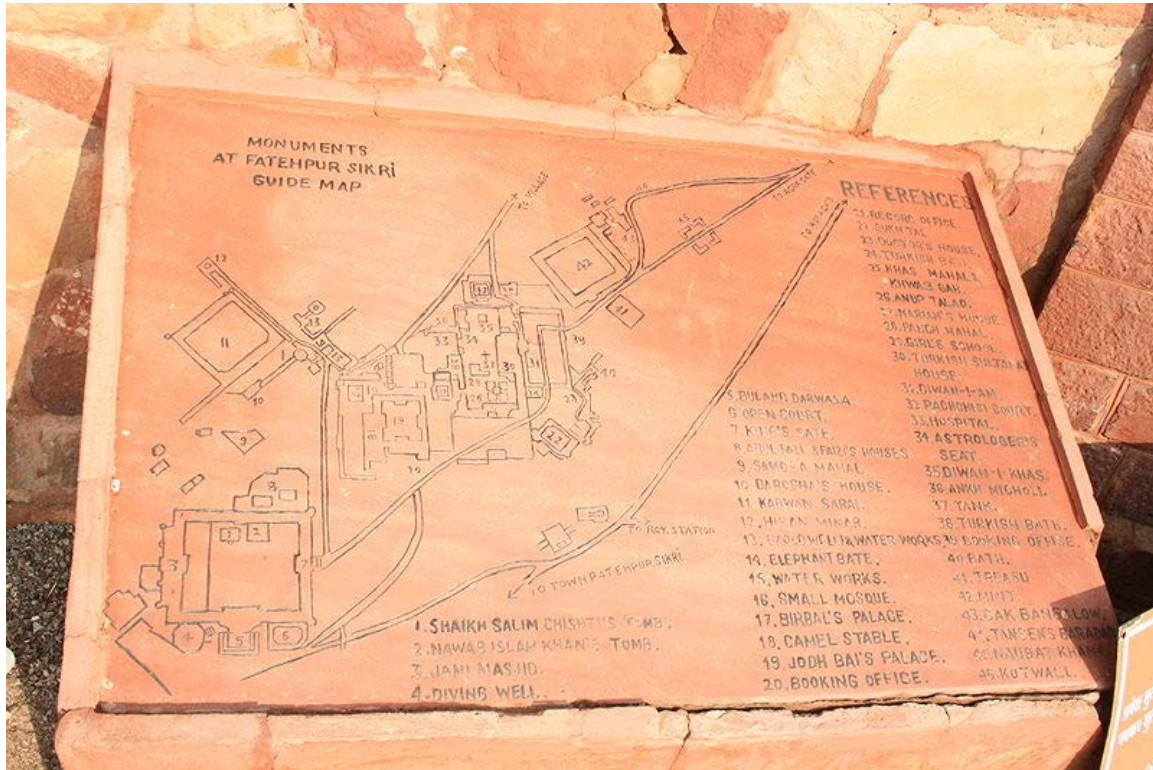
Mahal (Lake Palace), and a *baoli* (step-well) commemorate his victory. Akbar had inherited the Mughal Empire from his father Humayun and grandfather Babur. During the 1560s he rebuilt the Agra Fort and established it as his capital. He had a son and then twins, but the twins died. He then consulted the Sufi saint, Salim Chishti, who lived in a cavern on the ridge at Sikri. Salim predicted that Akbar would have another son, and indeed one was born in 1569 at Sikri and survived. He was named Salim to honour the saint and would later rule the empire as Emperor Jahangir. Here after the second birthday of Jahangir in 1571, Akbar then 28 years old, decided to shift his capital from Agra to the Sikri ridge, to honor Salim Chishti, and commenced the construction of a planned walled city which took the next fifteen years in planning and construction of a series royal palaces, harem, courts, a mosque, private quarters and other utility buildings. He named the city, Fatehabad, with *Fateh*, a word of Arabic origin in Persian, meaning "victory", it was later called Fatehpur Sikri. It is at Fatehpur Sikri that the legends of Akbar and his famed courtiers, the *nine jewels* or Navaratnas, were born. One of them, musician and singer Tansen is said to have performed on an island in the middle of the pool *Anup Talao*.

According to contemporary historians, Akbar took a great interest in the building of Fatehpur Sikri and probably also dictated its architectural style. Seeking to revive the splendours of Persian court ceremonial made famous by his ancestor Timur, Akbar planned the complex on Persian principles. But the influences of his adopted land came through in the typically Indian embellishments. The Easy availability of sandstone in the neighbouring areas of Fatehpur Sikri, also meant that all the buildings here were made of the red stone. The imperial Palace complex consists of a number of independent pavilions arranged in formal geometry on a piece of level ground, a pattern derived from Arab and central Asian tent encampments. In its entirety, the monuments at Fatehpur Sikri thus reflect the genius of Akbar in assimilating diverse regional architectural influences within a holistic style that was uniquely his own.

The Imperial complex was abandoned in 1585, shortly after its completion, due to paucity of water and its proximity with the Rajputana areas in the North-West, which were increasingly in turmoil. Thus the capital was shifted to Lahore so that Akbar could have a base in the less stable part of the empire, before moving back Agra in 1598, where he had begun his reign as he shifted his focus to Deccan. In fact, he never returned to the city except for a brief period in 1601. In later Mughal history it was occupied for a short while by Mughal emperor, Muhammad Shah (r. 1719 -1748), and his regent, Sayyid Hussain Ali Khan Barha, one of the Syed Brothers, was murdered here in 1720. Today much of the imperial complex which spread over nearly two mile long and one mile wide area is largely intact and resembles a ghost town. It is still surrounded by a five mile long wall built during its original construction, on three sides. However apart from the imperial buildings complex few other buildings stand in the area, which is mostly barren, except of ruins of the bazaars of the old city near the *Naubat Khana*, the 'drum-house' entrance at Agra Road. The modern town lies at the western end of the complex, which was a municipality from 1865 to 1904, and later made a "notified area", and in 1901 had a population of 7,147. For a long time it was still known for its masons and stone carvers,

though in Akbar time it was known and 'fabrics of hair' and 'silk-spinning'. The village of Sikri still exists nearby.

Architecture of Fatehpur Sikri



Site plan of Fatehpur Sikri

Fatehpur Sikri sits on rocky ridge, 3 km. in length and 1 km. wide, and palace city is surrounded by a 11 km wall on three side with the fourth being a lake at the time. The buildings of Fatehpur Sikri show a synthesis of various regional schools of architectural craftsmanship such as Gujarat and Bengal. This was because indigenous craftsmen from various regions were used for the construction of the buildings. Influences from Hindu and Jain architecture are seen hand in hand with Islamic elements. The building material used in all the buildings at Fatehpur Sikri, palace-city complex, is the locally quarried red sandstone, known as 'Sikri sandstone'. It is accessed through gates along the five-mile long fort wall, namely, Delhi Gate, the Lal Gate, the Agra Gate, Birbal's Gate, Chandanpal Gate, The Gwalior Gate, the Tehra Gate, the Chor Gate and the Ajmere Gate.



A panoramic view of the Fatehpur Sikri Palace



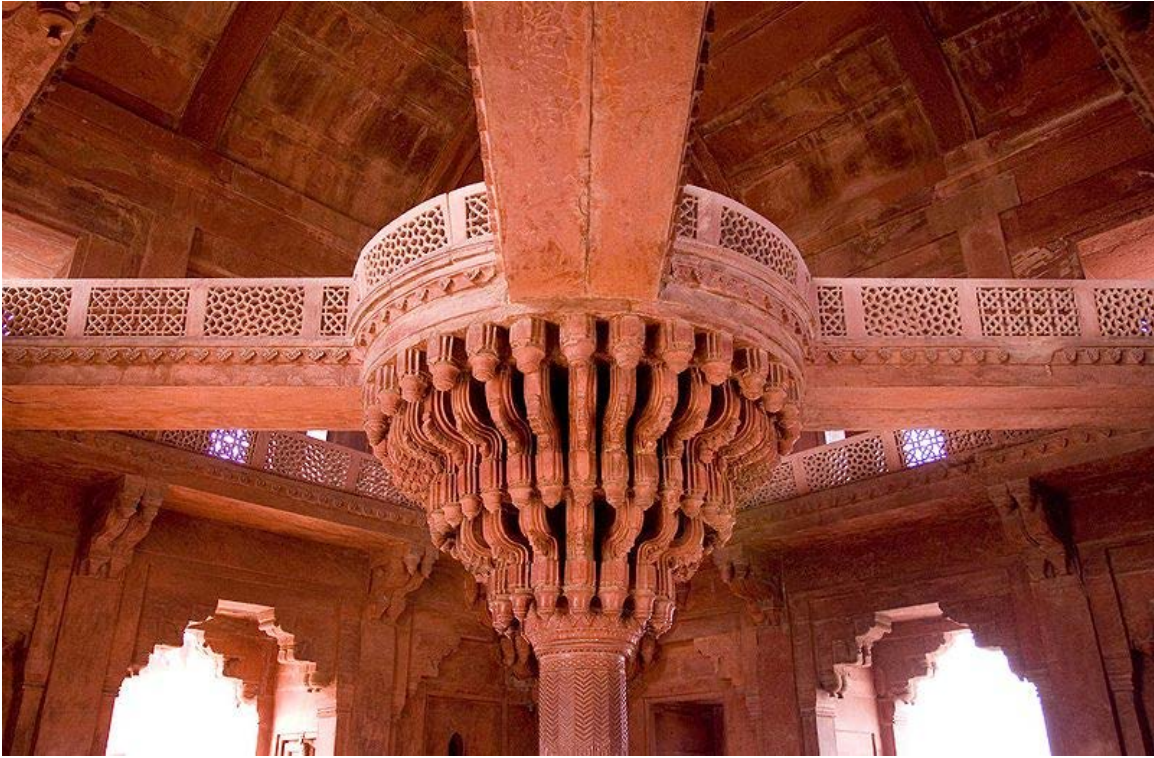
Buland Darwaza, the 54 mt. high entrance to Fatehpur Sikri complex



Jama Masjid, Fatehpur Sikri



Tomb of Salim Chishti (*left*) and Islam Khan I's tomb (*right*) in Jama Masjid courtyard, Fatehpur Sikri



The central pillar of Diwan-i-khas



Panch Mahal, Fatehpur Sikri

Some of the important buildings in this city, both religious and secular are:

- **Buland Darwaza:** Set into the south wall of congregational mosque, the Jama Masjid at Fatehpur Sikri, this stupendous piece of architecture is 54 metre high, from the outside, gradually making a transition to a human scale in the inside. The gate was added some five years later after the completion of the mosque ca. 1576-1577 as an 'victory arch', to commemorate the Akbar's successful Gujarat campaign. It carries two inscriptions in the archway, one of which reads: "Jesus Son of Mary (on whom be peace) said: The world is a bridge, pass over it, but build no houses on it. He who hopes for an hour may hope for eternity. The world endures but an hour. Spend it in prayer, for the rest is unseen". The central portico comprises three arched entrances, with the largest one, in the centre, is known locally as the Horseshoe Gate, after the custom of nailing horseshoes to its large wooden doors for luck. Outside the giant steps of the Buland Darwaza to left is deep well.
- **Jama Masjid:** It is a *Jami Mosque* meaning the Friday Mosque congregational mosque, and was perhaps one of the first buildings to come up in the complex, as its epigraph gives AH 979 (A.D. 1571-72) as the date of its completion, with a massive entrance to the courtyard, the Buland-Darwaza added some five years later. It was built in the manner of Indian mosques, with iwans around a central courtyard. A distinguishing feature is the row of chhatri over the sanctuary. There are three mihrabs in each of the seven bays, while the large central mihrab is covered by a dome, it is decorated with white marble inlay, in geometric patterns.
- **Tomb of Salim Chishti:** A white marble encased tomb of the Sufi saint, Salim Chisti (1478–1572), within the Jama Masjid's *sahn*, courtyard. The single-storey structure is built around a central square chamber, with has the grave of the saint, under a ornate wooden canopy, encrusted with mother-of-pearl mosaic. Surrounding it is covered passageway for circumambulation, with carved *Jalis*, stone pierced screens all around with intricate geometric design, and an entrance to the south. The tomb is influenced by earlier mausolea of the early 15th century Gujarat Sultanate period. Other striking features of the tomb are white marble serpentine brackets, which support sloping eaves around the parapet. On the left of the tomb, to the east, stands a red sandstone tomb of Islam Khan I, son of Shaikh Badruddin Chisti and grandson of Shaikh Salim Chishti, who became a general in the Mughal army in the reign of Jahangir. The tomb is topped by a dome and thirty-six small domed *chattris*, and contains a number of graves, some un-named, all male descendants of Shaikh Salim Chisti.
- **Diwan-i-Am :** *Diwan-i-Am* or Hall of Public Audience, is a building typology found in many cities where the ruler meets the general public. In this case, it is a pavilion-like multi-bayed rectangular structure fronting a large open space. South west of the Diwan-i-Am and next to the Turkish Sultana's House stand Turkish Baths.

- Diwan-i-Khas: the *Diwan-i-Khas*, or Hall of Private Audience, is a plain square building with four *chhatris* on the roof. However it is famous for its central pillar, which has a square base and an octagonal shaft, both carved with bands of geometric and floral designs, further its thirty-six serpentine brackets support a circular platform for Akbar, which is connected to each corner of the building on the first floor, by four stone walkways. It is here that Akbar had representatives of different religions discuss their faiths and gave private audience.
- Ibadat Khana: (House of Worship) was a meeting house built in 1575 CE by the Mughal Emperor Akbar, where the foundations of a new Syncretistic faith, *Din-e-Ilahi* were laid by Akbar.
- Anup Talao: A ornamental pool with a central platform and four bridges leading up to it. Some of the important buildings of the royal enclave are surround by it including, *Khwabgah* (House of Dreams) Akbar's residence, *Panch Mahal*, a five-storey palace, *Diwan-i-Khas* (Hall of Private Audience), *Ankh Michauli* and the Astrologer's Seat, in the south-west corner of the Pachisi Court.
- Hujra-i-Anup Talao: Said to be the residence of Akbar's Muslim wife, although this is disputed due to its small size.
- Mariam-uz-Zamani's Palace: The building of Akbar's wife, Mariam-uz-Zamani shows Gujarati influence and is built around a courtyard, with special care being taken to ensure privacy.
- Naubat Khana: Also known as Naqqar Khana meaning a *drum house*, where musician used drums to announce the arrival of the Emperor. It is situated ahead of the *Hathi Pol Gate* or the Elephant Gate, the south entrance to the complex, suggesting that it was the imperial entrance.
- Pachisi Court: A square marked out as a large board game, the precursor to modern day Ludo game where people served as the playing pieces.
- Panch Mahal: A five-storied palatial structure, with the tiers gradually diminishing in size, till the final one, which is a single large-domed chhatri. Originally pierced stone screens faced the façade, and probably sub-divided the interior as well, suggesting it was built for the ladies of the court. The floors are supported by intricately carved columns on each level, totalling to 176 columns in all.
- Birbal's House: The house of Akbar's favorite minister, who was a Hindu. Notable features of the building are the horizontal sloping sunshades or chajjas and the brackets which support them.

Other buildings included *Taksal* (mint), 'Daftar Khana (*Records Office*), Karkhanas (*royal workshop*), Khazana (*treasury*), *Turkish Baths*, Darogha's *Quarters*, *stables*, *Caravan sarai*, *Hakim's quarters etc.*

Demographics

Fatehpur Sikri had a population of 28,754. Males constitute 53% of the population and females 47%. Fatehpur Sikri has an average literacy rate of 46%, lower than the national average of 59.5%: male literacy is 57%, and female literacy is 34%. In Fatehpur Sikri, 19% of the population is under 6 years of age.

Administrative establishment



A view of the present Fatehpur Sikri, outside the historical city.

Fatehpur Sikri is one of the fifteen Block headquarters in the Agra district it has 52 Gram panchayats (Village Panchayat) under it.

The Fatehpur Sikri, is a constituency of the Lok Sabha, Lower house of the Indian Parliament , and further comprises five Vidhan Sabha (legislative assembly) segments ,:

1. Agra Rural
2. Fatehpur Sikri
3. Kheragarh
4. Fatehabad
5. Bah

In all there are 12 villages of Sisodia Rajputs near Fatehpur Sikri fort in Agra district. These are Daultabad, Nayavas, Satha, korai, Behrawati, Byara, Undera, Kachora, Singarpur, Vidyapur, Onera, Arrua.

Transport

Fatehpur Sikri is about 39 km. from Agra. The nearest Airport is the Agra Airport also known as Kheria Airport at Agra at 40 km, nearest railway station is the Agra Cantt. Railway Station again around 40 km away. It is suitably connected to Agra and neighbouring centres by road, where regular bus services of UPSRTC ply, apart from Tourist buses and taxies.


Chapter- 4

Humayun's Tomb

Humayun's Tomb, Delhi*

UNESCO World Heritage Site



| | |
|--------------------|---|
| State Party |  India |
| Type | Cultural |
| Criteria | ii, iv |
| Reference | 232 |
| Region** | Asia-Pacific |

Inscription history

| | |
|--------------------|---------------------|
| Inscription | 1993 (17th Session) |
|--------------------|---------------------|

* Name as inscribed on World Heritage List.

** Region as classified by UNESCO.

Humayun's tomb is the tomb of the Mughal Emperor Humayun. The tomb was commissioned by Humayun's wife Hamida Banu Begum in 1562 CE, and designed by Mirak Mirza Ghiyath, a Persian architect. It was the first garden-tomb on the Indian subcontinent, and is located in Nizamuddin East, Delhi, India, close to the *Dina-panah* citadel also known as *Purana Qila*, that Humayun founded in 1533. It was also the first structure to use red sandstone at such a scale. The tomb was declared a UNESCO World Heritage Site in 1993, and since then has undergone extensive restoration work, which is still underway. Besides the main tomb enclosure of Humayun, several smaller monuments dot the pathway leading up to it, from the main entrance in the West, including one that even pre-dates the main tomb itself, by twenty years; it is the tomb complex of Isa Khan Niyazi, an Afghan noble in Sher Shah Suri's court of the Suri dynasty, who fought against the Mughals, constructed in 1547 CE.

The complex encompasses the main tomb of the Emperor Humayun, which houses the graves of his wife, Hamida Begum, and also Dara Shikoh, son of the later Emperor Shah Jahan, as well as numerous other subsequent Mughals, including Emperor Jahandar Shah, Farrukhsiyar, Rafi Ul-Darjat, Rafi Ud-Daulat and Alamgir II. It represented a leap in Mughal architecture, and together with its accomplished Charbagh garden, typical of Persian gardens, but never seen before in India, it set a precedent for subsequent Mughal architecture. It is seen as a clear departure from the fairly modest mausoleum of his father, the first Mughal Emperor, Babur, called *Bagh-e Babur* (Gardens of Babur) in Kabul (Afghanistan). Though the latter was the first Emperor to start the tradition of being buried in a paradise garden. Modelled on *Gur-e Amir*, the tomb of his ancestor and Asia's conqueror Timur in Samarkand, it created a precedent for future Mughal architecture of royal mausolea, which reached its zenith with the Taj Mahal, at Agra.



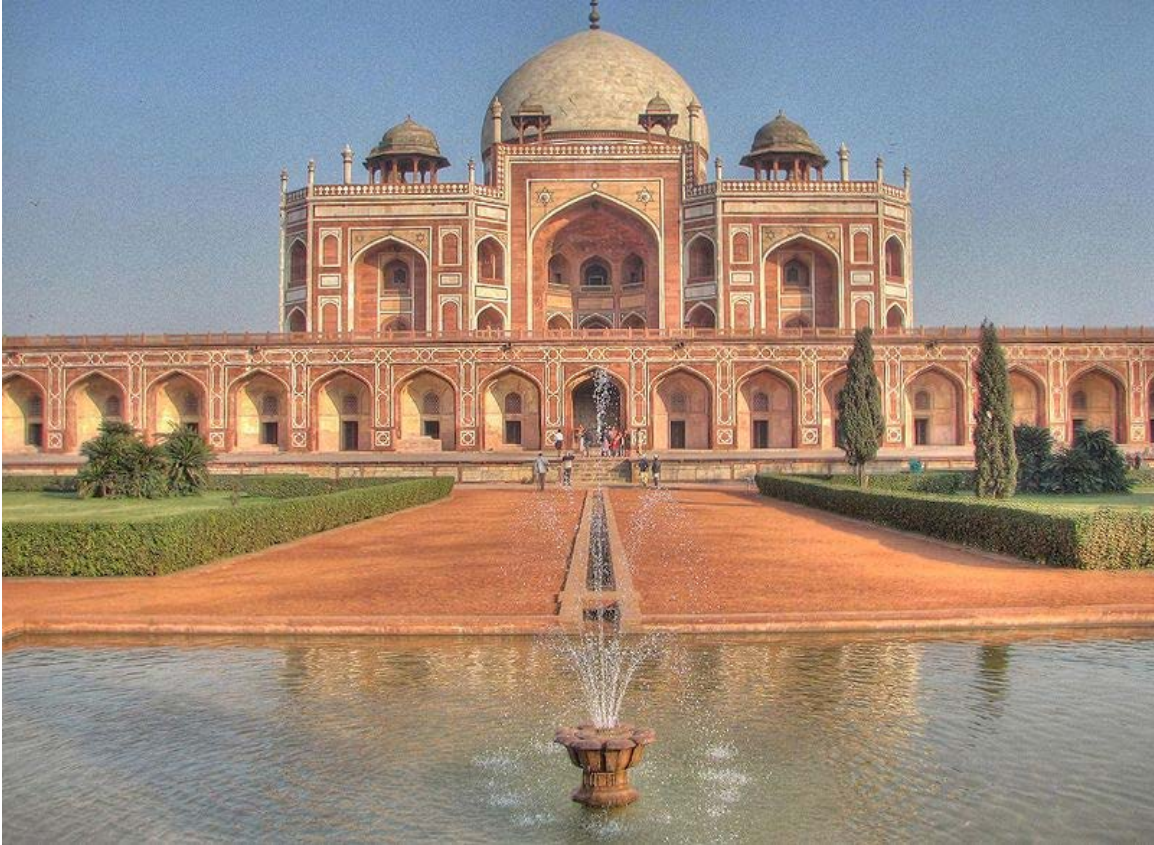
Details of Entrance portal into Humayun's Tomb



Entrance Gateway to Humayun's Tomb enclosure, from inside.



Chamfered edges add to the over all symmetrical design of the mausoleum



The fountain at the end of water channels in the *Charbagh* Garden, though simple in design were remarkable engineering innovation for the time.

The site was chosen on the banks of Yamuna river, due to its proximity to Nizamuddin Dargah, the mausoleum of the celebrated Sufi saint of Delhi, Nizamuddin Auliya, who was much revered by the rulers of Delhi, and whose residence, *Chilla Nizamuddin Auliya* lies just north-east of the tomb. In later Mughal history, the last Mughal Emperor, Bahadur Shah Zafar took refuge here, during the Indian Rebellion of 1857, along with three princes, and was captured by Captain Hodson before being exiled to Rangoon. At the time of the Slave Dynasty this land was under the 'KiloKheri Fort' which was capital of Sultan Kequbad, son of Nasiruddin (1268–1287).

History



Mughal Emperor, Humayun r. 1508 - 1556



Humayun's Tomb, with his Barber's Tomb (*Nai-ka-Gumbad*) in the foreground, Delhi, 1858 photograph.

After his death on January 20, 1556, Humayun's body was first buried in his palace at Delhi. Thereafter it was taken to Sirhind, in Punjab by Khanjar Beg, where in 1558, it was seen by his son, the then Mughal Emperor, Akbar. Akbar subsequently visited the tomb when it was about to be completed in 1571.

The tomb of Humayun was built by the orders of Hamida Banu Begum, Humayun's widow, and begun in 1565, nine years after his death, and completed in 1572 AD at a cost of 15 lakh rupees (1.5 million) at the time. She is often confused with another royal, Haji Begum, the first wife of Humayun, though according to *Ain-i-Akbari*, a 16th century detailed document written during the reign of Akbar, there was another Haji Begum, who was the daughter of Humayun's mother's brother, and was later in life, put in charge of the tomb.

According to `Abd al-Qadir Bada'uni, one of the few contemporary historians to mention its construction, the architect of the tomb was the Persian architect, Mirak Mirza Ghiyas (also referred to as *Mirak Ghiyathuddin*) who was brought from Herat (northwest Afghanistan), and had previously designed several buildings in Herat, Bukhara (now Uzbekistan), and others elsewhere in India. Unfortunately, before the structure's completion, he died and so his son *Sayyed Muhammad ibn Mirak Ghiyathuddin* completed his father's design in 1571.

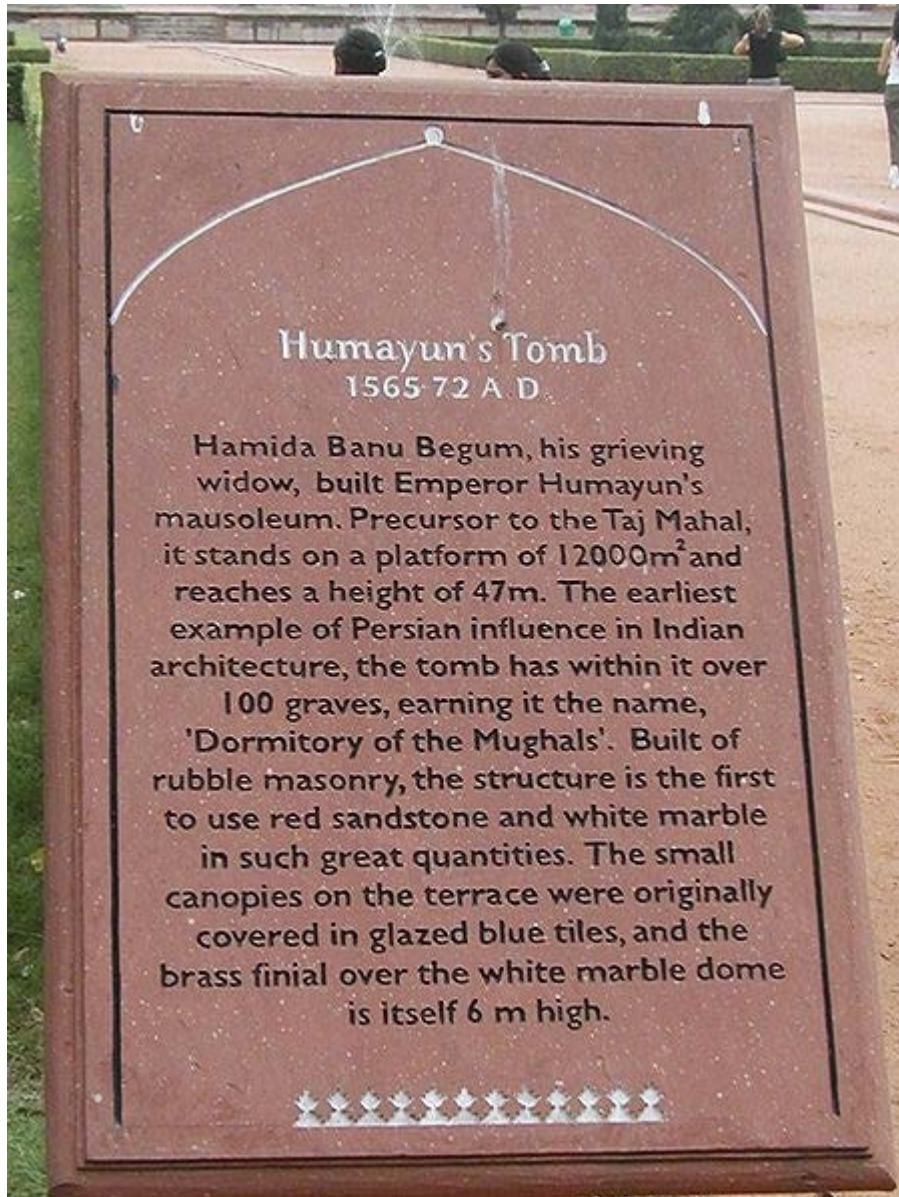


English garden-style roundabouts replaced the square central tanks of the Charbagh garden in 1860

An English merchant, William Finch, who visited the tomb in 1611, describes the rich interior furnishing of the central chamber (in comparison to the sparse look today). He mentioned the presence of rich carpets, and a *shamiana*, a small tent above the cenotaph, which was covered with a pure white sheet and with Holy books in front along with his sword, turban and shoes.

The fortunes of the once famous Charbagh (Four-square) gardens, which spread over 13 hectares surrounding the monument, changed repeatedly over the years after its construction. The capital had already shifted to Agra in 1556, and the decline of the Mughals accelerated the decay of the monument and its features, as the expensive upkeep of the garden proved impossible. By the early 18th century, the once lush gardens were replaced by vegetable garden of people who had settled within the walled area. However, the capture of the last Mughal emperor, Bahadur Shah Zafar during the Indian Rebellion of 1857 together with the premises, and his subsequent sentencing to exile, along with execution of his three sons, meant that the monument's worst days lay ahead, as the British took over Delhi completely. In 1860, the Mughal design of the garden was replanted to a more English garden-style, with circular beds replacing the four central water pools on the axial pathways and trees profusely planted in flowerbeds. This fault

was corrected in early 20th century, when on Viceroy, Lord Curzon's orders the original garden were restored in a major restoration project between 1903–1909, which also included lining the plaster channels with sandstone; a 1915 planting scheme, added emphasis to the central and diagonal axis by lining it with trees, though some trees were also planted on the platform originally reserved for tents. The 1882, the Official curator of ancient monument in India, published his first report, which mentioned that the main garden was let out to various cultivators, amongst them till late were the royal descendants, who grew cabbage and tobacco in it.



Site-plaque, "Hamida Banu Begum his grieving widow, built Emperor Humayun's mausoleum..."



Cenotaphs, of Hamida Banu Begum, Dara Shikoh etc. in a side room.



The near by tomb of Isa Khan Niyazi, a noble in Sher Shah Suri's court.

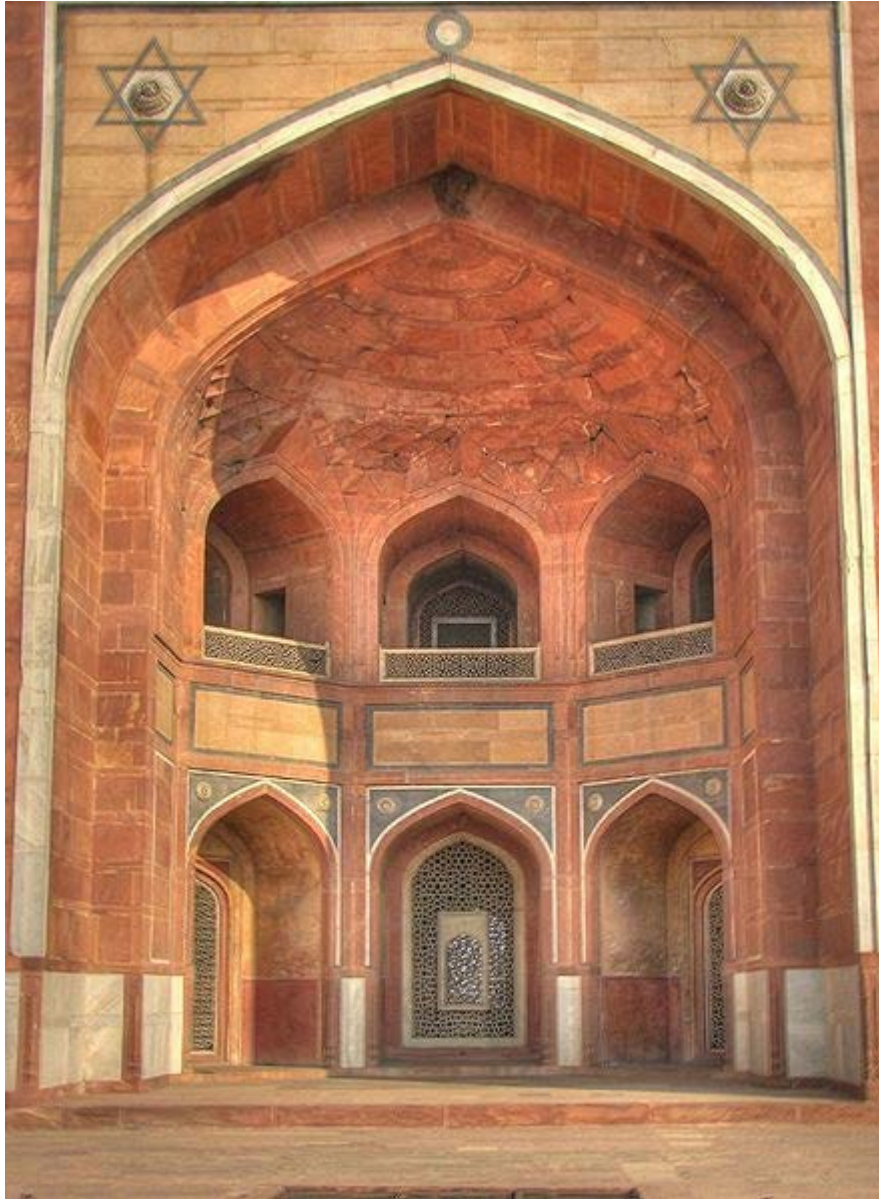


Isa Khan's mosque, across his tomb, also built ca 1547 AD, near Humayun's tomb.

During the Partition of India, in August 1947 the Purana Qila together with Humayun's Tomb, became major refugee camps for Muslims migrating to the newly founded Pakistan, and were later managed by the government of India. These camps stayed open for about five years, and caused considerable damage not only to the extensive gardens, but also to the water channels and the principle structures. Eventually, to avoid vandalism, the cenotaphs within the mausoleum were encased in brick. In the coming years, the Archeological Survey of India (ASI), took on responsibility for the preservation of heritage monuments in India, and gradually the building and its gardens were restored. Until 1985, four unsuccessful attempts were made to reinstate the original water features.

An important phase in the restoration of the complex, started around 1993, when the monument was declared a World Heritage Site. This brought new interest to its restoration, and a detailed research and excavation process began under the aegis of the Aga Khan Trust and the ASI, culminating in 2003, when the much of the complex, and gardens were finally restored, with its historic fountains running once again after several centuries of disuse. The restoration has been a continuous process ever since, with subsequent phases addressing various aspects and monuments of the complex.

Architecture



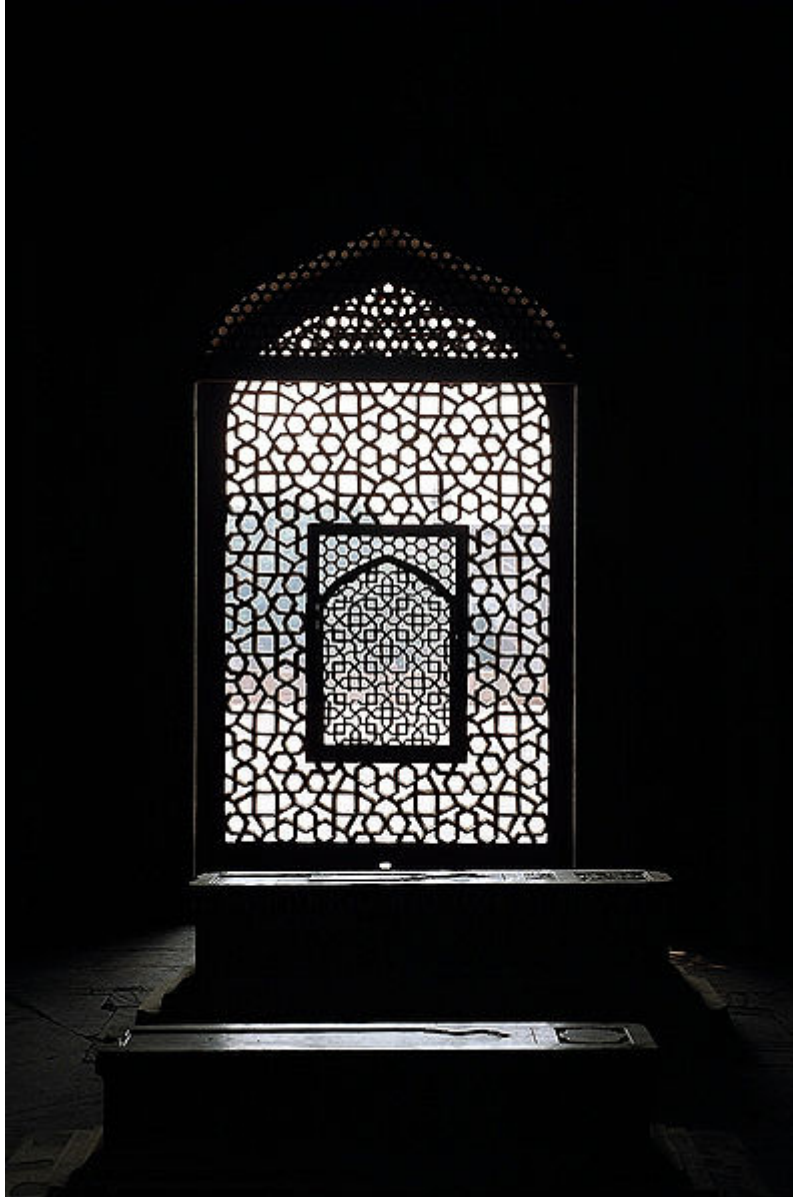
The exterior arch of Humayun's Tomb, showing niches on two levels.



Details of geometrical sandstone and marble *pietre dura* inlay patterns over the entrance *iwan* or high arc, and the *chhatris* and small minarets that surround the white marble central dome.



Inside view of the dome of Humayun's Tomb



The symbolically cut out *mihrab* facing west or Mecca, over the marble lattice screen.

Islamic rule in India also introduced Islamic architecture into the subcontinent, and early monuments started appearing in and around Delhi, the capital of Delhi Sultanate. Starting with the Mamluk dynasty which built the Qutb Minar (1192 AD) and its adjacent Quwwat-ul-Islam mosque (1193 CE). North India was successive ruled foreign dynasties in the coming centuries giving rise to the Indo-Islamic architecture. While the prevailing style of architecture was trabeate, employing pillars, beams and lintels, this brought in the arcuate style of construction, with its arches and beams, which flourished under Mughal patronage and by incorporating elements of Indian architecture, especially Rajasthani architecture including decorative corbel brackets, balconies, pendentive decorations and indeed kiosks or chhatris, to developed a distinct, Mughal architecture style, which was to become a lasting legacy of the nearly four hundred years of the Mughal rule. The combination of red sandstone and white marble was previously seen in Delhi Sultanate

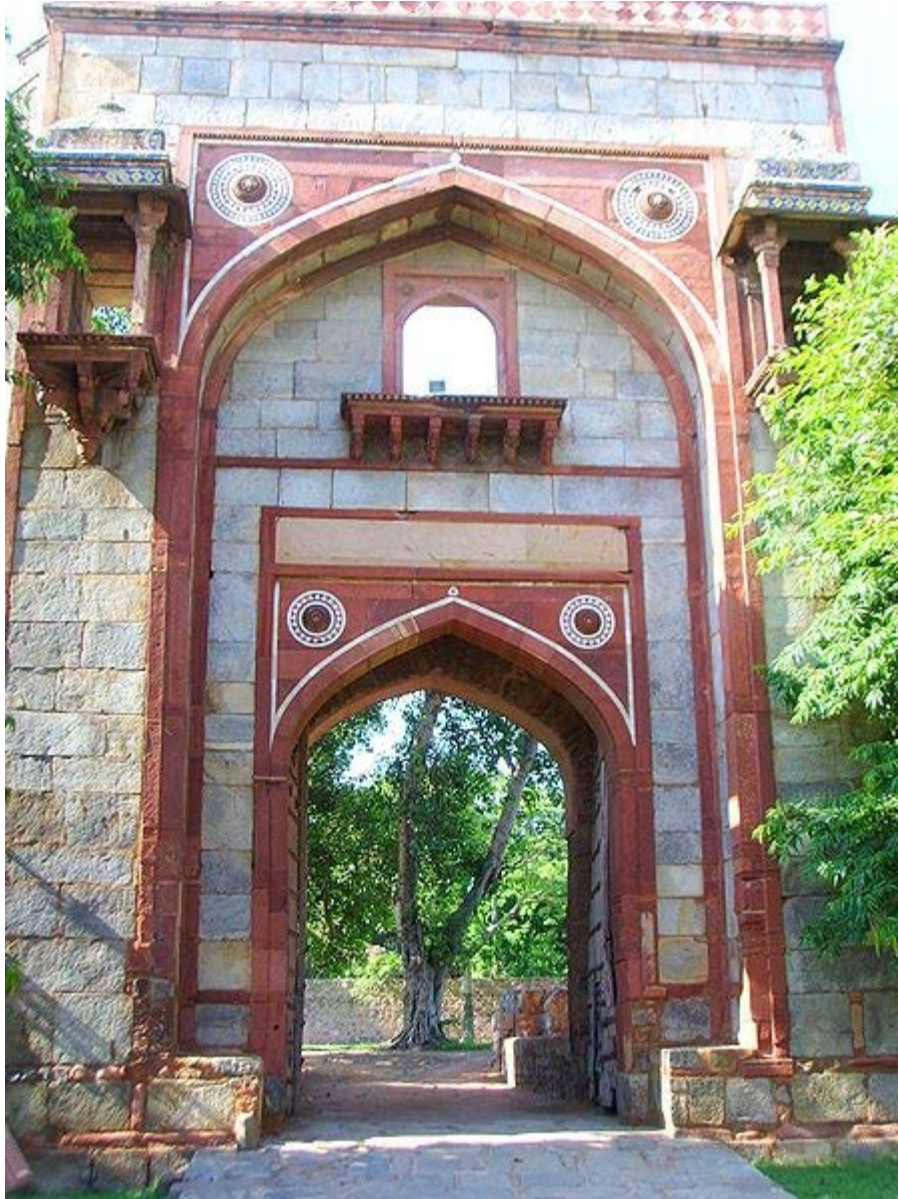
period tombs and mosques, most distinctively in the highly decorative Alai Darwaza in the Qutub complex, Mehrauli, built in 1311 AD, under the Khilji dynasty.

The high rubble built enclosure is entered through two lofty double-storeyed gateways on the west and south, 16 mt. high with rooms on either side of the passage and a small courtyards on the upper floors. Six-sided stars that adorn the main gateway on the west, are also seen on the iwan of the main tomb structure, though it has been used as ornamental cosmic symbol. The mosque usually present alongside royal tombs, like the Taj, is conspicuously missing from the enclosure, which has only one other structure, the tomb of Emperor's favorite barber, now commonly known as *Nai ka Gumbad* (Dome-of-barber). The tomb built of rubble masonry and red sandstone, uses white marble as a cladding material and also for the flooring, lattice screens (jaalis), door frames, eaves (chhajja) and for the main dome. It stands on a vaulted terrace eight-metre high and spread over 12000 sq. mt. It is essentially square in design, though chamfered on the edges to appear octagonal, to prepare ground for the design of the interior structure. The plinth made with rubble core has fifty-six cells all around, and houses over 100 gravestones. Plus, the entire base structure is on a raised platform, a few steps high.

Inspired by Persian architecture; the tomb reaches a height of 47 mt. and is 300 feet (91 m) wide, and was the first Indian building to use the Persian double dome on a high neck drum, and measures 42.5 m, and is topped by 6 mt high brass finial ending in a crescent, common in Timurid tombs. The double or 'double-layered' dome, has its the outer layer which supports the white marble exterior, while the inner part gives shape to the cavernous interior volume. As a contrast to the pure white exterior dome, rest of the building is made up of red sandstone, with white and black marble and yellow sandstone detailing, to relieve the monotony.



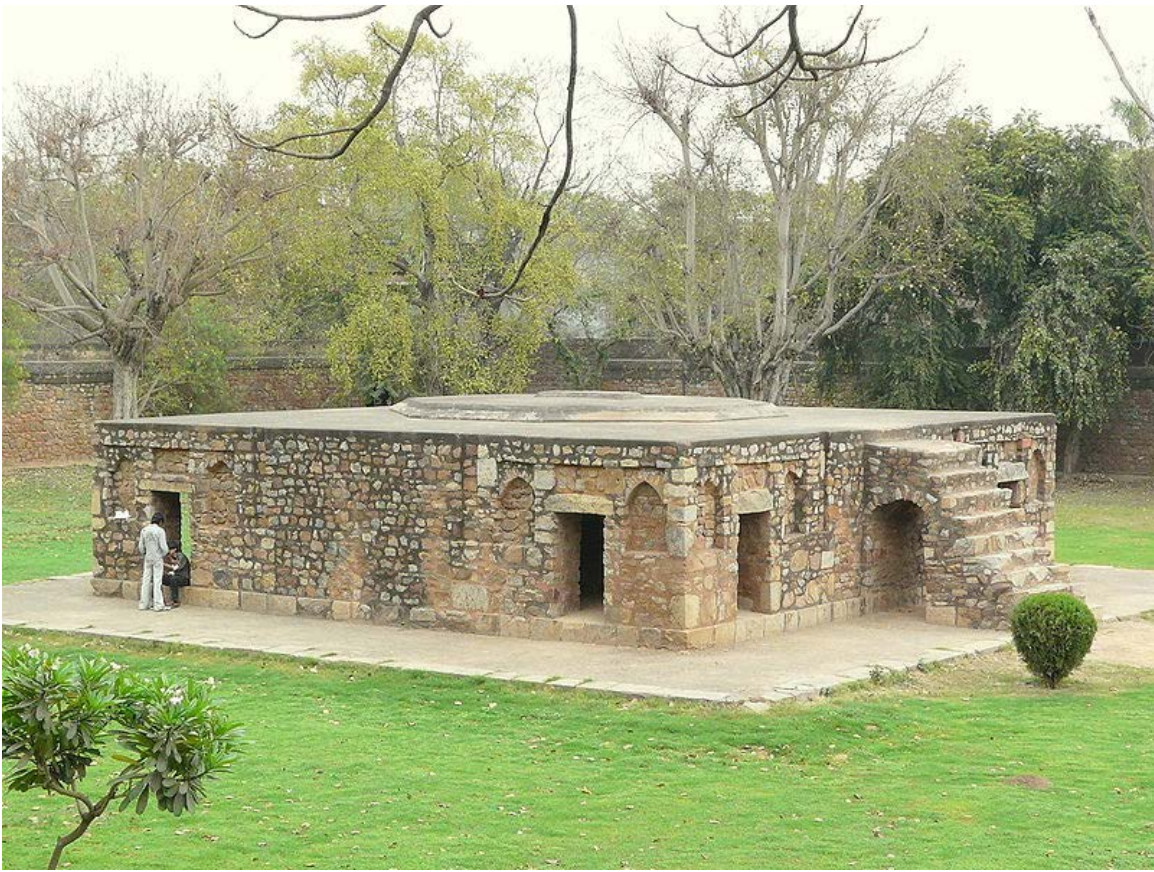
Nai-ka-Gumbad or Barber's Tomb, in Humayun's tomb complex, and a distant *Nila Gumbad* (Blue Dome), which lies outside the complex and is a late Mughal addition.



Gateway into *Arab Sarai*, south to the pathway towards Humayun's tomb.



Arab Sarai, (Rest house for the Arab), near Humayun's Tomb, built for the Persian craftsmen who came to build it.



Bu Halima's tomb and Garden, Humayun's tomb complex

The symmetrical and simple designed on the exterior is in sharp contrast with the complex interior floor plan, of inner chambers, which is a square 'ninefold plan', where eight two-storyed vaulted chambers radiate from the central, double-height domed chamber. It can be entered through an imposing entrance *iwan* (high arc) on the south, which is slightly recessed, while others sides are covered with intricate *jaalis*, stone lattice work. Underneath this white dome in a domed chamber (*hujra*), lies the central octagonal sepulcher, the burial chamber containing a single cenotaph, that of the second Mughal Emperor, Humayun aligned on the north-south axis, as per Islamic tradition, where in the head is placed to the north, while the face is turned sideways towards Mecca. The real burial chamber of the Emperor, however lies further away in an underground chamber, exactly beneath the upper cenotaph, accessible through a separate passage outside the main structure, which remains mostly closed to visiting public. This burial technique along with *pietra dura*, a marble and even stone inlay ornamentation in numerous geometrical and arabesque patterns, seen all around the facade is an important legacy of the Indo-Islamic architecture, and flourished in many later mausolea of the Mughal Empire, like the Taj Mahal, where again we find twin cenotaphs and exquisite 'pietra dura' craftsmanship.



Humayun's cenotaph stands alone in the main chamber; the real grave lies in the basement below

The main chamber also carries the symbolic element, a *mihrab* design over the central marble lattice or *jaali*, facing Mecca in the West, here instead of the traditional Surah 24, An-Noor of Quran which is inscribed on the mihrabs, this one is just an outline allowing light to enter directly into the chamber, from *Qibla* or the direction of Mecca, thus elevating the status of the Emperor, above his rivals and closer to divinity.

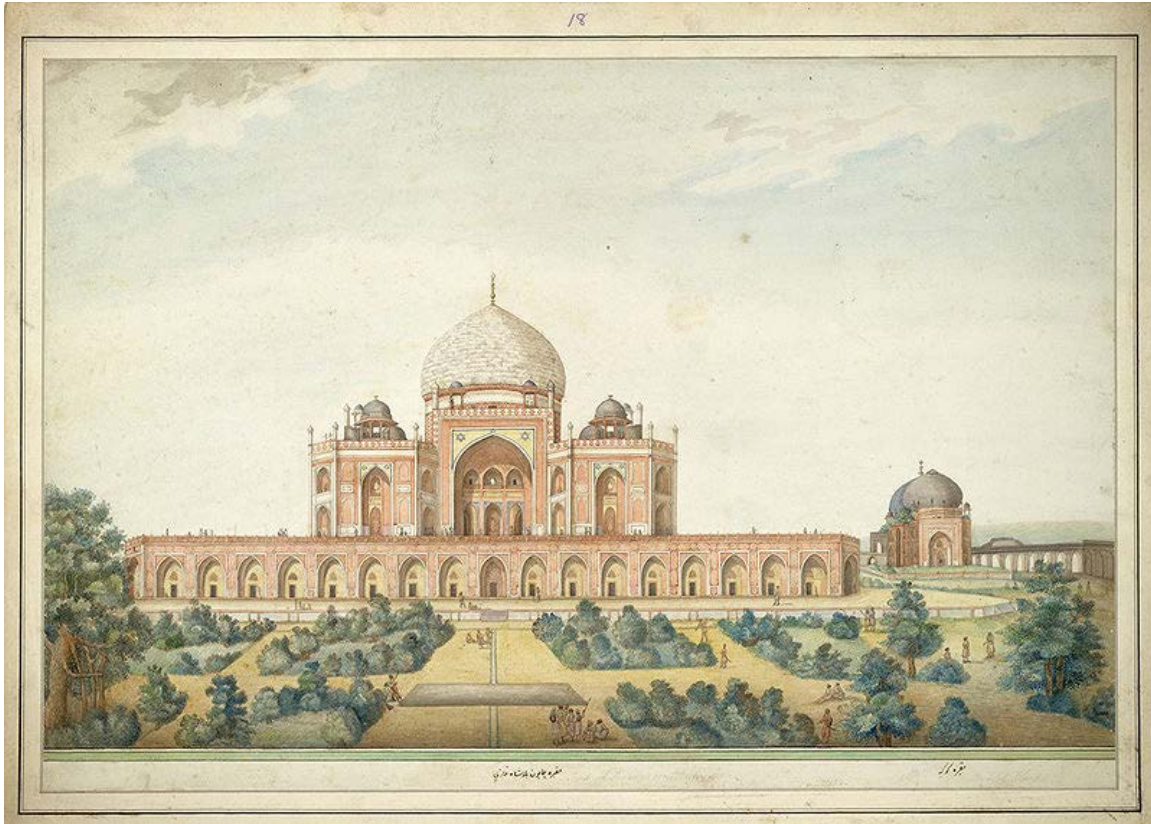
This chamber with high ceiling is then encompassed by four main octagonal chambers on two floors, set at the diagonals with arched lobbies leading to them also connecting them, plus there are four auxiliary chambers in between suggesting that the tomb was built as a dynastic mausoleum. Collectively the concept of eight side chambers not only offers passage for circumambulation of the main cenotaph, a practice common in Sufism and also visible in many Mughal imperial mausoleums, it also reflects the concept of Paradise in Islamic cosmology. Each of the main chambers has in turn eight more, smaller chambers radiating from them, and thus the symmetrical ground plan reveals itself to contain 124 vaulted chambers in all. Many smaller chambers too, contain cenotaphs of other members of the Mughal royal family and nobility, all within main walls of the tomb. Prominent among them cenotaphs of Hamida Begum herself, alongside Dara Shikoh. In all there are over 100 graves within the entire complex, including many on the first level terrace, earning it the name "Dormitory of the Mughals", since the graves are not inscribed their identification remains uncertain.

The building was first to use its unique combination of red sandstone and white marble, and includes several elements of Indian architectural, like the small canopies, or *chhatris* surrounding the central dome, popular in Rajasthani architecture and which were originally covered with blue tiles.

Char Bagh garden



Four central water courses define Char Bagh Garden's quadrilateral layout



Charbagh in 1820

While the main tomb took over eight years to build, it was also placed in centre of a 30-acre (120,000 m²) Char Bagh Garden (Four Gardens), a Persian-style garden with quadrilateral layout and was the first of its kind in the South Asia region in such a scale. The highly geometrical and enclosed Paradise garden is divided into four squares by paved walkways (khiyabans) and two bisecting central water channels, reflecting the four rivers that flow in *jannat*, the Islamic concept of paradise. Each of the four square is further divided into smaller squares with pathways, creating into 36 squares in all, a design typical of later Mughal gardens. The central water channels appear to be disappearing beneath the tomb structure and reappearing on the other side in a straight line, suggesting the Quranic verse, which talks of rivers flowing beneath the 'Garden of Paradise'.

The entire tomb and the garden is enclosed within high rubble walls on three sides, the fourth side was meant to be the river Yamuna, which has since shifted course away from the structure. The central walkways, terminate at two gates: a main one in the southern wall, and a smaller one in the western wall. It has two double-storey entrances, the West gate which used now, while the South gate, which was used during Mughal era, now remains closed. Aligned at the centre on the eastern wall lies a *baradari*, literally a pavilion with twelve doors, which is a building or room with twelve doors designed to allow the free draught of air through it, finally on the northern wall lies a *hammam*, a bath chamber.

Barber's Tomb

Towards the south-east corner, within the 'char bagh' garden, lies a tomb known as *Nai-ka-Gumbad*, or Barber's Tomb, it is datable to 1590-91, through an inscription found inside. Its proximity to the main tomb and the fact that it is the only other structure within the main tomb complex suggests its importance, however there are no inscriptions suggesting as to who is interred therein, the name Barber's tomb is the local name of the structure, hence still in use. The tomb stands on a raised platform, reached by seven steps from the south, it has a square plan and consists of a single compartment covered with a double-dome. Inside lie two graves each inscribed with verses from the Quran. Also, one of the graves is inscribed with the figure 999 which may stand for the Hijra year 1590-91.

Other monuments



Isa Khan Niyazi's Tomb, dating 1547

Tomb and mosque of Isa Khan: Several monuments dot the pathway leading up to the tomb enclosure from the main entrance in the West. Prominent among them is one that pre-dates the main tomb itself, by twenty years. Constructed in 1547 CE, it is the tomb complex of Isa Khan Niyazi, an Afghan noble in Sher Shah Suri's court of the Suri dynasty, who fought against the Mughals. The octagonal tomb is positioned within an octagonal garden, which was built during his own lifetime and the reign of Islam Shah Suri, son of Sher Shah. It later served as a burial place for the entire family of Isa Khan. On the western side of the tomb lies a three-bay wide mosque, in red sandstone. The octagonal tomb bears a striking resemblance to other tombs of the Sur dynasty

monuments in the Lodhi Gardens, in Delhi and demonstrates a marked progression in the development of the exquisite architectural style of the main tomb. Some of the architectural details present here were seen later in the main Humayun's tomb, though on a much grander scale, such as the tomb being placed in a walled garden enclosure.

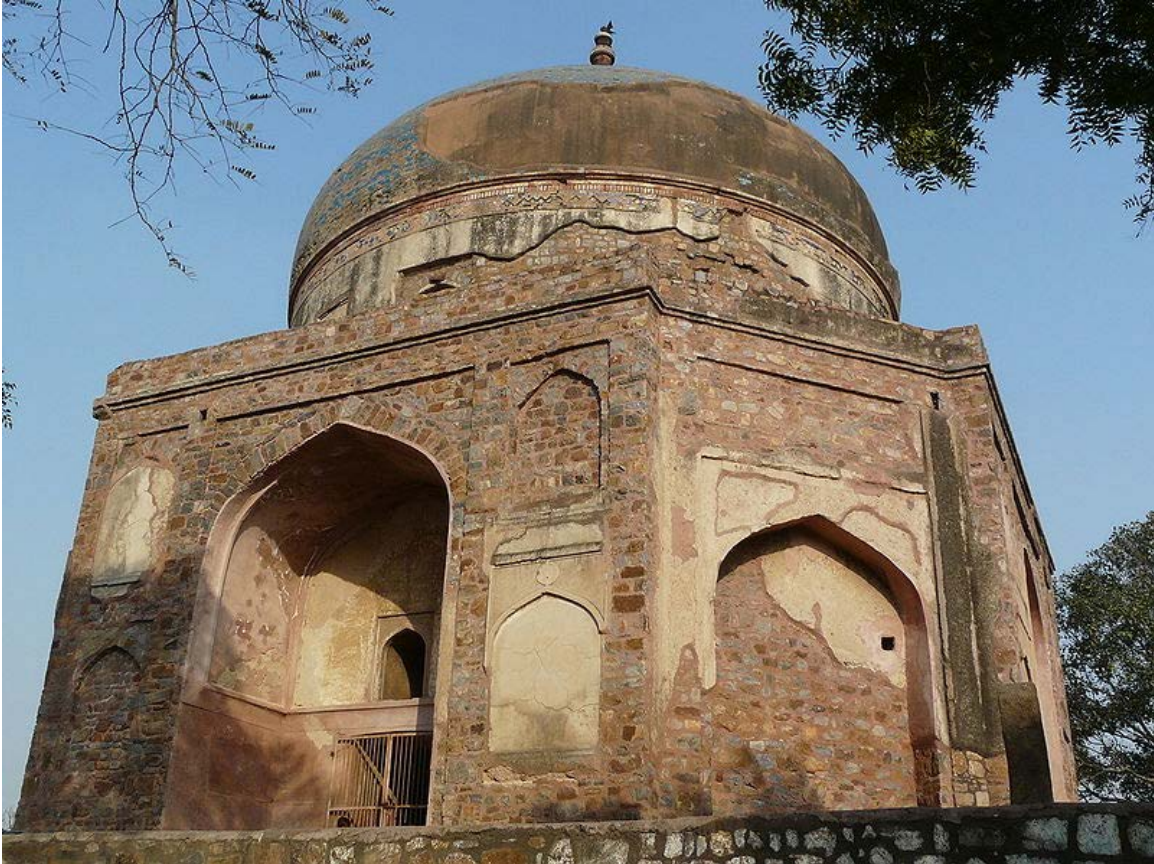


Afsarwala tomb (Officer's tomb), adjoining the *Afsarwala* mosque, built in 1566 AD, within the *Arab Sarai* complex.

Bu Halima's Tomb and Garden: When entering the complex from the West, visitor's first enter a garden complex, known as Bu Halima's Garden, though little is known about her, and since the tomb or the raised platform where it once stood is not at the centre, it appears to be a later addition.

Afsarwala Tomb and mosque: Standing southwest end of the complex, lies the *Afsarwala* tomb (Officer's Tomb) belonging to a nobleman (*Afsar* Indianized word for Officer) in Akbar's court. One of the marble graves inside the tomb is dated 1566-67 CE. The mosque itself can be dated to the same period judging from its siting, standing as it does adjacent to the tomb, rather than away from it.

Arab Sarai: Literally meaning the *sarai* (resthouse) for the Arabs, the structure stands adjacent to the *Afsarwala* mosque and was built by Hamida Banu Begum around 1560-1561 CE, ostensibly built for the craftsmen who came for the construction work.



Nila Gumbad ca 1625/6, built by courtier Abdul Rahim Khan-I-Khana, for his servant Fahim Khan

Nila Gumbad: Standing outside the boundary of the complex is the tomb known as *Nila Burj* (now known as *Nila Gumbad*) or 'Blue Dome', so called because it carries striking blue glazed tiles. It was built by Abdul Rahim Khan-I-Khana, son of Bairam Khan also a courtier in Mughal Emperor, Akbar's court, for his servant Miyan Fahim. Fahim, who not only grew up with his son, but later also died alongside one of Rahim's own sons, Feroze Khan, while fighting against the rebellion of Mughal general Mahabat Khan in 1625/26, during the reign of Jahangir. This structure is known for its unique architecture, as it is octagonal on the outside while square within; its ceiling is decorated with painted and incised plaster, it has a high neck dome and shows a conspicuous absence of a double dome feature, common to tombs of the period.

Chillah Nizamuddin Aulia: Believed to be the residence of patron saint of Delhi, Nizamuddin Auliya (d. 1325 A.D), is located just outside the main complex, near the northeastern corner of the principle mausoleum and is an example of Tughlaq period architecture.

Yet further away from the tomb complex, lie Mughal-period monuments, Bada Bateshwala Mahal, Chote Bateshwala Mahal, and *Barapula*, a bridge with 12 piers and 11 arched openings, built in 1621 by Mihr Banu Agha, the chief eunuch of Jahangir's court.

Restoration



Restoration work at Humayun's tomb, required removal of 3000 truckloads (12,000 cubic meters) of earth, and special chute installed at the back, from the roof (2008)



The re-setting and alignment of over 3,000 km of path edging, required some 60 stonecutters, and 2,000 meters of hand-dressed red sandstone slabs that edge the channels (2009)



Sandstone slab being measured, during restoration work at Humayun's Tomb. (2010)

Before the restoration work was undertaken, vandalism and illegal encroachments were rampant at the site of the tomb presenting a serious danger to the preservation of this invaluable treasure. At the main entry of Humayun's Tomb, dingy stalls had been put up under a very corrupt system of municipal patronage known as *tehbazari*, and all sorts of heavy vehicles were allowed to be parked illegally in these open spaces. On the Nila Gumbad side was a huge citadel of India's vote bank politics — thousands of 'slum dwellers' were kept by an influential section of the political leadership to serve as 'bonded voters' during elections. The environment of the dargah of Hazrat Nizamuddin Auliya had also been ruthlessly degraded and the holy tank had become a messy cesspool.

Restoration work by the Aga Khan Trust for Culture (AKTC) in collaboration with Archaeological Survey of India (ASI), which began around 1999 after research work which started in 1997, and was completed in March 2003. Around 12 hectares of lawns were replanted, and over 2500 trees and plants, including mango, lemon, neem, hibiscus and jasmine cuttings, were planted in the gardens. Installation of a new water circulation system for the walkway channels. To ensure that water flows naturally through the channels and pools on the 12-hectare (30 acre) site without the aid of hydraulic systems, the water channels were re-laid to an exacting grade of one centimetre every 40 metres (1:4000 scale). This eventually enabled water to flow through the watercourses in the gardens, and dormant fountains to start functioning once again. Other tasks in this mammoth restoration work included setting up a rainwater harvesting system using 128 ground water recharge pits, old wells which were discovered during the work were desilted and revitalized. This was first privately funded collaborative effort under the aegis of the National Cultural Fund (NCF) by the ASI. Funding included a sum of \$650,000 from the Aga Khan Trust for Culture of His Highness the Aga Khan, with help from the Oberoi Hotels Group. In addition, AKTC is conducting a more significant restoration at Babur's tomb, the resting place of Humayun's father in Kabul.

After the restoration work, the conditions in and around this complex underwent a sea-change. All the stalls and other intrusions were removed and the monuments and green spaces restored. Elegant gardens now surround the monuments, adding to their dignity and grace. When illuminated at night, the monument looks truly magnificent.

As a part of on-going restoration work, in 2009, ASI and Aga Khan Trust for Culture (AKTC) after months of manual work using hand-tools, removed a thick layer of cement concrete from the roof that was putting a pressure of about 1,102 tons on the structure. The cement concrete was originally laid in 1920s to prevent water seepage and led to a blockage in water passages, after its removal, subsequently each time there was leakage, a fresh layer of cement was added, leading to accumulated thickness of about 40 cm, this has now been replaced traditional lime-based roof layer. In the next phase, a similar treatment was given to tomb's first *chabutra* (plinth), originally paved with large blocks of quartzite stone blocks, some weighing over a 1,000 kg, though in the 1940s, an uneven settlement in the lower plinth was corrected by covering it with a layer of concrete adding to the disfigurement the original Mughal flooring, which matched with that at the West Gate.

The mausoleum today




Front view with reflections, central water channel in the 'Chahr Bagh' Garden

At present, threats to this monument arise from a potential terrorist attack or from vandalism as well as the regular mushrooming of illegal constructions and plastic waste thrown within the prohibited area around Humayun's Tomb. Threats of terrorist attack also lead to a sharp decline in tourist revenue which directly affects the upkeep of the monuments.

The Mumbai terrorist attacks of late 2008 saw a fall in tourist traffic to Humayun's tomb by more than 6000 in two months. Ill thought out construction plans like The Delhi Government's plans in 2006/2007 to build a new tunnel to connect East Delhi to Jawaharlal Nehru Stadium, Delhi in South Delhi, and to widen the roads near the tomb for the 2010 Commonwealth Games to connect National Highway-24 with Lodhi Road, also posed a serious threat to the monument. Urban planners feared that the historic monument would not have been able to withstand the vibrations ensuing from the construction work in such close proximity. Finally, the Archaeological Survey of India was able to halt the plans. During his visit to India in November 2010, US President Barack Obama visited this site.

Chapter- 5

Red Fort

Coordinates:  28°39'21"N 77°14'25"E / 28.65583°N 77.24028°E

The Red Fort Complex*

UNESCO World Heritage Site



The Red Fort is a prominent fort in Delhi

| | |
|--------------------|--------------|
| State Party | India |
| Type | Cultural |
| Criteria | ii, iii, iv |
| Reference | 231 |
| Region** | Asia-Pacific |

Inscription history

Inscription 2007 (31st Session)

* Name as inscribed on World Heritage List.

** Region as classified by UNESCO.

The **Red Fort** (Hindi: **लाल क़िला**, Urdu: **ہرقل لال**, usually transcribed into English as **Lal Qil'ah** or **Lal Qila**) is a 17th century fort complex constructed by the Mughal emperor Shah Jahan in the walled city of Old Delhi (in present day Delhi, India). It served as the capital of the Mughals until 1857, when Mughal emperor Bahadur Shah Zafar was exiled by the British Indian government. The British used it as a military camp until India was made independent in 1947. It is now a popular tourist site, as well as a powerful symbol of India's sovereignty: the Prime Minister of India raises the flag of India on the ramparts of the Lahori Gate of the fort complex every year on Independence Day. It was designated a UNESCO World Heritage Site in 2007 .

Mughal Emperor Shahjahan, started construction of the massive fort in 1638 and work was completed in 1648 (10 years). The Red Fort was originally referred to as "Qila-i-Mubarak" (the blessed fort), because it was the residence of the royal family. The layout of the Red Fort was organised to retain and integrate this site with the Salimgarh Fort. The fortress palace was an important focal point of the medieval city of Shahjahanabad. The planning and aesthetics of the Red Fort represent the zenith of Mughal creativity which prevailed during the reign of Emperor Shah Jahan. This Fort has had many developments added on after its construction by Emperor Shahjahan. The significant phases of development were under Aurangzeb and later Mughal rulers. Important physical changes were carried out in the overall settings of the site after the First War of Independence during British Rule in 1857. After Independence, the site experienced a few changes in terms of addition/alteration to the structures. During the British period the Fort was mainly used as a cantonment and even after Independence, a significant part of the Fort remained under the control of the Indian Army until the year 2003. The Red Fort is an attraction for tourists from around the world.

The Red Fort was the palace for Mughal Emperor Shah Jahan's new capital, Shahjahanabad, the seventh city in the Delhi site. He moved his capital here from Agra in a move designed to bring prestige to his reign, and to provide ample opportunity to apply his ambitious building schemes and interests.

The fort lies along the Yamuna River, which fed the moats that surround most of the wall. The wall at its north-eastern corner is adjacent to an older fort, the Salimgarh Fort, a defence built by Islam Shah Suri in 1546. The construction of the Red Fort began in 1638 and was completed by 1648.



The Indian flag flying from Delhi Gate

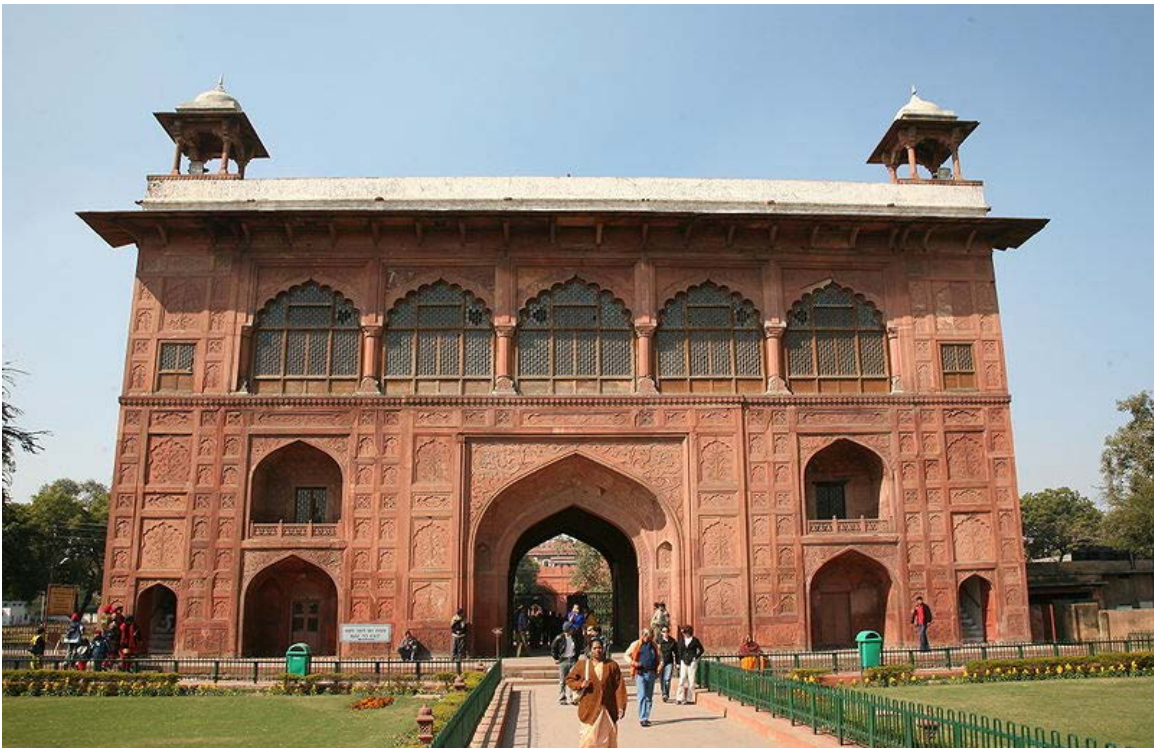
On 11 March 1783, Sikhs briefly entered Red Fort in Delhi and occupied the Diwan-i-Am. The city was essentially surrendered by the Mughal wazir in cahoots with his Sikh Allies. This task was carried out under the command of the Sardar Baghel Singh Dhaliwal, who led Karor Singhia misl which comprised Jat Sikhs from present day Amritsar and Tarn Taran districts (some major villages being Chabal, Naushehra Pannuan, Sirhali, Guruwali, Chabba, Sur Singh, Bhikhiwind, Khadur Sahib, Chola Sahib etc.).

The last Mughal emperor to occupy the fort was Bahadur Shah II "Zafar". Despite being the seat of Mughal power and its defensive capabilities, the Red Fort was not defended during the 1857 uprising against the British. After the failure of the 1857 rebellion, Zafar left the fort on 17 September. He returned to Red Fort as a prisoner of the British. Zafar was tried on in a trial starting on 27 January 1858, and was exiled on 7 October.

Architectural design



View of the pavilions in the courtyard



Naqqar Khana

Red Fort showcases the very high level of art form and ornamental work. The art work in the Fort is a synthesis of Persian, European and Indian art which resulted in the development of unique Shahjahani style which is very rich in form, expression and colour. Red Fort, Delhi is one of the important building complexes of India which encapsulates a long period of Indian history and its arts. Its significance has transcended time and space. It is relevant as a symbol of architectural brilliance and power. Even before its notification as a monument of national importance in the year 1913, efforts were made to preserve and conserve the Red Fort, for posterity.

The walls of the fort are smoothly dressed, articulated by heavy string-courses along the upper section. They open at two major gates, the Delhi and the Lahore gates. The Lahore Gate is the main entrance; it leads to a long covered bazaar street, the Chatta Chowk, whose walls are lined with stalls for shops. The Chatta Chowk leads to a large open space

where it crosses the large north-south street that was originally the division between the fort's military functions, to its west, and the palaces, to its east. The southern end of this street is the Delhi Gate.

Important buildings and other structures inside the fort



Diwan-i-Aam

Diwan-i-Aam

Beyond this gate is another, larger open space, which originally served as the courtyard of the **Diwan-i-Aam**, the large pavilion for public imperial audiences with an ornate throne-balcony (*jharokha*) for the emperor. The columns were painted in gold and there was a gold and silver railing separating the throne from the public.



Diwan-i-Khas

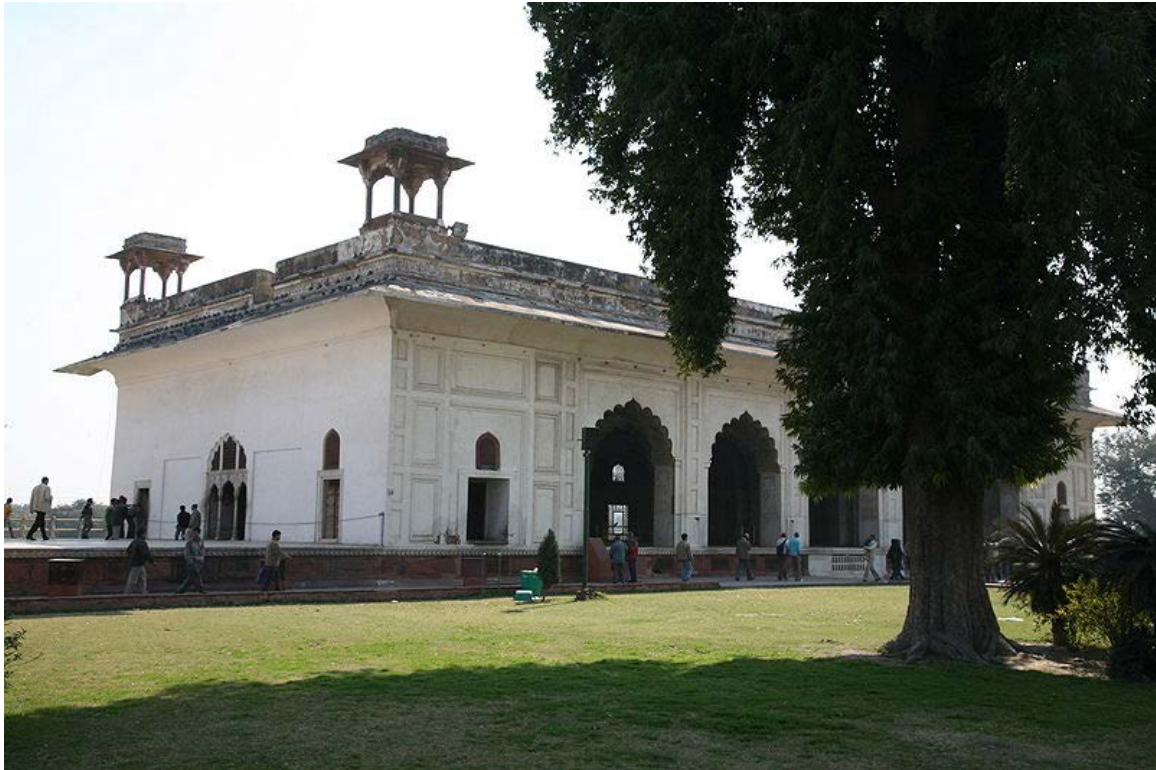
Diwan-i-Khas

The **Diwan-i-Khas** is a pavilion clad completely in marble, the pillars are decorated with floral carvings and inlay work with many semi-precious stones.

Nahr-i-Behisht

The imperial private apartments lie behind the throne. The apartments consist of a row of pavilions that sits on a raised platform along the eastern edge of the fort, looking out onto the river Yamuna. The pavilions are connected by a continuous water channel, known as the **Nahr-i-Behisht**, or the "Stream of Paradise", that runs through the centre of each pavilion. The water is drawn from the river Yamuna, from a tower, the *Shah Burj*, at the north-eastern corner of the fort. The palace is designed as an imitation of paradise as it is described in the Koran; a couplet repeatedly inscribed in the palace reads, "If there be a paradise on earth, it is here, it is here". The planning of the palace is based on Islamic prototypes, but each pavilion reveals in its architectural elements the Hindu influences typical of Mughal building. The palace complex of the Red Fort is counted among the best examples of the Mughal style.

Zenana



Rang Mahal

The two southernmost pavilions of the palace are *zenanas*, or women's quarters: the **Mumtaz Mahal** (now a museum), and the larger, lavish **Rang Mahal**, which has been famous for its gilded, decorated ceiling and marble pool, fed by the *Nahr-i-Behisht*.



Moti Masjid

Moti Masjid

To the west of the hammam is the **Moti Masjid**, the Pearl Mosque. This was a later addition, built in 1659 as a private mosque for Aurangzeb, Shah Jahan's successor. It is a small, three-domed mosque carved in white marble, with a three-arched screen which steps down to the courtyard.

Hayat Bakhsh Bagh

To its north lies a large formal garden, the **Hayat Bakhsh Bagh**, or "Life-Bestowing Garden", which is cut through by two bisecting channels of water. A pavilion stands at either end of the north-south channel, and a third, built in 1842 by the last emperor, Bahadur Shah Zafar, stands at the centre of the pool where the two channels meet.

Red Fort today



The Red Fort by night.

The Red Fort is one of the most popular tourist destinations in Old Delhi, attracting thousands of visitors every year. The fort is also the site from which the Prime Minister of India addresses the nation on 15 August, the day India achieved independence from the British. It also happens to be the largest monument in Old Delhi.

At one point in time, more than 3,000 people lived within the premises of the Delhi Fort complex. But after the Sepoy Mutiny of 1857, the fort was captured by Britain and the residential palaces destroyed. It was made the headquarters of the British Indian Army. Immediately after the mutiny, Bahadur Shah Zafar was tried at the Red Fort. It was also here in November 1945, that the most famous courts-martial of three officers of the Indian National Army were held. After India gained independence in 1947, the Indian Army took control over the fort. In December 2003, the Indian Army handed the fort over to the Indian tourist authorities.

Today, a sound and light show describing Mughal history is a tourist attraction in the evenings. The general condition of the major architectural features is mixed. None of the water features, which are extensive, contain water. Some of the buildings are in fairly good condition and have their decorative elements undisturbed. In others, the marble inlay flowers have been removed by looters and vandals. The tea house, though not in its historical state, is a functioning restaurant. The mosque and hamam are closed to the public, though one can catch peeks through the glass windows or marble lattice work.


Walkways are left mostly in a crumbling state. Public toilets are available at the entrance and inside the park, but some are quite unsanitary.

The entrance through the Lahore Gate leads to a retail mall with jewellery and crafts stores. There is a museum of "blood paintings" depicting young Indian martyrs of the 20th century along with the story of their martyrdom. There is also an archaeological museum and an Indian war memorial museum.

The fort was the site of a December 2000 attack by terrorist group Lashkar-e-Toiba which killed two soldiers and one civilian in what was described in the media as an attempt to derail the India-Pakistan peace process in Kashmir.

Chapter- 6


Lahore Fort

Coordinates:  31°35'25"N 74°18'35"E / 31.59028°N 74.30972°E

Fort and Shalamar Gardens in Lahore*

UNESCO World Heritage Site



| | |
|--------------------|--|
| State Party |  Pakistan |
| Type | Cultural |
| Criteria | i, ii, iii |
| Reference | 171 |

| | |
|----------------------------|--------------------|
| Region** | Asia-Pacific |
| Inscription history | |
| Inscription | 1981 (5th Session) |
| Endangered | 2000- |

* Name as inscribed on World Heritage List.

** Region as classified by UNESCO.

The **Lahore Fort**, locally referred to as *Shahi Qila* (Urdu: شہنشاہی قلعہ) is citadel of the city of Lahore, Punjab, Pakistan. It is located in the northwestern corner of the Walled City of Lahore. The trapezoidal composition is spread over 20 hectares.

Origins of the fort go as far back as antiquity, however, the existing base structure was built during the reign of Mughal emperor Akbar (1556–1605), and was regularly upgraded by subsequent rulers, having thirteen gates in all. Thus the fort manifests the rich traditions of Mughal architecture. Some of the famous sites inside the fort include: Sheesh Mahal, Alamgiri Gate, Naulakha pavilion, and Moti Masjid. In 1981, the fort was inscribed as a UNESCO World Heritage Site along with the Shalimar Gardens (Lahore).

The Pakistan Pavilion at Expo 2010 is designed as a replica of the fort.



Alamgiri Gate in front of the fort



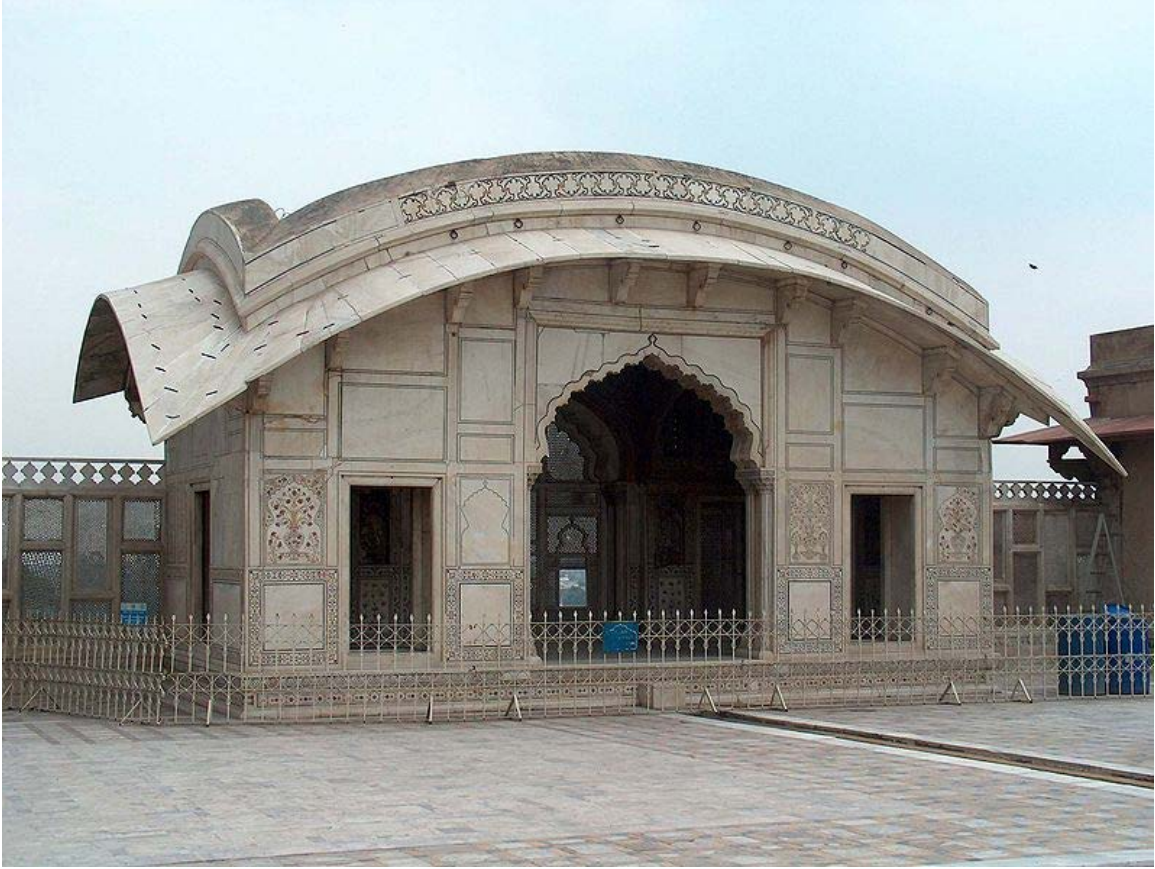
Lahore Fort at night-time.



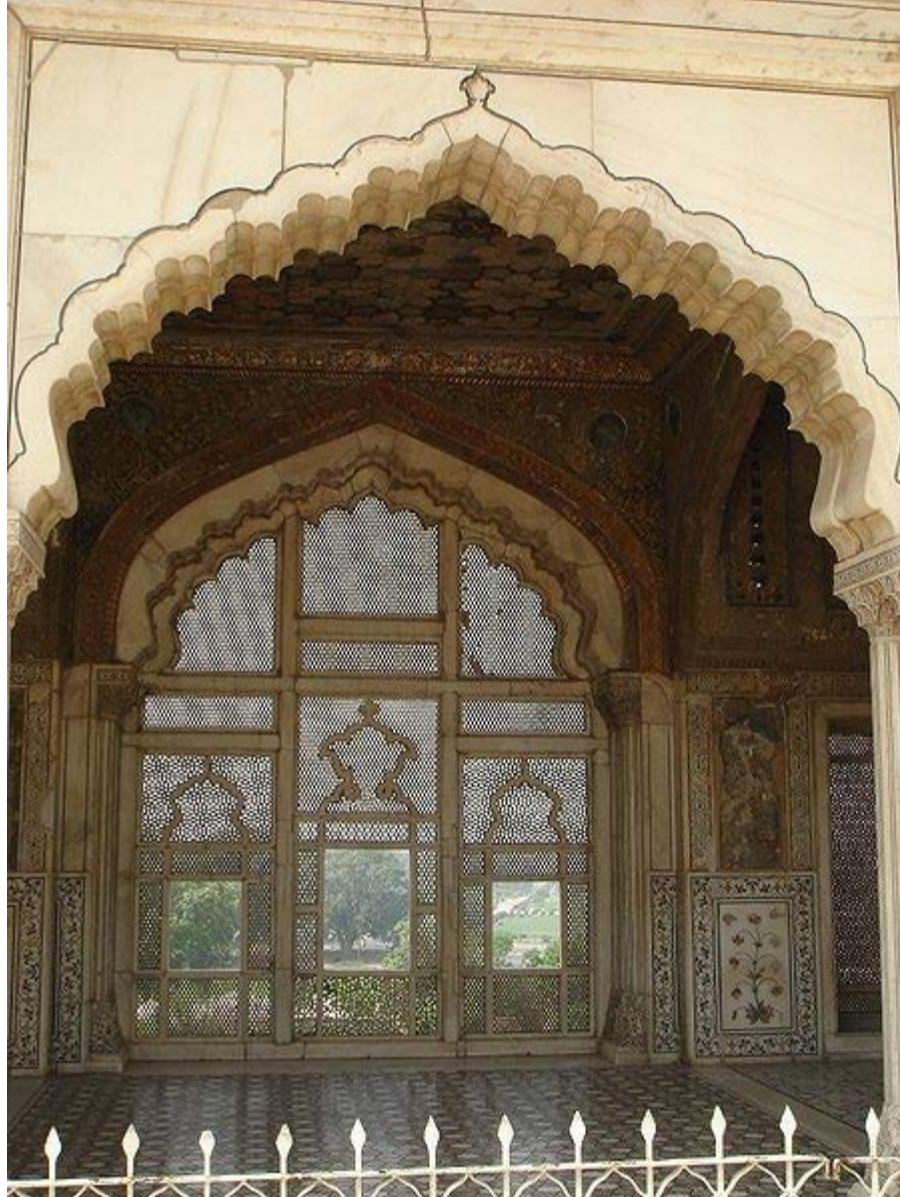
Old 'Khangah' inside Fort



Naulakha Pavilion



Naulakha Pavilion



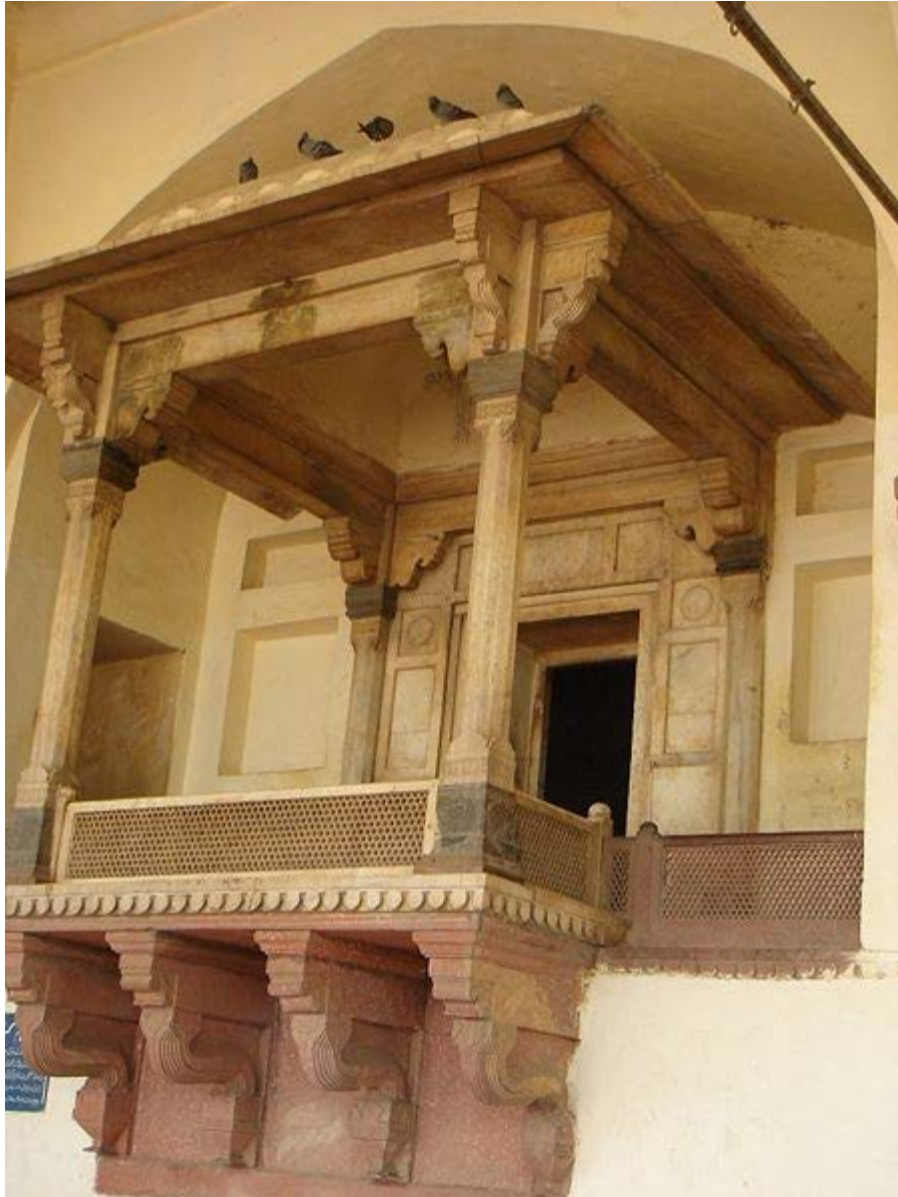
Naulakha Detail

Origins

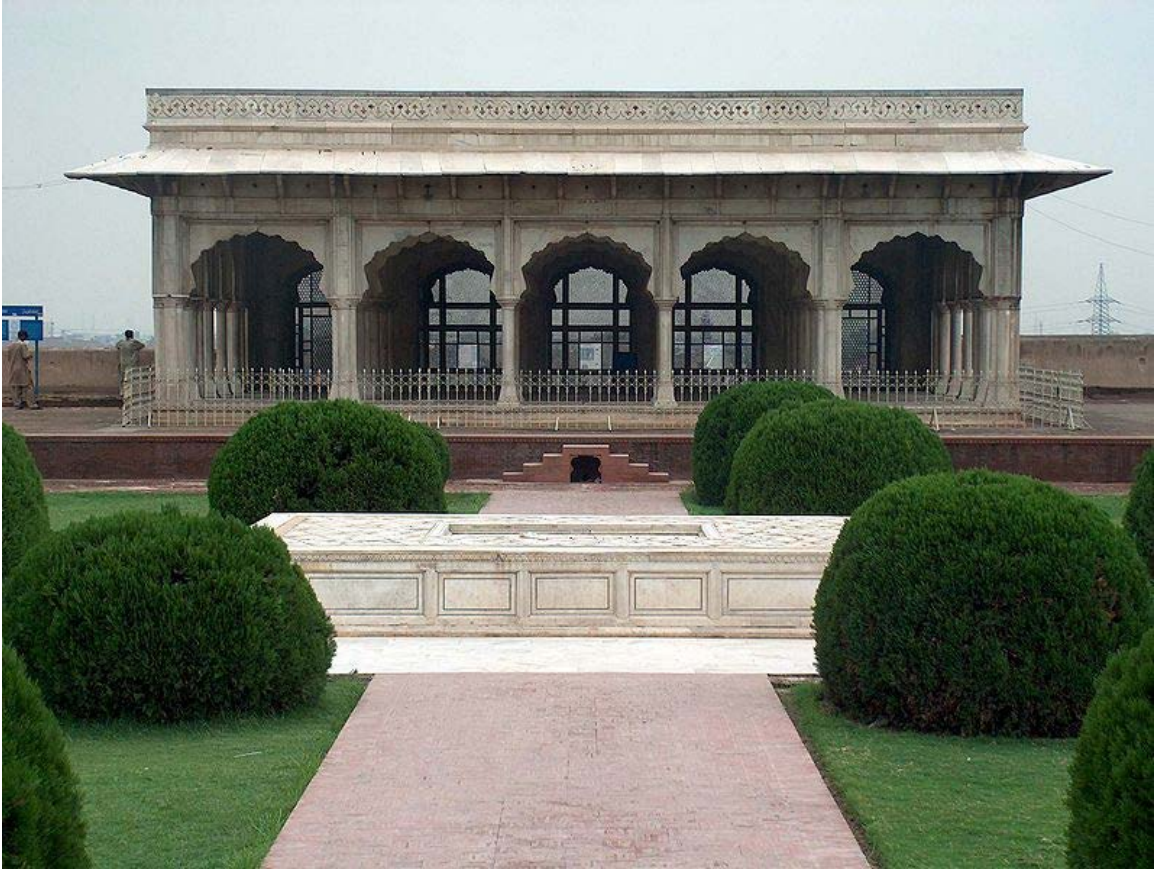
The origins of Lahore Fort are obscure and are traditionally based on various myths. However, during the excavation carried out in 1959 by the Department of Archaeology, in front of *Diwan-e-Aam*, a gold coin of Mahmood of Ghazni dated AH 416 (1025 AD) was found at a depth of 7.62 metres from the level of the lawns. Cultural layers continued to a further depth of 5 metres, giving strong indications that people had lived here, long before the conquest of Lahore by Mahmood in 1021 AD. Further mention of the fort is traceable to Shahab-ud-din Muhammad Ghuri's successive invasions of Lahore from 1180 to 1186 AD.



Black-wooden door



'Jharoka' - Royal Balcony



Diwan-e-Khas: Hall of Special Audience

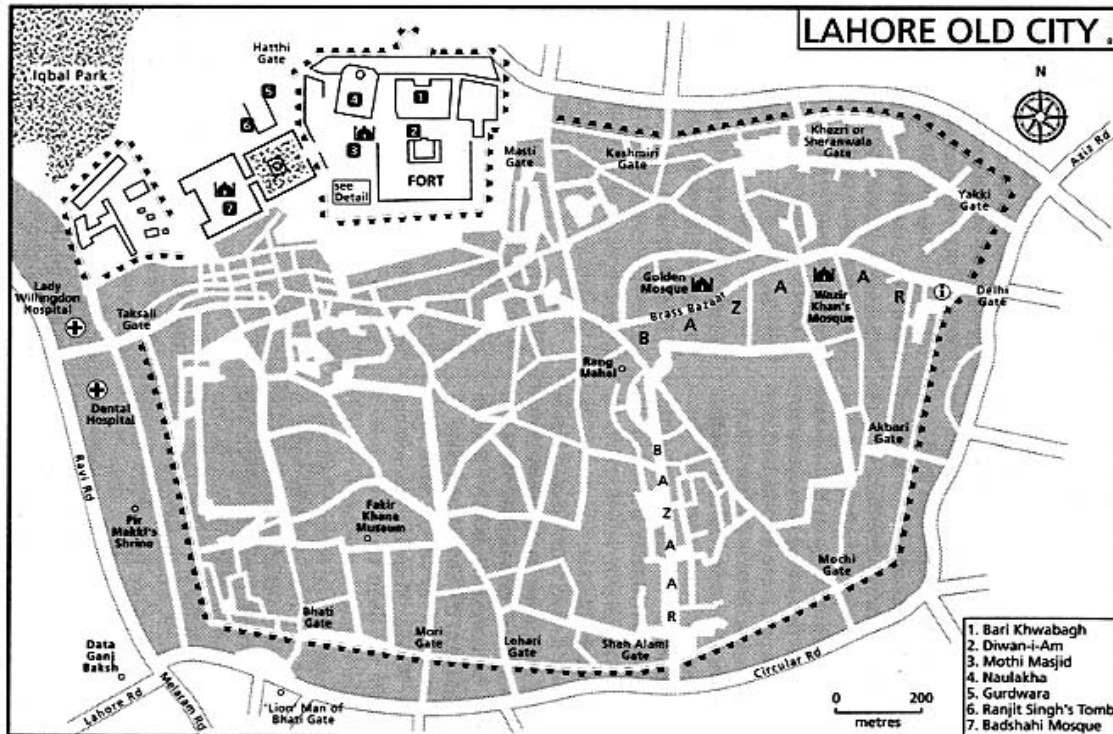


Diwan-e-Aam: Hall of Public Audience

Timeline



A picture showing the Lahore Fort and Hazuri Bagh Pavilion in 1870.



Location of Fort along the Walled City of Lahore

- It cannot be said with certainty when the Lahore Fort was originally constructed or by whom, since this information is lost to history, possibly forever. However, evidence found in archaeological digs gives strong indications that it was built long before 1025 AD.
- 1241 AD - Destroyed by Mongols.
- 1267 AD - Rebuilt by Sultan Ghiyas ud din Balban.
- 1398 AD - Destroyed again, by Amir Tamir's army.
- 1421 AD - Rebuilt in mud by Sultan Mubark Shah Syed.
- 1432 AD - The fort is occupied by Shaikh Ali of Kabul who makes repairs to the damages inflicted on it by Shaikha Khokhar.
- 1566 AD - Rebuilt by Mughal emperor Akbar, in solid brick masonry on its earlier foundations. Also perhaps, its area was extended towards the river Ravi, which then and up to about 1849 AD, used to flow along its fortification on the north. Akbar also built *Doulat Khana-e-Khas-o-Am*, the famous *Jharoka-e-Darshan* (Balcony for Royal Appearance), Masjidi Gate etc.
- 1618 AD - Jehangir adds *Doulat Khana-e-Jehangir*
- 1631 AD - Shahjahan builds *Shish Mahal* (Mirror Palace).
- 1633 AD - Shahjahan builds *Khawabgah* (a dream place or sleeping area), *Hamam* (bath), *Khilwat Khana* (retiring room), and *Moti Masjid* (Pearl Mosque).
- 1645 AD - Shahjahan builds *Diwan-e-Khas* (Hall of Special Audience).
- 1674 AD - Aurangzeb adds the massively fluted *Alamgiri Gate*.
- (Sometime during) 1799-1839 AD - The outer fortification wall on the north with the moat, the marble *athdera*, *Havaeli Mai Jindan* and *Bara Dari Raja Dhiyan Singh* were constructed by Ranjit Singh, Sikh ruler from 1799-1839 AD

- 1846 AD - Occupied by the British.
- 1927 AD - The British hand over the Fort to the *Department of Archaeology* after demolishing a portion of the fortification wall on the south and converting it into a stepped form thus *defortifying* the fort.

Structure




A view of the front of the *Sheesh Mahal*.

The strategic location of Lahore city between the Mughal territories and the strongholds of Kabul, Multan, and Kashmir required the dismantling of the old mud-fort and fortification with solid brick masonry. The structure is dominated by Persian influence that deepened with the successive refurbishments by subsequent emperors. The fort is clearly divided into two sections: first the administrative section, which is well connected with main entrances, and comprises larger garden areas and *Diwan-e-Aam* for royal audiences. The second - a private and concealed residential section - is divided into courts in the northern part, accessible through 'elephant gate'. It also contains *Shish Mahal* (Hall of Mirrors of Mirror Palace), and spacious bedrooms and smaller gardens. On the outside, the walls are decorated with blue Persian kashi tiles. The original entrance faces the Maryam Zamani Mosque, whereas the larger Alamgiri Gate opens to the Hazuri Bagh through to the majestic Badshahi Mosque.

Chapter- 7

Lalbagh Fort

Coordinates:  23°43.16'N 90°23.26'E / 23.71933°N 90.38767°E



The Lalbagh Fort was developed by Shaista Khan.

Lalbagh Fort (Bengali: **লালবাগ দুর্গ**) (also known as "Fort Aurangabad") is an incomplete Mughal palace fortress at the Buriganga River in the southwestern part of Dhaka, Bangladesh. Construction was commenced in 1678 by Prince Muhammad Azam

during his 15-month long vice-royalty of Bengal, but before the work could complete, he was recalled by Aurangzeb. His successor, Shaista Khan, did not complete the work, though he stayed in Dhaka up to 1688. His daughter Iran Dukht nick named Pari Bibi (Fairy Lady) died here in 1684 and this led him to consider the fort to be ominous.

Lalbagh Fort is also the witness of the revolt of the native soldiers against the British during the Great Rebellion of 1857. As in the Red Fort in India, they were defeated by the force led by the East India Company. They and the soldiers who fled from Meerat were hanged to death at the Victoria Park. In 1858 the declaration of Queen Victoria of taking over the administrative control of India from the Company was read out at the Victoria park, latter renamed Bahadur Shah Park after the name of the last Mughal Emperor who led that greatest rebellion against then British empire.



Lalbagh Fort



Lalbagh Fort



Lalbagh Fort



Lalbagh Fort

Layout of fort



Lalbagh fort and the Tomb of Pari Bibi

The fort was long considered to be a combination of three buildings:

- the mosque;
- the tomb of Bibi Pari; and
- the Diwan-i-Aam, comprising two gateways and a portion of the partly damaged fortification wall.

Recent excavations carried out by the Department of Archaeology of Bangladesh, however, they have revealed the existence of other structures, and it is now possible to have a more or less complete picture of the fort.

In the present fort area of 18 acres (73,000 m²), excavations have revealed the remains of either 26 or 27 structures, with elaborate arrangements for water supply, sewerage, roof gardens, and fountains. Renovation work by the Archaeology Department has now put Lalbagh Fort in a much-improved shape, and it has now become an interesting spot for tourists and visitors.



Lalbagh Fort



Lalbagh Fort



Lalbagh Fort

Gateways



1814 painting by Charles D'Oyly showing the South wall, beside the Buriganga River. Now, the river flows at least a mile to the south.

Of the three surviving gateways, the southern one is the most imposing. Seen from the front, it is a three-storeyed structure with a front-on, bordered with slender minarets. From inside, it gives the impression of a two-storeyed structure. The gateway on the northeast is a much smaller and simpler structure. Structural evidence indicates that the fort extended to the eastern side, beyond the present Shaista Khan Road. The third gate, now in the centre of the northern boundary wall, was left incomplete. The present one is a recent construction.

Southern fortification wall

The southern fortification wall, running westward from the South Gateway, stretches up to the huge bastion in the southwestern corner of the fort. It runs northward for a distance, and is then lost. The boundary wall on the eastern side, connecting the southern and northern gateways, is a modern wall, and it is now assumed that the fort originally embraced areas further east, beyond the present Shaista Khan Road. H



Incomplete Fortress near Lalbagh Fort



Inside Lalbagh Fort



Building at Lalbagh Fort



Mosque at Lalbagh Fort



Inside Lalbagh Fort-2.jpg

On the northern side of the southern fortification are placed utility buildings, such as the stable, the administrative block, and its western part accommodates a beautiful roof-garden, with arrangements for fountains and a water reservoir. The residential part is located on the eastern side of the western fortification, mainly to the south-west of the mosque, where the remains of a sewerage line have been found.

The southern fortification is a twin wall:

- the outer one is about 6.10 m high and 1.37 m thick; and
- the inner one is 13.7 m high with same thickness.

The two are solid up to a height of 6.10 m, and there are regular openings in the upper part of the inner wall.

The original fortification wall on the south has five bastions at regular intervals, and the western wall has two. Among the seven bastions, the biggest one is near the main southern gate at the back of the stable, which occupies the area to the west of the gateway. The bastion has an underground tunnel. Among the five bastions of the southern fortification, the central one is single-storeyed, while the rest are double-storeyed

structures. The central one contains an underground room with verandahs on three sides, and it can be approached either from the riverside or from its roof. The double-storeyed bastion at the southwestern corner of the fort is possibly a *Hawakhana*, with a water reservoir on its roof.

Two lines of terracotta pipes have been found that connect all the establishments of the fort with the reservoir. An extra-strong terracotta pipe line, made with double pipes (one inside the other), has been uncovered in the area between the *Hammam* and the tomb of Bibi Pari.



Rooftop garden

The area westwards from the stable, parallel to the southern fortification, once had a beautiful roof garden with fountain, rose, flower beds (marked with star designs), and a water reservoir. The buildings underneath contains the administrative blocks, and the residential part on the western side.

Central area



Exhibit at the museum inside Lalbagh Fort

The central area of the fort is occupied by three buildings:

- the Diwan-i-Aam and the Hammam on its east;
- the mosque on the west; and
- the tomb of Pari Bibi in between the two (in one line, but not at equal distance).

The mosque is a three-domed mosque, with a water tank in front (on the eastern side) for ablution.

A water channel, with fountains at regular interval, connects the three buildings from east to west, and two similar channels run from south to north:

- one through the middle of the ground, in between the Diwan-i-Aam and the tomb, forming a square tank, with fountains at the intersection with the east-west channel; and
- the other, from the water reservoir, passing through the bottom of the tomb.

The water channels and the fountains, a very common feature of Mughal architecture, create an atmosphere, not unlike those of the north Indian Mughal forts. A big square water tank (71.63 m each side), placed in front of and to the east of the Diwan-i-Aam, between the southern and northern gateways, adds to the beauty of the building. There are four corner stairs to descent into the tank.

Diwan-i-Aam

The double-storeyed Diwan-i-Aam, attached with a single-storeyed *Hammam* on its west, is an imposing building. The *Hammam* complex includes an open platform, a small kitchen, an oven, water storage area, a masonry brick bath-tub, a toilet, a dressing room and an extra room. The *Hammam* portion has an underground room for boiling water, and a passage for sweepers. A long partition wall runs north-south along the western facade of the *Hammam*, dividing the whole fort area into two divisions.

Tomb of Bibi Pari

The tomb of Bibi Pari, located in the center, is the most impressive of the surviving buildings of the fort. Eight rooms surround a central square room that contains the mortal remains of Bibi Pari. The central room is covered by a false octagonal-shaped dome, wrapped by a bronze plate.

The entire inner wall of the central room is covered with white marble, while the four rooms at the sides had stone skirting up to a height of one metre. The walls in the rooms at the four corners are skirted with beautifully-glazed floral tiles. The tiles have recently been restored; two of the original tiles have been retained. The room at the south eastern corner contains a small grave, popularly known to be of that of Shamsad Begum, possibly a relative of Bibi Pari.

The archaeological excavations have also revealed strata of the Sultanate, as well as of the pre-Muslim periods, from where terracotta heads and plaques have been found. Thus, it is now justified to say that though the Mughals founded Dhaka, it was definitely inhabited long before the Muslims came to Bengal.

Chapter- 8

Badshahi Mosque

Badshahi Mosque



Basic information

| | |
|--|---|
| Location |  Lahore, Pakistan |
| Geographic coordinates |  $31^{\circ}35'17.07''\text{N}$ $74^{\circ}18'36.45''\text{E}$ / $31.588075^{\circ}\text{N}$ $74.310125^{\circ}\text{E}$ Coordinates:  $31^{\circ}35'17.07''\text{N}$ $74^{\circ}18'36.45''\text{E}$ / $31.588075^{\circ}\text{N}$ $74.310125^{\circ}\text{E}$ |
| Affiliation | Sunni Islam |
| Province | Punjab |
| District | Lahore |
| Year consecrated | 1671 |
| Ecclesiastical or organizational status | Mosque |
| Leadership | Aurangzeb |

Architectural description

| | |
|---------------------------|--------|
| Architectural type | Mosque |
|---------------------------|--------|

| | |
|----------------------------|-----------------------|
| Architectural style | Islamic, Mughal |
| Completed | 1673 |
| Specifications | |
| Capacity | 100,000 |
| Dome(s) | 3 |
| Minaret(s) | 8 (4 major, 4 minor) |
| Minaret height | 176 ft 4 in (53.75 m) |

The **Badshahi Mosque** (Urdu: **دجسم ی هاشداب**) or the 'King's Mosque' in Lahore, commissioned by the Mughal Emperor Aurangzeb in 1671 and completed in 1673, is the second largest mosque in Pakistan and South Asia and the fifth largest mosque in the world. Epitomising the beauty, passion and grandeur of the Mughal era, it is Lahore's most famous landmark and a major tourist attraction.

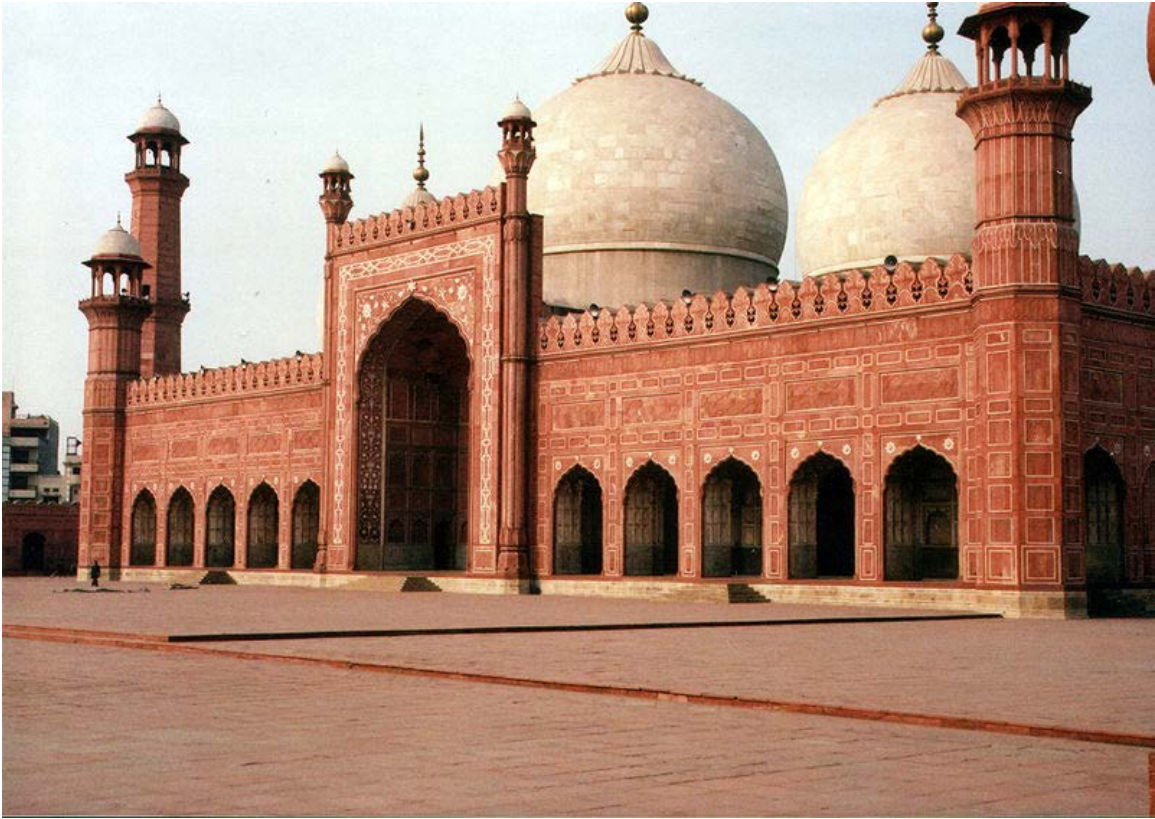
Capable of accommodating 5,000 worshippers in its main prayer hall and a further 95,000 in its courtyard and porticoes, it remained the largest mosque in the world from 1673 to 1986 (a period of 313 years), when overtaken in size by the completion of the Faisal Mosque in Islamabad. Today, it remains the second largest mosque in Pakistan and South Asia and the fifth largest mosque in the world after the Masjid al-Haram (Grand Mosque) of Mecca, the Al-Masjid al-Nabawi (Prophet's Mosque) in Medina, the Hassan II Mosque in Casablanca and the Faisal Mosque in Islamabad.

To appreciate its large size, the four minarets of the Badshahi Mosque are 13.9 ft (4.2 m) taller than those of the Taj Mahal and the main platform of the Taj Mahal can fit inside the 278,784 sq ft (25,899.9 m²) courtyard of the Badshahi Mosque, which is the largest mosque courtyard in the world.

In 1993, the Government of Pakistan recommended the inclusion of the Badshahi Mosque as a World Heritage Site in UNESCO's World Heritage List, where it has been included in Pakistan's Tentative List for possible nomination to the World Heritage List by UNESCO.



Mosque's main gateway entrance



Entrance to the Mosque's main prayer hall



Gateway to the Mosque



Hazuri Bagh Baradari in foreground

History

Construction (1671-1673)

Construction of the Badshahi Mosque was ordered in May 1671 by the sixth Mughal Emperor, Aurangzeb, who assumed the title *Alamgir* (meaning "Conqueror of the World"). Construction took about two years and was completed in April 1673.

The Badshahi Mosque was built opposite the Lahore Fort, emphasizing its stature in the Mughal Empire. It was constructed on a raised platform to avoid inundation from the nearby Ravi River during flooding. The Mosque's foundation and structure was constructed using bricks and compacted clay. The structure was then cladded with red sandstone tiles brought from a stone quarry near Jaipur in Rajasthan.

The construction work was carried out under the supervision of Aurangzeb's foster brother, Muzaffar Hussain (also known as Fidai Khan Koka), who was appointed Governor of Lahore by Aurangzeb in May 1671 to specifically oversee the construction of the Mosque and held that post until 1675. He was also Master of Ordnance to Aurangzeb. In conjunction with the building of the Badshahi Mosque, a new gate was

built at the Lahore Fort opening into the Hazuri Bagh and facing the main entrance of the Badshahi Mosque, which was named Alamgiri Gate after Aurangzeb.

Inscribed in a marble tablet on the entrance of the Badshahi Mosque are the following words in Persian:

“The Mosque of Abul Muzaffar Muhy-ud-Din Muhammad Aurangzeb Alamgir, Victorious King, constructed and completed under the superintendence of the Humblest Servant of the Royal Household, Fidai Khan Koka, in 1084 A.H.”



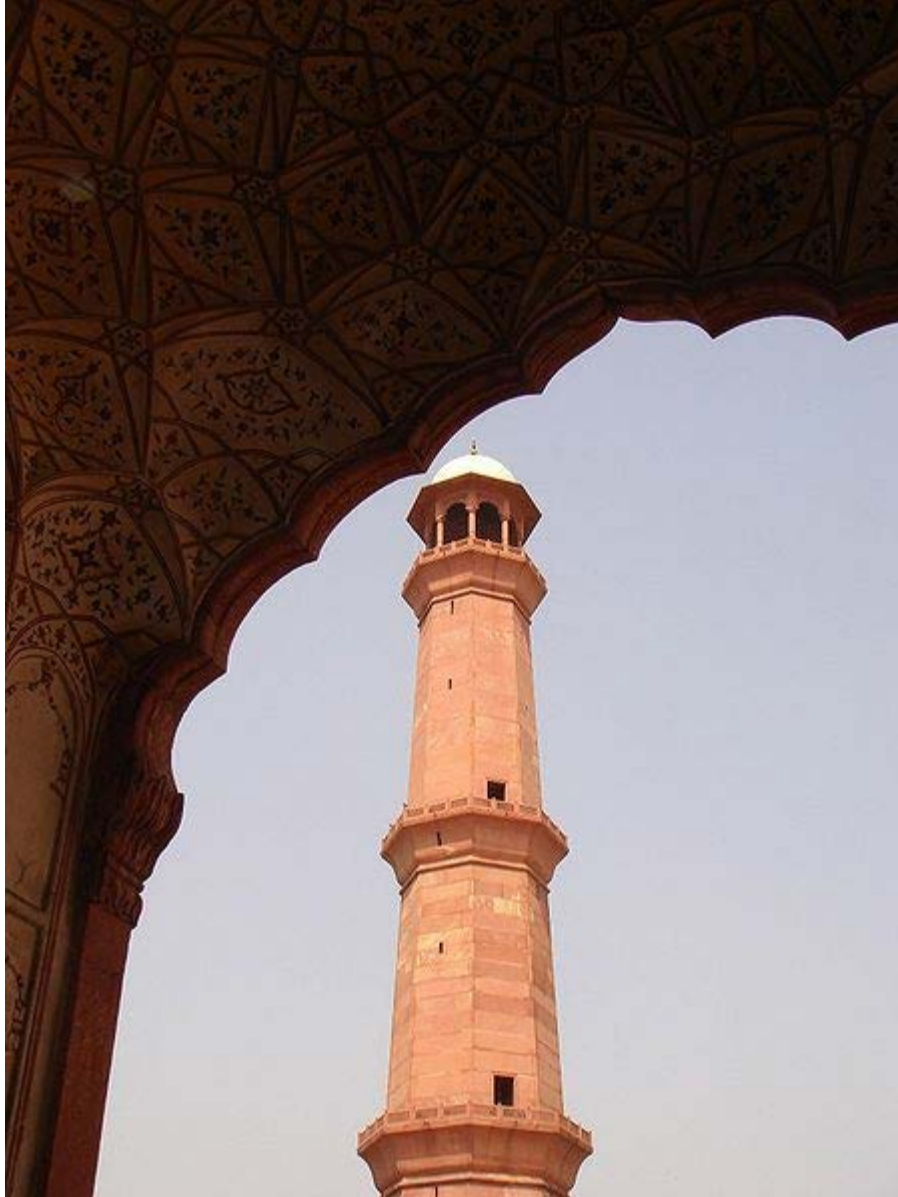
All architectural elements in harmony



Beautifully embellished main archway



View towards north-west



Cusped arch frames a minaret

Mosque under Mughal Rule (1673-1752)

When it was completed in 1673, the Badshahi Mosque was not only the largest mosque in the Mughal Empire, but also the largest mosque in the world - a record it would hold for 313 years until 1986. It was also one of the largest buildings in the Mughal Empire and the world. On a clear day, it could be seen from a distance of 15 km. The Badshahi Mosque elevated Lahore to greater political, economic and cultural importance in the Mughal Empire.

Mosque under Sikh Rule (1799-1849)

On 7 July 1799, the Sikh militia of the Sukerchakia chief, Ranjit Singh, took control of Lahore. After the capture of the city, the Badshahi Mosque was severely damaged when Ranjit Singh used its vast courtyard as a stable for his army's horses and its 80 *hujras* (small study rooms surrounding the courtyard) as quarters for his soldiers and as magazines for military stores. Ranjit Singh used the Hazuri Bagh, the enclosed garden next to the Mosque as his official royal court of audience.

In 1841, during the Sikh civil war, Ranjit Singh's son, Sher Singh, used the Mosque's large minarets for placement of *zamburaks* or light guns, which were placed atop the minarets to bombard the supporters of the Sikh Maharani Chand Kaur taking refuge in the besieged Lahore Fort, inflicting great damage to the Fort itself. In one of these bombardments, the Fort's Diwan-e-Aam (Hall of Public Audience) was destroyed (it was subsequently rebuilt by the British but never regained its original architectural splendour). During this time, Henri De la Rouche, a French cavalry officer employed in the army of Sher Singh, used a tunnel connecting the Badshahi Mosque to the Lahore Fort to temporarily store gunpowder.

Mosque under British Rule (1858-1947)

When the British took control of India, they continued the Sikh practice of using the Mosque and the adjoining Fort as a military garrison. The 80 cells (*hujras*) built into the walls surrounding the Mosque's vast courtyard on three sides were originally study rooms, which were used by the Sikhs under Ranjit Singh to house troops and military stores. The British demolished them so as to prevent them from being used for anti-British activities and rebuilt them to form open arcades or *dalans*, which continue to this day.



Pietre dure trellis' in mihrab



Inlay detail



White marble inlay in red sandstone



Minar-e-Pakistan richly framed by an aisle arch

Mosque's Return to Muslims and Restoration

Sensing increasing Muslim resentment against the use of the Mosque as a military garrison, which was continuing since Sikh Rule, the British set up the Badshahi Mosque Authority in 1852 to oversee the restoration and return of the Mosque to Muslims as a place of religious worship. From 1852 onwards, piecemeal repairs were carried out under the supervision of the Badshahi Mosque Authority. Extensive repairs commenced from 1939 onwards. The blueprint for the repairs was prepared by the architect Nawab Zen Yar Jang Bahadur.

Mosque under Pakistan (1947-present)

Restoration work at the Mosque continued after Lahore became part of the new Muslim State of Pakistan on 14 August 1947. By 1960, the Badshahi Mosque stood restored to its original condition at a total cost of 4.8 million rupees (1939-1960).

The Government of Pakistan established a small museum inside the Main Gateway Entrance of the Mosque. It contains relics of the Prophet Muhammad, his cousin Ali, and his daughter, Fatimah.

On the occasion of the 2nd Islamic Summit held at Lahore on February 22, 1974, thirty-nine heads of Muslim states offered their Friday prayers in the Badshahi Mosque, which were led by Mawlānā Abdul Qadir Azad, the then *Khatib* of the Mosque.

In 1993, the Government of Pakistan recommended the inclusion of the Badshahi Mosque as a World Heritage Site in UNESCO's World Heritage List, where it has been included in Pakistan's Tentative List for possible nomination to the World Heritage List by UNESCO.

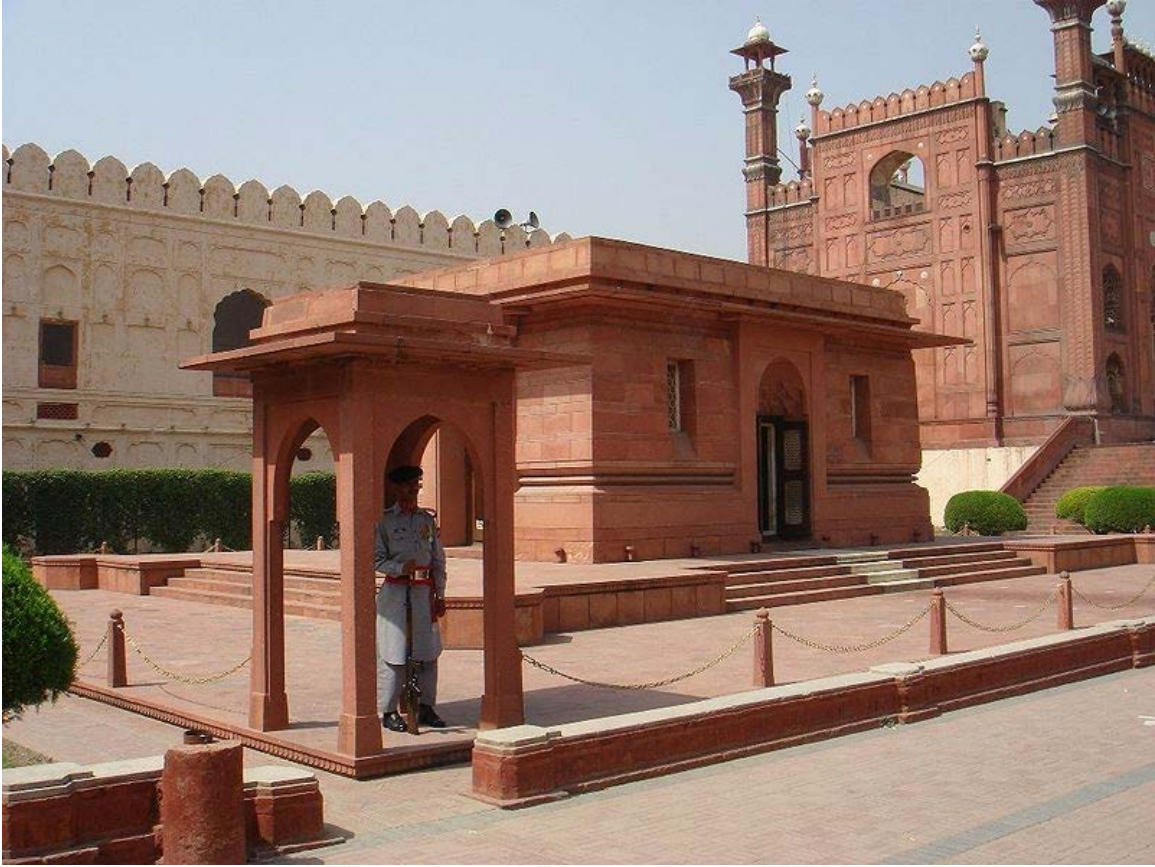
In 2000, the marble inlay in the Main Prayer Hall was repaired. In 2008, replacement work on the red sandstone tiles on the Mosque's large courtyard commenced, using red sandstone especially imported from the original source near Jaipur, Rajasthan, India.

Architecture & Design

The architecture and design of the Badshahi Mosque closely resembles that of the slightly smaller Jama Mosque in Delhi, India, which was built in 1648 by Aurangzeb's father and predecessor, Emperor Shah Jahan. Its design was inspired by Islamic, Persian, Central Asian and Indian influences. Like the character of its founder, the Mosque is bold, vast and majestic in its expression.



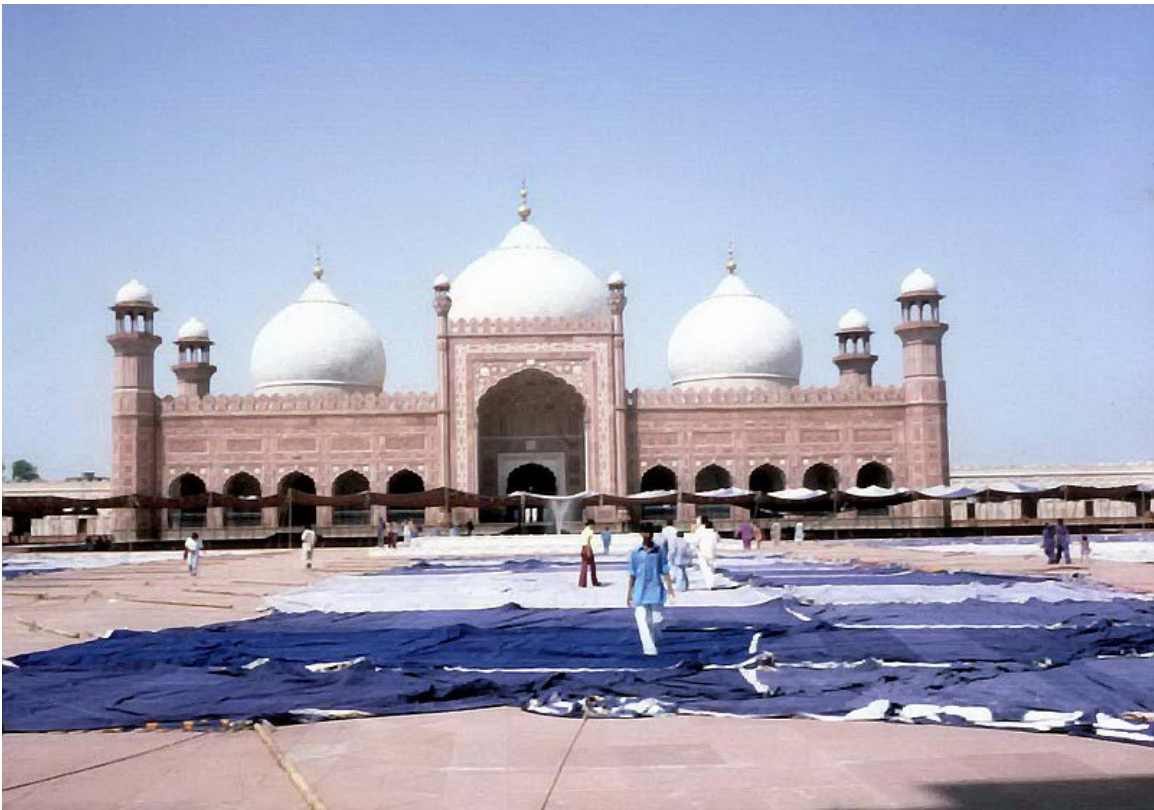
Samadhi of Ranjit Singh behind a minaret



Iqbal's mausoleum adjacent to gateway



View from Iqbal Park

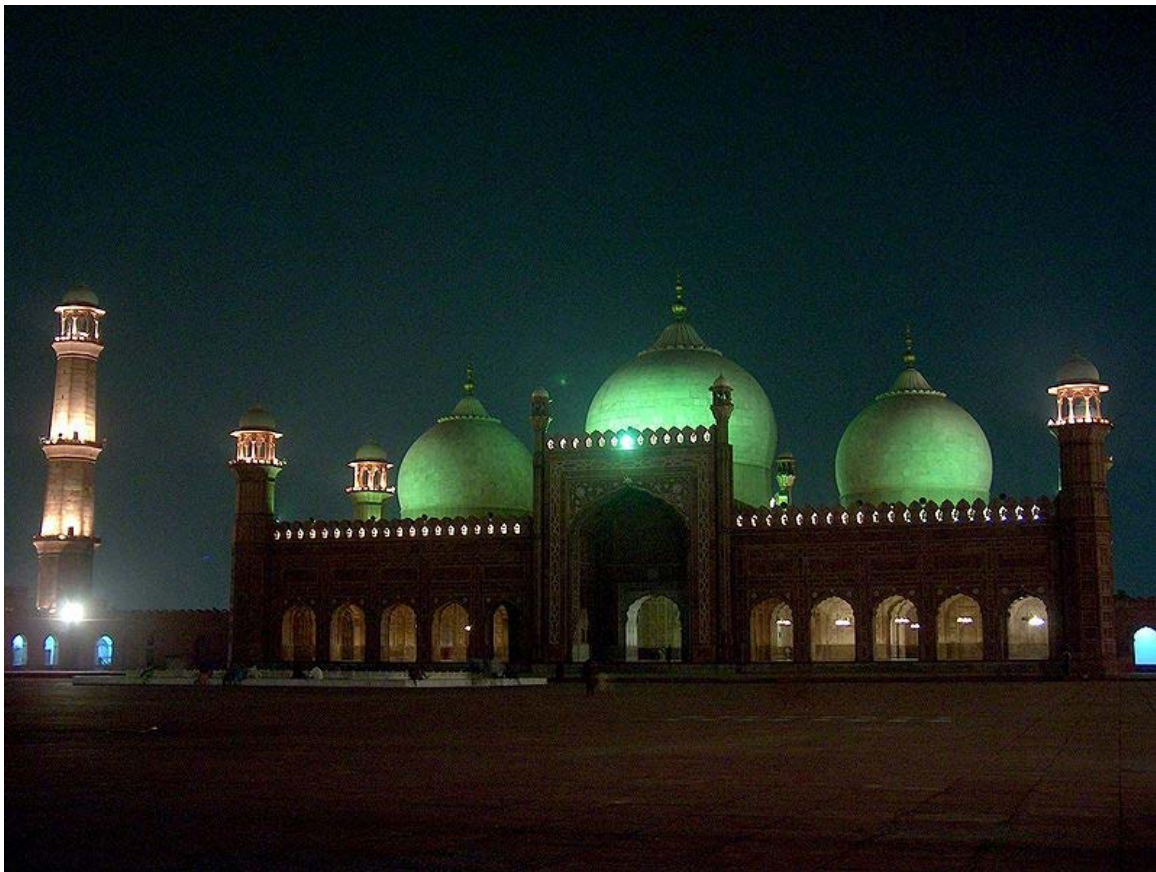


1976 view

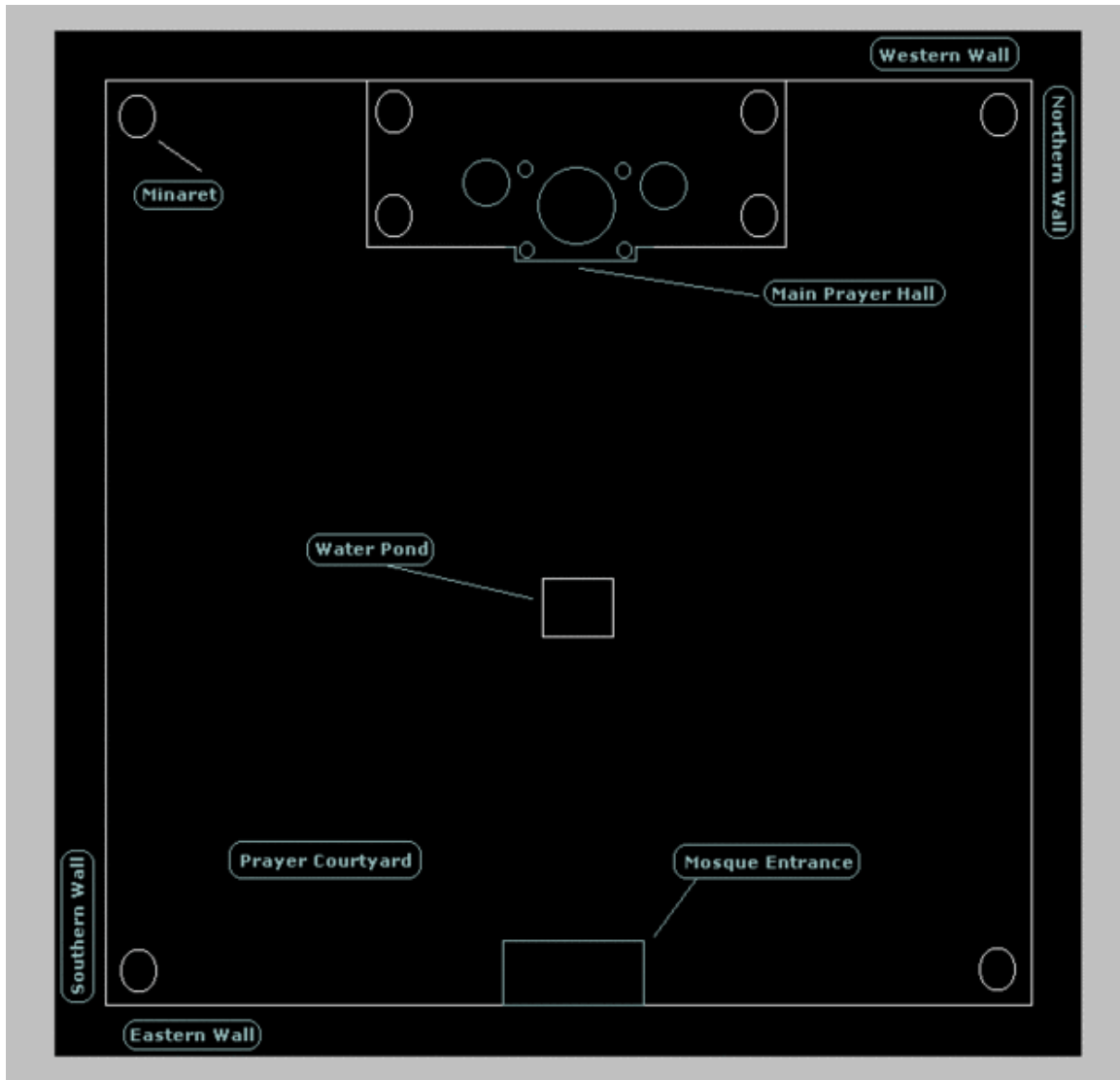
The steps leading to the Main Prayer Hall and its floor are in *Sang-e-Alvi* (variegated marble). The Main Prayer Hall is divided into seven sections by means of multi-foil arches supported on heavy piers, three of which bear the double domes finished externally in white marble. The remaining four sections are roofed with flat domes.

The interior of Main Prayer Hall is richly embellished with stucco tracery (Manbatkari), fresco work, and inlaid marble.

The exterior is decorated with stone carving as well as marble inlay on red sandstone, specially of lotiform motifs in bold relief. The embellishment has Indo-Greek, Central Asian and Indian architectural influence both in technique and motifs.



Badshahi Masjid at night



Layout of the mosque

The skyline is furnished by beautiful ornamental merlons inlaid with marble lining adding grace to the perimeter of the mosque. In its various architectural features like the vast square courtyard, the side aisles (*dalans*), the four corner minarets (*minars*), the projecting central transept of the prayer chamber and the grand entrance gate, is summed up the history of development of mosque architecture of the Muslim world over the thousand years prior to its construction in 1673.

The north enclosure wall of the Mosque was laid close to the Ravi River bank, so a majestic gateway could not be provided on that side and, to keep the symmetry the gate had to be omitted on the south wall as well. Thus, a four Aiwan plan like the earlier Jama Mosque in Delhi, could not be replicated at the Badshahi Mosque.

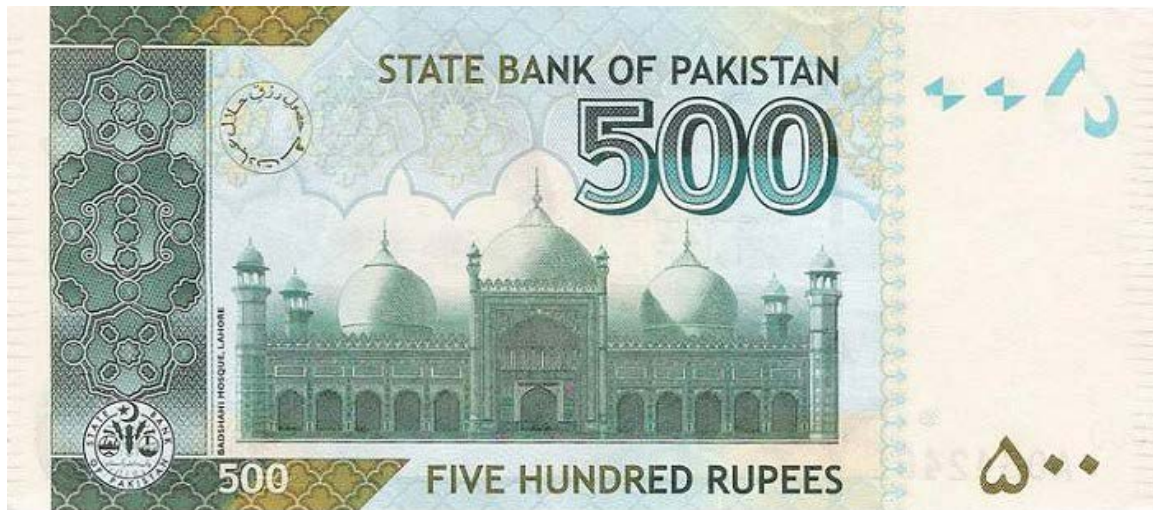
The walls were built with small kiln-burnt bricks laid in *kankar*, lime mortar (a kind of hydraulic lime) but have a veneer of red sandstone. The steps leading to the prayer chamber and its plinth are in variegated marble.

The main prayer chamber is very deep and is divided into seven compartments by rich engraved arches carried on very heavy piers. Out of the 7 compartments, three double domes finished in marble have superb curvature, whilst the rest have curvilinear domes with a central rib in their interior and flat roof above. In the eastern front aisle, the ceiling of the compartment is flat (*qalamdani*) with a curved border (*ghalatan*) at the cornice level.

The original floor of the courtyard was laid with small kiln-burnt bricks laid in the *Mussalah* pattern. The present red sandstone flooring was laid during the last major refurbishment (1939-60). Similarly, the original floor of the main prayer chamber was in cut and dressed bricks with marble and *Sang-i-Abri* lining forming *Mussalah* and was also replaced by marble *Mussalah* during the last major repairs.

There are only two inscriptions in the Mosque:

- one on the main gateway entrance
- the other of Kalimah in the prayer chamber under the main high vault.



The Badshahi Mosque on the 500 Rupee note of Pakistan.

Dimensions

- **Courtyard:** 528 ft 8 in (161.14 m) x 528 ft 4 in (161.04 m) (area: 278,784 sq ft (25,899.9 m²)) (the world's largest mosque courtyard) (compared to 186 × 186 ft (57 × 57 m) for the main platform of the Taj Mahal), divided into two levels: the upper and the lower. In the latter, funeral prayers can also be offered.

- **Prayer Chamber:** 275 ft 8 in (84.02 m) x 83 ft 7 in (25.48 m) x 50 ft 6 in (15.39 m) high, with its main vault 37 ft 3 in (11.35 m) x 59 ft 4 in (18.08 m) high but with the merlons 74 ft (22.55200 m). (area: 22,825 sq ft (2,120.5 m²))
- **4 Corner Minarets:** 176 ft 4 in (53.75 m) high and 67 ft (20 m) in circumference, are in four stages and have a contained staircase with 204 steps (compared with 162.5 ft (49.5 m) for the minarats of the Taj Mahal).
- **Central Dome:** Diameter 65 ft (20 m) at bottom (at bulging 70 ft 6 in (21.49 m)); height 49 ft (15 m); pinnacle 24 ft (7.3 m) and neck 15 ft (4.6 m) high.
- **2 Side Domes:** Diameter 51 ft 6 in (15.70 m) (at bulging 54 ft (16.46 m)); height 32 ft (9.8 m); pinnacle 19 ft (5.8 m); neck 9 ft 6 in (2.90 m) high.
- **Gateway:** 66 ft 7 in (20.29 m) x 62 ft 10 in (19.15 m) x 65 ft (20 m) high including domelets; vault 21 ft 6 in (6.55 m) x 32 ft 6 in (9.91 m) high. Its three-sided approach steps are 22 in number.
- **Side Aisles (Dalans):** 80 in number. Height above floor 23 ft 9 in (7.24 m); plinth 2 ft 7 in (0.79 m).
- **Central Tank:** 50 ft (15 m) x 50 ft (15 m) x 3 ft (0.91 m) deep (area: 2,500 sq ft (230 m²))

Architectural influence

The Badshahi Mosque has architecturally influenced the design of the following mosques:

- Sheikh Zayed Mosque, Abu Dhabi, U.A.E.
- Sir Syed Masjid, Aligarh, India
- Taj-ul-Masajid, Bhopal, India