The second palace, known as the Dar al-Madrasa after a nearby madrasa, is entirely different in conception. It comprises a huge garden (750 by 400 meters) enclosed by high walls. In contrast to the separate and haphazardly arranged units in the first palace, the interior of the second is strictly orthogonal and represents one architectural conception. A monumental entrance on the north led to apartments arranged around small courts and a long rectangular court with many small rooms on the east. Other buildings include a prayer hall, minaret, slaughterhouse, kitchens, and several baths, but the palace lacks any provision for the public life of the sovereign. Rather, it resembles a Moroccan private house infiltrated to a royal scale and probably served as the residence of the sultan’s enormous harem. (He reportedly had five hundred concubines and several hundred children.)

Remains of the third palace, known as the Palace of the Labyrinth (Qasr al-Muhammash) from the serpentine design of a fountain in the interior, lie to the south-east of the second palace. Measuring 400 by 240 meters, it consists of a series of large square or rectangular courts with rooms and pavilions and extensive gardens. The tunnel entrance on the south-east leads to a court, in the center of which stands a square mosque, added between 1792 and 1822. Although contemporary sources describe it as being in “the style of Istanbul,” its massive plain exterior and tiled pyramidal roof are more reminiscent of traditional mausoleums in Morocco. Beyond the treasury lies a large court of honor (74 by 71 meters), with axial reception rooms and a pool fed by channels in the center. The Marble Garden behind is divided into patterens like those at the Badia palace at Marrakesh. The hierarchical organization and range of spaces, from rows of rooms to elaborate pavilions, suggest that this palace was designed for official functions and receptions.

The grandiose scheme at Meknes invites comparison with imperial palaces at Istanbul, Isfahan, and Fatehsur Sikri. The plan evolved as it was being built, but the royal city was so large that it remained unfinished at the end of the sovereign’s long reign. Although pisé, made from the ever-available earth, was the main material of construction, other materials were collected wherever available: Roman sites such as Volubilis and Islamic sites such as Chella and Marrakesh were plundered, and marbles were imported from Pisa. Labor was extracted from the tribes under the sultan’s control, and Christian slaves and renegades were also put to work, although their numbers are often wildly exaggerated, particularly by tourist guides.

Meknes suffered during the succession crisis following Mawlay Isam’i’s death, and one-quarter of the royal city was razed. Nevertheless, work on the palace city continued, and the decoration of some monumental façades, such as that of the Bah Mansur (1530), were completed. This ponderous imposing gateway, which links the medina with the Dar al-Kabira, had been begun by Mawlay Isam’i and was completed by his son Mawlay ‘Abdallah in 1732. The grandest gate of the city, it has a horseshoe-arched opening flanked by salients, an arrangement which goes back to Almohad times, although the proportions and decoration have changed. The towers are raised on arcades and columns, giving them a curious insubstantial quality, and the façade is covered with elaborate lattice decoration in green and black tile, a motif more typical of minarets. The sumptuous decoration underscores the ceremonial function of the gate, which was meant to impress by its size and richness rather than its defensive potential.

These grandiose architectural ensembles were elaborately embellished and furnished. Fine-quality woodwork, both carved and turned, continued to be produced from wood cut in the Moroccan forests, and many beautiful ceilings survive. In general, the Marinid style (see Chapter 9) was continued, but the carving became shallower until it was gradually abandoned in favor of painting, a faster (and cheaper) technique of decoration. In comparison to the superb tiles and tableware made in Iran and Turkey, Moroccan ceramics are relatively coarse, although many examples made in the eighteenth and nineteenth centuries have an undeniable charm. Distinctive woven and embroidered textiles continued to be produced throughout the region, such as the superb Algiers embroideries of the seventeenth and eighteenth centuries, although the most sophisticated patrons often preferred imported pieces and many of the designs followed Ottoman models. A large banner woven of silk with metallic thread [131] follows the so-called type known in Ottoman Turkey, with its shield shape and depiction of Allah’s legendary two-bladed sword. Its inscription, in the distinctive Maghribi script, and date (1054/1643) indicate that it was made for members of the Qalawun, a Sufi order which flourished in North Africa. It was designed to be carried on the pilgrimage to Mecca. Its technique and design represent the continuation of the superb silk-weaving traditions of Nasrid Spain [160].

Illuminated and illustrated manuscripts also continued Maghribi traditions of script and decoration. Such texts as al-Jazuli’s Dalal’ al-dhabt were popularly copied, and these manuscripts were often decorated with representations of places or objects attached to the Prophet. A seventeenth-century manuscript containing several religious texts, including that of al-Jazuli, has, among others, illustrations of the Mosque of the Prophet, with the minbar and mihrab, and his grave and those of the two first caliphs at Medina (1532). In addition to its typical Maghribi square format (13.5 by 13.8 cm), the text is written in Maghribi script and the decorations are a late (and simplified) example of the western Islamic style of decoration. This manuscript was acquired in the 1960s in a bazaar in Kabul, Afghanistan, this provenance, in conjunction with the Devanagari script on paper re-used to bind the manuscript, suggests that this distinctively Moroccan manuscript had been taken to India, where it was later acquired by another pilgrim from India.

Other manuscripts were made by and for royal patrons. An ‘Alawi sultan himself is known to have copied a collection of hadith in 1739-40, following the old tradition of calligraphy as an appropriately royal art. Luxury copies of the Koran were also produced for the royal family to use and


give. One example [333], copied for a Sharifian prince in 1142/1729–30, is remarkable for its extensive use of color, including bright red, green, blue, and gold.13 With 263 folios measuring 31.5 by 19.5 cm, the manuscript has twenty lines of text per page in the vertical format standard outside the far Maghrib. The text is written in a somewhat spindly Maghrabi hand, the chapter headings in an archaizing knotted Kufic. Other panels of decorative script, such as the one on the middle right of the illustrated page, are in a stylized cursive hand. The large thuluth inscription in the lower margin of folio 261r states that the manuscript was endowed by Muhammad Bey to his congregational mosque, and suggests that the manuscript was eventually presented to one of the Beys of Egypt.
CHAPTER 18

Architecture in India under the Mughals and their Contemporaries in the Deccan

The Mughals (r. 1526–1858) were the greatest, richest, and longest-lasting Muslim dynasty to rule India. Their enormous wealth, which dwarfed that of their contemporaries in Iran and Turkey, derived ultimately from agriculture, for in this well-watered subtropical land a very large number of crops could profitably be raised, ranging from foodstuffs to fibers for an extensive textile industry. Babur (r. 1526–30), the founder of the dynasty, was a Chaghatay Turk descended on his father’s side from Tamerlane and on his mother’s from Chingiz Khan. Babur’s father, Ulugh Shaykh, had ruled a small Timurid principality in the Farghana Valley in Central Asia, but the rising power of the Uzbek Turks forced Babur to the east. In 1504 he took Kabul and swiftly began raids on India, defeating the Lodis at Panipat in 1526 and the Rajput chiefs at Kanwa near Agra in the following year. With these victories, the Mughal state gained a foothold in northern India, but Babur’s son Humayun (r. 1530–36, with interruption) was dethroned by insurrections of the nobles from the old Lodi regime, particularly Farid Khan Sur. Operating from Bikaner, the Afghan chief defeated Humayun at Kanauj in 1540 and drove the Mughal ruler from India until 1555. The Mughal domains passed to the control of Farid Khan, who assumed the regnal name Shah Jahan (r. 1540–55). He was not only a fine general but an able ruler, introducing important fiscal and monetary reforms, which were incorporated into the Mughal system of administration. During Shah Jahan’s interregnum, Humayun spent fifteen years in exile in Sind, Iran, and Afghanistan, but the squabbling for succession among Shah Jahan’s successors enabled the Mughals to regain the throne in 1555. Humayun died unexpectedly a year later after falling down the stairs of his library in Delhi and was succeeded by his son Akbar (r. 1556–1605). During Akbar’s long reign the dynasty extended its power over northern and central India, and under his successor, Jahangir (r. 1605–27), the policy of subjugating outlawing areas of the Indian subcontinent was continued. Shah Jahan (r. 1628–58) undertook an ambitious program of uniting Central Asia and India in a grand empire of Sunni Islam (to counter the Shi’ite Safavids), but this ended in failure in 1647, and a conservative reaction ensued under Aurangzeb (r. 1658–1707). Notables and provincial officials, both Muslim and non-Muslim, became increasing powerful, and by the eighteenth century the Mughal emperors in Delhi were only shadows of their former selves, as power devolved to provincial rulers and Europeans, particularly the British.

Mughal monuments survive from the period of Mughal rule than from any other, for the Mughal state was well aware of the declamatory power of architecture and used it as a means of self-representation and an instrument of royalty. In the later part of the period, royal patronage of architecture and the arts was curtailed, but the great monuments of the past continued to provide inspiration for patrons with shallower pockets. Under Mughal patronage there developed a distinctive and elegant style of architecture, in which indigenous traditions of Indo-Islamic architecture (see Chapter 14) were combined with forms and techniques imported from Iran and Central Asia (see Chapters 2 and 4). A similar composite style drawing on local and Iranian traditions developed in the Deccan. In general, the solid three-dimensional massing typical of earlier sultanate buildings gave way to a linear approach, in which flat surfaces were divided into panels. The brick and tile typical of earlier times were replaced by stone, particularly red sandstone and white marble, but the application of color was restrained in favor of high polish and meticulous finish. While traits of construction continued to be used in secular buildings, such new forms as the ogive arch and the bulbous dome became standard features of the Mughal style. Large congregational mosques were built by rulers who wished to emphasize their Muslim piety, but the most famous buildings associated with the Mughals are monumental tombs set on platforms amidst pools and formal gardens and magnificent forts and fortified palaces constructed throughout the empire, particularly in the capitals at Delhi, Fatehpur Sikri, Lahore, and Agra.

ARCHITECTURE UNDER THE EARLY MUGHALS (1526–1628) AND THEIR CONTEMPORARIES

Little remains of the architectural works by the first Mughal emperors, Babur and Humayun, although Babur is credited with introducing to India the Persian style of four-field garden (shahzadeh), and Humayun established Din Panah, Delhi’s sixth city, in 1533. Shir Shah was a notable patron of architecture. He restored the old pilgrimage route across his territory from Bengal to the Panjabis taken over by Akbar, and the synagogue in the area of Gurdaspur was built in 1558–59. He commissioned a monumental tomb, built between 1538 and 1545 (333). Octagonal in plan and three stories in elevation, it continues the type of tomb already erected in Delhi by the Lodis, but on a far grander scale. Measuring 41.5 meters in diameter, Shir Shah’s mausoleum is several times larger than any Lodi tomb. The tomb is set on a stepped foundation and a tall terrace.
with domed pavilions (chattris) at the corners, creating an immense pyramidal pile of ordered masonry which rises 45.7 meters in five distinct stages. The three stories of the model tomb are also articulated: the lowest story takes the form of a verandah with triple arches on each side, the second story is enlivened by crenellated parapets and domed pavilions at the corners, and the third story is relieved by a series of kiosks which break into the circular base of the dome and carry the eye upward to the ascending curves of the dome and its massive finial. The mausoleum is set in the middle of a great artificial lake, whose concreted sides measure 416 meters, and the building’s reflection in the water enhances its grandeur. Constructed of fine sandstone obtained from the nearby quarries at Chunar, the tomb is now a uniform gray but was originally brightly painted in red, blue, yellow, and white. Located close to the Grand Trunk Road for maximum visibility, it was designed to promote the idea of Shir Shah as a just ruler with an elevated genealogy. To boost his lineage, Shir Shah also built a second tomb at Sasaram for his father, Hasan Sur, and another (1542–3) at Narnaul, 120 kilometers south-west of Delhi, for his grandfather, Ibrahim Sur, a minor notable who had died ca. 1488.1

Much controversy surrounds Humayun’s architectural patronage, and much of the work in the Purana Qila should probably be attributed to Shir Shah. One small exception is the small octagonal pavilion known as the Sher Mandal and identified as the library where the emperor fell to his death. The monument most closely associated with Humayun, his tomb at Delhi [336, 337], was only begun six years later, under his son Akbar, and completed a decade later in 1571–2.2 Humayun’s tomb lies on the flat plain of Delhi near the banks of the Yamuna river, 1500 meters south of the rubble walls of Din Panah. The tomb is set to the east of the shrine of Nizam al-Din Awliya’ (1315–1355), one of India’s most revered Sufi saints; he was the successor of Shihab Farid Shakhani in the Chishtiya, the mystical order held in high esteem by the Mughals, who legitimized their rule by association with Sufis. Humayun’s tomb is set in the center of a large garden (4.48 meters square), which is divided into 36 squares by cross-axially arranged water channels and pathways. The tomb sits on a large podium (99 meters square) with 56 cells containing more than a hundred cenotaphs, and the height of the podium (6.5 meters) enhances the massiveness of the tomb, which measures 47.5 meters on a side and towers 42.5 meters above the ground. The flat surfaces and the restrained combination of red sandstone and white marble in flat panels create an impression of sobriety. On the interior, the central space contains Humayun’s cenotaph, two stories of octagonal chambers, containing cenotaphs for various members of Humayun’s family, fill the corners. This type of plan, often called by the Persian expression hadis bakhsh (“Eight Paradies”), is known to have been used in Timurid Iran (see Chapter 4). According to the contemporary historian Abul-Qasim Badauni, the tomb was designed by Mirak Mirza Ghiyath, an architect of Iranian descent who had worked in Herat, Bukhara, and India before undertaking this project.

The architect of Humayun’s tomb drew upon a wide range of sources. The building employed many of the same materials and techniques of construction used nearby in the sultanate period and Sur interregnum. The immediate inspiration for constructing a monumental tomb was undoubtedly Shir Shah’s slightly smaller tomb at Sasaram,
and like it, the building may well have been intended as a dynastic monument, although in both cases, for different reasons, this was not to be. The garden setting for Humayan’s tomb also paraphrases the pool at Susa, but the garden setting may be understood as another paradoxical reference implicit in the choice of the khusra khāsh form. Furthermore, Humayun’s tomb fits squarely into the Iranian tradition of imperial mausoleums, seen for example in Uljaytu’s tomb at Sulhantuy [46] and Timur’s at Samarqand [53, 54], and such features as a radially symmetrical plan and elongated drum with bulbous double dome show specific knowledge of the Timurid architectural repertoire.6

The Timurid features would have been readily known to the architect and desirable to the patron. Mirak Mirza Ghiyath is representative of craftsmen trained in the Timurid traditions of Iran and Central Asia who emigrated to India in the sixteenth century in search of patrons, bringing with them the International Timurid style, as it had been carried somewhat earlier to the Ottoman court. This taste for things Timurid may also show that already in the mid-sixteenth century Mughal rulers attempted to connect their line in India with its forebears in Iran by using forms identified with the Timurids. The Timurid architectural legacy, however, was substantially changed under the Mughals. Whereas Timurid architects had played with innovative vaulting and varied the interior spaces, the interior spaces of Humayun’s tomb have been regularized and made somewhat predictable as exterior monumentality became the overriding concern, and later the standard feature of imperial Mughal architecture.

Akbar originally ruled from Delhi, but two years after his accession he moved his capital to Agra, 200 kilometers to the south-east. The city was renamed Akbarabad in his honor and became the greatest in his empire. The main part lay on the west bank of the Yamuna and was provided with a drainage system to control the flow of rainwater. A new city wall was erected, and the old mud-brick fortress used by the Lodis was rebuilt in 1569 of sandstone, whose red color gives rise to its modern name, the Red Fort. The fort follows the irregular semicircular plan of its predecessor. On the city side it is enclosed by a moat and a double wall, broken by the Delhi Gate on the west and the Amar Singh Gate on the south. The two massive gates are distinguished by rows of arched niches and stunning veneer in red sandstone and white marble, with highlights in blue glazed tile. According to the contemporary historian Abu’l-Fazl, construction of the fort was supervised by Muhammad Qasim Khan, who is credited with various feats of civil engineering and who bore the dual titles Master of the Land and Sea Routes (mir-i ādār u kahr) and Master of Pyrotechnics (mir-i ātāh).7

Despite extensive remodeling to the interior of the Red Fort, two palaces in its south-east corner can be dated to the period of Akbar’s restoration. Both are trellised structures organized around central courts. The Akbari Mahal is partially destroyed, and the Jahangiri Mahal, which despite its name belongs to Akbar’s restoration, is the earliest Mughal palace extant.8 Like the gates, the outer façade [338] is articulated with an orderly series of blind niches and panels filled with geometric motifs. The interior is divided into a complex set of apartments. In contrast to the calm austerity of the exterior, many interior surfaces [339] are extravagantly decorated in carved stone, painted and carved stucco, and
tile. Brackets and struts are richly carved, and many of the motifs, such as the crocodile-like creatures emitting scrolls of foliage from their mouths, are adapted from the Hindu palaces at Gwalior, suggesting that masons were brought from this town 100 kilometers south, which had an imposing fort dating from the period of Tomar rule (1398–1517). Nevertheless, the geometric patterns on screens and balustrades in the Jahan-i Mahal derive from Timurid designs, particularly from the vocabulary of book ornament, for Timurid books were a rich source for Mughal ateliers (see Chapter 19). The balustrades and juxtaposition of materials of different colors recall earlier architecture in Delhi.

The same synthesis of diverse architectural traditions can be seen on a grander and more regular scale at Fatehpur Sikri (1570), the new capital that Akbar founded in 1571. Located forty kilometers west of Agra along the five-hundred-kilometer royal corridor that linked Agra to Ajmer, the city is set in the midst of a vast plain on a long (four-kilometer) narrow ridge overlooking a large lake, now dry. 

Babur had constructed a garden and octagonal pavilion at the site in 1527; and since 1561 Akbar had made an annual pilgrimage there in 1564. The noblest of the shahab Mu’in al-Din Chishti (d. 1226), the founder of the Chishtiya, at Ajmer. Sikri was a day’s journey from Agra and the site of the patronage of the shahab Salim Chishti (1579–1582). In 1568 he precipitously predicted that the sonless Akbar would soon have three sons, and in the following year Akbar’s son Raja Bhopal married Maryam al-Zamani gave birth to Prince Salim (later Jahangir) at Sikri. To commemorate the event, two years later Akbar ordered the construction of a new city known as Fatehabad (City of Victory), a Persian name which was soon supplanted in popular usage by the Indianized term Fatehpur Sikri and which became particularly apposite after Akbar’s conquest of Gujarat in 1573. Construction of the major elements in the new capital was finished within a decade, but the emperor left for Lahore in the Punjab in 1576 and seldom returned. The common explanation for Akbar’s abrupt departure is that the city’s water supply dried up, but this fact is not mentioned by any contemporary source and there was extensive provision for collecting, storing, and draining water in stepwells, reservoirs, pools, tanks, and channels. A more likely explanation is that Akbar departed to deal with the military and political upheaval following the death of his half-brother Mirza Hakim Muhammad, the governor of Kabul.

Most of the major constructions at Fatehpur Sikri can be dated to the fourteen years when the city served as Akbar’s principal residence. In contrast to such other imperial centers as Delhi, Agra, or Isfahan (see Chapter 13), it was built in a relatively short time by a single patron, and its plan is marked by a unity of design based on proportional modulations and ratios. Akbar’s constructions at Fatehpur Sikri are an interrelated series of modules set beside each other on the ridge, which provided the fine red sandstone used for the new buildings there and at Agra. The city is inserted between the old town of Sikri to the north-east and the hermitage of Salim Chishti (A on the plan) to the south-west. Eleven kilometers of massive stone walls with parapets and gateways (not shown on the plan) surrounded the city, except on the north-west, where the lakeshore once extended. The urban settlement formerly spread beyond the walls for a radius of twenty kilometers, and the environs contained imperial gardens and resthouses, residences for the nobility, a drinking and gambling zone, and even an experimental school dedicated to the study of language acquisition in children. Within the city the buildings are set in two distinct ways: service buildings such as the caravanserai (B), the mint or factory (C), and a long bazaar with a service node (Pers. chahar-baq, D) are set perpendicular to the south-west–north-east axis of the ridge, while the imperial section of the city, including the congregational mosque (E) and a residential and administrative area known as the palace (Pers. dairât-‘alâma), is set at an angle to the ridge and aligns with the qibla. The congregational mosque at Fatehpur Sikri (1573–74) is one of the biggest in India, is a huge rectangular building set on a high podium. The vast central court (95 by 18 meters) is surrounded by multi-domed arcades. A line of domed pavilions crowns the prayer hall on the west; its façade is divided by a tall iwan which screens the sanctuary dome. Opposite the mihrab in the east wall is the Imperial Gate (Badshahi Darwaza), which provided access to the Palace. The gate and sanctuary dome are aligned with the hermitage of Salim Chishti to the west and form the east–west axis of the mosque. A north–south axis is marked by a monumental gateway (height 34 meters) in the south wall, the Daulat Gate (Bab-e Daula Darwaza), which is approached from below by a steep flight of steps. On the north side of the court stands the white marble tomb of Salim Chishti (F), a small square (14.63 meters on a side) with a front porch carried on extraordinary square brackets. The central chamber is surrounded by a verandah whose intricate lattice screens (Pers. jali) [341] are some of the finest examples of their type. The tomb is visually distinct as the only building in the city not constructed of red sandstone, for white marble was reserved in this period for saints’ tombs. These tombs are also distinguished by interior wooden canopies overlaid with mother-of-pearl, a technique associated with Gujarat in the seventeenth and eighteenth centuries [382].

The palace at Fatehpur Sikri was a large complex (440 by 275 meters) with public areas to the north-east and private ones to the south-west. The main entrance from the ridge lay to the north-west through the Elephant Gate (G), now destroyed, but well known from contemporary representations in books [384]. The hall of repairs lived just inside the gate in the triangular area formed by the caravanserai, the north wall of the congregational mosque, and the west wall of the palace. The visitor passed from the Elephant Gate through a series of walkways and gates, now destroyed or walled up, to the court on the extreme north-east known as the State Hall (Owman-‘i Am; H on the plan). This large court (200 by 20 meters) was surrounded by colonnades; a five-bay loggia with beautifully carved sandstone screens projects from the center of the west side. The court was used for public receptions, ceremonies, and congregational prayer, and the emperor apparently sat in the royal loge facing east.

A small door in the north-west corner of the State Hall gave access to a second court [345], which was apparently