flowers fill the spandrels; spreading tendrils echo the cusps of the arches, which culminate in a fleur-de-lys. The decoration of this exquisite building shows that the realistic floral motif that had been typical of the Shahjahan period became increasingly abstract. The most impressive building of Auranzib’s reign is the Badshahi (“Imperial”) Mosque adjacent to the fort at Lahore [358]. Built under the supervision of his foster-brother Fakir Khan Koka in 1673–4, it is the last in the series of great congregational mosques in red sandstone and is closely modeled on the congregational mosque that Shahjahan had 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, seen in the Mosque of Vizier Khan [353], and the cusped arches and arabesque floral patterns inlaid in white marble give the building, despite its vast proportions, a lighter appearance than the prototype. 59

In the eighteenth century the patronage of architecture became increasingly independent of the Mughal court. The major new patrons were provincial rulers who proclaimed their defiance of the Mughals by copying their lifestyle and architecture. The Hindu Rajput princes of Amber, for example, had been allied militarily and through marriage to the Mughals since the time of Akbar, and their palace in the hilltop fortress incorporated such Mughal features as the Dvārā-ī ‘Am. With Mughal power on the wane, Maharaja Jai Singh II (r. 1699–1737) decided to expand from the cramped quarters to the dry lakebed on the plain below. The splendid new city was called Jaipur after its founder. The architect was Vidyadhar Chakravarti, a Bengali Brahmin who worked in the department of revenue and had already assisted in renovating the waterworks in nearby cities. The new city was laid out as a rectangle with seven unequal sectors arranged in a grid pattern with intersecting avenues, roads, lanes, and alleys. The main roads or bazaars are lined on each side with an equal number of shops of uniform size, shape, and façade. The central sector houses the palace complex with seven stories and multiple courts on the southern edge of a quadrangular garden, which housed the temple of the ruler’s personal deity, Govinda Deva. In addition to public buildings, residential quarters, ateliers, and offices, the palace includes an astronomical observatory [359] called Jantar Mantar, from the Sanskrit Yantrārasa, literally storehouse of machines. The observatory, built
in 1734, is an assemblage of thirteen structures of rather futuristic appearance, which are actually complex astronomical instruments built of stone and masonry, including a hemispherical dome, a quadrangle, and a circular gatehouse. The Timurid ruler Ulughbeg (see Chapter 4) Jai Singh used these huge instruments to construct astronomical tables.

The best example of architecture in the late Mughal period is the tomb of Safdarjung [136], built at Delhi in 1753–4 for the second ruler (nawab) of Oudh (Avadh). The nawabs, of Iranian origin, had entered the service of the Mughals in 1713, and in ten years they were appointed governors of the province of Avadh, and by 1775 they had made it the most important principality in north India. The tombs of Safdarjung and others have been restored and are still in use. The design of the Safdarjung tomb is a copy of the Taj Mahal, and it is situated in a large park.

The Mughal period was a time when the arts flourished, and the Mughal rulers were patrons of the arts. The Mughal emperors were great patrons of literature, art, and architecture. They commissioned many works of art, such as the Timurid manuscripts, and the Timurid style of painting was continued in the Mughal period. The Mughal emperors were also great patrons of the sciences, and they supported the work of astronomers, mathematicians, and engineers. The Mughal empire was a rich and prosperous one, and it was able to support a large and diverse range of cultural activities.

The Mughal period was a time of great change and development in India. The Mughal empire was a dynamic and innovative one, and it was able to absorb and adapt to many different influences from the outside world. The Mughal empire was a time of great artistic achievement, and it was a time when the arts flourished in a way that had never been seen before. The Mughal empire was a time of great political and military success, and it was a time when the Mughal empire was able to exert a powerful influence over a large part of India.

The Mughal period was a time of great religious tolerance, and it was a time when the arts flourished in a way that had never been seen before. The Mughal empire was a time of great political and military success, and it was a time when the Mughal empire was able to exert a powerful influence over a large part of India.
not seem to have been designed to illustrate a text, whether literary or historical, but depicts a contemporary or near-contemporary event. Most attempts to date the picture have assumed that this painting was the very one that the youthful Akbar gave his father, and hence ascribed it to a date before Humayun’s death in 1556. The painting phrase Allahu akbar would then have to be a later addition, for Prince Muhammad did not assume the regnal name Akbar until his accession. This scenario is unlikely, for it implies that ‘Abd al-Samad would have depicted an event which had not yet occurred, and it seems more likely that the painting was executed sometime during the first decade of Akbar’s reign to recall the event in question. The painting within the painting is therefore an artistic conceit, visually equivalent to the signing inscription on the rear wall of the ruined palace in the manuscript of the Khamsa made for Tahmasp [213], drawing attention to the artist’s wit and skill.

workshop is a copy of Kashi’s Persian version of the Kitab al-Dinna al-Dinna animalables, entitled Amur-i isahakili (“Lights of Canopus”) and dated 23 September 1570. A medium-sized volume (23 by 21 cm), it has twenty-seven illustrations showing the same human and animal types, landscape, and architecture found in the large paintings from the Humayuniana. The paintings in the Amur-i isahakili show how the image became increasingly important in painting under Akbar’s patronage. Paintings earlier in the manuscript conform to the traditional format and are confined within the text-block, but later paintings, such as Mayman the Persianic Monkey Luring the Bear to their Fair [361], explode into the margin and surround the text, which has consistently shrunk to two panels, each with two lines of text. The animal scenes are remarkable for their keen sense of observation and increasingly realistic depictions, and the palette is more muted and pastel than the vibrant and saturated colors traditional in Persian painting. The paintings have been attributed to various hands, but there are no marginal ascriptions, a feature common in later Mughal painting that seems to begin ca. 1580 with the manuscript of the Ahrizamia.15

Another manuscript prepared in the imperial atelier at approximately the same time as the Amur-i isahakili is a copy of the Koran.16 It is the only Koran known to have been made for Akbar, and the lavish use of gold and rich illumination show it to be a luxury manuscript. A note on the last folio (246v) states that the text was transcribed by Habbastallah al-Husayni at Lahore in 1572–4 for the use of the sultan (i.e., Akbar). Each page of fine-quality polished paper (33 by 22 cm) has seventeen lines of text written in different scripts and enclosed in cloud panels. The first, middle, and last lines are in muhaqqaq script, penned alternately in blue and gold, on a white ground. Between are shorter lines of naskh set between upright illuminated panels. The chapter headings are written in naskh on a gold ground, as is the bismilla (invocation) below. The central pages of the manuscript [364] at the beginning of Chapter 10 (Sainam Masam) have rich illumination, which is similar to contemporary Persian work but marked by a new predilection for pink, orange, and green.

In the 1580s, after the huge Humayuniana project had been completed, artists in the imperial atelier worked on a wide range of manuscripts. Some were translations of Hindu texts into Persian, the court language. For example, an illustrated copy of the Razmnama (“Book of Wars”), a translation of the Mahabhishakas, was made between 1582 and 1586. Other illustrated manuscripts chronicled the life of Akbar and his ancestors. These historical works include the Tuhirk-i ali, a history ordered to commemorate the millennium of the Islamic calendar; the Chingizname, a volume of Rashid al-Din’s Fami’ al-tawirinhil dealing with Chingiz Khan and his successors; the Tuhirk-i hordan-i timirin, a history of the descendants of Timur; the Buhumama, the memoirs of
Akbar's grandfather, and the Akbarnama, a history of Akbar's reign. These manuscripts are done on the grandest scale, with an average of 150 full-page illustrations in a volume of 500 folios. The images explode from the traditional boundaries of the text-block to encompass the entire page. To create such a large number of images in such a short time, production was organized in teams, with different artisans responsible for outlines, color, finishing touches, faces, and the like. In some cases, paintings prepared for earlier manuscripts were removed and pasted into new ones. In the first Akbarnama, for example, many illustrated pages were taken from an unidentified text and new text pasted over the original; in cases where paintings did not complicate the matter, entirely new sheets were transcribed. The newly constituted manuscript was completed in December 1595-January 1596, although the paintings have been attributed to stylistic grounds to 1586-7. The illustrations in these historical manuscripts provide an invaluable pictorial record of recent military campaigns, court ceremonies, and the personal exploits of the emperor. The depiction of The Construction of Fatehpur Sikri from the first Akbarnama [1553], for example, shows stone-masons and laborers at work on the Elephant Gate. Wooden scaffolding still supports the arch of the gateway, but the waterworks at the left are already in working order. This painting, like almost all the others in the manuscript, bears a formal ascription in the lower margin, which in this case indicates that the design was done by Ulao Kahn and the coloring by Bhavan Das. Notes on other paintings indicate that these large and complex images took from six to ten weeks to execute. These notes provide first-hand information about the working of the imperial atelier, and they balance the panegyric accounts recorded in contemporary histories, which suggest that the emperor chose every painting in every manuscript and played an active role in the management of the workshop.

The somewhat rough-and-tumble style of painting in the first Akbarnama became more polished and exquisite in a second copy of the text, whose paintings were done a decade after those in the first copy. The refined draftsmanship, rich colors, and polished surface place the second Akbarnama among the most advanced projects of the imperial atelier in the late 1590s. Established masters and novices worked together to achieve compositional clarity and spaciousness. The painting of 'Abd al-Fattah Presenting the First Book of the Akbarnama to Akbar [1566] is half of a double-page composition depicting an event that took place sometime after April 1596, when the author finished writing this section.
of the text. The illustration is thus nearly contemporary with the event depicted. An inscription in the margin states it is the work of Gowndhia. The son of Bihari Das, who had worked on the earlier Abharnana, Gowndhia later became celebrated for his portraits of holy men and other eccentrics. The painting from the Abharnana shows the increasing realism in late Akbari painting, in which architecture is depicted so accurately that specific buildings can sometimes be identified, and figures are individualized and interact convincingly.

Many of the same features are present in a group of smaller poetic manuscripts (average size 29 by 19 cm) made in the imperial atelier at Lahore in the late 1590s. These manuscripts include a copy of Jamai’s Baktarian ("Abode of spring") dated 1566, a copy of Nizami’s Khamsa done in the same year, and a copy of Khushru Dihavi’s Khamsa done in 1597-8. These manuscripts represent the finest books produced under the Mughals and have fine calligraphy, painting, illumination, marginal decoration, and painted and varnished covers. They were written on thick creamy paper, which had been carefully burnished, by such noted calligraphers as Muhammad Husayn al-Kashmiri, known as Zarrin Qalam ("Golden Pen"); and Abd al-Rahim, known as Amburis Qalam ("Amber Pen"). The paintings [357] show superb technical control, with subtle, highly variegated coloring and sensitive depiction of personal relationships. Like those in the second Abharnana, the illustrations show an increasing concern for space, volume, and individualized portraits. The paintings in the later Khamsa are somewhat more ambitious than those in the earlier two manuscripts: landscapes are broader and less dependent on panels of text, and one painting, The Quarrant King and Shrin Holding Separate Celebrations, has the most ambitious architectural setting of any Mughal painting.35

These poetic manuscripts from the late 1590s also have fine illumination, which can be distinguished from Iranian work by a greater use of reds, oranges, and other strong colors, a fondness for floral arabesque, and more daring shapes in the headings. The margins are painted with landscape, figurative, and floral designs in gold. This technique, which had culminated in Iran in the copy of Nizami’s Khamsa made for Shah Tahmash between 1539 and 1543 [213], soon degenerated into stereotyped designs applied with stencils. In these luxury manuscripts from the Mughal atelier, however, the margins are individually painted, although the themes are somewhat stock. The work seems often to have been assigned to artists at the beginning of their careers. For example, Mansur and Bulhand, who worked on the illumination and marginal decoration in two of these manuscripts, became known under Shahjahan for larger paintings of fauna and figures [357]. Fine painted and varnished covers around these manuscripts are rare examples of Mughal bookbinding to have survived. The covers of the Khamsa have elaborate compositions showing aerial and aquatic struggles between demons and angels, and a prince interrupting a successful hunt to visit a holy man; their quality shows them to be the work of an experienced and talented painter.41

The manuscripts produced in the 1590s exemplify the fully mature Mughal style of painting, in which Persian, Indian, and European elements are assimilated into a balanced and harmonious whole. As in Safavid Iran, the arts of the book were probably the preeminent art form in the early

Mughal period, and their designs were often copied in many of the other arts produced in royal ateliers. A network of imperial workshops (Pers. kirkhana) produced everything from coins to textiles and furnishings for the imperial household. In 1562-3 Akbar reintroduced gold coins to India, after a hiatus of more than a century. In 1577 the mint was reorganized, and the artist Abd al-Samad was made superintend- ent of the mint at Fatehpur. Square coins were introduced, and they supplanted round ones within two years. Akbar’s standard gold coin, the mohur [368], weighs eleven grams and has the profession of faith on the obverse and the emperor’s name, the mint, and the date on the reverse. Finely cut dies for striking gold coins were prepared by skilled engravers who even included poetic texts. The large flowing calligraphy, with deeply cut letters carefully piled on top of each other, attests to the art of the die-cutters.36

Many of the workshops, which were administered as part of the emperor’s extensive household, produced textiles, furnishings, and carpets. Carpet-weaving is not native to India, as the hot damp climate makes woolen pile rugs both impractical and unnecessary as floor coverings; this Iranian and Central Asian art was introduced there only under the Mughals. The first documentary evidence of carpet production dates to the reign of Akbar, who probably imported weavers from Herat. One of the earliest pieces attributed to Mughal patronage is an animal carpet with a red ground [369]. Coarsely woven on a cotton warp with wool weft, it has some six knots to the square centimeter. Rather than an overall pattern, the fragments show such recurring elements as a six-headed bird and a leopard mask with menacing fangs loosely connected to an arabesque. On the basis of technical and stylistic similarities to imperial carpets produced at Lahore in the seventeenth century, the carpet has been attributed there. The coarse weaving might suggest that it was the product of a workshop set up after Akbar’s move there in 1562, although its enormous size indicates that it was by no means the first product. The unusual design of this animal carpet may have been inspired by a similar design visible on an inhabited scroll depicted behind Timur’s head in a painting showing Timur Granting Audience from the copy of the Zafername made for Husayn Baysara and later in Akbar’s library. The quality of carpets produced in India soon improved, for a similar carpet with a more conventional arrangement of scrolling arabesques, whose leaves and bracts are replaced by animal heads, is more finely woven.37

Akbar’s love of illustrated books spurred other court patrons to establish ateliers and commission luxury manuscripts. ‘Abd al-Rahim Khan-i Khattak (1561–1626)7, commander-in-chief of the Mughal armies under Akbar and Jahangir, employed some twenty artists over nearly three decades, and at least seven manuscripts can be attributed to his atelier. In 1597 he commissioned a splendid illustrated copy of the Hindi epic, the Ramayana, in imitation of the one that Akbar had ordered. The manuscript was completed in 1605. Of the 150 paintings, the ones at the beginning of the manuscript are close in style to those produced in the imperial workshops, although ‘Abd al-Rahim’s artists used the simpler compositions and brighter colors of traditional Indian painting. The depiction of Rama and Lakshmana Fighting the Demoness Taranu by the artist Itat Khattak [370],
for example, shows the two heroes confronting the giant demons in an elaborate landscape setting. The pink rocky outcroppings and cloud-streaked sky relate to imperial work, but the demons is painted a vibrant combination of blue and orange and the two heroes are shown in profile and wear skirts of bright yellow and red.

Akbar's son Salim, the future Jahangir, was another prominent patron of illustrated manuscripts. At the end of the sixteenth century. According to Salim's memoirs, the Persian painter Aqa Riza joined the prince's service when the painter emigrated to India sometime before his son Abu'l-Hasan was born in the palace in 1588-9. When Salim went into exile at Allahabad at the beginning of the seventeenth century, he took his atelier with him, and at least three fine manuscripts are known to have been produced for him there. 34 Like the poetic texts made for Akbar in the late 1590s [357], these works show Salim's preference for small books with fewer and finer illustrations, often by a single artist. They also show the new interest in portraiture, for there are several portraits of the prince, who is shown witnessing a polo game and hunting deer. This interest was shared by Akbar, for his biographer Abu'l-Fazl reported that the emperor had the likenesses taken of his chief nobles and bound in albums. The practice of collecting specimens of calligraphy and painting in albums was already well established under the Salukids (see Chapter 12), and the Mughal emperors continued and refined the art. While only a few of the imperial portraits commissioned by Akbar are known, two of Salim's albums have survived and are the earliest and greatest of Mughal albums. The Gulshan Album in the Imperial Library, Tehran, contains works dated between 1600 and 1609, and the album in the Staatsbibliothek, Berlin, contains works dated between 1609 and 1618. 34 Both albums contain portraits, genre scenes, animal and flower studies, Persian and Deccan works, European paintings and prints, and Mughal versions of them. The paintings are uniformly high in quality, although Jahangir's atelier was smaller than his father's. Lesser painters went to seek work elsewhere, and the remaining masters were more specialized. Such artists as Manohar, Dawlat, and Bishan Das did portraits, Abu'l-Hasan large court scenes, and Mansur nature subjects. As in earlier albums, two facing pages of calligraphy, mainly by the renowned Persian calligraphers Mir 'Ali (d. 1538) and Sultan 'Ali Mashhadi (d. 1530), were succeeded by two pages with illustrations. All the folios are bordered by extraordinary marginal decoration painted in gold with polychrome washes; the calligraphic pages have figurals borders, and the illustrated pages have floral or abstract motifs. Fine gold-painted borders had already been used in manuscripts made in the 1590s [359], but in the borders of the Jahangir albums, figures became increasingly prominent and are emphasized with color and modeling. These borders contain many of the greatest Mughal portraits and are often signed. The album's borders include a wide range of subjects, such as animals and hunting scenes, European themes, and studies of shahkhs and holy men, courtiers, and workmen. Some of the scenes were copied from earlier works: the Gulshan Album, for example, includes Dawlat's copy of Bihai's portrait of the Persian poet Jami on folio 140. One of the finest pages in the Berlin Album shows the young Akbar presenting a book to Humayun in a tree-platform; it is a copy of 'Abd al-Samad's painting in the same album [361]. Other scenes were drawn from palace life. The recto of a detached folio [371], for example, has calligraphy by Mir 'Ali and marginal drawings depicting six artists preparing books in a landscape with hills, trees, and flowers. 35 The marginal paintings on the detached page show different stages in the production of books and related objects, and the Berlin Album contains a verso page (folio 18) whose margins show that it would have been the facing page.

The interest in portraiture continued throughout Jahangir's reign, as did a growing interest in European techniques and motifs. The English were frequent visitors to the Mughal court after 1600, the year the East India Company was granted a charter, and English examples provided the general prototypes for Mughal allegorical portraits. Bichitr's painting of Jahangir Preparing a Safi Shakh to Kings [372], removed from a sumptuous album in St Petersburg, shows the emperor presenting a book to the aged Shakhz Husayn, descendant of Mir 'Ali bin Chishti and superintendent of his shrine at Ajmer, where Jahangir lived from 1613 to 1616. Three men crowd into the lower left: a Turkish sultan, who seems to be a general type found in a European representation rather than a specific portrait by an Ottoman painter; King James I of England, who is copied from an English painting by John de Critz, which was probably presented to the Mughal court by the English ambassador, Sir Thomas Roe; and a Hindu who is holding a painting of himself bowing. This third and smallest figure seems to be a self-portrait of the painter, a well-known portraitist. Such self-portraits were an established visual conceit in Mughal painting [cf. 361]. Many of the motifs in the painting, such as the putti, hourglasses, and halo, are allegorical elements assimilated from European painting. The painting is thought to symbolize the emperor's choice of spiritual life over worldly power and allude to the source of Mughal dynastic power by association with mystical orders. 36 In the second