transverse vaults supporting domes. Subsidiary rooms on two levels fill the corners; on the sides are shallow porches opening to the exterior. The plan is distinguished by the intermingling of interior and exterior spaces; one passes from open gardens through sheltered and semi-enclosed spaces to an enclosed interior. The dissolution of the wall surface was enhanced by the extensive use of mirrors, not only in the small surfaces of the musqarnas vault but also in larger expanses of full-length mirrors of Venetian glass presented by the Doge. The building’s name, Chihil Sutun (“Forty columns”), is popularly thought to derive from the combined effect of the twenty columns of the talâr and their reflection in the long pool. This picturesque interpretation is probably inaccurate, as the word “forty” is used in Persian as “hundreds” in English, to refer to large numbers of things.

The Chihil Sutun was built by ’Abbas II in 1647, possibly around an earlier nucleus. Heavily damaged in a fire of 1703, it was substantially rebuilt in the following year, when the talâr was added. Thus the building does not represent a particular moment, but rather shows, like the ‘Ali Qapu, how Safavid palaces were continuously refurbished and enlarged to meet changing tastes and needs. Similarly, the wall paintings show differences in style and subject matter and were probably executed over time. Most of the small paintings seem to date from the late 1640s, while the four large ones that are the focus of the main hall were probably added twenty years later.16

The finest small paintings are found in the chambers east of the main hall on either side of the iwan, where they decorate the walls and lunettes below the ceiling. Enclosed in painted frames, they resemble paintings hung on a wall previously decorated with floral patterns. Well-preserved and beautifully restored, they represent the best of contemporary wall painting and show close affinities in subject matter and style to contemporary manuscript and album paintings. Indeed, some of the best have been attributed to Muhammad Qasim, one of the court painters at the time of Shah ’Abbas II and known for his work on several manuscripts.17

One room (P4) is decorated with scenes of picnickers in the country [244], drinking, pouring wine, chatting with cup and bottle in hand, reclining on cushions, or seated side by side under trees in open landscapes. Landscape elements are only an artificial background to the subject, which is the detailed depiction of the leisure class. These languid youths, with their elegant dress, show how the style of Riza persisted well into the mid-seventeenth century. Another room (P3) has scenes from Persian literature, depicting Khusrav and Shirin or Yusuf and Zulaykha, as well as unidentified single figures; its iconographic program seems to have been a counterweight to that of the carefully depicted pleasures depicted in the chamber opposite.

An entirely different style was used for the large historical murals in the main room. The four show the Safavid shahs engaged with their Muslim neighbors on the east: Isma’il battling the Uzbek Shihani Khan (often misidentified as the battle of Chaldiran), Tahmasp receiving the Mughal Emperor Humayun [245]; ‘Abbas I receiving Vâl Nâdr Muhammad Khan (the ruler of Bukhara from 1653 to 1658); and ’Abbas II receiving an Indian ambassador (probably

Tarbijot Khan, who was sent to the Safavid court on 12 November 1663 with a reply to ‘Abbas II’s embassy on the occasion of Avarangzhî’s accession in 1658). The composition and the use of chiaroscuro and atmospheric landscape show the impact of Western techniques of representation, although these features are superficially applied to a traditional Persian representational scheme. While overlapping figures have been used to suggest depth, the figures of the monarchs are centered in splendid isolation. Tahmasp, for example, is accorded the place of honor on the right. This Europeanizing style can also be seen in a dozen oil paintings on canvas as well as in the wall painting decorating the houses of the Armenians in New Julfa.18 The program of historical murals in the main room of the Chihil Sutun establishes the official character of the building, which was used for receptions and audiences. In contrast to the paintings of the ‘Ali Qapu, there are few erotic elements. These representations of official triumphs and embassies belong to the genre of wall decoration in palaces in the Islamic world and in western Central Asia, which can be traced back as early as the eighth century at Qasrây ‘Amra in the Jordanian desert and the seventh century at Aynasîyâb (old Samarrâqand).19

The other Safavid pavilion [246] to survive in Isfahan was erected under Sâlamân I/Safi II (r. 1666–94) and is of an entirely different character. Known as the Hašt Behist (“Eight Paradises”), it is a two-storied square structure in the Bagh-i Irânshâh (“Garden of the Nightingale”), aligned with the axis of the Chahar Bagh avenue. Measuring some thirty meters on a side, the pavilion consists of a central hall roofed with a musqarnas vault supporting a lantern over the
The revetment has disappeared, but Cote’s drawing made in the
nineteenth century shows that the surfaces were richly
decorated. Most of the Safavid work, including the tilled
panels in the spandrels of the exterior, seems to have been
on a small scale commensurate with the private nature of
the building, but Fath ‘Ali Shah (r. 1797–1834) had large
tile panels installed which depicted him enthroned and
flanked by his sons.

Fath ‘Ali Shah’s figural tiles are of a type known from
Safavid Isfahan. Several sets of cuarda seca tiles said to
come from one or more of the pavilions behind the Chahar
Bagh are preserved in European and American collections.88
They all show male and female figures in garden settings.
In one in New York (fig. 248), a reclining female figure with a
wine-bottle in one hand is attended by a male figure holding
a length of cloth and several other servants proffering food
and drink. The female figure has distinctly non-Iranian fea-
tures and hairstyle, and her male companion wears European
dress. In the London example the main figures are familiar
Persian types. In all cases the compositions have been
assembled from stock figures, accessories, and landscape
elements and rendered in six colors (green, light and dark
blue, black, yellow, and white). The irregular shape of the
upper edge of the large London and New York panels shows
that they were made to fit a specific location; the left edge of
the New York panel seems to have been cut at a later date,
for the figure offering a fruit-bowl is largely missing. The
New York panel has other peculiarities: the principal female
figure has three curious marks on each forearm. These may
correspond to the self-inflicted burns seen on the arms of
male lovers in seventeenth-century Persian drawings, and the
scarf her companion offers is already wound suggestively
through her legs. This suggestive iconography would have
been appropriate for the decoration of isolated pavilions for
delight, and indeed a text from the mid-eighteenth century
describes in lurid detail the goings-on in the gardens behind
the Chahar Bagh.

The last major architectural achievement of the Safavid
period is the complex of buildings erected by Husayn I (r.
1694–1722) on the Chahar Bagh.89 The ensemble repre-
sents a return to the grandiose planning favored by Abbas
I and includes a madrasa, known as the Madar-i Shah
("Mother of the Shah"), as well as a caravanserai, stables,
and a bazaar, whose combined revenues supported the
charitable foundation. The plan is characterized by rigid
symmetry and axiality; the madrasa, caravanserai, and stables
are aligned and connected by the bazaar, which runs along
their north sides. The bazaar is a broad corridor 220 meters
long, bordered on both sides by arcades; the 80 meters on the
west along the madrasa have deep recesses for shops,
while the central and eastern parts have shallower booths.
The main entrance to the madrasa opens off the Chahar
Bagh and leads to its open court (fig. 249). Pathways and pools
divide it into quadrants, a repetition on a smaller scale of the
Chahar Bagh outside. The court is surrounded by two stories
of rooms, and, as at the fifteenth-century madrasa at Khargird
(figs. 62, 63), the corners are bevelled. The dome chamber, set
at right angles to the entrance and therefore not accurately
aligned with the qibla, apex that of the Shah Mosque, al-
though the tilework shows a notable decline from that of the
previous building. There are large bands of simple check-
work and almost no tile mosaic. The geometric designs are
often coarse, and the palette includes a caustic yellow.
Nevertheless, the courtyard of the Madar-i Shah madrasa,
with its shaded walkways, whitewashed plaster with the
vaulting lines picked out in blue, and shimmering tilework
reflected in the pool, bestows an air of grace and serenity on
the building far greater than its architecture might otherwise
merit. The expansive scale and confident massing of forms
in the complex set the style for architects in the following
two centuries.
The grand development of Isfahan under 'Abbas I was
repeated on a smaller scale at Shiraz under the patronage of
Muhammad Karim Khan Zand, who was the Safavid regent
there from 1730 to 1779. He glorified his capital with broad
avenues and more than twenty-five public buildings,
including a mosque, a bazaar, and a palace. The most
important were grouped around a great mausoleum, following
the arrangement introduced by the Safavids at Isfahan and
Kirmanshah. Although it has been modernized and bisected by
a boulevard, the original disposition of buildings can be
reconstructed. On the north lies the citadel, or Arg, and some
fragmentary remains of the palace grounds. On the south is
the Regent's Mosque (Masjed-i Vakil), which was begun in
1756. It is a congregational mosque with a square court (60
meters to a side) surrounded by single-story arcades with
iwan's on the north and south. The north iwan connects to
the deeply recessed entrance from the mausoleum, while the
south iwan leads to the main prayer hall, a deep rectangle
with five rows of vaulted bays supported on forty-eight fluted
stone columns. The court façade has a stone dado and tiles
painted with naturalistic flowers in distinctive rose and
yellow tones [250]. The Vakil complex also included a public
bath behind the mosque and a vaulted bazaar to its east.

ARCHITECTURE UNDER THE UZBEKS

The Shibanids and Tuay-i-irimids were active builders. They
had broad international contacts, especially with Muscovy,
and many commercial structures, such as bazaars,
caravanserais, bridges, and underground reservoirs,
were erected; but patronage of major buildings was concentrated
in Bukhara, the capital, and such other large centers as
Samarkand. The most characteristic civic structure was the
dzhanas, a type of retail market structure which had a central
domed space surrounded by vaulted lanes and workshops. In
general the architectural traditions established in the fifteenth
century under the Timurids were continued, but bold vaults
and domical systems that organized interior spaces in new
ways were also used. Plans and forms became standardized,
and the structural innovations of individual buildings are not as
interesting as the organization and siting of architectural
ensembles which reveal the economic and urban develop-
ment of the area in this period.

CHAPTER 14

Architecture and the Arts in Central Asia under the Uzbeks

Between the fall of the Timurid dynasty at Herat in the early
sixteenth century and the coming of the Russians in the
nineteenth, Transoxiana underwent a neo-Chinese revival,
and the political system was organized into appanages led by
khanates descended from Chingiz Khan through his eldest son
Jochi. Sovereignty was corporate and embodied in the ruling
clan, and succession was established by seniority. In the
sixteenth century legitimacy was limited to agnates, or male
descendants, of Jochi's youngest son Shibar (or Shayban),
and the family that controlled Transoxiana from 1500 to
1578 is usually known as the Shahbanuh. In the seventeenth
and early eighteenth centuries, legitimacy was limited to
agnates of another of Jochi's sons, Tuay-i-imur, and the family
that controlled the area is known as the Tuay-i-
imurids. Even more important than the khanates were the
amirs, leading members of Turk-Mongol tribal groups who
held both military and bureaucratic ranks. A third group of
participants within the appanage framework was the learned
class, which included traditional Muslim scholars and the
shaykhs and members of Sufi brotherhoods. This group
often served to mediate between the other two and between
the disenfranchised and the ruling classes. All three groups,
commonly if somewhat inaccurately called Uzbeks, were
important patrons of architecture and art, particularly book-
painting. In form and style, the works of art produced under
Uzbek patronage in Central Asia were dependent upon the
styles established in the fifteenth century under the
Timurids (see Chapters 4 and 5), and the repetition of the
same forms for more than two centuries means that these
works of art, although copious in quantity (more than 350
public buildings, for example, are mentioned in contempor-
ary sources), are often mediocre in quality, particularly when
compared with contemporary works produced under the
Safavids and Ottomans, who had far greater treasuries at
their disposal.

The city of Bukhara replaced Samarkand as the political
and religious center of Transoxiana. In the first half of the
sixteenth century, the capital underwent radical reconstruc-
tion under the Shibanid 'Abd Allah, who served as khan of
Bukhara from 1512 and as supreme khan from 1533 until
his death in 1540, and his son 'Abd al-'Aziz, who served as
khan of Bukhara from 1540 to 1550 [251]. The city walls
were rebuilt, and the remains of a huge fortified wall, ten
meters high and five meters thick, with a crenellated parapet
and semicircular towers, can still be seen. Like Fez in
Morocco, Bukhara has preserved much of its traditional
aspect, and it presents one of the best examples of a pre-
 modern Islamic city.

Several ensembles were built, including one in the center
of Bukhara known as Pa-ye Kalan ("Foot of the Kalan"),
which comprised a minaret, mosque, and madrasa. The
forty-five-meter Kalan minaret had been built in 1172 by
the Qarakhanid Arslan Khan and was one of the outstanding
monuments in the city. Adjacent to it was a large congre-
gational mosque, which had been founded at the same
time the minaret was built. One of the largest mosques in Central
Asia, it measures 130 by 80 meters and accommodates
12,000 worshippers. During the fifteenth century the
mosque was renovated, and according to an inscription the
reconstruction was completed in 1514 [121]. In the center of
the main, or east, façade rises a slender portal entrance
with beveled corners flourishing a wide arched opening. The
portal leads to a spacious court (77 by 40 meters) with iwans
and domes.
in the middle of the four sides linked by single-storied arcades. The long central axis is marked by a tall blue dome (30 meters in height) and a polychrome mihrab in the interior. The building is remarkable for its clear and simple form and restrained decoration, especially compared to that of the previous century. Most of the walls are of polished brick inset with glazed tiles, and only the portal is set off by more elaborate decoration in marble and glazed tile.

The third building in the Pa-i Kalan ensemble, the large Mir-i 'Arab madrasa (1535–6) which stands opposite the Kalan Mosque, is named for its founder, Sayyid Mir 'Abdallāh was a Sufi shaykh known as Mir-i 'Arab who came from Sayra (Iṣfahān) to Bukhara sometime after 1515. The madrasa takes its simple, rectangular form (73 by 55 meters) from the adjacent mosque. It has a central court (35 by 33 meters) surrounded by iwans and two stories of rooms. Three sides of the building are blank, while the main façade, once covered with multicolored tile mosaic of high quality, contains a central iwan flanked by arcades and towers at the corner [253]. Two slender blue domes on tall drums rise behind the façade: one marks the cruciform lecture hall (Pers. dār al-hūn), the other the burial place of the founder. The interior rooms are covered by a distinctive system of four intersecting arches, flat pendentives, and a miqarnas frieze supporting a lantern drum and dome, all faced with white plaster and highlighted with polished brick and glazed insets around the edges of the design.

In the second half of the sixteenth century, Bukhara flourished under another branch of the Shirvanid family and the leadership of 'Abdallāh b. Iskandar. 'Abdallāh seized Bukhara in 1537 and four years later managed to have his father Iskandar proclaimed supreme khan. Iskandar remained a figurehead while 'Abdallāh served as actual ruler, and at his father's death in 1583, 'Abdallāh himself was proclaimed supreme khan with the help of the Sufi shaykh Khwaja Sa'd al-Dīn Juybari. Under the patronage of 'Abdallāh Khan (r. 1583–68), his chief confidant, the amīr Qal'ā Bāb Kukalnash, and the Sufi Khwaja Sa'd, two large-scale projects were undertaken in the city of Bukhara [251]: a major east–west thoroughfare and a north–south artery. Both of these developments attest to the economic expansion of the city in the second half of the sixteenth century and its commercial and cultural functions, as do other large-scale urban developments of the period, such as the Maydan-i Shah in Isfahān (see Chapter 13).

The east–west thoroughfare in Bukhara ran from the Registan, an important retail district below the citadel, westward beyond the city walls for five kilometers to the shrine complex known as Char Bāk (254, 255). The name was a shortened form of Chahar Bāgh-i Imam Abu Bakr Ahmad b. Sa'd ["Four-fold garden of the Imam Abu Bakr Ahmad b. Sa'd"], and the site was the family cemetery of the Juybari shaykhs, the leading representatives of the Naqsbändi order of Sufis. It was a favorite area for outings by the Juybari family, and by the mid-sixteenth century already contained several tombs and shrines. In the decade 1559–69, 'Abdallāh Khan financed the construction of several new buildings, including a mosque (1 on plan), a madrasa (2), and a khanāqaq or hospice for Sufis (3). The three buildings are set on a platform in a U-shape open to the east; the longer
and lower madrasa in the center connects the mosque and khanqah, each with a large iwan in front of a tall dome. On the exterior, both mosque and khanqah appear similar, with double domes set on drums pierced with windows, but their interiors are markedly different. The rectangular mosque has a single unifed space ingeniously created by setting the three-tiered cupola between semidomes supported on horsehoe arches. The cruciform khanqah has a more traditional arrangement of a dome resting on intersecting arches and a network of decorated pendentives. Several hundred yards to the east of the complex at the end of the road from Bukhara was an elaborate two-story gateway (A), and to the north of the shrine lay a twenty-five-hectare park (B) planted with flowering and fruit-bearing trees. The head of the Juyhuri family provided a substantial endowment for the shrine, with income from several parcels of land, a village, and two gristmills west of Bukhara. As late as 1914, the income supporting the madrasa still amounted to some six thousand rubles. The east-west thoroughfare served as the locus of development for a residential and cultural district in the south-west section of the city. At the east end, the thoroughfare was anchored by another public complex, comprising a bath and two facing madrasas, the Madar-i Khan Madrasa, completed in 1566–7, and the Abdallah Khan madrasa, added twenty years later. To accommodate the residential and "green-belt" development that accompanied the new boulevard, the city walls were extended and the overall area enclosed within the walls increased by some twenty percent.

The development of the north-south artery through the center of Bukhara between 1562 and 1587 was more commercial in character [256]. Spaced along the center of this artery are three covered markets, called chinar or chaharba [257]. A shortened form of chahar bazar ("four markets"), the term refers to a building erected over the intersection of two major commercial streets or to the surrounding district that takes its name from the market. In Bukhara these chinar are also called pakh ("arches") because of their domed roofs. The northernmost (A) is the Goldsmiths' Dome (yag-i zarparan), which, despite its name, was a royal emporium for textiles. Some 350 meters to the south (B) is the Hatsellers' Dome (yag-i bokhur furesh), another 150 meters to the south-east (C) is the Moneychangers' Dome (yag-i sarnifan). These retail markets were surrounded by supporting commercial facilities and public institutions. Between the Goldsmiths' Dome and the Hatsellers' Dome, for example, there is a large caravanserai (D) and a warehouse for wholesale trading (Pers., zine, E). The caravanserai is a rectangular building, whose plan is similar to that of a madrasa: a court surrounded with two floors of lodgings, storerooms, and stables. The warehouse, by contrast, is an enclosed and roofed building which can be locked at night and does not have stables or lodgings. To the east of the Moneychangers' Dome, the amir Qol Bala Kukaltash financed the construction of a madrasa in 1569 (F). Measuring 56 by 69 meters, it is one of the largest madrasas in Central Asia and could accommodate some five hundred students. Like earlier buildings in Bukhara, it has a simple plan and plain exterior [358], but the interior facades are more heavily decorated with glazed tile.

Following Abdallah's death in February 1598, Shirvani control of Transoxiana collapsed, and sovereignty in the area passed to the Tugai-timurids. They controlled a smaller territory than their predecessors had, as the Tugai-timurids had lost Herat and Khuratan and the northern province. Already in the first decade of their rule, squabbles erupted over the question of succession, and in 1612 the khanate was divided into a bipartite state ruled separately from two capitals: Ismaquli ruled from Bukhara as great khan (r. 1612–42), and his younger brother Nadir (Nadir) Muhammad ruled from Balkh as little khan. The construction boom that had characterized Bukhara in the second half of the sixteenth century was curtailed, although large complexes were still built. The major patron in the first half of the seventeenth century in Bukhara was Nadir Divanbegi Astar, a high-ranking military administrator. One of his major works is the complex known as the Lab-i Hau ("Edge of the reservoir"). The area between Qol Baba Kukaltash's madrasa and the branch of the Zarafshan river that ran through the city center was developed by adding a rectangular stone reservoir (36 by 45.5 meters). On the west side of the tank, Nadir Divanbegi Astar ordered a combined
mosque-khanaqah [259] and on the east a madrasa. Work on the U-shaped complex was completed by 1620, and the arrangement may have inspired the final plan of the most famous complex from the period, the Registan in Samarqand.

The Registan, the town square of Samarqand, had been the site of a paired madrasa-khanaqah built by the Timurid ruler Ulugh Beg in 1417–21 (see Chapter 4). During the sixteenth century other smaller buildings had been added around the square, and in the first decade of the sixteenth century the conqueror of Transoxiana and founder of the Shibanid line, Muhammad Shihani (r. 1501–10), had built a double madrasa on the east. It served as a funerary madrasa for the patron and thirty-three members of his dynasty and had a massive stone platform (four meters square and two meters high) for their cenotaphs. Other sixteenth-century buildings in the area included a congregational mosque and madrasa, built to the south of Ulughbeg’s madrasa ca. 1528 by Aliakbar Kukaltash, an important military figure. The only one of these fifteenth- and sixteenth-century buildings to survive is Ulughbeg’s madrasa [257–58], and it was the key to the Registan’s development in the seventeenth century.

Work on the Registan [260] was renewed ca. 1621 by Yalangnush II Alkhi, a military administrator who was governor of Samarqand, the center of his family’s feudal territory. He had Ulughbeg’s khanqah demolished to make way for a new madrasa, known as the Sharia (“Lion possessing”) from the rampant lions decorating the spandrels of the entry portal [261]. Completed in 1635–6, the building was designed to complement Ulughbeg’s madrasa opposite. It has the same massing and composition of the facade as the Timurid prototype: a huge iwan flanked by ribbed domes on tall drums, with slender minarets at the corners. On the interior, the court is surrounded by two stories of cells. The most striking feature of the building is its decoration. Both exterior and interior facades are revetted in tile, and interior surfaces are painted with polychrome vegetal themes. The spandrels of the main facade show deer being pursued by lions which have human-faced suns rising behind their backs, astrological figures recalling those over the entrance to the bazaar at Isfahan [232]. The figures are done in a full palette of tile mosaic, with a predominant use of yellow. Although striking from a distance, the drawing is less assured than the work of the fifteenth century.

The third and largest building on the Registan [262] is the madrasa known as the Tilyar (“Gold work”). It was built between 1646 and 1650, but it has a symmetrical facade with an arched portal flanked by minarets at the corners. The domed rooms for teaching and prayer found in the other two madrasas on the Registan are omitted, as the building includes a large congregational mosque on the west. The mosque comprises a ribbed dome set on a high drum, flanked by rectangular halls covered with fifteen vaults supported on piers. On the interior, a marble dado is surrounded by richly painted and gilded plaster. Despite the additive nature of construction, the Registan in Samarqand appears as a unified ensemble because of the harmonious proportions, majestic volumes, and brightly colored decoration. It gives a good sense of the scale of work undertaken in Transoxiana during the seventeenth century. Forms were constantly repeated and less attention was paid to individual units than to the building of large urban ensembles with elaborate decoration.

The power of the Tugay-timurid state continued to decline in the later seventeenth century. In 1642, on the death of his older brother, Nadir Muhammad assumed the khansate, which was briefly reunited during his reign (1642–5). Following his death, however, civil war and occupation by the Mughals of India meant that the khansate was divided again in 1651. The two khansates were once more held by brothers, although not on friendly terms: Bukhara was ruled by Nadir Muhammad’s eldest son, Abul al-Kazi, and Balkh was ruled by Nadir Muhammad’s fifth son, Shabangu, who ruled as chief khan from 1631 to 1681, was considered a cultured man with a fondness for devotional poetry. The sources praise his love of Islamic learning, which can be seen in his rule as the major patron in Bukhara during the second half of the seventeenth century. In addition to a now destroyed madrasa on the Registan, he built a large (50 by 48 meters) madrasa in the city [263]. Completed in 1651–3, it forms an ensemble with the Ulughbeg madrasa near the Goldsmiths’ Dome. The plan is based on that of the